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## NORTHERN ILLINOIS UNIVERSITY

Accounting Information Systems - The Fundamentals of Business Processes

A Thesis Submitted to the
University Honors Program
In Partial Fulfillment of the
Requirements of the Baccalaureate Degree
With the University Honors
Department

by Carollyn S. Gehrke

DeKalb, Illinois May 11, 1996

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### HONORS THESIS ABSTRACT THESIS SUBMISSION FORM

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#### Abstract (100-200 words):

Develop instructional materials for use by the introductory accounting information systems classes. These materials will include case studies for the computerization of various fictional small businesses. Computerization of fictional small businesses will be done utilizing QuickBooks Pro. This will combine the Systems Understanding Aid (SUA) currently being utilized by the ACCY 354 - Introductory Accounting Information Systems classes with additional information created to start businesses and continue their operations. Also, create an internet web site to be accessed by students for further transactions and information. Implementation of an EDI system will also be developed to be accessed by students for further transactions. These hypothetical businesses may be used for instructional purposes in the classroom as documentation of the process will be described thoroughly.

### **PREFACE**

This project was undertaken because of it allows me to combine my interest in computers with my understanding of accountancy and business processes. The project is of interest to me due to the educational purpose it serves in an increasingly computerized world. The more informed I can become of different software packages, the more knowledgeable I will be in the workforce. Also, the more practical experience I can obtain with different technologies will be beneficial in any future endeavors. The real benefit to this project is that not only will I be learning, but will be sharing my knowledge with others.

You may be asking yourself: "Why is there so much emphasis on technology? Once I get a job they'll train me on the systems they want me to know."

This, in part is true. Every organization does things differently and therefore will have specialized programs to accomplish their goals. On the other hand, there is seldom time to teach an employee everything. Expectations are high for graduating students and the more experience you have, the more marketable you become.

I have learned the following things about technology in the workplace:

- Be willing to admit your weaknesses and be willing to work your tail off to strengthen yourself in that area.
- You will make mistakes that you won't even recognize until you see the work years later.
- Every day you will learn something new, it's a matter of recognizing the knowledge and using it.
- Take every opportunity to do it "right" the first time. You have to write a
  memo (or something ordinary) but why not make it "brilliant".
  Everything you touch markets you and your knowledge. Never pass
  your opportunities by intentionally.
- Try to do something you haven't done before just because you want to.
   Have fun creating graphs and pictures so that your work gives you pleasure.

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## GETTING TO KNOW QuickBooks Pro 3.1

**Introduction** 

QuickBooks Pro is an accounting package which works as you do, in a logical business process. There are many general ledger packages available on the market. QuickBooks Pro by Intuit was chosen due to its cost effectiveness and ease of use. A cost-benefit analysis should always be considered before purchasing and setting up a general ledger package.

This case is provided as a step-by-step introduction to some of the most commonly used features of QuickBooks Pro. This case should be used by students to familiarize themselves with the program.

Designates an action 

Designates scenario information 

Company Profile

Harmony Piano Works is owned and operated by Sara Montage as a sole proprietorship in DeKalb, Illinois. Services include piano tuning, refinishing, and repairs. Each job Sara accepts is individual in nature and is bid and charged separately. Payment is due upon receipt of an invoice. Sara decides to use QuickBooks Pro as the most appropriate software package for her small business.

Start QuickBooks Pro by double-clicking on the icon. This will place the QuickBooks Pro icon in the upper right-hand corner and give you several menu items to choose from.

From the File menu, choose New Company...

### **CREATING A NEW COMPANY**

You are about to create a new company file. You will be asked a series of questions which will set up the new company preference. You will be able to change these preferences after the new company is created. Do you wish to continue?

Please select the company type which most closely matches yours.

Choose yes.

Please enter your company name, address, and the first month of your fiscal year.

□ Name: Harmony Piano Works

Address: 898 Wurlitzer Road

DeKalb, IL 60115

First month in your fiscal year: January

#### NEXT

QuickBooks has three invoice formats to fit different types of businesses. Please select the format that you prefer to use. You can change this format at any time.

**Service Format** This format is recommended for businesses that sell primarily services, but also some goods.

Professional Format If your business sells services and requires a lot of room for descriptions, use this format.

**Product Format** Use this format if your company sells and ships parts or products.

Custom Format You can customize the names of any fields on any sales form, and decide which fields you want to see on your screen and which fields you want to print. You can also change the title of any sales form.

Choose the Service Format for this example.

#### NEXT

Creating New Company

QuickBooks can help you start your company with a present chart of accounts. You'll be able to edit the accounts you choose at any time.

Please select the company type which most closely matches yours.

Choose Service Business.

#### NEXT

Setting up Sales Tax

Do you charge your customers sales tax?

Choose NO. 

Using Inventory

Do you stock inventory or write purchase orders?

Choose YES.

Using Estimates

Do you prepare written or verbal estimates for your customers?

Choose YES. 

Using Time Tracking

Do you track your time or your employees' time for any of the following reasons:

• invoicing your customers?

paying your employees?

• analyzing the profitability of your business?

Choose NO. 

Setting Up Payroll

Do you want to use QuickBooks for payroll?

Choose YES. 

Federal and State ID's

Federal ID: 

65-8753211

Filing State:  $\Pi$ 

State Employer ID: 

51340

Note: You can enter this information later on the Company information screen.

Choose OK. 

Complete!

QuickBooks is about to create your new company. Select "Next" to continue. Select "Prev" if you want to review your options.

#### NEXT

Save your company as a new filename. In this case, we will save our file as Harmony Piano Works. Make sure that you are sending your file to your disk and not to the hard drive.

## SETTING UP YOUR CHART OF ACCOUNTS

Once your file has been created, you will see a menu bar and icon bar at the top of your screen.

First, go to the Lists menu and drag down to the Chart of Accounts. This brings up the following chart of accounts window.

Name	Type	Balance
Checking Fixed Assets Accum. Depreciation Credit Card Payroll Liability Loan Payable Retained Earnings Fees Reimbursed Expense Sales	Bank Fixed Assets Fixed Assets Credit Card Other Current Liability Long Term Liability Equity Income Income Income	0.00 0.00 0.00 0.00 0.00 0.00

Sara has spoken with her friend, an accountant, who advised her to set up her chart of accounts as follows.

1010	Cash
1020	Accounts Receivable
1030	Prepaid Insurance
1040	Office Supplies
1050	Software
1060	Acc. Dep Software
1080	Computer Equipment
1090	Acc. Dep Computer
2010	Accounts Payable
3010	Sara Montage, Capital
3020	Retained Earnings
4010	Revenue From Services
5010	Advertising Expense
5020	Utilities Expense
5025	Advertising Expense
5030	Rent Expense
5040	Office Supplies Expense
5045	Supply Expense
5046	Tool Expense
5050	Depreciation Expense-Software
5060	Depreciation Expense-Computer Equipment
5070	Insurance Expense
5080	Professional Services Expense
5090	Payroll Expense
5150	Miscellaneous Expense

## REVISING THE CHART OF ACCOUNTS

Turning Account Number Feature On:

QuickBooks allows the use of account numbers, but their use is not required. If you already have a chart of accounts that uses account numbers, you can turn numbers on in Transaction Preferences.

Go to Prefs...Transactions...and make sure the option is selected. 

If you have this feature turned on, QuickBooks displays a Number field when you enter a new account or subaccount. If the preference is turned off, QuickBooks doesn't display a Number field.

### Modify the Default Chart of Accounts

Select \*1100-Checking by clicking on it (it will turn blue when you have chosen it). Then click Edit. This will take you to a completed dialogue box. You will want to modify it as follows.

ou will want to modif	y it as ionows.	
Type:	Bank	
Number:	1010	
Name:	Cash	
Description	Cash/Checking	
Bank #:	995-432-0	
Opening Balance:	0.00 as of 01/01/96	
Opening Balance.		<del></del>

Then, click on OK.

- Select \*Credit Card by clicking on it (it will turn blue when you have chosen it). Then in the menu bar go to Edit . . . Delete Account. It will ask you if you are sure, click on YES.
- The next account we want is 1020-Accounts Receivable. Click the New button. This will take you to a new dialogue box. Fill it in as follows.

Type:	Accounts Receivable	
Number:	1020	
Name:	Accounts Receivable	
Description	Accounts Receivable	
Note:		
Subaccount of:		
Opening Balance:	0.00 as of 01/01/96	

Click on the Next button. Fill it in as follows. 

lick on the Next button	Fill it in as follows.
Type:	Other Current Asset
Number:	1030
Name:	Prepaid Insurance
Description:	Prepaid Insurance
Bank #:	
Opening Balance:	0.00 as of 01/01/96
Opening Balance	

Click on the Next button. Fill it in as follows. 

lick on the Next button.	FIII It III as follows:
Type:	Other Current Asset
Number:	1040
Name:	Office Supplies
Description:	Office Supplies
Bank #:	
Opening Balance:	0.00 as of 01/01/96
Opening Zarazzz	<u> </u>

Click on the OK button. Select \*1400-Fixed Assets by clicking on it (it will turn blue when you have chosen it). Then click Edit. This will take you to a completed dialogue box. You will want to modify it as follows.

mpleted dialogue box	You will want to modify it as follows.
Type:	Fixed Asset
Number:	1050
Name:	Software
Description:	Software
Note:	
Subaccount of:	
Opening Balance:	0.00 as of 01/01/96

Click on the OK button. Select \*1420-Fixed Assets by clicking on it (it will turn blue when you have chosen it). Then click Edit. This will take you to a completed dialogue box. You will want to modify it as follows.

ompleted dialogue box	You will want to modify it as follows:
Type:	Fixed Asset
Number:	1060
Name:	Acc. Dep - Software
Description:	Acc. Dep - Software
Note:	
Subaccount of:	1050 - Software
Opening Balance:	0.00 as of 01/01/96
Opening Balance.	

Click on the OK button. Click on the new button 

ick on the OK button	. Click on the new button
Type:	Fixed Asset
Number:	1080
Name:	Computer Equipment
Description:	Computer Equipment
Note:	
Subaccount of:	0.00 as of 01/01/96
Opening Balance:	0.00 0.0

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Click on the OK button. Click on the new button 

ick on the OK button	. Click on the new button
Type:	Fixed Asset
Number:	1090
Name:	Acc. Dep - Comp. Equip.
Description:	Acc. Dep - Comp. Equip
Note: Subaccount of:	1080 - Computer
Subaccount of.	0.00 as of 01/01/96
Opening Balance:	

Click on the Next button. Fill in as follows. 

Fill in as follows.
Accounts Payable
2010
Accounts Payable
Accounts Payable
0.00 as of 01/01/96
0.00 0.0

Click on the Next button. Fill in as follows. 

ick on the Next button.	Fill in as follows.
Type:	Equity
Number:	3010
Name:	Capital, Sara Montage
Description:	Capital, Sara Montage
Note:	
Subaccount of:	
Opening Balance:	0.00 as of 01/01/96
Opening Baranes	

Click on the OK button. Select \*3900-Retained Earnings by clicking on it (it will turn blue when you have chosen it). Then click Edit. This will take you to a completed dialogue box. You will want to modify it as follows.

a completed dialogue	box. 100 will want to
Type:	Equity
Number:	3020
Name:	Retained Earnings
Description:	Retained Earnings
Note:	
Subaccount of:	
Opening Balance:	0.00 as of 01/01/96
Opening Baranee.	

Page 7 QuickBooks Pro

Click on the OK button. Then click Edit. This will take you to a completed dialogue box. You will want to modify it as follows.

alogue box. You will	want to modify it as ionows.
Type:	Fixed Asset
Number:	1090
Name:	Acc. Dep - Comp. Equip.
Description:	Acc. Dep - Comp. Equip
Note:	
Subaccount of:	1080 - Computer
Subaccount of.	0.00 as of 01/01/96
Opening Balance:	0.00

- Continue this process until you have the chart of accounts requested above. Then go to File... Print List . . . OK.
- Close the chart of accounts window by clicking in the upper left hand corner of the window.

## **ENTERING ITEMS**

Items save you time. Once you have entered them, the information is immediately cross-referenced by your invoices and purchase orders. The item field shows the item name you entered when you created the name. All additional information about the item (description, rate, and amount) is automatically placed on the line with the item. Enter the quantity and QuickBooks Pro will automatically calculate the line total and the document total.

Go to the Lists menu and drag down to the Items. This brings up the following window.

Name	Description	Type	Account	On Hand	Price

Sara knows that she will provide four services. She plans to charge a specific price per hour which will be applied to account 4010 - Revenues from Services. This price will include all materials she uses.

		Price
Name	Description	
	Piano Tuning	\$35.00/hour
PT100		\$25/hour
KR100	Keyboard Repairs	
PR100	Piano Repair	\$30/hour
	Piano Refinishing	\$40.00/hour
PR200	Fland Reimisming	

Please see "Modifying Your Items Lists" of this section for more information.

## ENTERING CUSTOMERS/VENDORS

Customers and Vendor Lists save you time. Once you have entered them, the information is immediately cross-referenced by your invoices and purchase orders. The item field shows the item name you entered when you created the name. All additional information about the item address, terms, etc. are automatically placed on the document.

Go to the Lists menu and drag down to the Customers:Jobs. This brings up the following window.

Name	Balance	Job Status	Estimate Total

Sara knows that she will provide have contractual service with the following people.

Addross	Phone	Terms
	815-756-5632	Due on
		Receipt
1472 South 14th Street	815-754-6824	Due on Receipt
	Address 1787 State Route 23 DeKalb, IL 60115 1472 South 14th Street DeKalb, IL 60115	1787 State Route 23 815-756-5632 DeKalb, IL 60115 1472 South 14th Street 815-754-6824

- Click on the New button and enter the appropriate information.
- Go to the Lists menu and drag down to the Vendors. This brings up the following window.

Name	Balance

- Sara does not yet know which vendors she will have, but as they are entered, they will be added to this list.
- You would click on the New button and enter the appropriate information if you had any.

### MAKE A BACK-UP

A back-up allows you to save all company information up to a specific point.

Go to File . . . Back Up . . . enter the name to save your back-up as and make sure that the file will be saved where you want it. Click on Save.

### **TRANSACTIONS**

After creating the appropriate lists, you are ready to start entering transactions. The Activities Menu provides most of the actions which commonly occur in a business.

1/1/96

Sara contributes \$5,000 in cash to Harmony Piano

Works.

Activities . . . Enter Special Transactions . . .

This brings up a General Journal Entry Window.

Fill it in so that:

Date:

1/1//96

 Entry No.: 101

 Account
 Debit
 Credit
 Memo
 Name

 1010-Cash
 5,000
 Working Capital
 Solution

 3010-Capital, Sar
 5,000
 Working Capital
 Solution

Click on the OK button.

**P** 

1/2/96

Record the receipt of invoice #14576 and QuickBooks Pro

3.1 from MacWarehouse. Invoice total is \$99.00.

Address:

1200 Oak Street, PO Box 3013

Lakewood, NJ 08701-5926

Phone:

800-710-9926

Activities . . . Inventory . . . Receive items and enter bill. This brings up a Pay Bill Window. Start by filling in the vendor name "MacWarehouse" and then hitting tab. QuickBooks Pro will bring up a window stating that this vendor is not in the vendor list. Click on the Setup button to set up this vendor.

The Vendor window will need to have the following information completed.

GENERAL INFORMATION

Vendor:

MacWarehouse

Account No:

094325

Name &

MacWarehouse

Contact:

Address:

1200 Oak Street

Alt. Contact:

PO Box 3013

Credit Limit:

Lakewood, NJ 08701-5926

Tax ID:

Phone:

800-710-9926

Print on Check as:

MacWarehouse

Fax:

Alt Phone:

CATEGORIZING AND DEFAULTS

Type: Supplies

Terms: Due on Receipt

Click on the OK button. This will take you back to the pay bills window. Fill in:

Date:

01/02/96

Reference Number:

14576

Amount Due:

\$99.00

Click in the Memo Area and fill in:

QuickBooks Pro

Click on the Expenses tab and fill in:

Account:

1050-Software

Amount:

\$99.00

Memo:

QuickBooks Pro

Click on OK.

If you want to make sure that things are all okay, you can see that they were booked correctly by going to the Chart of Accounts. You will see that Accounts Payable and Software have both been effected.

1/3/96

Issue invoice #200 to Dan Heinisch in the amount of \$280.00 for piano tuning. Dan was billed for 8 hours of tuning.

Activities . . . Create Invoice 

This brings up the Invoice window. Use the pull down menu to find Dan Heinisch. All of the specific information regarding Dan will be entered (terms, address, etc.). Fill in the rest of the invoice as you would a manual invoice. Customer Message on invoice should read: Please remit to above address. Make sure that the date is correct and the number of the invoice. When done, print it and then click OK.

( ) 1/4/96 Issue invoice #201 to Tim Gulotta in the amount of \$187.50 for a keyboard repair. Tim is being billed for 7.5 hours of keyboard repair.

Activities . . . Create Invoice 

Page 11 QuickBooks Pro

Record the receipt of invoice #7724 from a new vendor in 1/5/96 P

the amount of \$496.55 for Supplies. Charge to Supply

Expense

Name:

Piano City Refinishers

Contact: Address: Laurent Bourgeois 8026 SW 61st Street

Sycamore, IL 60178

Phone:

815-895-2267

Fax: Account: 815-895-2270 HPW5001

Terms:

Due on Receipt

Type:

**Supplies** 

Activities . . . Inventory . . . Receive items and enter bill. 

Record the receipt of check #292 in the amount of \$280.00 1/8/96 

from Dan Heinisch for payment of invoice #200.

Activities . . . Receive Payments. Fill in the customer:job field first. This will reference any outstanding invoices that payment may be applied to.

Record the receipt of check #1476 in the amount of \$80.00 1/10/96 from Tim Gulotta in partial payment of invoice #201. 

Activities . . . Receive Payments. 

Issue invoice #202 to Don Otten, a one-time customer, in 1/11/96 the amount of \$220.00 and record the receipt of his check #768 for \$220.00 for 5.5 hours of refinishing work.

Activities . . . Enter Cash Sale. Similar to when creating a new vendor, when you type in the name, you may either quick add, or set-up. Another option is to simply make Harmony Piano Works a customer:job and apply the cash sale to the company itself. In this case, simply do a quick-add. Customer Message should read: Thank you for your business.

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Record the receipt of invoice #2514 from Hardware 1/12/96

Northwest in the amount of \$362.90 for Tools.

Hardware Northwest Name: Fredrica Peterson Contact: 1768 Woods Road Address: Cortland, IL 60112

815-758-9623 Phone: 815-756-4453 Fax:

574532 Account:

Due on Receipt Terms:

Supplies Type:

Activities . . . Enter bill. 

( )

Record the receipt of check #1483 in the amount of 1/15/96

\$107.50 for the remaining payment of invoice #201 from

Tim Gulotta.

Activities . . . Receive Payments. 

Receive the \$362.90 of Tools ordered from Hardware **P** 1/16/96

Northwest with a copy of invoice #2514.

Activities . . . Inventory . . . Receive items. 

Record the purchase and payment (check #1023) of 1/17/96

advertising from the Southeast Times, invoice #943, in

the amount of \$75.00. Set-up as "other" type.

Southeast Times Name: Betsy Friedlund Contact: 5942 Gallagher Lane Address:

DeKalb, IL 60115

815-753-4752 Phone: 815-758-6944 Fax:

Activities . . . Write Checks 

Page 13 QuickBooks Pro

1/18/96

Record the receipt of invoice #X485 from Northwest Gas

in the amount of \$164.00 for Gas and Oil Expense.

Name: Northwest Gas Contact: Bill Peters

Alt Contact: Tessie O'Gorman Address: 792 Freedom Court

DeKalb, IL 60115

Phone: 800-758-5541
Fax: 815-758-6711
Account: 5789234AD0
Terms: 2% 10 Net 30
Type: Supplies

Activities . . . Enter Bill.

### **REPORTS**

QuickBooks Pro automatically produces many reports for you. Print the following reports to check your work.

Print the following reports. (Make sure all are covering the dates you wish them to cover.

Reports . . . Profit & Loss . . . Standard

Reports . . . Balance Sheet . . . Standard

Check Figures:

rigures.	
Cash	4,925.00
Accounts Pavable	1,485.35
Total Assets	5,711.50
Revenues	687.50
Expenses	1 461 35
Expenses	1,401.00

### TURN IN

Sara Montage would like the following pieces of information filed with her reports.

Chart of Accounts Check

Invoice 200–201 Profit and Loss Statement

Sales Receipt 202 Balance Sheet

QuickBooks Pro Page 14

### MODIFYING YOUR ITEM LISTS

Type	Use for	
Service Items	Services you charge for or services you purchase.	
<b>Inventory Parts</b>	Items you purchase, track as inventory, and then resell.	
Non-Inventory Parts	Items you purchase but do not resell; items you sell but do not purchase; items you purchase and resell but do not track as inventory.	
Other Charge	Other charges on a sale or a purchase; such as freight or	
Group	Fast entry of a group of individual items already on the list.	

Items can be entered by going to the list menu>items. This brings up a pop-up screen describing all of your current items. To add a new item, click on the new button. To edit an item, select the item you wish to modify and then click on the edit button.

### To create an item for a service, non-inventory part, or other charge:

- 1. From the Lists menu, choose Items.
- 2. Click New.
- 3. In the Type field of the New Item window, choose Service, Non-inventory Part, or Other Charge.

  Depending on your choice, QuickBooks displays one of three versions of the New Item window.
- 4. Enter an item name or number.

  The item name you enter here appears on the Item list you choose from when entering a sale. If you wish, you can print it on the invoice or sales receipt. Enter a name that will distinguish this item from others on the list. You may use letters or numbers, up to a maximum of 13 characters.
- 5. Enter a description.

  QuickBooks enters this description on the sales form when you enter the item name in the Item field of the form.
  - NOTE: The description may be up to three lines long; to start a second or third line, press Enter (Windows) or Return (Macintosh). You can edit the description on the sales form if you need to. (To move to the next line of an item description on an invoice, press the Down Arrow key.)
- 6. (Optional) If this item is a subitem of an existing item, select the "Subitem of" check box and specify the parent item's name.
- 7. (Optional) Enter a rate or sales price for the item.

If the price of this item changes often, you can leave this field blank and enter the amount when you're entering a sale. For an Other Charge type, you may enter either an amount or a percentage. To enter a percentage, type a % sign after the number.

- 8. If you charge sales tax on this item, select the Taxable checkbox.

  Click the checkbox (or tab to it and press the spacebar). If you use this item in a taxable sale, you'll see a "T" next to the item on the sales form and QuickBooks will use the item in its calculation of sales tax.
- 9. Enter an account for this item.
  For items you sell, you'll usually enter an income account, such as "Sales," or a subaccount of an income account. (When you choose a subaccount, QuickBooks places a colon between the parent account name and the subaccount, as in "Sales:Labor."
- 10. Record the item.
  - To record but leave the window open to enter another item, click the Next button.
  - To record and close the window, click OK. QuickBooks adds your new item to the Item list, so you can select it while entering a sale.

#### To create an inventory item:

- 1. From the Lists menu, choose Items.
- 2. Click New.
- 3. In the Type field of the New Item window, choose Inventory Part.

  QuickBooks displays a larger New Item window with additional fields.
- 4. Enter an item name or number.

  The item name you enter here appears on the Item list you choose from when entering a sale. You may use letters or numbers, up to a maximum of 13 characters.
- 5. (Optional) If this item is a subitem of an existing item, select the "Subitem of" check box and specify the other item's name.
- 6. Fill in the purchase information fields for easy reordering of stock. QuickBooks uses the purchase cost, purchase description, and inventory asset account you enter here on purchase orders and checks, credit cards, and bills where you pay for this item.

• Enter the Purchase Description your vendor uses to describe this item. You may enter up to three lines of description.

• Enter the Cost per item you expect to pay when you reorder. You can change the cost on any PO.

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• Enter the Reorder Point at which you want QuickBooks to remind you to reorder.

• (Optional) Choose or enter your Preferred Vendor. QuickBooks displays the preferred vendor for an item in reports like the Physical inventory worksheet, so you can easily reorder inventory from your

preferred vendors by looking at the report.

• (Optional) In the Inventory Asset field, select a different inventory asset account if you don't want to use the default account. If you use the same account of all your inventory items, the balance of this account will show the total value of all your inventory at any one time.

- (Optional) In the COGS (cost of goods sold) field, select a different cost of goods sold account if you don't want to use the default account. QuickBooks calculates the cost by using the average cost of the items in stock at the time of sale.
- 7. Fill in the sales fields for information you show to customers.

  QuickBooks uses the sales description, sales price, and sales income account on invoices, cash sales, and credit memos where you use this item.
  - The Sales Description may be up to three lines long; to start a second or third line, press Enter (Windows) or Return (Macintosh). You can edit the description on the sales form if you need to. (To move to the next line of an item description on an invoice, press the Down Arrow key.)

• Enter the Sales Price for this item, or leave the field blank if the sales

price varies.

• In the Sales Income field, choose an income account for tracking

income you earn from sales of this item.

- If you charge sales tax on this item, select the Taxable checkbox. One a taxable sale, QuickBooks will include this item in its calculation of sales tax.
- 8. Enter the current quantity and value as of today.

  If you find later you made a mistake in the quantity on hand or value, you can adjust either one in the Adjust Quantity/Value on Hand window. Or you can change the value or date in the Inventory Asset register.

• Set an average cost. The amounts you enter here establish your

average cost for this item.

• Choose a date.

- Adjust total value. Although QuickBooks multiplies the Qty on Hand by the amount in the Cost field, you can adjust the Total Value by typing in a different amount.
- 9. Record the item.

• To record but leave the window open to enter another item, click the Next button.

• To record and close the window, click OK.

QuickBooks adds your new item to the Item list, so you can select it while entering a sale.

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## ENTERING BILLS WHEN YOU RECEIVE THEM

Enter bills as soon as you receive them. That way, your cash flow reports will be up to date, and you won't run the risk of setting bills aside for later and forgetting to pay them. Let QuickBooks remind you when it's time to pay.

There are three areas of a bill where you can enter information:

On the top half of the bill, enter information from the bill itself.

• Under the Expenses tab, enter expenses (including reimbursable expenses) you're being billed for.

• Under the Items tab, enter any items (that is, services and products on your Item list) that you're being billed for.

### Filling in the top of the Enter Bills window

From the Activities menu, choose Enter Bills. 1.

In the Vendor field, choose from the drop-down list or enter the vendor. 2.

(Optional) Change the date. 3.

- (Optional) Enter the bill number in the Ref. No. field. 4.
- Enter the amount of the bill in the Amount Due field. 5.

Enter the vendor's payment terms. 6.

- QuickBooks enters the terms you entered when you set up the vendor.
- QuickBooks uses the terms to determine the due date of the bill payment and the date you'd need to pay by in order to receive a discount for early payment.

• You can enter terms if the field is blank or type over the terms QuickBooks enters.

(Optional) Enter a memo about the bill. 7.

### Filling in the Detail area

You can assign a bill amount to expenses, items, or both.

### USING THE EXPENSES TAB

### To record a bill for expenses:

Click the Expenses tab. 1. If you assign the amount of the bill to various expense accounts, customers, jobs, and classes in the detail area, your reports will accurately reflect how much you spend within each expense account, for each customer or job,

and within each class you have set up.

Distributing the bill amount to the correct customers also allows you to apply any reimbursable expenses to your sales.

(Optional) Click Next to enter another bill. 2.

Click on OK when you're finished with the Enter Bills window. 3.

When you record a bill, QuickBooks enters it in your accounts payable register.

#### USING THE ITEMS TAB

#### To record a bill for items with no PO:

- 1. Fill in the top of the Enter Bills window as described in that section.
- 2. Click the Items tab.
- 3. Enter the items in the detail area.

  If you enter inventory items, QuickBooks adjusts your inventory to show that you have received the items. QuickBooks uses the cost you enter here to adjust the average cost.

4. To enter shipping charges or tax not associated with any one item, click the expenses tab and add these charges together with their expense accounts.

5. Click Next to record this bill and enter another, or click OK to record and close the window.

#### To record a bill for items which you created a PO:

- 1. In the Enter Bills window, enter the name of the vendor.

  When you click Yes in the message window about open PO's for that vendor, QuickBooks displays a list of the vendor's open PO's.
- 2. Click the PO's that contain items you're receiving and being billed for. QuickBooks places a check mark to the left of the PO's you click. (You can enter one bill for several PO's.)
- 3. When you've clicked the correct PO's, click OK.

  QuickBooks returns you to the Enter Bills window and fills in the items from the PO's you marked.
- 4. Fill in the top of the Enter Bills window as described in that section.
- 5. Make any necessary changes to the items listed in the detail area. If you didn't receive all the items on the PO, you can edit the quantity (or cost) of any item, or delete an item completely from the detail area of the bill. Edit the detail area until it reflects the actual items you received and are being charged for on this bill.

For inventory items, QuickBooks uses the cost you enter here to adjust the average cost.

Let  ${\bf Quick Books}$  enter the items from the PO for you.

Even if you make a mistake editing the detail area, or delete a line you later decide you want to have on the bill, click Select PO; then click the PO containing the items you want to re-add to the bill. Quick Books remembers the edits you've made to other lines, but replaces any lines you deleted.

Letting QuickBooks enter the items (instead of typing them in) ensures that your quantity on order for the items will be reduced.

- On each line, assign a Customer:Job if the items are for a specific customer 6. or job.
- (Optional) If you begin editing quantities of items and make a mistake, click Clear Qtys to clear all quantities. To return all quantities to their original 7. values, click the same button (now called Receive All).
- If you received additional items not on any purchase order, enter them 8. directly on the next available line.
- To enter shipping charges or tax not associated with any one item, you can click the Expenses tab and add these charges associated with the expense 9.

You may want to associate expenses like tax or freight charges with your cost of goods sold accounts (COGS) instead of an expense account.

Record the bill. 10.

When you record a bill, QuickBooks enters the transaction into your accounts payable (A/P) register.

- To record this bill and enter another one, click Next.
- To record the bill and close the window, click OK.

### **PAYING BILLS**

In the Pay Bills window, QuickBooks lists all the bills you owe as of any date you enter. You mark the bills you want to pay, and QuickBooks writes and records the checks or credit card charges. If you pay by check, all you do is print (or write) the checks when you're ready.

You don't have to print (or even use) checks to use the Pay Bills function The Pay Bills window is a way of automatically calculating what you owe each vendor and recording checks (or credit card charges). QuickBooks enters the payment in your check (or credit card) register. You can write the checks manually.

You can even pay bills with cash. If your petty cash account is a bank account type, select Check in the Pay By area of the Pay Bills window. Then choose your cash account in the drop-down list.

### To Pay Bills:

From the Activities menu, choose Pay Bills. 1.

Fill in the fields at the top of the Pay Bills window. If you don't see all the bills you expect in the Pay Bills window or some bills 2. appear to be missing, check that the date next to Show Bills due on or before field is the date you want.

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- 3. Mark the bills you want to pay now or click Pay All Bills to have QuickBooks mark them all for you.

  Mark bills to pay by clicking on them with the mouse, or select a bill with the arrow keys and press the spacebar to mark it.
  - The Pay All Bills button changes to Clear Payments, so you can unmark bills and start over.
- 4. If you want to pay only part of a bill now, enter the amount you'd like to pay in the Amt. Paid column.
- Select a bill and click Discount Info.
- 6. In the Discount Information window, make changes if necessary, and click OK to record the discount.

  QuickBooks reduces the amount due for this bill in the Pay Bills window. If you pay the lowered amount, QuickBooks puts the amount of the discount into the account you specified in the Discount Information window.
- 7. In the Pay Bills window, click OK to record your payments.
  - QuickBooks prepares one check for each vendor and records the checks in the check register with BILLPMT in the Type field.
  - QuickBooks records the payment to each vendor in the accounts payable register. The amount you paid appears in the Paid column in the A/P register.
- 8. If you write checks by hand, enter the correct check numbers in the check register.

  If you send handwritten checks, go to the check register and enter the number of each handwritten check in the Num field of each check QuickBooks prepared.
- 9. If you print checks, you can print them now.
  To print, choose Print Forms from the File menu the Print Checks. If your checks are not listed, go to the check register. Press T in the Num field of each check and record. Next time, be sure to select To be printed in the Pay Bills window.

IMPORTANT! Don't enter checks to your vendors after using Pay Bills. QuickBooks writes and records checks to pay the bills you marked in the Pay Bills window. You can edit the checks if you wish. If you also enter bill payments in the Write Checks window, you'll have two check recorded to each vendor.

## HAVE QUICKBOOKS REMIND YOU TO PAY YOUR BILLS

The due date in the Enter Bills window allows QuickBooks to remind you to pay each bill. You tell QuickBooks how many day in advance to remind you.

- 1. From the Preferences (Windows) or Prefs (Macintosh) menu, choose Reminders.
- 2. Choose whether to have QuickBooks' Reminders window show you a summary of bills you need to pay, a list of the bills in detail, or not to remind you at all to pay bills.
- 3. Enter the number of days *before* the due dates of your bills that you'd like to be reminded to pay.

For example, if it takes four days for your mailed checks to reach your vendors, you might enter 5 or 6, to be on the safe side.

## ENTERING CREDIT FROM A VENDOR

Enter credit from a vendor in the Enter Bills window. Just change the Bill setting to Credit.

- 1. From the Activities menu, choose Enter Bills.
- 2. At the top of the Enter Bills window, click "Credit" instead of "Bill."
- 3. In the top half of the window, choose or enter a vendor name and the amount of credit.
- 4. In the detail area, enter the expense accounts, customers, jobs, items, or classes you want to credit.
- 5. Click OK.
  QuickBooks records the credit in your A/P account. In the A/P register, the transaction type is "BILLCRED."

## APPLYING CREDIT FROM A VENDOR

You can easily apply any credit you have with a vendor to pay bills from that vendor.

- 1. From the Activities menu, choose Pay Bills.
- 2. In the Sort Bills By Field, choose vendor.
- 3. Fill in the rest of the fields in the top of the Pay Bills window.

  QuickBooks displays both bills and credit for each vendor. The credit is displayed with the bills, since you sorted by vendor.
- 4. Using the mouse, mark the bills you want to pay and any credit you want to use.

  QuickBooks applies any credit you marked to bills you marked for the same vendor.
- 5. Click OK.
  QuickBooks writes a check to each vendor for the amount of the bills you marked minus any credits you marked.

## PURCHASE ORDERS

	QuickBooks form to use
Order items you'll receive and pay	Purchase order.
for later.  Receive items before receiving a bill;	Item receipt.
no initial order.	Bill
Receive items and a bill together; no initial order.	
Day for and receive items at the same	Check or credit card.
time, such as in an over-the-counter purchase.	

## Customizing the Purchase Order Form:

- 1. From the Preferences (Windows) or Prefs (Macintosh) menu, choose Inventory/PO's.
- 2. Under Purchase Order Style, click Customize.
- 3. Mark the checkboxes of the fields you would like to see on your screen, and the fields you would like to print.

  Click the checkbox again to clear a check mark.
- 4. Change the names of any of the fields you'll be using on the purchase order.

- Click the Header tab. 5
- Mark the header fields you would like to see and print, and change any 6. header field names. If you change the default title of the PO in this window, QuickBooks remembers the title you enter here and displays it on every new PO. The Change Title button on each PO changes the title for that PO only.
- Click the Columns tab. 7.
- Mark any columns you would like to see and print in the line item area, 8. and change any column names.
- Click the Footer tab. 9.
- Mark any footer fields you would like to see and print, change any footer 10. field names.

### Filling in a Purchase Order

When you use purchase orders to buy inventory items, QuickBooks updates your inventory, so you know which items are on order and when they're due to be received.

- From the Activities menu, choose Create Purchase Orders. 1.
- Fill in the top of the purchase order. Enter the vendor, date, PO number, vendor's address, and a Ship To 2. address. The date you entered in the Expected (delivery date) field appears on stock status reports as the next receipt date for inventory on order.

NOTE: If the vendor has been entered in a list, all information referenced to the vendor will appear when selected from the pull-down menus.

- (Optional) Enter a class for this transaction. If the Class field does not show on your screen, you can turn Class 3. Tracking on in Transaction Preference.
- Fill in the detail area by entering the items you are ordering. 4.
  - If you've already set up these items as inventory items on your Item list, choose the items you're ordering from the drop-down list in the Item column. QuickBooks fills in the description and rate from the information you entered when you set up the item.
  - If you're entering a new item, type in the item's name and press Tab. When you're done adding the item, QuickBooks returns you to your purchase order.
- Complete the PO. 5.
  - (Optional) Enter a message to your vendor.

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• (Optional) Enter a memo for this PO. The memo appears in the PO list and other places QuickBooks refers to this PO. It may be helpful to enter a short description. The memo does not print on the PO.

## Using PO's for non-inventory items and services

You may want to use a QuickBooks purchase order for items you don't stock or even resell. For example, you might use PO's to order office supplies or computer repair for your own business.

You can enter non-inventory and service items in the detail area of a PO. (Make sure that you assign items you purchase to expense accounts, not income accounts.)

When you use PO's for non-inventory items, you can still track your open PO's to see what you have and have not received, but non-inventory items are not included in reports showing items on order.

### Viewing Purchase Orders

- From the Lists menu, choose Chart of Accounts. 1.
- At the bottom of the chart of accounts, select Purchase Orders. 2.
- Click QuickReport The PO QuickReport shows the PO's you've created in chronological order, 3. along with the PO number, vendor name, memo, and amount.

## Editing and Deleting Purchase Orders

- From the Lists menu, choose Purchase Orders. 1.
- Select the PO you want to edit or delete. 2.
- Do one of the following: 3.
  - Click Edit and change any of the information on the PO. Then click
  - From the Edit menu, choose Delete Purchase Order.

Closing a Purchase Order Manually

When you receive all the items against a purchase order (using an item receipt, check, bill, or credit card), QuickBooks marks the PO "Received in full." Suppose, however, that you don't receive all the items on a PO, and you find out you're not going to receive them. Maybe your vendor is out of the item, or maybe it's not being made anymore. In a case like this, you "close" either all or part of the PO manually, so QuickBooks doesn't show the items as "on order" anymore, but you still have a record that you ordered them. When you close a PO manually, QuickBooks marks the PO "Closed."

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You can close lines of a PO separately, or you can close a whole PO.

## To Close a Line of a Purchase Order Manually

From the Lists menu, choose Purchase Orders.

Select an open PO you want to close items on and click Edit. 2.

One the PO, click in the "Clsd" column on the right end of the detail area. QuickBooks removes any inventory items you marked closed from reports 3. showing items on order. If you close every line of the PO, QuickBooks marks the whole PO closed.

### To Close an Entire PO Manually

Select the Closed checkbox in the upper right corner of the Create Purchase Orders window.

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# CASE 1



Austin Explorer Maps

## AUSTIN EXPLORER MAPS

Computerizing an Accounting System

COMPANY PROFILE

Austin Explorer Maps was established in 1990 as a sole proprietorship with the intent of creating maps to meet the needs of Austin's growing tourist industry. Three specialized maps, focusing on golf courses, wineries, and ski resorts were designed along with a general tourist information map describing other Austin attractions. All four maps were designed during 1990 and began selling in 1991. The products were well received and the need for long-range planning on map updates was established. New golf courses, wineries, ski resorts, and other attractions are opening frequently and the current growth trend is expected to continue. Consequently, as the first editions of the maps sold during 1991 and 1992, research and design on second updated versions of each product occurred simultaneously. As of December 1, 1992, the second edition of the Attraction map is selling well and the second editions of the new Wine and Ski maps have just been delivered by the printer in time for the holiday sales period. The new Golf map is expected to be completed soon. In addition to maps, Austin Explorer Maps sells three types of display racks for the maps. Due to the varied types of outlets, plastic, wood, and wire racks have been selected.

Austin Explorer Maps markets its products to large distributors of books and maps and directly to other retail outlets on a wholesale basis. For management information purposes, Austin Explorer Maps maintains separate inventory, cost of goods sold, and sales accounts in its chart of accounts for each type of map (Attractions, Ski, Wine, and Golf) and a single inventory, cost of goods sold, and sales account for all type of racks. In addition, sales accounts are further subdivided by type of customer: Distributor and Wholesale.

## Company Information

Company Name: Austin Explorer Maps

Address: 1515 South Fourteenth Street

Austin, MN 55912

Federal ID: 53-7642106

State ID: 40239

Fiscal Start Date: January 1, 1996

Sales Tax: 0 SUTA Rate: 3.5 FUTA Rate: 0.8

Next Check Number: 2542 Next Invoice Number: 2049

Default Invoice Comment: Thank you for your business!

Next Purchase Order 501

Chart of Accounts				
1060	Cash		36,202.94	
1200	Accounts Receivable			
1210	Snowmobile Map Inventory		710.00	
1220	Ski Map Inventory		16,382.65	
1230	Attraction Map Inventory		14,258.40	
1240	Wine Map Inventory		4,979.43	
1250	Rack Inventory		1,675.00	
1300	Office Supplies		347.60	
1310	Shipping Supplies		246.70	
1320	Prepaid Insurance		450.00	
1550	Office Equipment		7,000.00	
1560	Acc. Dep Office Equipment		-4,152.71	
1600	Vehicle		16,000.00	
1610	Acc. Dep Vehicle		-5,366.63	
2200	Accounts Payable		31,963.60	
2310	FIT Payable		546.31	
2320	SIT Payable		361.62	
2335	Medicare Tax Payable	792.60		
2340	FUTA Payable	185.36		
2350	SUTA Payable	23.24		
2400	Medical Insurance Payable	272.64		
3560	Retained Earnings		78,185.62	
4010	Wholesale Golf Map Sales	5320	FUTA Expense	
4210	Wholesale Clri Man Sales	5330	SUTA Expense	
4220	Wholesale Ski Map Sales Wholesale Wine Maps Sales	5400	Phone Expense	
4230	Wholesale Attraction Map Sales	5410	Postage Expense	
4240	Distributor Golf Map Sales	5420	Shipping Expense	
4310	Distributor Ski Map Sales	5430	Advertising Expense	
4320	Distributor Wine Map Sales	5440	Vehicle Expense	
4330	Distributor Attraction Map Sales	5450	Utilities Expense	
4340	Rack Sales	5460	Rent Expense	
4500	Sales Discounts	5470	Membership and Dues Expense	
4600	Sales Returns & Allowances	5480	Subscription Expense	
4700 5010		5500	Dep. Exp Office Equipment	
	and the second s	5510	Dep. Exp Vehicle	
5020		5610	Insurance Expense	
5030		5620	Office Supplies Expense	
5040		5630	Shipping Supplies Expense	
5050 5301	_	5650		
		5800		
5310 5215			•	
5315	Medicale Tax Daponic			

#### **INVENTORY**

Number	Description	Unit	Price	Qty	$\mathbf{Cost}$
Attr2-D	Explore Austin-Attractions	Each	2.25	7,646	.54
Attr2-W	Explore Austin-Attractions	Each	3.00	1,575	.54
Golf1	Explore Austin-Golf	Each	3.00	1,028	.69
RPlast	Plastic Racks	Each	5.95	100	5.00
RWire	Wire Racks	Each	4.75	100	3.75
RWood	Wood Racks	Each	4.95	200	4.00
Ski1	Explore Austin-Ski	Each	3.00	320	.82
Ski2-D	Explore Austin-Ski	Each	2.25	18,000	.75
Ski2-W	Explore Austin-Ski	Each	3.00	3,494	
Wine1	Explore Austin-Wine	Each	3.00	456	.76
Wine2-D	Explore Austin-Wine	Each	2.25	17,525	.68
Wine2-W	Explore Austin-Wine	Each	3.00	2,934	.68

Golf1, Ski1, and Wine1 maps are obsolete (dated) inventory items.

### PROJECT ACCOUNTING

Beginning January 1, 1996, Austin Explorer Maps has decided to begin using the Project component of QuickBooks Pro on an experimental basis. Five projects have been established:

- 1. Attraction Map Sales Summary
- 2. Golf Map Sales Summary
- 3. Rack Sales Summary
- 4. Ski Map Sales Summary
- 5. Wine Map Sales Summary

Revenues and expenses associated with each type of map sale, regardless of the type of customer the map is sold to, will be distributed to the appropriate project. All revenues and expenses associated with rack sales will be distributed to the Rack Sales Summary Project. Austin Explorer Maps plans to evaluate the usefulness of the Project reports at the end of January.

### PAYROLL AND EMPLOYEE INFORMATION

Austin Explorer Maps employs four people in addition to the owner, Karen Baily, who acts as the business manager for the company. Joyce Graham is employed as the research and design specialist for new and existing products. Arlie Richman is the sales manager working both the Distributors and various Wholesale customers. Alice White is the accountant and Sam York is the shipping clerk. The job functions of each employee contribute equally to generating all types of sales and cannot be specifically identified with a particular product. Therefore payroll transactions will not be distributed to Projects. Employees are paid monthly on the last working day of each month. Medical insurance is provided with a small co-payment required of each employee for

personal coverage; coverage for additional family members is at the expense of the employee.

Name: Address: Phone: SSN: Birthdate: Hire Date: Pay Periods: Yearly	Joyce Graham 3456 SE Madison St. Austin, MN 55912 507/437-8989 476-05-8582 02/15/65 12/1/92 12 18,000.00	Name: Address:  Phone: SSN: Birthdate: Hire Date: Pay Periods: Yearly Salary:	Arlie Richman 2302 K Street Austin, MN 55912 507/437-8173 542-34-5331 07/02/59 02/01/91 12 26,400.00
Salary: Hourly 1: Hourly 2: Tax Table: Withhold Allow: Status:	Minnesota 2 Married	Hourly 1: Hourly 2: Tax Table: Withhold Allow: Status:	Minnesota 2 Married

## TRANSACTIONS

### Enter the following Sales

ENTER CUSTOMER NAME Invoice #2049		Northwest Pipelines c/o Todd Blackman 3080 South 210th Street		
Phone: 414-789-8200		Kent, Washington 98032		
Trans Date	QTY Ordered	Item Ordered	Terms	
1/1/96	1200	Ski2-D	2% 10 net 30	
прос	4200	Attr2-D		
	1000	Wine2-D		
	20	RPlast		
	15	RWire		

ENTER CUSTOMER NAME		Applegate Vineyard c/o Jane Martin		
Invoice #2050 Phone: 504-563-	2142	7927 Caves Highway Cave Junction, Oregon	97523	
Trans Date	QTY Ordered	Item Ordered	Terms	
1/2/96 30		Wine2-W	2% 10 net 30	
	1	RWood	_	

ENTER CUSTO	MER NAME	Lost Lake Lodge c/o Ken Ho		
Invoice #2051		P.O. Box 94	07000	
Phone: 504-663-	3400	Lost Lake, Oregon 97028		
Trans Date	QTY Ordered	Item Ordered	Terms	
1/2/96 10		Ski1	2% 10 net 30	
	5	RWire		

ENTER CUSTOMER NAME Invoice #2052 Phone: 414-835-6540		Pacific Crest Maps c/o Elaine Nelson		
		25177 NE 61st Street Redmond, Washington 98052		
Trans Date	QTY Ordered	Item Ordered	Terms	
1/3/96	2500	Attr2-D	2% 10 net 30	
900		Ski2-D		
	650	Wine2-D		

ENTER CUSTO Invoice #2053 Phone: 504-754-		Springwater Count c/o Cheri Cooper 181 North Main Banks, Oregon 971	.06
Trans Date	QTY Ordered	Item Ordered	Terms
1/3/96	10	Golf1	2% 10 net 30
110100	50		
	25	Wine2-D	

1/7/96 Record the return of 2 Golf1 maps @ \$3.00 each from Springwater Country Club on Credit Memo #2054.

1/8/96 Record the return of 3 Wine2-W maps @\$3.00 each from Applegate Vineyard for a total of \$9.00 on Credit Memo #2055.

1/8/96 Record the return of 5 Ski1 maps @ \$3.00 each from Lost Lake Lodge for a total of \$15.00 on Credit Memo #2056.

1/11/96 Receive a check for \$14,298.44 from Northwest Pipelines for payment on invoice #2049. Memo on check states: \$291.81 discount.

Enter the following Purchase Orders.

ENTER VEND Account #: 5724 PO #501 Phone: 507-433-	13AZ12	S. Glade Supply Co 3300 NW Street St. Austin, MN 55912 Contact: Kelly Cla	Helens Road
Trans Date	QTY Ordered	Item Ordered	Terms
	1/12/96 100 300		2% 10 net 30
ВТДОО			
200		RWire	

ENTER VEND Account #: AEI PO #502 Phone: 503-389-	M57632	Interstate Racking 550 South 7th Stree Amana, IA 57898 Contact: Heather	t
Trans Date	QTY Ordered	Item Ordered	Terms
1/12/96 200		RWire	2% 10 net 30

ENTER VEND Account #: 3Z42 PO #503 Phone: 507-764-	291AE	Engineered Shelvi 9999 South 14th Str St. Paul, MN 56790 Contact: Casey Sc	reet O hmidt
Trans Date	QTY Ordered	Item Ordered	Terms
1/12/96	50	RWood	2% 10 net 30

Received invoice #8643 and all goods ordered on PO #501 from S. 1/14/96 Glade Supply Company. Received invoice #12763 in the amount of \$750.00 from Interstate 1/19/96 Racking Systems for the purchase of 200 wire racks. Also received the 200 racks, all in good condition. Received invoice #634 in the amount of \$200.00 from Engineered 1/19/96 Shelving for the purchase of 50 wood racks. Also received the 50 racks, all in good condition. Receive invoice #927 for January Advertising in the Minnesota 1/20/96 Traveler for \$300.00. Cut and send check to P.O. Box 336, St. Paul, MN 59876. Contact Lester Berry at 507-764-3574 if you have any questions regarding the bill. Make a purchase on account 658XXC45 of office supplies from 1/22/96 Edwards' Business Supply. Receive invoice #27631 and goods in the amount of \$57.60. [Edwards' Business Supply is located at 9270 NE Glisan Street, Austin, MN 55912. Phone #: 507-437-6524. Terms: 2% 10 Net 30.1 Make a purchase on account from Metro Graphics in the amount of 1/23/96 \$16,742.00 for Building Sign and Advertising Logo installed on 1/23/96. Receive invoice #382087, charge to Advertising Expense. [Metro Graphics is located at 1726 SW Parkway, Minneapolis, MN 59870. Phone #: 507-764-5551. Terms: 2% 10 Net 30. Contact Person: Fred Johnson Receive invoice #5621 from Storage Systems Inc. in the amount of 1/25/96 \$250.00 for storage. Charge to Rent Expense. [Storage Systems Inc. is located at 78945 Hormel Drive, Austin, MN 55912. Phone #: 507-433-9856. Fax #: 507-437-5512. Terms: Due on receipt. Contact Person: Jim Guyette] Pay Interstate Racking System for invoice #12763. Apply the 1/28/96 purchase discount to the Rack Inventory. Pay Engineered Shelving for the balance of invoice #634. Take 1/28/96 advantage of the purchase discount. Apply the purchase discount to the Rack Inventory. Pay Edwards' Business Supply for invoice #27631. 1/31/96 Pay Metro Graphics for invoice #382087. 1/31/96

Pay Storage Systems Inc. for invoice #5621.

1/31/96

Issue a check to the Federal Reserve Bank for payment of the January payroll liabilities and taxes. Federal Reserve Bank receives checks at 9000 East Court Street, St. Paul, MN 59876. The contact person there is Jim Thompson at 507-764-5000.

FUTA Payable \$1,338.91 Medicare Tax Payable \$185.36

1/31/96 Record the payment of the SUTA Payable liability of \$361.62 to the Minnesota Department of Revenue and mail to PO Box 14800, St. Paul, MN 59878.

1/31/96 Record the payment of the Medical Insurance Payable liability of \$125.00 to Coordinated Insurance Group and mail to 7831 SE Stark Street, Austin, MN 55912.

1/31/96 Pay the invoice #86431 to S. Glade Supply Company. Apply the purchase discount to the Rack inventory.

1/31/96 Issue a payroll check to Joyce Graham for her regular salary, deducting \$25.00 for medical insurance.

1/31/96 Issue a payroll check to Arlie Richman for his regular salary, deducting \$75.00 for medical insurance.

1/31/96 Issue a payroll check to Alice White for her regular salary, deducting \$25.00 for medical insurance.

1/31/96 Issue a payroll check to Sam York for 153 regular hours at his regular hourly rate.

1/31/96 Hire a new employee.

Name: Susan Hudson

Address: 6127 SW Corbatt Avenue

Austin, MN 55912 Phone: 507/436-2710

Phone: 507/436-2710 SSN: 503-246-2710 Birthdate: 08/18/72

Hire Date: 08/18/72
01/31/96

Pay Periods: 12 Yearly 16,000.00

Salary:

Hourly 1: 7.00 Hourly 2: 10.50

Tax Table: Minnesota
Withhold 1

Withhold Allow:

Status:

Single

#### Receive the manual inventory count from Sam York. Adjust records 1/31/96 and charge any adjustments to Miscellaneous Expense

Number	Description	Unit	Price	Qty	ADJ	Cost
Attr2-D	Explorer Austin-	Each	2.25	946	+100	.54
	Attractions					
Attr2-W	Explorer Austin-	Each	3.00	1,575	-100	.54
	Attractions					
Golf1	Explore Austin-Golf	Each	3.00	1,020	OK	.69
RPlast	Plastic Racks	Each	5.95	180	OK	5.00
RWire	Wire Racks	Each	4.75	480	OK	3.75
RWood	Wood Racks	Each	4.95	549	OK	4.00
Ski1	Explore Austin-Ski	Each	3.00	315	-315	<b>.</b>
Ski2-D	Explore Austin-Ski	Each	2.25	15,850		.75
Ski2-W	Explore Austin-Ski	Each	3.00		OK	.75
Wine1	Explore Austin-Wine	Each	3.00	456		.76
Wine2-D	Explore Austin-Wine	Each	2.25	15,850	+500	.68
Wine2-W	Explore Austin-Wine	Each	3.00	2,907	-500	.68

#### Create a new inventory ledger item record as follows: 1/31/96

Number	Description	Unit	Price	Qty	Cost
Golf2-D	Explore Austin-Golf	Each	3.00		.70

Want a minimum level of 100 units maintained.

#### Record the following adjusting entries. 1/31/96

1.	Office Supplies used	\$215.45
2.	Shipping Supplies used	\$176.49
3.	Expired Prepaid Insurance	\$150.00
4.	Office Equipment Depreciation	\$180.55
5.	Vehicle Depreciation	\$233.33

#### REPORTS

Print out the following reports.

- Profit & Loss Statement
- Balance Sheet
- A/R Aging SummarySummary Sales by Item
- Customer Statements

# HORIZON EVENTS

Computerizing an Accounting System

**Directions** 

You have been asked by a company to computerize their accounting information system utilizing QuickBooks Pro.

Company Profile

Seth Hunter has decided to become a sole proprietor with the founding of Horizon Events. Horizon Events is to be an event planning business owned and operated by Seth located in Portland, Oregon. The service provided by Horizon Events is the planning and oversight of special events for individuals and organizations ranging from birthday parties to fundraising events for nonprofit organizations to neighborhood festivals. Services include desktop publishing of invitations and announcements, bulk mailings, publicity when appropriate, and logistical support for entertainment, food service, facilities, and decorations. The business does not have any employees; Seth plans to hire support staff on a contractual basis as needed for individual events.

Seth plans to maintain his own accounting records using QuickBooks Pro. Seth charges his clients by the hour, issuing invoices payable upon receipt as work progresses for a particular event. As a small business with limited cash flow, Seth arranges for specific services such as printing or entertainment on behalf of his clients; however, the client is the contracting party for these services and is responsible for the payment of related charges.

## Company Information

Company Name: Horizon Events

Åddress: 9076 SE Main Street

Portland, Oregon 97214

Federal ID: 44-1357978

State ID: 55555

Fiscal Start Date: January 1, 1996

Sales Tax: 0 SUTA Rate: 3.5 FUTA Rate: 0.8

Next Check Number: 1000 Next Invoice Number: 100

Default Invoice Comment: Thank you for choosing Horizon Events!

Next Purchase Order 1000

Number:

## CHART OF ACCOUNTS

1020 Ad 1030 P: 1040 O 1050 Sc 1060 A 1080 C 1090 A 2010 A	Cash Accounts Receivable Prepaid Insurance Office Supplies Software Acc. Dep Software Computer Equipment Acc. Dep Computer Accounts Payable  502 503 504 506 507 508 508 509 509 509 509 509 509 509 509 509 509	4010 Revenue From Services 5010 Advertising Expense 5020 Utilities Expense 5030 Rent Expense 5040 Office Supplies Expense 5050 Dep. Exp Software 5060 Dep. Exp Computer Equipment 5070 Insurance Expense 5080 Professional Services Expense 5150 Miscellaneous Expense
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#### **ITEMS**

Seth has decided to have the following services:

	Description	Price/Rate
Name	Event Planning Services	\$50/hour
EVP	Graphic Design Services	\$35/hour
GD		\$65/hour
CONV	Conversion Services	

Seth has also received a list of items from Pacific Office Supply to Purchase. He uses their codes for his item list. He plans to use the name supplied by his vendors for all purchases.

NT	Description	Price/Rate
Name	100 sheets/box resume paper	\$12.95
P1-35-410-10		\$14.98
D5-72260	Calligraphy Set	\$14.95
D5-9893-2	Spin-O-Tray (black)	
E7-51126	Premier Line Mail/Literature Center	\$14.85
J4-8959	Plain Paper Transparency Film -	\$64.25
04-0300	100 sheets/box	
NE 01001	12-Design Spectracolor Pen Set	\$10.75
N5-21661	24-Design Spectracolor Pen Set	\$21.00
N5-21662	500 sheets/box Diamond Bond Paper	\$17.85
P1-31-220-10	500 sneets/box Diamond Bond 1 aper	\$19.35
P1-31-920-10	500 sheets/box Recycled Paper	\$5.40
P1-36-124-30	80 sheets/box Private Stock Paper	\$20.60
P2-1118	2500 White Business Envelopes	
P2-54414	100 Manila Envelopes	\$40.98
P3-42-650	One Dozen Legal Pads	\$24.72
	10 Doublesided High Density Disks	\$35.40
S2-12882	10 Doublesided High Density	

Horizon Events Page 2

#### **TRANSACTIONS**

- On 01/01/96 Seth Hunter makes a \$25,000.00 cash contribution to Horizon Events.
- On 01/01/96 record 18 hours at \$50 per hour for Event Planning Services provided to Sally Hall. Payable upon receipt.

Sally Hall 4590 SE 17th Street Portland, Oregon 97214 Phone: 503-232-5389 Fax: 503-233-5490

On 01/01/96 place a purchase order for 5 coaxial cables with Cascade Electric. The cables are \$10.00 a piece.

Cascade Electric 890 SE Stark Street Portland, Oregon 97214 Phone: 503-285-4455 Fax: 503-286-4466 Contact: Billy Gates Terms: 2% 10 net 30 Account: HE51486X

On 01/01/96 record 10 hours of Event Planning Services for Nancy Coleman. Payable upon receipt.

Nancy Coleman 5600 SE 82nd Street Portland, Oregon 97214 Phone: 503-288-0460 Fax: 503-289-0561 On 01/01/96 make a purchase on account from Pacific Supply for office supplies. Receive Invoice #8210 totaling \$85.75.

Pacific Computer Supply 3628 SE 39th Street Portland, Oregon 97214

Phone: 503-299-0561 Terms: 2% 10 net 30 Account: 5342XYZ

ITEM	DESCRIPTION	QTY
D5-9893-2	Spin-O-Tray (black)	1
S2-12882	10 double-sided high density disks	2

On 01/01/96 record 20 hours of Event Planning Services for Terry Weeks. Payable upon receipt.

Terry Weeks 2390 SE Madison Blvd. Portland, Oregon 97214 Phone: 503-231-6790

Fax: 503-232-6891

On 01/03/96 record 25 hours of Event Planning Services for Nancy Coleman. Payable upon receipt.

Nancy Coleman 5600 SE 82nd Street Portland, Oregon 97214 Phone: 503-288-0460 Fax: 503-289-0561

- On 01/04/96 receive check #1542 for invoices #101 and #103. Check total was \$1,750.00.
- On 01/04/96 Record a cash sale of 2 hours of Graphic Design Services at a rate of \$35.00 per hour. Sold to Kelly Quin, 239SW Broadway, Portland, Oregon 97205. Received Check #6832 totaling \$70.00.
- On 01/04/96 receive the one D5-9893-2 and two S2-12882's from Pacific Supply associated with invoice #8210. Received in good condition and placed in the office.

On 01/05/96 make a purchase on account from Pacific Supply for office supplies. Receive Invoice #8213 and goods totaling \$612.98.

ITEM	DESCRIPTION	QTY
D5-72260	Calligraphy Set	5
N5-21662	24-Design Spectracolor Pen Set	4
P1-36-124-30	80 sheets/box Private Stock Paper	20
P3-42-650	One Dozen Legal Pads	14

- On 01/06/96 receive check #7821 for a cash sale made to Mary Wilson. Event Planning Service was done for one hour. The check total was \$50.00.
- On 01/07/96 On 03/07/96 make a cash sale to Nancy Coleman for one hour worth of Graphic Design Service. Cash received was \$35.00.
- On 01/13/96 create a new customer record for Roger Takamura.

Roger Takamura 8519 SE 19th Street Portland, Oregon 97214 Phone: 503-231-4312

Phone: 503-231-4312 Fax: 503-232-4413

On 01/15/96 make a place a purchase order to Pacific Supply for office supplies.

ITEM	DESCRIPTION	QTY
P1-31-220-10	500 sheets/box Diamond Bond	25
	Paper	
P2-54414	100 Manila Envelopes	50

On 01/13/96 Create a new customer record for Sunnyside Neighborhood Association.

Sunnyside Neighborhood Association

3421 SE Salmon

Portland, Oregon 97214 Phone: 503-280-6266

Fax: 503-281-6367

Contact Person: Cindy Galbraith

On 01/14/96 modify Nancy Coleman's address:

4301 NE Tillamook Street Portland, Oregon 97213 Phone: 503-288-0460 Fax: 503-289-0561

On 01/14/96 make a purchase on account from Portland Weekly for \$410.00 for advertising expense. Receive invoice number 6842.

Portland Weekly 8900 SE Ladd Blvd. Portland, Oregon 97214 Phone: 503-232-5612 Fax: 503-232-5688

Terms: 2% 10 net 30

 $\bigcirc$  On 01/15/96 place a purchase order to Pacific Supply for office supplies.

ITEM	DESCRIPTION	QTY
J4-8959	Plain Paper Transparency Film - 100 sheets/box	5
D5-9893-2	Spin-O-Tray (black)	5
	Calligraphy Set	25
P1-31-220-10	500 sheets/box Diamond Bond Paper	5

On 01/16/96 purchase office supplies on account from Northwest Office Supply. Receive invoice #12372 and goods which total \$673.00.

Northwest Office Supply 1005 SE Grand Avenue Portland, Oregon 97214 Terms: 2% 10 net 30

Account: 756428

ITEM	DESCRIPTION	QTY
E7-51126	Premier Line Mail/Literature Center	25
N5-21661	12-Design Spectracolor Pen Set	10
N5-21662	24-Design Spectracolor Pen Set	5
	500 sheets/box Diamond Bond Paper	5

On 01/16/96 Receive Invoice #8299 and goods totaling \$2,453.50 from Pacific Supply.

ITEM	DESCRIPTION	QTY
P2-1118	2500 White Business Envelopes	5
S2-12882	10 Doublesided High Density Disks	5
P1-31-220-10	500 sheets/box Diamond Bond Paper	100
P1-35-410-10	100 sheets/box resume paper	30

- On 01/17/96 pay Pacific Computer Supply's Invoice #8210 in full. (\$558.43)
- On 01/17/96 pay Invoice #8213 in full.
- On 01/17/96 pay Invoice #8299 in full.
- On 01/20/96 pay Invoice #K00324 for the goods received on 01/01/96 from Cascade Electric.
- On 01/21/96 make a cash purchase with check #1004 from Conversion Technologies. They converted a DOS document to a MAC format for \$65.00. Received invoice #9863. (Record as a miscellaneous expense.)

  Conversion Technologies
  6655 SW Hampton Street
  Portland. Oregon 97223
- On 01/22/96 Receive Invoice #8467 totaling \$859.75 from Pacific Office Supply for goods ordered on purchase order #1002 dated 1/15/96.
- On 01/23/96 record the purchase and payment of invoice #1246 for advertising from:

  Buckman Voice

Buckman Voice 5409 SE 14th Avenue Portland, Oregon 97214

On 01/25/96 create a new vendor.

Jim Hart 410 NW 18th Street, #303 Portland, Oregon 97209 Phone: 503-223-6590

Fax: 503-224-6691

- 01/31/96 Record use of \$256.00 for the office supplies.
- 01/31/96 Add account entitled "5090 Dues and Membership Expenses" to the chart of accounts.

#### **REPORTS**

- Print the following reports.
  - Profit & Loss Statement
  - Balance Sheet

  - A/R Aging Summary
    Summary Sales by Item
    Customer Statements

## CLASSIC CLOCKS, INC. Computerizing a Manual Accounting System

Assume that the company is all paper based prior to starting.

#### Directions

You have been asked by a company to computerize their accounting information system utilizing QuickBooks Pro.

Company Profile

Classic Clocks is a sole proprietorship owned by Maria Lindsay in DeKalb, Illinois. Maria operates a retail store selling clocks and watches. She has maintained a manual accounting system for her business and would now like to convert to a computerized accounting system beginning January 1, 1996. Maria has selected QuickBooks Pro 3.1 as the most appropriate software for her merchandising business with employees.

## Company Information

	Classic Clocks, Inc.
Company Name:	
Address:	1200 Lakeway
	DeKalb, IL 60115
Federal ID:	93-9876543
State ID:	1234567
Fiscal Start Date:	January 1
Sales Tax:	8%
SUTA Rate:	3.5
FUTA Rate:	0.8
Next Check Number:	2840
Next Invoice Number:	5882
Default Invoice	Thank you for shopping at Classic Clocks!
Comment:	
Next Purchase Order	7227
Number:	

Page 1 Classic Clocks

## **CHART OF ACCOUNTS**

Number	Type	Description	<u>Balance</u>	Subaccount to:
1010	Bank	Cash	8,424.63	
1050	Dank	Petty Cash	100.00	
200	Accounts	Accounts Receivable		
1200	Receivable			
1310	Other Assets	Clock Inventory	20,065.00	
1320	Other random	Watch Inventory	11,648.00	
1410		Office Supplies	311.15	
1420		Prepaid Insurance	200.00	
1550	Fixed Asset	Office Equipment	4,700.00	
1551	TIREG TIBBET	Accum. Deprec Office Equip.	-2,683.18	Office
1001				Equipment
1650		Store Equipment	4,000.00	
1651		Accum. Deprec Store Equip.	-1,341.59	Store Equipmen
2200	Accounts Payable	Accounts Payable		
2310	Other Payables	FIT Payable	255.28	
2320		SIT Payable	124.72	
2330		Social Security Tax Payable	369.64	
2335		Medicare Tax Payable	86.44	
2340		FUTA Payable	6.15	
2350		SUTA Payable	194.15	
2400		Medical Insurance Payable	44.00	
2500		Sales Tax Payable	1,170.90	
3560	Equity	Maria Lindsay, Capital (RE)	42,268.02	
3580	Equity	Maria Lindsay, Drawing	24,200.00	Capital (RE)
4010	Revenue	Clock Sales		
4020	Itevenue	Watch Sales		
4200		Sales Returns & Allowances		
4300		Sales Discounts		
5010	Cost of Goods Sold	COGS-Clocks		
5020	Cost of Goods Sold	COGS-Watches		
5300	Expenses	Payroll Expense		
5305	Expenses	Taxes		
5310		Social Security Tax Expense		Taxes
5320		Medicare Tax Expense		Taxes
5330		FUTA Tax Expense		Taxes
5340		SUTA Tax Expense		Taxes
5410	+	Advertising Expense		
5420		Utilities Expense		
5430		Deprec. Expense - Office Equip.		
5440	+	Deprec. Expense - Store Equip.		
5450	+	Insurance Expense		
5460		Rent Expense		
5470		Office Supplies Expense		
5480	+	Telephone Expense		
5490		Bank Service Charge Expense		
5500		Miscellaneous Expense		

Classic Clocks Page 2

### CUSTOMER INFORMATION

All invoices are payable upon receipt.

Name: Address: Elaine Heras 1395 Salmon Street

DeKalb, IL 60115 815-666-2941

Phone:

Name:

Fax: Historical

Outstanding

Sales Invoice:

Credit Terms:

none

2% 10 net 30

Corporate

Headquarters

815-667-1254

\$3,520.80

Northwest Inns

1726 West 9th Street Address: DeKalb, IL 60115

Phone: Fax: Historical

815-667-1250 #5876, dated 12/28/95,

Outstanding Sales Invoice:

2% 10 net 30 Credit Terms:

Name: Address:

Jeremy Saling 1824 Coho Road

DeKalb, IL 60115

Phone: Fax:

815-663-5601

Historical Outstanding #5853, dated 12/18/95, \$1,490.40

Sales Invoice:

2% 10 net 30 Credit Terms:

Name:

Sandpoint School

District

Wendy Corbett

901 South Fourth Street Address:

DeKalb, IL 60115

Phone: Fax:

815-662-0078 815-662-0075

Historical

#5879, dated 12/29/95,

\$3,682.80 Outstanding

Sales Invoice:

Credit Terms: 2% 10 net 30

Name: Address: Classic Clocks II 5678 Karfre Road Sycamore, IL 60178

Phone:

815-667-5512 815-667-5515

Fax:

Historical none

Outstanding

Sales Invoice:

Credit Terms:

2% 10 net 30

### VENDOR INFORMATION

Name:

Contact: Address: True Time Clocks Alice Anderson 540 Belmont Avenue

Seattle, Washington 98125

Account: Phone:

XER2456 206-567-9045 206-567-9046 #7726, dated 12/29/95,

\$2,300.00

Fax: Historical Outstanding

Purchase Invoice:

Credit Terms:

Name:

Contact: Address: Clock Wholesalers

**Bob Mandel** 

8321 Trolly Street San Francisco,

California 94023 7890QS43 415-989-3522

Account: Phone: Fax:

Historical Outstanding

Purchase Invoice:

Credit Terms:

415-989-5400 none

Name:

Contact: Address: Joan Smith

83814

Account: Phone: Fax:

208-667-1034 208-667-1035

Historical Outstanding Purchase

Invoice:

Credit Terms:

Idaho Electric

1213 Sixth Avenue Coeur D'Alene, Idaho

8349Y

none

Name: Contact:

Address:

Sagle Office Supply

Account:

Phone: Fax:

Historical Outstanding Purchase Invoice:

Credit Terms:

Doug Parmentor 345 NW 3rd Street Austin, MN 55912

97ZXY4 507-667-2244 507-667-2245

none

Name: Contact:

Address:

Watch Works Wayne Sayles

12014 SW Canyon Road

Beaverton, Oregon

97005

Account: Phone:

Fax: Historical Outstanding

Purchase Invoice:

Credit Terms:

Q13579A 503-292-7869

503-292-7870 #6770, dated 12/22/95,

\$3.165.00

Name: Contact:

Address:

Tom Henning 5623 NW 4th Street Boston, MA 35576

Western Telephone

Account: Phone:

Fax: Historical Outstanding Purchase

Invoice: Credit Terms: 6876830ABC 874-667-9965 874-667-9582

none

## INVENTORY INFORMATION

Clock Inventories -

Asset: 1310 Clock Inventory Revenue: 4010 Clock Sales Expense: 5010 COGS-Clocks

Number	Description	Price	MIN	$\underline{\mathtt{QTY}}$	$\underline{\mathrm{Cost}}$
C100	Floor Clock	1,190.00	2	10	595.00
C200	Chime Clock	300.00	15	35	150.00
C300	Cuckoo Clock	350.00	5	15	175.00
C400	Mantle Clock	390.00	5	20	195.00
C500	School House	78.00	10	60	39.00
	Clock				

Watch Inventories -

Asset: 1320 Watch Inventory Revenue: 4020 Watch Sales Expense: 5020 COGS-Watches

Number	Description	<u>Price</u>	MIN	QTY	$\underline{\text{Cost}}$
W100	Silver Watch	118.00	4	12	59.00
W200	Gold Watch	330.00	5	31	165.00
W300	Brass Watch	98.00	10	25	49.00
W400	Bronze Watch	130.00	10	40	65.00
W500	Plastic Watch	40.00	25	100	10.00

### EMPLOYEE INFORMATION

Name:

Martha A.

Simmons

Address:

220 North Second

Street

DeKalb, IL 60115

SSN:

541-87-7865

Phone:

815-754-2450

Hire Date:

08/01/91

Pay Periods:

12

Yearly

\$20,700.00

Salary: Hourly 1:

Hourly 2: Tax Table:

Illinois

Withhold Allow:

Married Status:

State Allow:

Name:

Howard J. Welsh

Address:

230 NW Way

Cortland, IL 60112

SSN:

541-98-6652

Phone:

815-756-2411

Hire Date:

06/15/91

Pay Periods: 12

Yearly

\$18,000.00

Salary:

Hourly 1: Hourly 2: \$8.00 \$12.00

Tax Table:

Illinois

Withhold

Allow:

Status:

Single

State Allow:

## **HISTORICAL OUTSTANDING INVOICES**

Customer: Date: Terms:	Jeremy Saling 12/18/95 2% 10 net 30		Invoice: Total: Via:	5853 \$1,490.40 UPS	· · · · · · · · · · · · · · · · · · ·
Quantity	Item Code		<u>ription</u>		
10	W100		r Watch		
5	W500	Plast	ic Watch		

Customer:	Northwest Inns		Invoice:	5876
Date: Terms:	Corporate Headquarters 12/28/95 2% 10 net 30		Total: Via:	\$3,520.80 Federal Express
Quantity	Item Code	Desci	ription	
3	C200		e Clock	
3	C400		le Clock	
1	C100	Floor	Clock	

Customer: Date: Terms:	Sandpoint School Distri 12/29/95 2% 10 net 30		Invoice: Total: Via:	5879 \$3,682.80 US Mail	
Quantity	Item Code		<u>ription</u>		
10	C500		ol House Cl	ock	
10	W300		Watch_		
5	W200	Gold	Watch		

## HISTORICAL OUTSTANDING PURCHASE ORDERS

Vendor: Date: Expected:	Watch Works 12/22/95 01/05/96	PO: Total:	6770 \$3,165.00
Quantity	Item Code	<u>Description</u>	
15	W200	Gold Watch	
20	W500	Plastic Watch	
10	W300	Brass Watch	

Vendor: Date: Expected:	True Time Clocks 12/29/95 01/15/96	PO: Total:	7726 \$2,300.00	
Quantity	Item Code	<u>Description</u>		
2	C200	Chime Clock		

Classic Clocks
Page 6

### **TRANSACTIONS**

- 01/01/96 Increase the Petty Cash account balance by \$50.00.
- O1/10/96 Sold one gold watch (item #W200) to Elaine Heras as a cash sale. Received check #7124 in full payment. Print sales receipt #5882. Note that the program has automatically calculated the 8% sales tax on this invoice. Ship via Federal Express.
- 01/14/96 Receive invoice #6Y549 from True Time Clocks with all of the goods order on PO #7726 received in good condition and placed on the showroom floor.
- 01/14/96 Receive invoice #9X4X3 from Watch Works with all of the goods order on PO #6770 received in excellent condition. Watches were placed in the storage room.
- 01/18/96 Issue check #2840 to True Time Clocks in full payment of invoice #6Y549.
- 01/18/96 Issue check #2841 to Watch Works in full payment of invoice #9X4X3.
- 01/20/96 Received check #765 from Jeremy Saling in the amount of \$1,460.59 in full payment of invoice #5853.
- 01/23/96 Make a deposit of all checks on hand.
- 01/27/96 Received invoice #C1011 from Clock Wholesalers in the amount of \$1,190.00 for the purchase of two floor clocks (C100). Items received in good condition.
- 01/31/96 Issue a payroll check Martha Simmons for her regular salary, deducting \$22.00 for medical insurance. Print check #2841. Then, pay Howard J. Walsh who has no additional deductions.

#### REPORTS

- Chart of Accounts
- Income Statement
- Balance Sheet
- Customer Statements

### FIRELIGHT STOVES

Computerizing a Manual Accounting System

#### **Directions**

You have been asked by a company to computerize the accounting information system utilizing QuickBooks Pro.

Company Profile

Firelight Stoves is a sole proprietorship owned by Janice Cook in Sycamore, Illinois. Janice operates a retail store selling various types of stoves. She has maintained a manual accounting system for her business and would now like to convert to a computerized accounting system beginning January 1, 1996. Janice has selected QuickBooks Pro 3.1 as the most appropriate software for her business. As a merchandising business with employees, Janice plans to use the General, Receivables, Payables, Inventory, and Payroll of the program.

### **Company Information**

Company Name:	Firelight Stoves
Address:	2000 East Evergreen
	Sycamore, IL 60178
Federal ID:	93-6531096
State ID:	39128
Fiscal Start Date:	January 1, 1996
Sales Tax:	8%
SUTA Rate:	3.5
FUTA Rate:	0.8
Next Check Number:	1706
Next Invoice Number:	5882
Default Invoice	Thank You for Keeping Warm with Firelight
Comment:	Stoves!
Next Purchase Order	47727
Number:	

Page 1

## **Chart of Accounts**

Trans	<u>Description</u>	<u>Balance</u>	Subaccount to:
lype	Cash	\$5,674.32	
Bank	Petty Cash	100.00	
Pagirahla	Accounts Receivable		
	Inventory	33,523.50	
Other Assets	Office Supplies	1,962.43	
	Prepaid Insurance	500.00	
m: 1 A A	Office Equipment	4,800.00	
Fixed Asset	Accum. Deprec Office Equip.	-2,747.21	Office Equipment
	Store Equipment	1,500.00	
	Accum. Deprec Store Equip.	-830.55	Store Equipment
	Accounts Payable		
Accounts Payable	FIT Payable	264.43	
Other Payables	Social Security Tax Payable	377.20	
	Medicare Tax Payable	95.38	
	FUTA Payable	6.98	
	SUTA Payable	134.40	
	Sales Tax Payable		
	Opening Balance Equity	XXX	
Equity	Owner Drawing		Opening Balance Equity
	Retained Earnings		
Revenue	Sales		
Revenue	Sales Returns & Allowances		
	Sales Discounts		
Cost of Goods Sold	Cost of Goods Sold		
Expenses	Taxes		
Ехрепаса	Payroll Expense		
	Bank Service Charge		
	Advertising Expense		
	Utilities Expense		
	Deprec. Expense - Office Equip.		
	Deprec. Expense - Store Equip.		
	Insurance Expense		
	Rent Expense		
	Office Supplies Expense		
	Miscellaneous Expense		

Firelight Stoves

### CUSTOMER INFORMATION

Name:

Alice White Designs

Name:

Construction Contractors

Address:

3987 West Evergreen Sycamore, IL 60178

Address:

10234 NW 99th Street

DeKalb, IL 60115

Phone:

815-236-9712

Phone: Fax:

815-783-5533

Fax:

Historical Outstanding #5825, dated 11/2/95,

Historical

#5672, dated 06/09/95. \$3,024.00

\$5.211.00

Outstanding Sales Invoice:

Credit Terms: 2% 10 net 30

Sales Invoice:

2% 10 net 30 Credit Terms:

Nancy Powers,

Address:

Name:

1643 SE 31st Street Cortland, IL 60112

Creative Housing

Address:

Name:

Interiors 1824 SE Salmon Street

DeKalb, IL 60115

Phone:

815-723-2370

Phone: Fax:

815-236-7721

\$2.808.00

Fax:

Historical Outstanding

Sales Invoice:

#5876, dated 11/28/95,

\$1,026.00

Historical

#5821, dated 10/31/95,

Outstanding

Sales Invoice:

Credit Terms: 2% 10 net 30 Credit Terms: 2% 10 net 30

Name: Address: Northwest Warmth 3122 West 9th Street

Sycamore, IL 60178

Phone:

815-457-1443

Fax:

Historical

#5879, dated 11/29/95,

Outstanding Sales Invoice: \$2,673.00

Credit Terms:

2% 10 net 30

### VENDOR INFORMATION

Name:

Phone:

PO:

Address:

Cascade Electric 890 Stark Avenue

DeKalb, IL 60115

815-232-1292

Account: Historical

Outstanding

08321

none

Name: Address: Contractor's Gazette 977 SW 11th Avenue Sycamore, IL 60178

Phone: Account: 815-223-3611 FIRSTOV03 none

Historical Outstanding

PO:

2% 10 net 30 Credit Terms:

Credit Terms:

2% 10 net 30

## VENDOR INFORMATION, continued

Name:	Ona Johnson Barns	Name:	Federal Reserve Bank Vancouver Branch
Address:	3219 West 99th Street DeKalb, IL 60115	Address:	PO Box 3436 Oregon, IL 68661
Phone:	815-457-2312	Phone:	815-226-1149
Account:	79834X	Account:	OPQ23046
Historical	none	Historical	none
Outstanding		Outstanding	
PO:		PO:	2% 10 net 30
Credit Terms:	2% 10 net 30	Credit Terms:	2% 10 net 30
Name: Address:	Housewares 345 California Street San Francisco, IL	Name: Address:	Gommel Corporation 1679 Timothy Lane Cortland, IL 60112
Phone:	64023 815-989-3412	Phone:	815-222-7854
Account:	976437	Account:	A00Y43
Historical	#6770, dated 11/22/95,	Historical	none
Outstanding	\$1,494.00	Outstanding	
PO:		PO: Credit Terms:	2% 10 net 30
Credit Terms:	2% 10 net 30	Credit Terms.	2% 10 net 30
Name: Address:	National Stove 4970 Stove Road Genoa, IL 67895	Name: Address:	Pacific Office Supply 3638 Main Street Rochelle, IL 65554
Phone:	815-222-9543	Phone:	815-645-1234
Account:	8789805	Account:	15739423
Historical Outstanding	none	Historical Outstanding PO:	none
PO: Credit Terms:	2% 10 net 30	Credit Terms:	2% 10 net 30

## VENDOR INFORMATION, continued

Rocky Mountain	Name:	Stove Wholesalers
neading 120 Summit Blvd. New York, NY 98664	Address:	3295 North Field Denver, Colorado 80227
718-246-8612 A60123D none	Phone: Account: Historical Outstanding PO:	719-423-9997 QLPA4678 #8962, dated 11/29/95, \$1,636.50 2% 10 net 30
2% 10 net 30	Credit Terms.	270 TO NEU CC
Walker's Woodstove	Name:	Illinois Dept. of Revenue
345 Spokane Road Seattle, Washington 98125	Address:	PO Box 14800 Springfield, IL 62777
206-345-4511 FLS9234 #7226, dated 11/29/95, \$937.50	Phone: Account: Historical Outstanding PO: Credit Terms:	309-378-3390 9432167-IL-244 none 2% 10 net 30
2% 10 net 30	Cledit leims.	270 20 2100
Western Telephone 4298 10th Avenue Vancouver, Washington 98665		
206-222-3500 084678 none		
2% 10 net 30		
	Heating 120 Summit Blvd. New York, NY 98664 718-246-8612 A60123D none  2% 10 net 30  Walker's Woodstove 345 Spokane Road Seattle, Washington 98125 206-345-4511 FLS9234 #7226, dated 11/29/95, \$937.50  2% 10 net 30  Western Telephone 4298 10th Avenue Vancouver, Washington 98665 206-222-3500 084678 none	Heating 120 Summit Blvd. New York, NY 98664  718-246-8612 A60123D none  2% 10 net 30  Walker's Woodstove  345 Spokane Road Seattle, Washington 98125 206-345-4511 FLS9234 #7226, dated 11/29/95, \$937.50  Western Telephone 4298 10th Avenue Vancouver, Washington 98665 206-222-3500 084678 none  Address:  Address:  Address:  Phone: Account: Historical Outstanding PO: Credit Terms:

## **INVENTORY INFORMATION**

Clock Inventories -

Asset: Inventory Revenue: Sales

Expense: Cost of Goods Sold

Number	Description	Price	MIN	QTY	$\underline{\mathrm{Cost}}$
1	Glow Stove	650.00	10	39	282.00
9	Mini-Glow Stove	175.00	5	11	75.50
2	Little Spark Stove	225.00	5	10	84.00
3	Blaze Stove	825.00	15	33	375.00
4	Cook Stove	950.00	10	25	425.00
5	COOK Broke	200.00			

## EMPLOYEE INFORMATION

Name:

Theresa L. Meyer

Address:

Phone:

815-252-8931

SSN: Birthdate:

08/29/54

Hire Date: Pay Periods:

12

Yearly Salary:

Hourly 1:

Hourly 2:

Tax Table:

Withhold

Allow:

Status:

PO Box 9800

DeKalb, IL 60115

541-48-2002

06/01/91

\$22,200.00

Illinois

Married

Name:

Address:

Kevin E. Zenner

2302 K Street Sycamore, IL 60178

815-206-2783

Phone: 542-34-5331 SSN: 07/02/59

Birthdate: 02/01/91 Hire Date:

Pay Periods: 12

Yearly

Salary:

Hourly 1: 8.00 10.50 Hourly 2:

Tax Table: Withhold

Illinois

Allow:

Status:

Single

# HISTORICAL OUTSTANDING INVOICES

Customer: Date: Terms:	Construction Contractor 06/09/95 2% 10 net 30	S	Invoice: Total: Via:	5672 \$3,024.00 UPS	
Quantity	Item Code		<u>ription</u> Spark Stov		
$\frac{4}{2}$	3   5	Cook			

Customer: Date: Terms:	Nancy Powers Interiors 10/31/95 2% 10 net 30		Invoice: Total: Via:	5821 \$2,808.00 UPS	
	Item Code		ription_		{
4	1	Glow	Stove		

Customer: Date: Terms:	Alice White Designs 11/02/95 2% 10 net 30		Invoice: Total: Via:	5825 \$5,211.00 UPS	·
Quantity	Item Code		<u>ription</u>		
3	1		Stove		
10	2		Glow Stove		
	3	Little	Spark Stov	e	
5					

Customer: Date: Terms:	Creative Housing 11/28/95 2% 10 net 30	Invoice: Total: Via:	5876 \$1,026.00 UPS	
Quantity	Item Code	<u>Description</u>		
1	5	Cook Stove		

Customer: Date: Terms:	Northwest Warmth 11/29/95 2% 10 net 30	Invoice: Total: Via:	5879 \$2,673.00 UPS
Quantity	Item Code	Description	
3	4	Blaze Stove	

# HISTORICAL OUTSTANDING PURCHASE ORDERS

Vendor: Date: Expected:	Stove Wholesalers 11/29/95 12/15/95	PO: Total:	8962 \$1,636.50
Quantity	Item Code	<u>Description</u>	
5	1	Glow Stove	
3	2	Mini-Glow Stove	

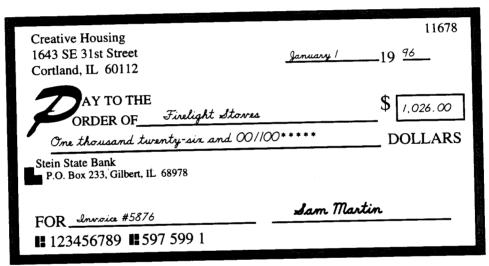
Vendor: Date: Expected:	Walker's Woodstove 11/29/95 12/05/95	PO: 7226 Total: \$937.50
Quantity	Item Code	<u>Description</u>
3	2	Mini-Glow Stove
4	3	Little Spark Stove
1	4	Blaze Stove

Vendor: Date: Expected:	Housewares 11/22/95 12/22/95	PO: 6770 Total: \$1,494.00
Quantity	Item Code	Description
3	3	Little Spark Stove
5	1	Glow Stove

Firelight Stoves Page 8

### **TRANSACTIONS**

- 01/05/96 Receive all goods ordered from Housewares on PO #6770. Invoice number is HW3542. All goods were received in excellent condition.
- 01/05/96 Prepare an invoice (#5882) to Nancy Powers Interiors for the sale of 5 Blaze Stove (Item #4) at the regular sales price and sales tax percentage.
- 01/05/96 Issue a check to Gommel Corporation for rent during the month of January for \$750.00.
- 01/05/96 Prepare credit memo #5883 to Northwest Warmth for the return of 1 Little Spark Stove (Item #3) for \$225.00 plus sales tax.
- 01/05/96 Receive check #11678 from Creative Housing for payment of invoice #5876.



- 01/05/96 Prepare debit memo #27 to Housewares for the return of 1 Glow Stove (Item #1) for a total of \$282.00.
- 01/05/96 Receive goods and invoice #8541 in association with PO #7226 from Walker's Woodstove.

Firelight Stoves

01/05/96 Receive invoice #4896 from Rocky Mountain Heating. Also received 10

Mini-Glow Stoves.

Mo		Heating	Invoice #: Date: : Finelight Sta 2000 East & Sycamore.	ol-02-96 mes wergreen
Code	Quantity	Description	Unit Price	Amount
3862	10	Mini-Blow Stone	\$75.50	\$755.00
		Approved - J.C.	***************************************	
Shipp	oing: FOB	Destination Terms: 2% 10 n/S	30 TOTAL	\$755.00

01/05/96 Issue a check in the amount of \$937.50 to Walker's Woodstoves in payment of invoice #8541. Apply the applicable discount.

01/05/96 Receive invoice #43X243 from Stove Wholesalers in association with PO #8962. Also received the goods in excellent condition.

01/05/96 Enter weekly cash sales, approved by J.C. Sold one item #2, two item

#3s, and three #5s plus 8% sales tax.

	RELI Week			Number:	eek ending:	48 OI-05-96 J. C.
Item	QTY	Unit	Description		Unit Price	Amount
#2 #3 #5	/ 2 3	Each Each Each	Mini-Elow St Little Spark S. Cook Stove Subtotal 8% Sales Tar		\$175.00 225.00 950.00	\$175.00 . 450.00 2,850.00 3,475.00 . 278.00
Cor	nments:				TOTAL	\$3,753.00

01/05/96 Make the weekly deposit. Print all checks, invoices, purchase orders, and credit memos.

Page 10 Firelight Stoves

- 01/12/96 Prepare an invoice to Creative Housing for the sale of 1 Cook Stove (Item #5) at our regular sales price and sales tax percentage.
- 01/12/96 Issue a check in the amount of \$1,603.77 to Stove Wholesalers in payment of invoice #43X243. Be sure to apply the applicable discount.
- 01/12/96 Receive check #6221 from Northwest Warmth for payment of invoice #5879. Check was written for \$2,673.00

Northwest Warmth		6621
3122 West 9th Street	January 9	-19 <del>96</del>
Sycamore, IL 60178		
AY TO THE		\$ 2,673.00
ORDER OF Firelight Stoves		2,000
Two thousand six hundred seventy	i-three and 00/100	_ DOLLARS
Stein State Bank P.O. Box 233, Gilbert, IL 68978		
Invoice #5879 and Credit Memo		
FOR \$243.00	Cathy Beaso.	n
<b>■</b> 123456789 <b>■</b> 597 599 1		

01/12/96 Receive invoice #8571 from National Stove. Also received 5 Arc Burner Stoves.

National Stove 4970 Stove Road Genoa, IL 67895		Unit Price: \$525.00	Unit Price: \$525.00 Minimum: 3 TO: Firelight Stores		
Code	Quantity	Description	Unit Price	Amount	
9120	5 Each	Arc Burner Stove	\$ 250.00	\$1,250.00	
		Арргомеd - J. C.			
Shipping: FOB Distination Terms: 2% 10 71/30 TOTAL \$1,250.					

- 01/12/96 Prepare a debit memo to National Stove for the return of 1 Arc Burner Stove (Item #6) for a total of \$250.00.
- 01/12/96 Receive invoice #7213 from Contractor's Gazette for Trade Show Advertising for \$400.00. This invoice is marked payable upon receipt.

01/12/96 Enter weekly cash sales, approved by J.C. Sold one item #6 and two item

#3s plus 8% sales tax.

FIRELIGHT STOVES Weekly Cash Sales Summary			Number: 49 For the week ending: 0/-12-9 Approved by: 9. C.		01-12-96	
Item	QTY	Unit	Description		Unit Price	Amount
#6	2	Each Each	Arc Burner St. Little Spark & Subtotal 8% Sales Tan	Itove	\$525.00 225.00	\$ 525.00 450.00 975.00 78.00
Comments:			TOTAL	\$1,053.00		

- 01/12/96 Receive office supplies and invoice #8267 from Pacific Office Supply. Invoice totaled \$316.80 and is payable upon receipt.
- 01/12/96 Prepare an invoice to Construction Contractors for the sale of 1 Arc Burner Stove (Item #6) at the regular sales price and sales tax percentage.
- 01/12/96 Make the weekly deposit. Print all checks, invoices, purchase orders, and credit memos.
- 01/19/96 Receive 10 Little Spark Stoves from Walker's Woodstove with invoice #7681 for \$840.00.
- 01/19/96 Issue a check in the amount of \$755.00 to Rocky Mountain Heating in payment of invoice #4896.
- 01/19/96 Purchase 6 Arc Burner Stoves at \$250.00 each from a newly approved vendor and received invoice #Z721. Shipping was F.O.B. destination and terms were net 30. Account number assigned is: 436578

Gas Stoves Limited 351 Geary Street Sandwich, IL 60578 Phone: 815-989-4343

01/19/96 Issue a check to the Federal Reserve Bank for the payment of the December payroll liabilities and taxes as follows:

FIT Payable	<b>\$264.43</b>
Social Security Tax Payable	377.20
Medicare Tax Payable	<u>95.38</u>
Total amount due	\$737.01

- 01/19/96 Issue a check to the Illinois Department of Revenue for the payment of the December sales tax in the amount of \$1,110.38.
- 01/19/96 Receive check #11982 from Creative Housing for invoice #5883. Check total is \$1,005.48 and the memo designates the \$20.52 discount taken advantage of.
- 01/19/96 Create a new "Land" account in the chart of accounts.
- 01/19/96 Prepare an invoice to Alice White Designs for the sale of 1 Cook Stove at the regular sales price and sales tax percentage.
- 01/19/96 Enter weekly cash sales on summary #50, approved by J.C. Sold one item #4 at and two item #1s plus 8% sales tax.
- 01/19/96 Issue a check to Janice Cook in the amount of \$1,100.00 as a January draw.
- 01/19/96 Make the weekly deposit. Print all checks, invoices, purchase orders, and credit memos.
- 01/26/96 Prepare debit memo to Walker's Woodstoves for the return of 2 Little Spark Stoves in the amount of \$168.00 purchased on invoice #7681.
- 01/26/96 Prepare an invoice to a new customer, Atlas Remodeling, 310 Long Avenue, Schaumburg, IL 69778, phone: 206-425-9660, for the sale of 2 Mini-Glow Stoves at the regular sales price and sales tax percentage. Terms are net 30.
- 01/26/96 Issue a check in the amount of \$1,212.00 to Housewares in payment of invoice #HW3542 less credit received for items returned 01/05/96.
- 01/26/96 Prepare credit memo #5888 to Atlas Remodeling for the return of 1 Mini-Glow Stove (Item #2) for \$175.00 plus sales tax.
- 01/26/96 Receive 4 Cook Stoves from Rocky Mountain Heating with invoice #4982 which totals \$1,700.00. Terms are net 30.
- 01/26/96 Receive office supplies and invoice #8419 from Pacific Office Supply. Invoice totaled \$102.05 and is payable upon receipt.
- 01/26/96 Receive invoice #8627 from National Stove totaling \$168.00 with 2 Little Spark Stoves.
- 01/26/96 Enter weekly cash sales on summary #51, approved by J.C. Sold one item #4 plus 8% sales tax.
- 01/26/96 Receive invoice #7362 from Contractor's Gazette for Trade Show Advertising for \$700.00. This invoice is marked payable upon receipt.

Firelight Stoves Page 13

- 01/26/96 Sold 7 item #1s at the Trade Show plus 8% tax. Cash sale total was \$4,914.00.
- 01/26/96 Issue a check in the amount of \$655.20 to Walker's Woodstoves in payment of invoice #7681 less credit earned for items returned.
- 01/26/96 Make the weekly deposit. Print all checks, invoices, purchase orders, and credit memos.
- 01/31/96 Prepare an invoice to Northwest Warmth for the sale of 1 Arc Burner Stove (Item #6) at the regular sales price and sales tax percentage.
- 01/31/96 Receive \$189.00 in the form of check #768 from Atlas Remodeling. Memo states that the total is for invoice #5887 less credit memo #5888.
- 01/31/96 Receive invoice #Z894 for \$425.00 from Gas Stoves Limited. Also received the cook stove that was ordered.
- 01/31/96 Pay the Western Telephone bill. Total current charges on invoice #69-201 are \$102.48. Invoice date is 01-29-96. Charge to Utilities Expense.
- 01/31/96 Pay Contractor's Gazette for all outstanding invoices.
- 01/31/96 Pay Cascade Electric for January service. Invoice #K010023 is due on 02-04-96 for \$98.65. Invoice date is 01-30-96.
- 01/31/96 Enter weekly cash sales on summary #52, approved by J.C. Sold two item #2s and 1 item #5 plus 8% sales tax.
- 01/31/96 Issue a check to replenish Petty cash. Reconciliation shows:

Office Supplies	\$56.20
Miscellaneous Expense	16.12
Janice Cook, Drawing	25.00
Total	97.32

01/31/96 Please issue payroll checks as follows:

Check #	Employee	Salary	Hourly Rate	Hours
1719 1720	Theresa Meyer Kevin Zenner	\$1,850.00	\$8.00	154

01/31/96 Make the month-end deposit. Print all checks, invoices, purchase orders, and credit memos.

Firelight Stoves

# 01/31/96 Reconcile the Bank Statement

CHECKS		OTHER C	REDITS	DEP	OSITS
Number 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718	Amount \$750.00 918.75 1,603.77 755.00 737.01 1,110.38 1,100.00 1,212.00 655.20 102.48 1,100.00 98.65 97.32	Service Charge: 01-31 \$3	35.00	Date 01-05 01-12 01-19 01-26	
Balar Addi Dedu	Reconciliation ace per Bank actions actions actions	\$13,009.24 + \$	Balance per Book Additions Deductions Adjusted Balance	+ <u>-</u> - <u>-</u>	,942.97

## **REPORTS**

- Chart of Accounts
- Income Statement
- Balance Sheet
- Customer Statements
- Cash Reconciliation Statement

- A/R Aging Summary
  Summary Sales by Item
  Purchase by Item Summary listed by Vendor

# **EDI**



Minimizing the Paper Chase

# **Electronic Data Interchange (EDI)**

According to Kenneth C. and Jane P. Laudons' book entitled: Management Information Systems: Organization and Technology, EDI is best defined as:

Electronic Data Interchange (EDI): Direct computer-to-computer exchange between two organizations of standard business transaction documents.

Transaction Documents may include invoices, bills of lading, or purchase orders. EDI saves money and time because transactions can be transmitted from one information system to another through a telecommunications network, eliminating the printing and handling of paper at one end and inputting of data at the other. EDI may also provide strategic benefits by helping a firm "lock in" customers making it easier for customers or distributors to order from them rather than from competitors.

EDI differs from electronic mail in that it transmits an actual structured transaction (with distinct fields such as the transaction date, transaction amount, sender's name, and recipient's name) as opposed to an unstructured text message such as a letter. For EDI to work properly, four key requirements must be addressed:

### Transaction Standardization.

Participating companies must agree on the form of the message to be exchanged. Transaction formats and data must be standardized. The American National Standards Institute (ANSI) has developed the X.12 data interchange protocol as a generic, flexible business data interchange standard for EDI, but specific industries have adopted multiple EDI standards. This can raise problems for interorganizational networking, since manufacturing, retail, and banking standards may collide.

### Translation Software.

Special software must be developed to convert incoming and outgoing messages into a form comprehensible to other companies.

### Appropriate "Mailbox" Facilities.

Companies using EDI must select a third-party, value-added network with mailbox facilities that allow messages to be sent, sorted, and held until they are needed by the receiving computer. For example, the insurance field generally uses Information Network, and office systems tend to use GE Information Services.

### Legal Restrictions.

To comply with legal requirements, certain transactions require "writing," a "signature," or the "original document" in hard copy form. (EDI messages do not, for example, deal with warranties or limitations of liability and other conditions of doing business typically contained in hard-copy business documents.) Parties must agree on the means of verifying that messages are authentic and complete according to agreed upon protocol, the point in the transaction when the contract between the parties goes into effect, error-checking procedures, and the level of network security to prevent unauthorized access and use of the system.

# Why Should a Company Use EDI?

### SAVE TIME AND MONEY

EDI is a tremendous cost- and time-saving system. Since the transfer of information from computer to computer is automatic, there is no need to rekey information. With no data entry, the chance for error drops to near zero. RJR Nabisco estimates that processing a paper purchase order costs the company \$70. Processing an EDI purchase order reduces the cost to a mere 93 cents.

### IMPROVE CUSTOMER SERVICE

EDI is also a method of improving customer service. The quick transfer of business documents and marked decrease in errors allow you to fill orders faster. KMart and other retailers have implemented a program called Vendor Stock Replenishment System (VSR). VSR requires that vendors maintain appropriate inventory levels in all stores. With VSR, you don't risk having the store run out of your product while you wait for a purchase order. You send stock as your EDI system reports it is necessary and automatically bill the client. It cuts days, even weeks, from the order fulfillment cycle and ensures that your product is always on the shelf.

#### END REPETITION

EDI documents are stored in a mailbox. You can look at the documents in your mailbox at any time. If your customer wants a copy of an invoice, instead of calling you they simply check their mailbox. Imagine the time savings from not having to copy and fax/mail copies of invoices or purchase orders.

### EXPAND YOUR CUSTOMER BASE

Many large manufacturers and retailers are ordering their suppliers to institute an EDI program. When evaluating a new product to carry or a new supplier to use, the ability to do EDI is a big plus. Keep in mind, too, that these companies tend to stop doing business with suppliers who don't comply with EDI.

There are other uses for EDI as well. Universities use EDI to exchange transcripts quickly. Auto manufacturers use EDI to transmit large, complex engineering designs created on specialized computers. Large multinational firms use EDI to communicate between locations.

### MORE INFORMATION ON EDI

http://www.premenos.com/ Visit

Contact: Accredited Standards Committee X12 (ASC X12)

1800 Diagonal Road, Suite 355

Alexandria, VA 22314 Phone: 703/548-7005

# Electronic Data Interchange (EDI) CASE STUDY

This case study was taken from Kenneth C. and Jane P. Laudons' book entitled: <u>Management Information Systems</u>: <u>Organization and Technology</u>. It is found on page 299–300.

# Should All Firms Move to EDI?

Is what's good for General Motors, Chrysler, and Sears good for their suppliers? All of these firms are insisting that their suppliers use electronic data interchange with them, hoping to eliminate paper and delays in the ordering process.

Sears was even willing to supply smaller vendors with limited resources with EDI translation software, training, and access to the Sears Communication Company network to speed the process. The only expense for the vendor was transportation, lodging, and the cost of an IBM-compatible PC that met specifications. The vendor had 90 days to move its purchase order, shipping notice, invoice, and functional acknowledgment transactions to EDI.

Some analysts view these highly ambitious EDI programs as unrealistic. Requiring trading partners to do EDI creates pressure and hardship, and many of the presumed benefits - such as a reduction of staff and errors - are not easy to prove. Other companies have been more lenient than GM, Chrysler, and Sears in that they use EDI with a smaller percentage of vendors.

EDI cuts down on repeated data entry and manual handling of paper transactions. Some 25 percent of the cost of processing business transactions is related to basic data entry and associated tasks. EDI can potentially reduce expenses and human error, as well as shorten transaction cycle times.

The Harper Group, a San Francisco-based freight forwarding company, found EDI especially valuable for tracking two-way movement of orders and monitoring the status of the shipments. The Harper Group is a holding company that owns 12 specialized transportation businesses and employs more than 3500 people in more than 300 branches in 43 countries. Handling international shipments is very information intensive.

EDI helped Harper to refocus its staff to take on new types of jobs. While the company doubled in its revenue between 1989–1992, its employees can spend more time servicing customers and less time on internal management. Two people on the accounting staff in San Francisco can do what fifteen used to do in a remote office, saving \$400,000 annually. The initial investment was only \$40,000 in software and \$100,000 in hardware for the EDI system - a 10-to-1 return.

As companies move to adopt EDI, they must consider several factors if they are to achieve a meaningful implementation. EDI, more than any other technology or

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business strategy, requires a team approach between users from the financial area and technical systems specialists. Experts caution against adopting EDI in a piecemeal fashion. If a company still has to re-enter some of its transaction data manually, this procedure interrupts a smooth, seamless data flow.

To eliminate data entry, companies must first standardize. They must standardize the form of their purchase order by examining their business documents with trading partners and establishing a set of standards to use with all of them. Once a level of standards is determined, a pilot program should be initiated to deal with customer and supplier workflow to determine the optimal point to issue a purchase order and a material release. If a company is not using standard X.12 transaction sets, the information is provided by a printout that is manually audited, edited, and finally keyed into a computer. The manual reentering of data interrupts a smooth flow, and the translation software has to be integrated into a company's business application.

EDI requires firms to alter their company-to-company business dealings. If a single company implements EDI in isolation, it becomes an exercise in futility and a wasted investment unless a meaningful portion of its trading partners join in. Cooperation among companies, suppliers, and customers is required.

Steven J. Olden, the vice president of information systems at The Harper Group, notes that EDI is not a solution by itself. It needs to be integrated with other systems in the partners' computers—finance, manufacturing, inventory, purchasing, and so on. Instead of thinking about how to send transactions back and forth, the company has to think about the entire process from both ends. Firms often underestimate the amount of money it takes to implement EDI.

Large companies and customers have accepted EDI as a way of life. The key is to get down to the smaller companies, who tend to be reactive rather than proactive in implementing EDI. There is often a lack of understanding at the management level about what EDI can do for a company and where they can go with it. Implementing EDI requires people and money resources plus management support from the top down. The information systems department has to worry about the hardware, software, and communications to integrate EDI into the business environment.

The benefits of international EDI are even greater than for using EDI domestically. There is probably three times as much paperwork involved in international shipments as in domestic, so that the efficiencies of EDI are magnified severalfold. Moving products from country to country requires that forms be filled out for customs clearance and delivery of each shipment. In many countries, EDI can move the information in advance of the goods, completing the paperwork before a plane lands.

However, using EDI for international business raises additional concerns. There is no worldwide standard for sending business transactions electronically. ANSI X.12 is the accepted U.S. standard, but Europe's dominant standard is Edifact. Most analysts say that supporting two standards is less of a problem than is

solving the business issues that have to be negotiated—which transactions to receive, how often, which mailbox to send to, and deciding who is going to pay for what.

#### Sources:

Cashin, Jerry. "Business Transactions Take Electronic Route." Software Magazine, December 1991.

Frye, Colleen. "EDI Beginning to Stretch National, Business Bounds." Software Magazine, May 1992.

Glatzer, Hal. "EDI: The Information-Intensive Way to Move Cargo." Computerworld, September 7, 1992.

# **Case Study Questions**

- 1. What management, organization, and technology factors should companies consider in assessing whether or not to adopt EDI?
- 2. What are the major obstacles to EDI implementation?
- 3. If you were a supplier for General Motors, Chrysler, or Sears, how would you feel about using their EDI system? Why?

EDI

# 820 - Payment Order/Remittance Advice EDI Segment Information

Set Number - 820 Set Name - Payment Order/Remittance Advice Functional Group - RA

This Draft Standard for Trial Use contains the format and establishes the data contents of the Payment Order/Remittance Advice Transaction Set (820) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to make a payment or send a remittance advice. This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee through a financial institution or through a third party agent.

# 820 Payment Order/Remittance Advice Segment Hierarchy

ISA			Interchange Start
ISA	GS		Group Start
	ab	ST	Transaction Set Header
		D1	BPR Beginning Segment for Payment Order/
			Remittance Advice
			NTE Note/Special Instruction
			TRN Trace
			CUR Currency
			REF Reference Numbers
			DTM Date/Time Reference
			N1 Name
			N2 Additional Name Information
			N3 Address Information
			N4 Geographic Location
			REF Reference Numbers
			PER Administrative Communications Contact
			ENT Entity
			ADX Adjustment
			NTE Note/Special Instruction
			PER Administrative Communications Contact
			DTM Date/Time Reference
			ITA Allowance, Charge, or Service
			TXI Tax Information
			SLN Subline Item Detail
			SLN Subline Item Detail NTE Note/Special Instruction
			TXP Tax Payment
			LX Assigned Number
			REF Reference Numbers
			TRN Trace
			NM1 Individual or Organizational Name
			REF Reference Numbers
			G53 Maintenance Type
			AIN Income
			QTY Quantity
			DTP Date or Time or Period
			INV Investment Vehicle Selection
			DTP Date or Time or Period
		$\mathbf{SE}$	Transaction Set Trailer
	$\mathbf{G}\mathbf{E}$		Group End
IEA	A		Interchange End

# 820 Payment Order/Remittance Advice Segment Information

### ST Transaction Set Header

Mandatory Segment

Element	Element #	Att.	Description	Qualifiers/Definition
ST01	143	M	Transaction Set Identifier Code	820 X.12.4 Payment Order/Remittance Advice
ST02	329	М	Transaction Set Control Number	ID Control # that must be unique within the transaction set functional group assigned by the originator for a transaction set.

# BPR Beginning Segment for Payment Order/Remittance Advice Mandatory Segment

Element	Element #	Att.	Description	Qualifiers/Definition
BPR01	305	M	Transaction Handling Code	A = Off Invoice (deduction from original
BPKUI	303	141	Trunsaction 22mics.	invoice)
			D = Make Payment Only	
		l .		L = Apply on Account
		1		Q = Credit Due
		1		T = Adjustment Requested
BPR02	782	M	Monetary Amount	Monetary Amount
BPR03	478	M	Credit/Debit Flag Code	C = Credit
DIKUJ	1770	1		D = Debit
BPR04	591	М	Payment Method Code	Code Identifying the method for the
DFK04		""	Tay mone areas	movement of payment instructions.
	1			ACH = Automated Clearing House
		1		CHK = Check
		l l		REV = ACH Reversal
BPR05	812	10	Payment Format Code	Code identifying the payment format to be
DI KOS	1012	ľ		used
				CCD = Cash Concentration/Disbursement
i	l l			PBC = Commercial/Corporate Check
BPR14	896	0	Account Number Qualifier Code	Code indicating type of bank account or
DI KI		1	1	other financial asset
		ł		01 = Time Deposit
	1	ŀ	1	05 = Stock
		ŀ	1	DA = Demand Deposit
				RD = Return items on Demand Deposit
	1	ļ	<b>\</b>	Account
ļ		1	Į.	RS = Return Items on Savings Account
				SG = Savings
BPR15	508	C	Account Number	Account Number set up to designate
		<u> </u>		trading parties
BPR16	513	0	Effective Entry Date	Date the originating company intends for
	1			the transaction to be settled.

BPR Beginning Segment for Payment Order/Remittance Advice (Continued)

Mandatory Segment

Manda	Mandatory Segment Code identifying the business reason for						
BPR17	1048	0	Business Function Code	Code identifying the business reason for this payment VEN = Vendor Payment			
BPR20	896	O	Account Number Qualifier Code	Code indicating type of bank account or other financial asset  01 = Time Deposit  05 = Stock  DA = Demand Deposit  RD = Return items on Demand Deposit  Account  RS = Return Items on Savings Account  SG = Savings			
BPR21	508	C	Account Number	Account Number set up to designate trading parties			

# NTE Note/Special Instruction Optional Segment

	I Segmen		Description	Qualifiers/Definition
<u>Element</u>	Element #	Att.	<u>Description</u>	
NTE01	363	0	Note Reference Code	Code identifying the functional area or purpose for which the note applies  ADD = Additional Information  DOD = Description of Damage  PAY = Payables  PRI = Priority  TRS = Quality Information
NTE02	3	M	Free Form Message	Free-form Text

#### TRN Trace

Optional Segment

	n Segmen	$\overline{}$	Description	Qualifiers/Definition
Element TRN01	Element # 481	Att. M	Trace Type Code	1 = Current Transaction Trace Numbers 2 = Referenced Transaction Trace Numbers
TRN02	127	M	Reference Number	Reference number or identification number as defined for a particular Transaction Set or as specified by the Reference Number Qualifier
TRN03	509	0	Originating Company Identifier	A unique identifier designating the company initiating the funds transfer instructions. The first character is a one-digit ANSI identification code designation (ICD) followed by the nine-digit identification number which may be an IRS employer identification number (EIN) data universal numbering system (DUNS) or a user assigned number. The ICD for and EIN is 1 DUNS is 3 user assigned number is 9.
TRN04	127	0	Reference Number	Reference number or identification number as defined for a particular Transaction Set or as specified by the Reference Number Qualifier

CUR Currency
Optional Segment

	l Segmen		-	Qualifiers/Definition
<u>Element</u>	Element #	Att.	Description	
CUR01	98	M	Entity Identifier Code	Code identifying an organizational entity a
1				physical location or an individual
ļ		1		2J = Individual
				2K = Partnership
		ļ		2L = Corporation
				DU = Resale Dealer
				DA = Delivery Address
		ļ .		DL = Dealer
CUR02	100	M	Currency Code	Code (Standard ISO) for country in whose
	l			currency the charges are specified.
CUR07	374	0	Date/Time Qualifier	Code specifying type of date or time or
l como,			_	both date and time.
		1	i	001 = Cancel After
•				002 = Delivery Requested
		1		003 = Invoice
				004 = Purchase Order
			1	008 = Purchase Order Received
				012 = Terms Discount Due
				013 = Terms Net Due
	1			061 = Cancel if Not Delivered By
				063 = Do Not Deliver After
				064 = Do Not Deliver Before
1		1		598 = Rejected
CUR08	373	0	Date	Date (YYMMDD).
CUR09	337	o	Time	Time expressed in 24-hour clock time as
	] ",	~	1	follows: HHMM or HHMMSS or
	1			HHMMSSD or HHMMSSDD where H =
		1		hours $(00-23)$ M = minutes $(00-59)$ S =
				integer seconds (00-59) and DD = decimal
	1			seconds; decimal seconds are expressed as
1	1			follows: $D = tenths (0-9)$ and $DD =$
1				hundredths (00-99)

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	l Segmen Element #	Att.	Description	Qualifiers/Definition
REF01	128	M	Reference Number Qualifier	12 = Billing Account 14 = Master Account Number 9F = Referral Number AP = Accounts Receivable Number AN = Associated Purchase Orders BB = Authorization Number BT = Batch Number CK = Check Number CM = Credit Memo DB = Buyer's Debit Memo DL = Debit Memo DM = Associated Product Number EF = Electronic Funds Transfer ID Number F3 = Submission Number IK = Invoice Number IX = Item Number K0 = Approval Code K5 = Task Order OP = Original Purchase Order PO = Purchase Order Number PX = Previous Invoice Number VR = Vendor ID Number
REF02	127	С	Reference Number	Reference number or identification number as defined for a particular Transaction Set or as specified by the Reference Number Qualifier
		$\frac{1}{C}$	Description	Free-form Text

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# **DTM Date/Time Numbers**Optional Segment

	l Segmen		D	Qualifiers/Definition
<u>Element</u>	Element #	Att.	<u>Description</u>	
DTM01	374	M	Date/Time Qualifier	Code specifying type of date or time or
		1		both date and time.
				001 = Cancel After
		1		002 = Delivery Requested
l .				003 = Invoice
				004 = Purchase Order
	ĺ	l .		008 = Purchase Order Received
Ì				012 = Terms Discount Due
		1		013 = Terms Net Due
	i	1		061 = Cancel if Not Delivered By
		1		063 = Do Not Deliver After
	ŀ	1		064 = Do Not Deliver Before
1			1	598 = Rejected
DTM02	373	С	Date	Date (YYMMDD).
DTM03	337	$\frac{c}{c}$	Time	Time expressed in 24-hour clock time as
DIMIOS	331		111110	follows: HHMM or HHMMSS or
				HHMMSSD or HHMMSSDD where H =
		l.	<b>\</b>	hours (00-23) M = minutes (00-59) S =
				integer seconds (00-59) and DD = decimal
	1			seconds; decimal seconds are expressed as
		1		follows: D = tenths (0-9) and DD =
	1	ŀ		hundreths (00-99)
D. (0.4	(22	<del>                  _  </del>	Time Code	Code identifying the time. In accordance
DTM04	623	О	Time Code	with International Standards Organization
	}			standard 8601 time can be specified by a +
ļ.				or - and an indication in hours in relation
	1	ł	1	to Universal Time Coordinate (UTC) time.
	1	Ĭ		CD = Central Daylight Time
				CS = Central Standard Time
				CT = Central Time
<b> </b>	1			LT = Local Time
				The first two characters in the designation
DTM05	624	О	Century	
		4		of the year (CCYY).
DTM06	1250	C	Date Time Period Format Qualifier	Code indicating the date format, time
1				format, or date and time format.
		1		CC = First Two Digits of Year Expressed
		1		in Format CCYY
	1		1	CM = Date in Format CCYYMM
	1	1		CY = Year Expressed in Format CCYY
1				D6 = Date Expressed in Format
	1	1	1	D8 = Date Expressed in Format
	1			CCYYMMDD
	1			TM = Time Expressed in Format HHMM
ŀ				TS = Time Expressed in Format
1				HHMMSS
DTM07	<del>                                     </del>	<del>  _</del> -	D . m: . D . i . i	Expressed per the qualifier (1250)
1 13/11/11 1/07	1251	C	Date Time Period	Expressed her me dugither (1720)

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#### N1 Name

Optional Segment

Ориона	i peginen	<u> </u>		0 10 0 0
Element	Element #	Att.	Description	Qualifiers/Definition
	<u>Dicinone n</u>		NT	Name of Person
N1	93	<u>M</u>	Name	14diffe of 1 orson

### N3 Address Information

Optional Segment

Optiona	u Segmen	<u> </u>		10 11m m m 11
Element	Element #	Att.	Description	Qualifiers/Definition
Licincia	166	M	Address Information	Address Information

# N4 Geographic Location Optional Segment

Optiona	al Segmen	<u>t                                      </u>		LO US DESIGN
Element	Element #	Att.	<u>Description</u>	Qualifiers/Definition
N401	19	0	City Name	Free-form text for city name
N402	156	0	State or Province Code	Code (Standard State/Province) as defined by appropriate government agency.
N403	116	0	Postal Code	Code defining international postal zone code excluding punctuation and blanks (zip code for United States)
N404	26	0	Country Code	Code identifying the country.
N405	309	С	Location Qualifier	Code identifying type of location.  AC = City and State  BS = Place of Business  CC = Country  CI = City  PS = 5 Digit US Zip
N406	310	0	Location Identifier	Code which identifies a specific location.

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### **REF Reference Numbers**

Optional Segment

	Element # 128	Att. M	Description Reference Number Qualifier	Qualifiers/Definition 12 = Billing Account
	128	M	Reference Number Qualifier	
			D. Carrosa Number	14 = Master Account Number 9F = Referral Number AP = Accounts Receivable Number AN = Associated Purchase Orders BB = Authorization Number BT = Batch Number CK = Check Number CM = Credit Memo DB = Buyer's Debit Memo DL = Debit Memo DM = Associated Product Number EF = Electronic Funds Transfer ID Number F3 = Submission Number IK = Invoice Number IX = Item Number K0 = Approval Code K5 = Task Order OP = Original Purchase Order PO = Purchase Order Number PX = Previous Invoice Number VR = Vendor ID Number Reference number or identification number
REF02	127	С	Reference Number	as defined for a particular Transaction Set or as specified by the Reference Number Qualifier
REF03	35	С	Description	Free-form Text

# PER Administrative Communications Contact

Optional Segment

Element	Element #	Att.	Description	Qualifiers/Definition
PER01	366	M	Contact Function Code	Code identifying the major duty or responsibility of the person or group named.  AA = Authorized representative AC = Administrative Contracting Officer AD = Accounting Department AP = Accounts Payable Department PI = Preparer
PER02	93	0	Name	Name of Person
PER03	365	С	Communication Number Qualifier	Code identifying the type of communication number.  BN = Beeper Number.  CP = Cellular Phone  EM = Electronic mail  HP = Home Phone Number  TE = Telephone  WP = Work Phone Number
PER04	364	С	Communication Number	Complete communications number including country or area code when applicable.

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ENT Entity
Optional Segment

Element	Element #	Att.	Description	Qualifiers/Definition
ENT01	554	0	Assigned Number	Number assigned for differentiation within
				a transaction set.
ENT02	98	C	Entity Identifier Code	Code identifying an organizational entity a
		1		physical location or an individual
		1		2J = Individual
				2K = Partnership
		1		2L = Corporation
				DU = Resale Dealer
				DA = Delivery Address
_				DL = Dealer
ENT03	66	C	Identification Code Qualifier	Code designating the system/method of
	1			code structure used for Identification Code
		1		8 = Vendor UPC code
ENT04	67	C	Idetification Code	Code identifying a party or other code.
ENT08	128	C	Reference Number Qualifier	12 = Billing Account
				14 = Master Account Number
		1		9F = Referral Number
				AP = Accounts Receivable Number
	ļ			AN = Associated Purchase Orders
	1		1	BB = Authorization Number
	1			BT = Batch Number
				CK = Check Number
				CM = Credit Memo
		ı		DB = Buyer's Debit Memo
	İ			DL = Debit Memo
1		ŀ		DM = Associated Product Number
		1		EF = Electronic Funds Transfer ID
		ŀ		Number
	i	ì		F3 = Submission Number
		ı	ľ	IK = Invoice Number
				IX = Item Number
				K0 = Approval Code
		-		K5 = Task Order
				OP = Original Purchase Order
	1			PO = Purchase Order Number
				PX = Previous Invoice Number
				VR = Vendor ID Number
ENT09	127	C	Reference Number	Reference number or identification number
		1		as defined for a particular Transaction Set
	1	-		or as specified by the Reference Number
l .				Qualifier

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# ADX Adjustment Optional Segment

Optional Segment						
Element	Element #	Att.	Description	Qualifiers/Definition		
ADX01	782	M	Monetary Amount	Monetary Amount		
ADX01 ADX02	426	M	Adjustment Reason Code	Code indicating reason for credit memo or adjustment to invoice credit memo or payment.  01 = Pricing Error 02 = Allowance/Charge Error 03 = Extension Error 04 = Item Not Accepted - Damaged 05 = Item Not Accepted - Quality 06 = Quantity Contested 07 = Incorrect Product 11 = Returns - Damage 15 = Returns - Recall 24 = Incorrect Discount 48 = Service Charge 52 = Credit for Previous Overpayment 53 = Remittance for Previous Underpayment 57 = Volume Discount Taken 59 = Items Not Received 76 = Cash Discount 81 = Credit as Agreed A7 = Payment on Account B2 = Rebate C2 = Special Allowance D5 = Volume Discount F1 = Defective L2 = Discount L7 = Miscellaneous Deductions L8 = Miscellaneous Credits		
ADX03	128	C	Reference Number Qualifier	12 = Billing Account 14 = Master Account Number 9F = Referral Number AP = Accounts Receivable Number AN = Associated Purchase Orders BB = Authorization Number BT = Batch Number CK = Check Number CM = Credit Memo DB = Buyer's Debit Memo DL = Debit Memo DM = Associated Product Number EF = Electronic Funds Transfer ID Number F3 = Submission Number IK = Invoice Number IX = Item Number K0 = Approval Code K5 = Task Order OP = Original Purchase Order PO = Purchase Order Number PX = Previous Invoice Number VR = Vendor ID Number		

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ADX Adjustment Optional Segment

Options	ai Degii	ICIIU		
ADX04	127	С	Reference Number	Reference number or identification number as defined for a particular Transaction Set or as specified by the Reference Number Qualifier

## IT1 Baseline Item Data (Invoice)

Optional Segment

Optiona	al Segmen	.t		
Element	Element #	Att.	Description	Qualifiers/Definition
IT101	350	0	Assigned Identification	Alphanumeric characters assigned for
				differentiation within a transaction set.
IT102	358	M	Quantity Invoiced	Number of units invoiced (supplier units)
IT103	355	М	Unit or Basis for Measurement Code	Code specifying the units in which a value
				is being expressed or manner in which a
				measurement has been taken.
			1	4E = 20-pack
		Į.		4F = 100-pack
1				BX = Box P1 = Percent
		<u> </u>		
IT104	212	M	Unit Price	Price per unit of product service
				commodity etc.
IT105	639	О	Basis of Unit Price Code	Code identifying the type of unit price for an item.
	1			an item. BD = Before Discount
		1		DS = Discount
				QT = Quoted
	1			RT = Retail
1		1	1	WH = Wholesale
IT106	235	0	Product/Service ID Qualifier	Code identifying the type/source of the
111100	233	10	1 Toduce Service 15 Quanties	descriptive number used in Product/Service
		İ		ID.
		1		CB = Buyer's Catalog Number
				DP = Discontinued Part Number
	i			GS = General Specification Number
				PU = Part Reference Number
	i			SK = Stock Keeping Unit (SKU)
				SN = Serial Number
				VN = Vendor's Item Number
				VO = Vendor's Order Number
				VX = Vendor's Specification Number
IT107	234	С	Product/Service ID	Identifying number for a product or
	ł			service.

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## **REF Reference Numbers**

Optional Segment

Optional Segment					
Element	Element #	Att.	Description	Qualifiers/Definition	
REF01	128	M	Reference Number Qualifier	12 = Billing Account 14 = Master Account Number 9F = Referral Number AP = Accounts Receivable Number AN = Associated Purchase Orders BB = Authorization Number BT = Batch Number CK = Check Number CM = Credit Memo DB = Buyer's Debit Memo DL = Debit Memo DM = Associated Product Number EF = Electronic Funds Transfer ID Number F3 = Submission Number IK = Invoice Number IX = Item Number K0 = Approval Code K5 = Task Order OP = Original Purchase Order PO = Purchase Order Number PX = Previous Invoice Number VR = Vendor ID Number	
REF02	127	С	Reference Number	Reference number or identification number as defined for a particular Transaction Set or as specified by the Reference Number Qualifier	
REF03	35	C	Description	Free-form Text	

# ITA Allowance, Charge or Service Optional Segment

Element	Element #	Att.	Description	Qualifiers/Definition
ITA01	248	M	Allowance or Charge Indicator	Code which indicated an allowance or charge of the service specified.  A = Allowance C = Charge N = No Allowance or Charge R = Allowance Request
ITA02	559	С	Agency Qualifier Code	Code identifying the agency assigning the code values.  AB = Assigned by Buyer  AS = Assigned by Seller  ZZ = Mutually Defined
ITA03	560	С	Special Services Code	Code identifying the special service.  CT = Count and Recount  IG = Invoice with Goods  PB = Previous Billing  ZZ = Mutually Defined  A0010 = Alterations  W0010 = Warranties

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# ITA Allowance, Charge or Service, continued Optional Segment

Optiona	al Segme	ent _		
ITA04	331	M	Allowance or Charge Method of Handling Code	Code indicating method of handling for an allowance or charge.  01 = Bill Back 02 = Off Invoice 03 = Vendor Check to Customer 04 = Credit Customer Account 05 = Charge to be Paid by Vendor 06 = Charge to be Paid by Customer 07 = Optional
ITA05	341	0	Allowance or Charge Number	The number assigned by a vendor referencing an allowance promotion deal or charge.
ITA06	359	0	Allowance or Charge Rate	Allowance or Charge Rate per Unit.
ITA07	360	0	Allowance or Charge Total Amount	Total dollar amount for the allowance or charge.
ITA08	378	0	Allowance/Charge Percent Qualifier	Code indicating on what basis allowance or charge percent is calculated.  1 = Item List Cost  2 = Item Net Cost  3 = Discount/Gross  4 = Discount/Net  5 = Base Price per Unit  6 = Base Price Amount  7 = Base Price Amount Less Previous  Discount  8 = Net Monthly on all Invoices Past Due  Allowance or charge expressed as a percent
ITA09	332	C	Allowance or Charge Percent	Quantity basis when allowance or charge
ITA10	339	0	Allowance or Charge Quantity	quantity is different from the purchase order or invoice quantity.
ITA11	355	0	Unit or Basis for Measurement Code	Code specifying the units in which a value is being expressed or manner in which a measurement has been taken.  4E = 20-pack 4F = 100-pack BX = Box P1 = Percent
ITA12	380	0	Quantity	Numeric value of quantity.
ITA13	352	С	Description	A free-form description to clarify the related data elements and their content.

# ITA Allowance, Charge or Service, continued Optional Segment

Optional Segment						
ITA14	150	C	Special Charge or Allowance Code	Code identifying type of special charge or allowance.  230 = Credit  275 = Discount - Incentive  295 = Discount - Special  400 = Freight  AAJ = Adjustments  CAC = Cash Discount  CDF = Canceled Order  COD = COD Amount  IIA = Invoice Adjustment  MSG = Miscellaneous Charge  QQD = Quantity Discount  RAA = Rebate  RFD = Refund  SAF = Special Credit  TTD = Trade Discount		
ITA15	822	0	Source Subqualifier	A reference that indicates the table or text maintained by the Source Qualifier.		
ITA16	662	0	Price Relationship Code	Code indicating the relationship of the price or amount to the associated segment.  A = Add  D = Delete  I = Included  O = Information Only		

#### NM1 Optional Segment (to supply the full name of an individual or organizational entity)

Element	Element #	Att.	Description	Qualifiers/Definition
Element				Code identifying an organizational entity a
NM101	98	M	Entity Identifier Code	physical location or an individual
		İ		2J = Individual
				2K = Partnership
				2L = Corporation
				DU = Resale Dealer
l,		1		DA = Delivery Address
				DL = Dealer
NM102	1065	M	Entity Type Qualifier	Code qualifying the type of entity
1		1	1	1 = Person
1	1			2 = Non-Person Entity
NM103	1035	0	Name Last or Organization Name	Individual last name or organizational
TUNITOS	1000	`		name
NM104	1036	0	Name First	Individual first name
NM105	1037	0	Name Middle	Individual middle name or initial
NM106	1038	0	Name Prefix	Prefix to individual name
NM107	1039	o	Name Suffix	Suffix to individual name
NM108	66	Ċ	Identification Code Qualifier	Code designating the system/method of
11111100				code structure used for Identification Code
				8 = Vendor UPC code
NM109	67	C	Identification Code	Code identifying a party or other code.

### QTY Quantity

Optional Segment

	Lloment #		Description	Oualifiers/Definition
Element QTY01	Element # 673	Att. M	Description Quantity Qualifier	Qualifiers/Definition  Code specifying the type of quantity.  01 = Discrete Quantity  02 = Cumulative Quantity  1J = Due  28 = Quantity Available for Return  60 = Total Authorized Quantity  74 = Damaged Goods  75 = Receipts  76 = Returns  A5 = Adjusted Quantity  A6 = Adjustments  AA = Unacknowledged Quantity  AB = Urgent Quantity Delivery
QTY02	380	M	Quantity	AT = Actual PX = Prior Units Accepted Numeric value of quantity.
QTY03	355	0	Unit or Basis for Measurement Code	Code specifying the units in which a value is being expressed or manner in which a measurement has been taken.  4E = 20-pack  4F = 100-pack  BX = Box P1 = Percent

# **AMT Monetary Amount** Optional Segment

Optional Segment					
Element	Element #	Att.	<u>Description</u>	Qualifiers/Definition	
AMT01	522	M	Amount Qualifier Code	Code to qualify amount.  1 = Line Item Total  2 = Batch Total  5 = Total Invoice Amount  D = Payor Amount Paid  E = Estimated Credit  AD = Adjusted Total  AT = Total Received  BD = Balance Due  BM = Adjustments	
AMT02	782	М	Monetary Amount	Monetary Amount	

# **DTP Date or Time or Period**Optional Segment

Element	Element #	Att.	Description	Oualifiers/Definition
DTP01	374	M	Date/Time Qualifier	Code specifying type of date or time or both date and time.  001 = Cancel After  002 = Delivery Requested  003 = Invoice  004 = Purchase Order  008 = Purchase Order Received  012 = Terms Discount Due  013 = Terms Net Due  061 = Cancel if Not Delivered By  063 = Do Not Deliver After  064 = Do Not Deliver Before  598 = Rejected
DTP02	1250	M	Date/Time Period Format Qualifier	Code indicating the date format, time format, or date and time format.  CC = First Two Digits of Year Expressed in Format CCYY  CM = Date in Format CCYYMM  CY = Year Expressed in Format CCYY  D6 = Date Expressed in Format  YYMMDD  D8 = Date Expressed in Format  CCYYMMDD  TM = Time Expressed in Format HHMM  TS = Time Expressed in Format  HHMMSS
DTP03	1251	М	Date Time Period	Expressed per the qualifier (1250)

# SE Transaction Set Trailer Mandatory Segment

Element	Element #	Att.	<u>Description</u>	Qualifiers/Definition
SE01	96	М	Number of Included Segments	Total number of segments included in a transaction set including ST and SE segments.
SE02	329	М	Transaction Set Control Number	ID Control # that must be unique within the transaction set functional group assigned by the originator for a transaction set.

# EDI - 820 CASE STUDY

Super Electric Company has requested that Waren Distributing make all payments via EDI. They have provided a contract by which they will not only provide, but maintain the equipment, software, services, and testing necessary to insure the integrity of all documents transmitted for one year. After time duration has lapsed, Waren will have to maintain the system.

Each party will use security/access limitation software and/or procedures sufficient to reasonably ensure that all transmissions of documents are authorized and to protect its business records from unauthorized access.

Jim Adams will be in charge of keying all payment orders into the system. To make him more familiar with the process, a hard copy of the X.12 Standards has been provided with detailed segment information from Super Electric Company. Also, as the first two transactions will be done via EDI, they will also be printed out so that Jim can properly understand the sytem.

To make the EDI process smoother, Super Electic Company has agreed to make all item numbers consistent with those of Waren. (See Document No. 2)

On January 5, 199Y, Waren receives 2 invoices via EDI for goods ordered January 1st. They also receive copies of the invoices the next day with the goods. Nancy Ford receives the goods and fills out a receiving report. Jim Adams manually completes the following payment orders and enters them into the computer. Apply the proper amount to the general ledger and journals.

NOTE: Trading partners are able to specify exactly which information they need, but must also have a system capable enough to receive additional information.

# SUPER ELECTRIC COMPANY

ORIGINAL INVOICE

Housewares & Audio Business Div. 1285 Boston Avenue Bridgeport, CT 06602

Invoice No. WD19000 Account No. 0690977 Invoice Date 01-05-XX

Customer Service Hotline (800) 634-8000

SOLD TO: Waren Distributing Inc. 1978 Michigan Avenue

SHIP TO: Waren Distributing Inc. 1978 Michigan Avenue

Chicago, IL 60612

	Chicago, IL 60	Chicago, IL 60612							
Your Order Number 400	Our Order         Date         Date           Number         Ordered         Shipped           1420400         01/01/9Y         01/05/9Y				Cartons 500	Weight 10750	<u>Shipped Via</u> Interstate Motor Freight		
					F/P	Shipped	Unit	Price	Extension
					P	150	EA	15.00	2,250
AC-40	Alarm Clock				P	250	EA	27.00	6,750
T-104	Toaster				P	100	EA	29.00	2,900
EFP-510	Electric Frying Pa	an				100			
							<u> </u>		
Deduct	Only if Paid By				eight 100	Pay		Invoice '	
2%	1-25-9Y			,	100	••	ļ		\$11,900

Jane receives all of the items in good condition and places them in the warehouse.

ST Transaction Set Header

SIIIa	ISACHOII S	CUILC	<del></del>	0 110 D C 11
Element	Element #	Att.	Description	Qualifiers/Definition
ST01	143		Transaction Set Identifier Code	820
			Transaction Set Control Number	WD19001
ST02	329	IVI	Transaction Set Conserve	

BPR - Beginning Segment for Payment Order/Remittance Advice

BLK - E	BPR - Beginning Segment for Fayment Order/technical Segment for Fayment Segment for Fayment Segment for Fayment Segment for Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Segment Fayment Fa					
Element	Element #	Att.	Description	Qualifiers/Definition		
BPR01	305	М	Transaction Handling Code	D		
BPR02	782	M	Monetary Amount	11,662		
BPR03	478	M	Credit/Debit Flag Code	C		
BPR04	591	М	Payment Method Code	ACH		
BPR05	812	0	Payment Format Code	CCD		
BPR14	896	0	Account Number Qualifier Code	SG		
BPR15	508	Ċ	Account Number	0690977		
BPR16	513	o	Effective Entry Date	9Y0108		
BPR17	1048	Ō	Business Function Code	VEN		
BPR20	896	ō	Account Number Qualifier Code	SG		
BPR21	508	Č	Account Number	0690977		

NTE Note/Special Instruction					
Element	Element #	Att.	Description	Qualifiers/Definition	
NTE01	363	0	Note Reference Code	PAY	
NTE02	3	М	Free Form Message	Thank you for your continued support!	

#### TRN Trace

1101 1	lacc			O. If and Definition
Element	Element #	Att.	Description	Qualifiers/Definition
TRN01	481	М	Trace Type Code	
TRN02	127	М	Reference Number	WD19000
		10	Originating Company Identifier	9354421722
TRN03	509	10		WD19000
TRN04	127	0_	Reference Number	11217000

**CUR Currency** 

	urrency		r =	Qualifiers/Definition
Element	Element #	Att.	Description	
CUR01	98	М	Entity Identifier Code	DL
CUR02	100	М	Currency Code	US
CUR07	374	0	Date/Time Qualifier	003
	373	o	Date	9Y0105
CUR08		+		130954
CUR09	337	10	Time	12000

#### **REF Reference Numbers**

THE IM	Her ence L	(unito	CI 5	Lo vic on C ivian
Element	Element #	Att.	Description	Qualifiers/Definition
REF01	128	М	Reference Number Qualifier	AN
REF02	127		Reference Number	400
	<del></del>	<del>  </del>	Description	Received via EDI
REF03	35		Description	

**DTM Date/Time Numbers** 

DIMID	are time	· Tuill		Outliff and Definition
Element	Element #	Att.	Description	Qualifiers/Definition
DTM01	374	М	Date/Time Qualifier	003
DTM02	373	C	Date	9Y0105
DTM03	337	C	Time	091347
	623	0	Time Code	CD
DTM04		0	Century	209Y
DTM05	624	15	Date Time Period Format Qualifier	CM
DTM06	1250	15-	Date Time Period	209Y01
DTM07	1251	<u>  C</u>	Date Time Feriod	

#### N1 Name

	14T 14Sm	Te			O IIC D C ities
	Element	Element #	Att.	Description	Qualifiers/Definition
	Lienen	Dicinon.			Waren Distributing Inc.
1	N1	93	M	Name	Water Distributing Inc.
	741	75			

### N3 Address Information

N3 Add	itess ппоі	IIIau	OH	
Element	Element #	Att.	Description	Qualifiers/Definition
Licitoni	166	M	Address Information	1978 Michigan Avenue
	100	747	7 Iddiese Mitera	

Element	graphic L Element #	Att.	Description	Qualifiers/Definition
N401	19	0	City Name	Chicago
N402	156	ŏ	State or Province Code	IL
N403	116	ő	Postal Code	60612
N404	26	ŏ	Country Code	US
N405	309	Ċ	Location Qualifier	BS
N406	310	Ö	Location Identifier	001

### REF Reference Numbers

REF Reference Numbers							
Element	Element #	Att.	Description	Qualifiers/Definition			
REF01	128		Reference Number Qualifier	AN			
	127	C	Reference Number	400			
REF02		<del>  = -</del>	Description	Received via EDI			
REF03	35	10	Description				

## **PER Administrative Communications Contact**

PER Administrative Communications Contact					
Element	Element #	Att.	Description	Qualifiers/Definition	
PER01	366		Contact Function Code	AP	
PER02	93	0	Name	Jim Adams	
PER03	365	ĬČ	Communication Number Qualifier	EM	
	364	Ċ	Communication Number	jadams@war.com	
PER04	304	<u> </u>	Committee		

**ENT Entity** 

ENT Entity						
Element	Element #	Att.	Description	Qualifiers/Definition		
ENT01	554	o	Assigned Number	792		
ENT02	98	<del> </del> C	Entity Identifier Code	DL		
	66	<del>                                      </del>	Identification Code Qualifier	8		
ENTO3	67	15	Idetification Code	812		
ENT04		c	Reference Number Qualifier	AN		
ENT08	128		Reference Number	400		
ENT09	127	C_	Reference Pullioci			

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IT1 Baseline Item Data (Invoice)

	Element #	Att.	<u>Description</u>	Qualifiers/Definition
Element		0	Assigned Identification	WD19000
IT101	350 358	М	Quantity Invoiced	150
IT102	355	M	Unit or Basis for Measurement Code	BX
IT103 IT104	212	M	Unit Price	15.00
IT104 IT105	639	0	Basis of Unit Price Code	BD
IT105	235	lo	Product/Service ID Qualifier	VN
IT107	234	ľč	Product/Service ID	AC-40

Loop

Loop			1=	Qualifiers/Definition
Element	Element #	Att.	Description	
IT108	350	0	Assigned Identification	WD19000
IT109	358	М	Quantity Invoiced	250
	355	M	Unit or Basis for Measurement Code	BX
IT110		<del></del>	Unit Price	27.00
IT111	212	M	Basis of Unit Price Code	BD
IT112	639	0_		VN
IT113	235	0	Product/Service ID Qualifier	
IT114	234	C	Product/Service ID	T-104

Loop				Qualifiers/Definition
Element	Element #	Att.	Description	
IT115	350	О	Assigned Identification	WD19000
IT116	358	М	Quantity Invoiced	100
	355	M	Unit or Basis for Measurement Code	BX
IT117		_	Unit Price	29.00
IT118	212	M		BD
IT119	639	10	Basis of Unit Price Code	VN
IT120	235	0	Product/Service ID Qualifier	
IT121	234	C	Product/Service ID	EFP-510

**REF Reference Numbers** 

REF Ke	eference N	umb	ers	
Element	Element #	Att.	Description	Qualifiers/Definition
			Reference Number Qualifier	K0
REF01	128	C	Reference Number	01
REF02	127	15		Received all items in good condition
REF03	35	C	Description	Received an items in good to

ITA Allowance, Charge or Service

Element	Element #	Att.	Description	Qualifiers/Definition
ITA01	248	M	Allowance or Charge Indicator	A
ITA01	559	C	Agency Qualifier Code	AB
TA03	560	Č	Special Services Code	7.7.
ITA03	331	M	Allowance or Charge Method of	02
11710.		l	Handling Code	
ITA06	359	0	Allowance or Charge Rate	2%
ITA08	378	0	Allowance/Charge Percent Qualifier	4
ITA09	332	C	Allowance or Charge Percent	2%
ITA11	355	o	Unit or Basis for Measurement Code	BX
ITA12	380	lő	Quantity	500
ITA13	352	tc	Description	Received all items in good condition
TTA14	150	t <del>č</del>	Special Charge or Allowance Code	295
ITA16	662	10	Price Relationship Code	I

NM1

TATAT T				To us most in
Element	Element #	Att.	Description	<u>Oualifiers/Definition</u>
NM101	98	M	Entity Identifier Code	DL
NM102	1065	M	Entity Type Qualifier	2
NM103	1035	0	Name Last or Organization Name	Waren Distributing Inc.
	66	<del>lč</del>	Identification Code Qualifier	8
NM108		$\frac{c}{c}$	Identification Code	812
NM109	67		Idelitification Code	

**QTY Quantity** 

ATT A	laning			T
Element	Element #	Att.	Description	Qualifiers/Definition
OTY01	673		Quantity Qualifier	60
		M	Quantity	500
QTY02	380		Unit or Basis for Measurement Code	
OTY03	355	10	Unit of Basis for Measurement Code	<u>DA</u>

**AMT Monetary Amount** 

STATE TAR	One cary 1	HIOG		
Element	Element #	Att.	Description	Qualifiers/Definition
AMT01	522	M	Amount Qualifier Code	5
AMT02	782	М	Monetary Amount	11,900
TOOD	702			

LOOP	-			
Element	Element #	Att.	Description	Qualifiers/Definition
AMT03	522		Amount Qualifier Code	BD
AMT04	782	М	Monetary Amount	11,662

DTP Date or Time or Period

1711 17	ace of Inc	01 1	. 02204	
Element	Element #	Att.	Description	Qualifiers/Definition
DTP01	374	М	Date/Time Qualifier	003
DTP02	1250		Date/Time Period Format Qualifier	CM
	1251	M	Date Time Period	209Y01
DTP03	1231	IVI	Date Time Terror	

**SE Transaction Set Trailer** 

SE Trans				
Element E	Element#	Att.	Description	Qualifiers/Definition
	96		Number of Included Segments	21
	329		Transaction Set Control Number	WD19000

## SUPER ELECTRIC COMPANY

ORIGINAL INVOICE

Housewares & Audio Business Div. 1285 Boston Avenue Bridgeport, CT 06602

Invoice No. WD19001 Account No. 0690977 Invoice Date 01-05-XX

Customer Service Hotline (800) 634-8000

**SOLD TO:** Waren Distributing Inc.

1978 Michigan Avenue Chicago, IL, 60612 **SHIP TO:** Waren Distributing Inc. 1978 Michigan Avenue

Chicago, IL 60612

	Inicago, IL ou	012		 	Cintugo,			
Your Order Number 401	Our Order Number 1420401	Date Ordered 01/01/9Y	<u>Date</u> Shipped 01/05/9Y	 Cartons 500	10750		Shipped erstate Mot	tor Freight
Stock Number	Description			F/P	Shipped	Unit	Price	Extension
EK-48	Electric Knife		-	 P	150 150	EA EA	18.00 25.50	2,700 3,825
M-24 SD-21	Mixer Smoke Detector			P P	100 100	EA EA	17.00 24.50	1,700 2,450
I-52	Iron							
				 			T	Total
Deduct 2%	Only if Paid By 1-25-9Y			eight 100	Pay •••		Invoice	\$10,675

Jane counts the goods when they arrive. Received only 50 mixers. Everything was in good condition.

ST Transaction Set Header

STTrar	saction 5	er He	auei	Our life are / Definition
Element	Element #	Att.	Description	Qualifiers/Definition
			Transaction Set Identifier Code	820
ST01	143			WD19001
ST02	329	M _	Transaction Set Control Number	WD15001

BPR - Beginning Segment for Payment Order/Remittance Advice

BPR - B	BPR - Beginning Segment for Payment Order Tentualite Advice						
Element	Element #	Att.	Description	Qualifiers/Definition			
BPR01	305	М	Transaction Handling Code	D			
BPR02	782	М	Monetary Amount	7,913.50			
BPR03	478	M	Credit/Debit Flag Code	C			
	591	M	Payment Method Code	ACH			
BPR04		0	Payment Format Code	CCD			
BPR05	812	tŏ	Account Number Qualifier Code	SG			
BPR14	896	$\frac{10}{C}$	Account Number	0690977			
BPR15	508	+	Effective Entry Date	9Y0108			
BPR16	513	10	Business Function Code	VEN			
BPR17	1048	10	Business Function Code	SG			
BPR20	896	0	Account Number Qualifier Code	0690977			
BPR21	508	] C	Account Number	0070711			

NTE Note/Special Instruction

NTENO	te/Specia	l Insi	ruction	T
	Element #	Att.	Description	Qualifiers/Definition
Element			Note Reference Code	PAY
NTE01	363			Thank you for your continued support!
NTE02	3	M	Free Form Message	I Halik you for your continues supper.

TRN T	TRN Trace						
Element	Element #	Att.	Description	Qualifiers/Definition			
TRN01	481	М	Trace Type Code				
TRN02	127	M	Reference Number	WD19001			
TRN03	509	0	Originating Company Identifier	9354421722			
TRN03	127	0	Reference Number	WD19001			
1 KIN04	141	19	1.40.0				

	urrency	Att.	Description	Qualifiers/Definition
Element	Element #		Entity Identifier Code	DL
CUR01	98	M_		US
CUR02	100	M	Currency Code	003
CUR07	374	0	Date/Time Qualifier	9Y0105
CUR08	373	0	Date	
CUR09	337	ТО	Time	131542

**REF Reference Numbers** 

REF Reference Numbers						
Element	Element #	Att.	Description	Qualifiers/Definition		
			Reference Number Qualifier	AN		
REF01	128			401		
REF02	127	C	Reference Number			
REF03	35	C	Description	Received via EDI		
TCDI OU						

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**DTM Date/Time Numbers** 

DIMD	ate/Ime	Tum		Qualifiers/Definition
Element	Element #	Att.	Description	
DTM01	374	M	Date/Time Qualifier	003
	373	C	Date	9Y0105
DTM02		C	Time	131542
DTM03	337	<del> </del>	Time Code	CD
DTM04	623	0		209Y
DTM05	624	10_	Century Print Format Qualifier	CM
DTM06	1250	IC_	Date Time Period Format Qualifier	209Y01
DTM07	1251	C	Date Time Period	207101

#### N1 Name

	NI Nan	1e		·	O -116 (Definition
1	Element	Element #	Att.	Description	Qualifiers/Definition
	Element				Waren Distributing Inc.
	N1	93	M	Name	

N3 Address Information					
Element	Element #	Att.	Description	Qualifiers/Definition	
Element	166		Address Information	1978 Michigan Avenue	

N4 Geographic Location

	graphic L			Qualifiers/Definition
<b>Element</b>	Element #	Att.	<u>Description</u>	
N401	19	0_	City Name	Chicago
N402	156	0	State or Province Code	
N403	116	0	Postal Code	60612
N404	26	ō	Country Code	US
N405	309	Ċ	Location Qualifier	BS
N406	310	ŏ	Location Identifier	001

### REF Reference Numbers

KEF Ke	REF Reference Numbers						
Element	Element #	Att.	Description	Qualifiers/Definition			
			Reference Number Qualifier	AN			
REF01	128			401			
REF02	127	C	Reference Number	Received via EDI			
REF03	35	C	Description	Received via EDI			
ICDI UU			<del></del>				

# PER Administrative Communications Contact

PER Ad	PER Administrative Communications Contact						
Element	Element #	Att.	Description	Qualifiers/Definition			
	366	M	Contact Function Code	AP			
PER01		0	Name	Jim Adams			
PER02	93		Communication Number Qualifier	EM			
PER03	365	<del> </del> C	Communication Number	jadams@war.com			
PER04	364	10	Communication Number				

**ENT Entity** 

ENT En	ENT Entity						
Element	Element #	Att.	Description	Qualifiers/Definition			
ENT01	554	0	Assigned Number	793			
	98	<del> </del>	Entity Identifier Code	DL			
ENT02		<del>  = -</del>	Identification Code Qualifier	8			
ENT03	66	15	Idetification Code	812			
ENT04	67	15	Reference Number Qualifier	AN			
ENT08	128	ا		401			
ENT09	127	<u>  C                                   </u>	Reference Number	1 401			

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ADX.	Adiv	ıstm	ent
------	------	------	-----

	ADA Aujustineit					
Element	Element #	Att.	Description	Qualifiers/Definition		
ADX01	782	М	Monetary Amount	50.00		
ADX02	426	М	Adjustment Reason Code	01		
ADX03	128	С	Reference Number Qualifier	IK		
ADX04	127	С	Reference Number	WD19001		
LOOP						
ADX05	782	M	Monetary Amount	2,550.00		
ADX06	426	М	Adjustment Reason Code	06		
ADX07	128	С	Reference Number Qualifier	IK		
ADX08	127	C	Reference Number	WD19001		

#### IT1 Baseline Item Data (Invoice)

Element	Element #	Att.	Description	Qualifiers/Definition
IT101	350	0	Assigned Identification	WD19001
IT102	358	М	Quantity Invoiced	150
IT103	355	М	Unit or Basis for Measurement Code	BX
IT104	212	М	Unit Price	18.00
IT105	639	0	Basis of Unit Price Code	BD
IT106	235	0	Product/Service ID Qualifier	VN
IT107	234	С	Product/Service ID	EK-48

#### Loop

Element	Element #	Att.	Description	Qualifiers/Definition
IT108	350	0	Assigned Identification	WD19001
IT109	358	М	Quantity Invoiced	150
IT110	355	M	Unit or Basis for Measurement Code	BX
IT111	212	М	Unit Price	25.50
IT112	639	0	Basis of Unit Price Code	BD
IT113	235	0	Product/Service ID Qualifier	VN
IT114	234	Ċ	Product/Service ID	M-24

#### Loop

Element	Element #	Att.	Description	Qualifiers/Definition
IT115	350	0	Assigned Identification	WD19001
IT116	358	M	Quantity Invoiced	100
IT117	355	М	Unit or Basis for Measurement Code	BX
IT118	212	М	Unit Price	17.00
IT119	639	0	Basis of Unit Price Code	BD
IT120	235	0	Product/Service ID Qualifier	VN
IT121	234	C	Product/Service ID	SD-21
7				

#### Loop

Element	Element #	Att.	Description	Qualifiers/Definition
IT122	350	0	Assigned Identification	WD19001
IT123	358	М	Ouantity Invoiced	100
IT124	355	М	Unit or Basis for Measurement Code	BX
IT125	212	М	Unit Price	24.50
IT126	639	0	Basis of Unit Price Code	BD
IT127	235	0	Product/Service ID Qualifier	VN
IT128	234	С	Product/Service ID	I-52

**REF Reference Numbers** 

ILLI IN	TUST TECTOR CONTROL TO THE TOTAL TOT						
Element	Element #	Att.	Description	Qualifiers/Definition			
REF01	128		Reference Number Qualifier	K5			
REF02	127		Reference Number	02			
	35	C	Description	Invoice Discrepency			
REF03	33		Description	1			

ITA Allowance, Charge or Service

	Flament   Flament #   Att   Description   Qualifiers/Definition							
Element	Element #	Att.	Description					
ITA01	248	M	Allowance or Charge Indicator	A				
ITA02	559	C	Agency Qualifier Code	AB				
ITA03	560	С	Special Services Code	ZZ				
ITA04	331	M	Allowance or Charge Method of Handling Code	02				
ITA06	359	0	Allowance or Charge Rate	2%				
ITA07	360	0	Allowance or Charge Total Amount	161.50				
ITA08	378	0	Allowance/Charge Percent Qualifier	4				
ITA09	332	С	Allowance or Charge Percent	2%				
ITA11	355	0	Unit or Basis for Measurement Code	BX				
ITA12	380	0	Quantity	400				
ITA13	352	C	Description	All goods received taken at discount price				
ITA14	150	C	Special Charge or Allowance Code	295				
ITA16	662	0	Price Relationship Code	I				

#### NM1

Element	Element#	Att.	Description	Qualifiers/Definition
NM101	98	М	Entity Identifier Code	DL
NM102	1065	М	Entity Type Qualifier	2
NM103	1035	0	Name Last or Organization Name	Waren Distributing Inc.
NM108	66	Ċ	Identification Code Qualifier	8
NM109	67	C	Identification Code	812

**QTY Quantity** 

ATT A				Qualifiers/Definition
Element	Element #	Att.	Description	Qualifiers/Definituon
OTY01	673	М	Quantity Qualifier	A5
QTY02	380	М	Ouantity	400
OTY03	355	0	Unit or Basis for Measurement Code	BX

**AMT Monetary Amount** 

WIAT TAT	onerary r	TITO	HIV	
Element	Element #	Att.	Description	Qualifiers/Definition
AMT01	522	M	Amount Qualifier Code	5
AMT02	782	М	Monetary Amount	10,675
7111102	702			

LOOP

Element	Element #	Att.	Description	Qualifiers/Definition
AMT03	522		Amount Qualifier Code	AD
AMT04	782	М	Monetary Amount	7,913.50

DTP Date or Time or Period						
	Att.	<u>Description</u>	Qualifiers/Definition			
	М	Date/Time Qualifier	003			
	М	Date/Time Period Format Qualifier	CM			
	М	Date Time Period	209Y01			
	ate or Tim   Element #   374   1250   1251	Element #   Att.   374   M   1250   M	Element #   Att.   Description     374   M   Date/Time Qualifier     1250   M   Date/Time Period Format Qualifier     Date/Time Period Format Qualifier     Pariod Format Qualifier     Pariod Format Qualifier			

SE Transaction Set Trailer

SE Transaction Set Trailer							
Element # Att.			Description	Qualifiers/Definition			
			Number of Included Segments	22			
SE01	96		Transaction Set Control Number	WD19001			
SE02	329	M	Transaction Set Control Number	11217001			

# STEP-BY-STEP Web Pages Planning Guide

From Macworld: Creating Cool Web Pages with HTML by David Taylor.

When you design a simple one-page Web site for personal use, you can probably get away just letting the page evolve as you experiment. When you design a complex set of interconnecting Web documents or a commercial home page, you'll need to go about the process more systematically. Here's a guide to planning the process step-by-step.

## Stage One: Conceptualization

A lot of your HTML choices and design decisions follow from overall decisions about the goal of the Web pages and the people you hope to reach with them. Thinking through those questions early in the process will save you a lot of time in the end if you're working on a complex venture.

Step 1: Establish the Goal

As with any other project, you can expect the best results if you figure out up front exactly what you want the Web pages to do for you, your company, or your client. It's sometimes a challenge to clearly articulate the purpose, but it saves a lot of time you'd lose to unnecessary revisions if you make sure you know what you're doing and why before you plunge into the design.

Part of setting the goal of your Web pages is identifying as clearly as possible your intended audience. The tools for identifying who visits a Web page are limited, and so far there's no accepted standard for how to count the number of users to establish return on investment or the number of people in the target audience who have received your message. If you spend some time thinking about what kind of people you want to reach, however, during design you can focus on including things that will bring those people, you can judge which external links to incorporate, and you can zero in on the sites you most want to point to your site. And you can do some contingency planning about what to do if your site turns out to be so intriguing that it's swamped by loads of browsers who aren't in the target audience.

Your target audience may play a big role in determining how you design your pages. For example, if you're preparing a site for Macintosh multimedia developers, you can assume that all targeted users will be able to play QuickTime movies, but that wouldn't be the case for a site directed toward a more general audience. Or, if you're creating a site directed toward Netscape users, you could go ahead and use the Netscape extensions to HTML, but you might want to stick to the standard HTML tags for a broader audience.

Page 1 Web Site Creation

Do you want a lot of repeat visitors? If so, you need to plan to change elements of the page frequently to keep the site interesting to the real Web zealots. Some commercial sites are designed to change may times each day, for example.

When considering audience, think about which browser software you plan to support (and therefore test with). A number of sites publish statistics about the types of browsers in use by visitors to certain sites.

Another factor that may control your design, especially in a corporate setting, is who's going to maintain the site and how much time do they have to do it? Many companies find that managing and maintaining Web sites and responding to all the inquires they generate takes more time and money than originally anticipated. If a company goes on the Web but can't keep up with the visitor's demands for information or follow-up, the company seems unresponsive, so make sure those issues are part of any discussion about a commercial Web site plan. (Interestingly enough, even if a commercial Web site doesn't include a company's internet address, launching a Web site often leads to more e-mail from the outside world, sometimes radically more e-mail - something else to factor in).

Remember that it's the World Wide Web. Whether you mean to or not you'll have a global audience, so if your client or company or content has international aspects, be sure to include that in the Web page plan. For example, if you are planning to publish product information for a company that distributes its products worldwide, make sure to include international sales office contact information as well as U.S. contact information. If you don't distribute worldwide, say so. Some Web home pages offer the users a choice of languages: Click your native language and link to a set of pages that you can read without translating.

Step 2: Outline the Content

Once you have a goal in mind, it helps to outline what content you want to include in the Web page or set of pages. As you outline, keep track of what content you merely need to collect, which you need to create, and which you need to retool for the on-line medium. Remember that some of the content may be links to information that's not part of your site - include that in your outline, too. The outline serves as a starting point for mapping out how the parts will interact.

Which of the information is simply text? Which text should be scrollable? Which text should be in short chunks that fit easily within a window of the browser?

What kind of interactivity do you need to build in? Do you need to collect any information about the visitors to the page? Are you going to try to qualify visitors by having them register their address or other information in a form? (That creates two tiers of visitors: browsers and users, whom you can attempt to contact in the future through URLs they leave for you.

Page 2 Web Site Creation

Will the Web site link to any other pages on the same Web server or to external Web documents? Will you make internal links relative (all files in the same subdirectory or folder on the server, so only the unique part of the path name appears in each link address) or absolute (with complete path and file name for each link)?

Step 3: Choose a Structure for the Web Page

Once you have the big picture of what the Web pages need to cover and what external links you're likely to want, you can settle on a basic organization of the pages. Do you want a linear structure so users can switch from screen to screen like a slideshow, using Next and Back navigation buttons? How about a branching structure, with a choice of major topics on the home page that link to content or a choice of subtopics? If a branching hierarchy would be too rigid, how about a more organic web structure with many links that interconnect the parts of the content? What about a hybrid structure that combines a formal hierarchy with some linear "slideshows" and a complex nexus as appropriate for the different parts of the site?

Whatever structure seems right for the purpose and content, if it's a complex site, it's a good idea to sketch out a map or storyboard for the pages, using lines to indicate links. You can make your map with pencil and paper, index cards and yarn on a bulletin board, a drawing program, or any other tool that works for you. (There's one program, NaviPress, that helps visualize the relationships in a set of Web pages.) Make sure the home page reflects the organization that you choose; that really helps to orient users.

## Stage Two: Building Pages

Once you have a plan for the pages, you can roll up your sleeves and get your hands into HTML. You can start with the home page and move on to the other pages within a set, adjusting the home page design as necessary as you go along. You might feel more comfortable designing the linked pages first and finishing up with the home page; it doesn't really matter, so choose which approach fits your style and remember that it's a process.

Step 4: Code, Preview, and Revise

You'll find that you work in cycles: coding, placing graphics and links, and then previewing what you've done, changing the code, and previewing again in the browser software (that is, unless you're working with one of the rare HTML editing tools that offers "what you see is what you get"). As you become accustomed to the effect of the HTML formatting tags, you'll have fewer cycles of coding, previewing, and revising the code, but even experienced HTML tamers expect to go through many revisions.

Fortunately, finding mistakes in the code is relatively simple: usually the flaw in the page points you to the part of the HTML that's not quite right.

Web Site Creation Page 3

Remember to format your HTML so that it's easy to revise and debug, and include comments about the code if someone else might maintain the HTML files later.

# Step 5: Add Links Internally and Externally

Once you have the basic framework of your pages, you should check whether they make sense. Obviously you'll need you develop the material that links back and forth internally.

If you've planned carefully, you'll be able to add links to your site as you go along. Or you can add external links later. Some pages have a changing set of links to external pages - you can arrange each week or every day or several times a day, depending on the purpose of the page.

# Step 6: Optimize for the Slowest of Your Target Audience

Once the pages have all the elements in place, make sure of the connections you expect your target audience to use. Remember, those who use on-line systems like CompuServe, America Online, have bps modems. If you want to reach the lowest common denominator, your pages at that speed over the on-line systems and modems need low-speed alternatives to accommodate the slowest connections target audience.

## Stage Three: Testing

Just in case you didn't get the message yet: for great Web sites, revise and test your work.

## Step 7: Test and Revise Yourself

Even when you think you've worked out all the kinks, it's too early for pats on the back and thinking its time to celebrate. If you're serious about Web publishing, the pages with all the browsers you intend to support, keep your emphasis on the user. At least in your target audience, and on different computer systems you may have. For example, what happens to graphics when they have a screen which shows fewer colors than yours?

# Step 8: Have Other Testers Check Your Work

You can only go so far in testing your own work. The same way you tend to overlook your own typos, someone else may readily find obvious flaws that you're blind to in your own Web pages. As much as is practical, have people in-house test your Web pages, if you're creating a site at work or in an organization, or load it all on the Web server as a pilot project and ask a trusted few testers to use the pages and report back any problems or suggestions for improving your Web pages.

## Stage Four: Load the Files on the Web

When you have finished testing the files locally, you're ready to put them up on the Web for live test driving. You may need to do some preparation if you're sending the files to someone else's Web server for publishing.

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Step 9: Prepare Files for the Server

Make sure your files are ready to go on the server. Put all files for your page in one folder (or one directory) on the hard disk of the Web server for your own site. Within that folder (or directory) you can name the file you mean to be the home page "index.html" - that's the file that's loaded as the home page by default by most Web server software.

If you're using someone else's server, find out if there are any file naming conventions you need to follow - for example, you may need to limit file names to eight characters plus a three character extension, such as "webpp.htm" for DOSbased servers.

If you are using someone else's server, you'll probably seen you Web page files there via ftp, Zmodem file transfer, or some other electronic file transfer. Be careful to save Mac files in binary format, not MacBinary format, if you're sending them to a site not running a Mac server. If you're moving referenced text files to a server that's not a Mac server, maybe you can save them in the right format for that platform; check the file format options in your text editor's Save As dialog box.

Step 10: Doublecheck your URL

If you're not sure of the URL for your pages, check with the administrator for the Web site. Try out the URL to make sure it's correct before passing it around to testers or printing it on business cards.

Step 11: Test Drive Some More

This is the true test of your Web pages. Can you find and use them? What about the other testers you've lined up? Test, revise, reload, and retest. It may take a while to iron out the wrinkles in a complex set of pages, but hang in there.

If you've transferred your files to an alien system, you may see unexpected results such as line breaks in your Web page text where you didn't intend them, particularly in text formatted with <PRE> tag. You may have double-spaced text where you meant to show single-spaced text, for example. If you can't easily solve the problem, you may need to use a UNIX filter to fix line break problems; consult the Web site administrator if you're stuck.

## Stage Five: Announce Your Web Page

Finally, it's time to let the world know your Web page exists! Communicate to others. And take a moment to celebrate your World Wide Web publishing debut.

Page 5 Web Site Creation

### How I Approached Building A Web Page STEP-BY-STEP Web Pages Planning Guide

## Step 1: Establish the Goal

Part of setting the goal of your Web pages is identifying as clearly as possible your intended audience.

This web site's target audience is undergraduates and graduates at NIU who are interested in Accounting Information Systems courses. Additionally, anyone who is interested in what NIU is doing in terms of Accounting Information Systems education (future students, other university students, professors, professionals, etc.) may be a potential audience member. Because a web site may be visited by anyone utilizing the world wide web, there is not true way to actually know our visitors. Hopefully, it will contain information which is not only educationally helpful, but also provides an insight into the course as a whole.

The primary target users (NIU students) have general access to the internet via the student computer labs available on the NIU campus. Additionally, students may have access from their homes. The primary browser utilized by most of the target users is Netscape. The site should not overuse graphics, movies, or sound bytes due to the slow response time on the student network.

Do you want a lot of repeat visitors?

Repeat visits are highly indicative of this site. While the home page will remain primarily the same, class announcements and assignments should be posted regularly for interactive use with students. Once again, the student system will be utilized the most often to receive information. Text should make up a large part of the site.

Who's going to maintain the site and how much time do they have to do it?

This site will be maintained by the professors, graduate students, and undergraduate assistants who are dealing directly with the classes. Each should be allotted ample time and resources to maintain the site. Additionally, time showed be allocated to the combined distribution of information to users.

## Step 2: Outline the Content

Once you have a goal in mind, it helps to outline what content you want to include in the Web page or set of pages.

Which of the information is simply text? Which text should be scrollable? Which text should be in short chunks that fit easily within a window of the browser?

What kind of interactivity do you need to build in? Do you need to collect any information about the visitors to the page?

Will the Web site link to any other pages on the same Web server or to external Web documents? I have taken all three of the accounting information systems classes available on campus. As a planner of a web site, I took into consideration that which would have made my role as a user easier. The syllabus, discussion questions, in-class cases, case studies, and help guides are all valuable aspects of the instructional material. Therefore, they are all integral parts of the web site. Additionally, I felt that a submission form found directly on the page would increase communications with the instructor of the course.

The information is primarily text, which should have a minimal amount of graphics included due to access use. Additionally, because the classes are taught in topical units, the site should link specific information together. A topic area will have discussion questions, in-class cases, and help guides/information which should be linked together.

The web site could increase its user-friendliness by being updated weekly to remind students that they should be sure to reference certain information that week. Also, comments about the class and reminders should be utilized as valuable feedback for both students and instructors. Students should feel that their comments are important, and all e-mail should be responded to.

This will be up to the instructor. The site may possibly list URL's that are interesting or provide true links.

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#### Step 3: Choose a Structure for the Web Page

Do you want a linear structure so users can switch from screen to screen like a slideshow, using Next and Back navigation buttons? I choose a primarily linear structure which allows users to go back and forth between content area. There are buttons to allow the user to go from any page to the home page, to other content pages, and help pages. This will allow the user a coherent way to use the site.

#### Step 4: Code, Preview, and Revise

You'll find that you work in cycles: coding, placing graphics and links, and then previewing what you've done, changing the code, and previewing again in the browser software.

This was done by testing the pages in the view mode of PageMill. I also moved the root folder several times to be sure that the links were not disturbed. Fortunately, PageMill allows you to both create and view your site without worrying too much about code.

#### Step 5: Add Links Internally and Externally

Once you have the basic framework of your pages, you should check whether they make sense. Obviously you'll need you develop the material that links back and forth internally.

Once again, this was done by testing the pages in the view mode of PageMill. I also moved the root folder several times to be sure that the links were not disturbed. Fortunately, PageMill allows you to both create and view your site without worrying too much about code.

#### Step 6: Optimize for the Slowest of Your Target Audience

Once the pages have all the elements in place, make sure of the connections you expect your target audience to use. Due to the fact that most of the users would be using the student server, the pages needed to be primarily text so that they would be able to gain access quickly without long response times. This will be essential to the success of the site so that students know they will be able to access their information quickly.

#### Step 7: Test and Revise Yourself

By testing this site several times, it brought to my attention several link errors. The more I revised it, the more I had concerns about the links. It was important to always come back the next day and test the pages after make changes.

#### Step 8: Have Other Testers Check Your Work

You can only go so far in testing your own work. The same way you tend to overlook your own typos, someone else may readily find obvious flaws that you're blind to in your own Web pages.

This was done by my supervising professor.

# Step 9: Prepare Files for the Server

Make sure your files are ready to go on the server. Put all files for your page in one folder (or one directory) on the hard disk of the Web server for your own site.

I kept all of my web site within one root folder for ease of transferring throughout creation of it.

#### Step 10: Double-check your URL

If you're not sure of the URL for your pages, check with the administrator for the Web site. Try out the URL to make sure it's correct before passing it around to testers or printing it on business cards. I kept all of my web site within one root folder for ease of transferring throughout creation of it. It will be necessary to make sure that all of the URLs are proper upon transfer.

#### Step 11: Test Drive Some More

This is the true test of your Web pages. Can you find and use them? What about the other testers you've lined up? Test, revise, reload, and retest. It may take a while to iron out the wrinkles in a complex set of pages, but hang in there.

This will be done continually by those who create and use it. Students should feel free to comment about the ease of use, as they are the true users and inevitably testers as well.

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**ELECTRONIC FUNDS TRANSFER** The electronic transfer of funds from payer to payee through the banking system.

HUB Also called sponsors, hubs are large companies, very active in EDI, that strongly encourage their paper-based business partners to begin using EDI

ISO International Standards Organization

JIT Just-In-Time Manufacturing

**NEX/UCS** Network Exchange UCS

NRF National Retail Federation

POS Point-Of-Sale

PROPRIETARY STANDARDS Industry specific or company specific data formats that do not comply with ASC X12 standards

TRADING PARTNER Vendor or other party with whom business is conducted

TRANSACTION SET A complete business document such as an invoice, a purchase order, or a remittance advice

VAN Value Added Network

# WEB GLOSSARY

ADDRESS The place on the Web where a page is located. Generally referred to as the URL.

ALIAS An alternative label.

ANCHOR A type of link. Either a spot in a document that actually links to another place in the document or another document (a hypertext link), or the spot elsewhere in the document that can be quickly reached through a hypertext link.

**ANONYMOUS FTP** A scheme by which users can retrieve files over the internet without having an account on the remote system. Usually, the user logs in as anonymous and leaves his or her e-mail address as a password.

ATTRIBUTE An addition to an HTML tag that qualifies or extends the meaning of the tag.

Glossary

- **BOOKMARK** A Web URL that's automatically stored by the browser software for easy access later (also see hotlist)
- **BROWSER** A program used to look at Web pages. The appearance of the page is determined by the specific browser used to view it (and the size of the viewing window).
- CGI See common gateway interface
- COMMON GATEWAY INTERFACE An interface between World Wide Web servers and scripts, utilities and programs.
- **DATA** The never-ending stream of stuff that appears on the internet, as differentiated from *information*, which is data that has some meaning or value to the user.
- E-MAIL Electronic mail a convenient way to send messages to other users or groups without the hassle of paper or postage stamps.
- **FILE TRANSFER PROTOCOL** The internet protocol used to transfer files. Also a program. The way files are sent and received over the internet. Typically a user needs an account on a remote system unless it allows anonymous FTP access (see *anonymous FTP*).
- FTP See file transfer protocol.
- GOPHER A popular information-distribution service based on a hierarchical menu system; often overshadowed by the more sophisticated World Wide Web. The main Gopher site is at the University of Minnesota.
- **HOME PAGE** The central or initial document seen by visitors to your Web site. You can have many other Web pages connected to your home page.
- HOSTNAME The unique combination of computer and domain name that describes a particular computer on the internet. For example, "oats.farm.niu.edu" is a hostname at Northern Illinois University. Alternatively, some people believe just the name of the computer itself is its hostname, with all additional information the domain name. That would mean that the same computer would have a hose name of "oats" and a domain name of "farm.niu.edu". There's no consensus.
- **HOTLIST** A Web URL that is automatically stored by the browser software for easy access later; also known as a collection of bookmarks.
- HREF See hypertext reference.
- HTML See Hypertext Markup Language.

- HTML TAG A specific formatting instruction within an HTML document. Tags are usually contained within angle brackets, as in <HTML>.
- HTTP See Hypertext Transfer Protocol.
- **HYPERMEDIA** Any combination of hypertext and graphics, video, audio, and other media. The World Wide Web is a hypermedia environment because it allows multiple types of media to be used simultaneously in a document.
- **HYPERTEXT** An interconnected web of text information, wherein any given word or phrase may link to another point in the document or to another document.
- HYPERTEXT REFERENCE The address of the destination of a hypertext link.
- HYPERTEXT MARKUP LANGUAGE The document formatting language understood by World Wide Web browsers. This language is used to define and describe the page layout of documents displayed in a World Wide Web browser. HTML is a application of SGML (Standardized General Markup Language).
- **HYPERTEXT TRANSFER PROTOCOL** The underlying system whereby Web documents are transferred over the internet.
- **INFORMATION** The small subset of data that is actually useful and meaningful to the current user at the current moment.
- **INLINE GRAPHICS** Graphics that appear beside the text in a Web page when viewed via a browser (as opposed to graphics that require separate view programs).
- INTERNET The global network of networks that enable some or all of the following: exchange of e-mail messages, files, Usenet newsgroups, and World Wide Web pages. Also known as the Net.
- LINK A hypertext reference to another page or another location on the same page. May be a word, picture, or other area of a Web page that users can click to move to another spot in the document to another document.
- MARKUP LANGUAGE A special type of programming language that allows users to describe the desired appearance and structural features of a document.
- MOSAIC The original World Wide Web browser program developed at the National Center For Supercomputing Applications at the University of Illinois. Its release in 1993 sparked the explosive growth of the Web and helped boost interest in the internet. Many similar software programs to Mosaic commercial, shareware and freeware versions for almost any platform have been developed since Mosaic's release.

Glossary

- **NET** See internet.
- **NETSCAPE** A World Wide Web browser developed by Netscape Communications, created by some of the original NCSA Mosaic programmers. Netscape, more formally Netscape Navigator, may be the most popular browser on the Net.
- **ORDERED LIST** A list of items, often numbered, that describe steps in a process (steps 1, 2, 3, and so on).
- **POINTER** A word, picture, or other area that users can click to move to another spot in the document or to another document; same as *link*.
- **PORT** A particular "frequency" used to transfer a particular type of information between internet computers; FTP uses a specific port, whereas HTTP uses another. Somewhat analogous to television channels.
- SGML See Standardized General Markup Language.
- STANDARDIZED GENERAL MARKUP LANGUAGE The markup language that is the parent of HTML. SGML provides a means of defining markup for any number of document types (such as HTML). You don't mark up text in SGML, per se you mark up text using an application or instance of SGML. HTML is one of those applications.
- TCP/IP See Transfer Control Protocol/Internet Protocol
- **TELENET** An internet service that enables users to log on to a remote system and work on it as though they were directly connected to the system on site.
- TRANSFER CONTROL PROTOCOL/INTERNET PROTOCOL A system networks use to communicate with each other over the internet.
- URL See Uniform Resource Location.
- UNIVERSAL RESOURCE LOCATION An address on the World Wide Web. It includes the appropriate protocol, the system path, and filename. The standardized way in which any resource is identified within a Web document or to a Web browser. Most URLs consist of the service, host name, and directory path. An example of a URL:

  http://www.timeinc.com/time/daily/time/latest.html.
- UNORDERED LIST A list of items that have no implied order; commonly, a set of bulleted items.
- UNIX A very powerful operating system that is the object of a lot of criticism and adoration. Probably the most common operating system on the Internet, UNIX has some internet features built right into it.

**WWW** World Wide Web. A massive, distributed hypermedia environment that is part of the internet. Consisting of millions of documents, thousands of sites, and dozens of indexes, the Web is a fluid and often surprising place of information and activity.

## GETTING TO KNOW QUICKBOOKS PRO Works Cited

Certain information excerpted from QuickBooks Pro 3.1 User's Guide - Day-to-Day Reference Information.

## Harmony Piano Works is a modified case from:

Hearing, Sylvia. Computerized Accounting: With CA-Simply Accounting for Windows. Prentice Hall:New Jersey. 1996.

# CASE STUDIES Works Cited

Austin Explorer Maps, Classic Clocks, Firelight Stoves, and Horizon Events are modified cases from:

Hearing, Sylvia. Computerized Accounting: With CA-Simply Accounting for Windows. Prentice Hall:New Jersey. 1996.

## CREATING A WEB PAGE Works Cited

Adobe PageMill Version 1.0 - User's Manual. Adobe Systems Incorporated. 1995.

Gelinas, U., Oram, A., and Wiggins, W. <u>Accounting Information Systems</u> Southwestern, 1993.

Hollander, A., Denna, E, and Cherrington, J. Accounting, Information Technology, and Business Solutions. Erwin, 1995.

QuickBooks 3.1 QuickBooks Pro - User's Guide. Intuit, Inc. 1995.

## EDI Works Cited

Adobe PageMill Version 1.0 - User's Manual. Adobe Systems Incorporated. 1995.

Gelinas, U., Oram, A., and Wiggins, W. <u>Accounting Information Systems</u> Southwestern, 1993.

Premenos Web Site. http://www/premenos.com

# **KEY TERMS**Works Cited

Adobe PageMill Version 1.0 - User's Manual. Adobe Systems Incorporated. 1995.

Gelinas, U., Oram, A., and Wiggins, W. <u>Accounting Information Systems</u> Southwestern, 1993.

Hollander, A., Denna, E, and Cherrington, J. <u>Accounting</u>. <u>Information Technology</u>, and <u>Business Solutions</u>. Erwin, 1995.

Premenos Web Site. http://www/premenos.com/edi/ediglos.html