

# Chapter 1 Accounting Succinctly

Computer developers are frequently asked to create systems to assist a client in running his or her business. While the developer has the tools (e.g., SQL Server, C#, Visual Studio, etc.) to produce solid applications, the client has the knowledge of the business that needs to be computerized.

Unfortunately, most of the clients are not developers. (If they were, why would they hire programmers in the first place?)

The meeting of these two kinds of expertise is often fraught with miscommunication. The client explains his or her needs to the developer who, in turn, tries to convert those needs into a design and, eventually, into a running application. Often, after the client sees the finished program, he or she then has a clearer picture of what he or she wants the computer to do and, unfortunately, that picture frequently looks nothing like the program the developer wrote.

This disconnect (between the customer's explanations of his or her needs and how they are seen by all of the other roles in development) has been known for a long time, as shown in Figure 1. The tree swing diagram has been used for years and, although the artwork has improved, the concept remains true to this day:

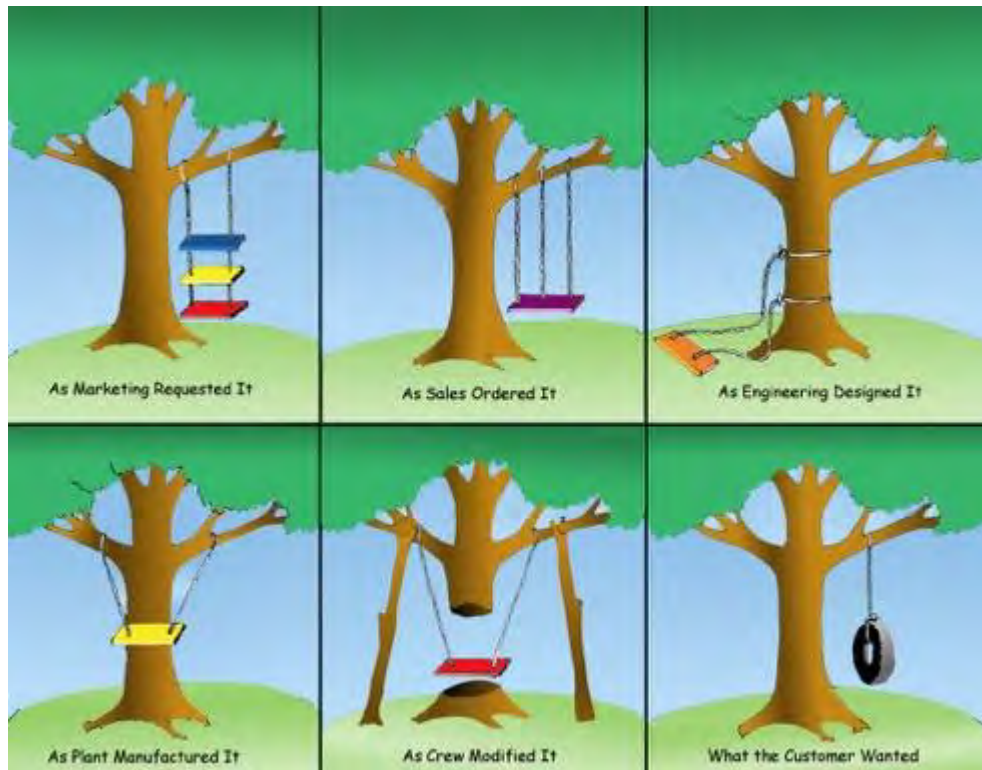


Figure 1: Tree swing diagram, courtesy of the [Monolithic Dome Institute](#)

What I will do in this book is introduce developers to some of the most common business applications he or she may run into. I will also identify some terms that have special meaning so that, when one client explains that the repair parts can be “LIFO” but the new cars better be “specific-id” and another client wants to convert from “weighted average” to “FIFO,” the developer will understand that the clients are actually talking about inventory reporting.

In the first chapter, I would like to explore some fundamental accounting concepts and definitions. While it is not my intent or desire to have developers study for the CPA exam, it is my hope to allow them to understand what the client means when terms such as debit, credit, and out of balance are discussed.

## Basic Accounting Background

Accounting begins with one simple concept which is as fundamental to accountants as the DO WHILE loop is to programmers. This concept is that all businesses have assets which are funded by one of two sources: the business owners (equity) or the company’s creditors (liabilities). Another view of this concept is the equation:

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNER'S EQUITY}$$

An accounting system, therefore, provides a method of record keeping that allows the user to track business activity and to record each transaction's impact on the above equation. To achieve these objectives, the system uses two primary repositories of information: the Chart of Accounts and the journals.

## Chart of Accounts

The Chart of Accounts is an itemized list of assets, creditor bills, and owner's equity in the business that need to be tracked by the system. Each item in the chart is generally assigned an account number and a descriptive name. In addition, each item has a dollar balance associated with it. The account numbers assigned usually designate some sort of grouping of the accounts. All assets, for example, might begin with the number one while current assets range from 1,000 through 1,500. For example, if the business owns a computer setup worth \$5,000, then its entry in the chart of accounts might look as follows:

*Table 1: Computer Asset in Chart of Accounts*

Account #	Description	Type	Balance
1750	HP Server, Router, and two workstation computers	Asset	\$5,000



**Note:** For example's sake, we are grouping several hardware component together; however, in most businesses, each hardware component would have its own entry in the chart of accounts.

If the business borrowed money for the computer system (say \$4,000), then another entry in the chart would reflect that loan:

Table 2: Loan for Computer Purchase

Account #	Description	Type	Balance
2550	Computer Loan-HP Server and workstations	Liability	\$4,000

Each item in the business will be listed in a similar fashion in the chart. This listing of accounts is sometimes called the General Ledger. The account type field is also important since we must be able to determine the account type to test that our basic equation stays true.

In our example above, the account type is part of the chart. In many accounting systems, the account number defines the account type. Whichever method is used, we can test the basic equation by the following construct:

- Is the SUM of all assets exactly equal to the SUM of all liabilities + the SUM of all owner's equity?

If the equation is true, then accounting books are in balance. A balance sheet is a financial statement that lists the assets on one side and the liabilities and equity on the other. Both sides are totaled and must be equal. It provides the business with an accurate picture on a given date of the net worth of the business (net worth is the sum of all of the assets minus the sum of all liabilities, which happens to be the same as the sum of the owner's equity accounts).

## Journals

Journals are recordings of activity or business transactions that have occurred. Every journal entry will impact one or more of the accounts in the ledger—either increasing or decreasing that account's balance. Many accounting systems will group transactions into specialized journals such as a sales journal or a cash receipts journal. In addition to the specialized journals, almost all systems have a general journal in which transactions which don't fall into any group are recorded.

In computer terms, the chart of accounts is a master file and the journal is the activity file which affects items in the master. Usually, transactions are accumulated in the journal and, after a period of time, applied to or posted against the chart of accounts:

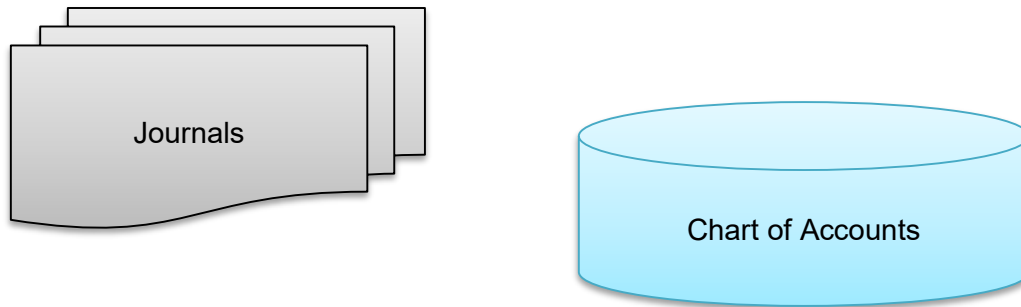


Figure 2: Transaction and master

Now that we have briefly reviewed the two main information sources for the systems, let's take a look at how these two work together to ensure that the key equation (shown below) always stays in balance:

- $\text{Assets} = \text{Liabilities} + \text{Equity}$

## Double Entry Accounting

Double Entry Accounting is the most common method of accounting for business transactions. To understand how the method works, we need to introduce two new terms that are somewhat hard to define: **debit** and **credit**.

Each account in the chart has a balance and this balance is considered to be a debit or a credit. For the asset accounts, the debit represents a positive balance in the chart while the credit represents a negative balance. If the business checking account has \$6,000 in it, we would say the account has a \$ 6,000 debit balance. If they write a check which reduces the balance, that check will be credited to the account. Credit entries reduce the balance in an asset account.

The liability and equity accounts work in reverse; credits are considered positive balances and the debit represents a negative balance. If the sales tax liability for one state is \$ 2,000, we would say we have a \$2,000 credit balance in sales tax payable. As they pay the sales tax, that balance will be reduced by debiting the account.

The following chart summarizes debits and credits:

Table 3: Debit/Credit Summary

Description	Debit	Credit
Assets such as cash, inventory, computers, office supplies, etc.	Increase	Decrease
Liabilities such as phone bills, car loan, sales tax collected, etc.	Decrease	Increase
Equity such as owner's contribution, common stock, etc.	Decrease	Increase

Every transaction that occurs must consist of at least one debit and one credit entry. The total of all debits and credits must equal. As long as this rule is followed, the books will never get out of balance.

## Let's Review a Few Examples

- A. **Business is started by the owner who contributed \$10,000 into the business checking account.**
- B. **Business buys a computer system to do consulting work on. The system costs \$6,000, which is paid for by a \$1,000 check and a loan for \$5,000.**
- C. **The owner buys three necessary items: a copy of Visual Studio, the Syncfusion library, and a subscription to a Web development magazine. Owner pays by check.**
- D. **The first installment of \$1,000 is paid on the computer system.**

To properly record the above events, the following items are entered in the chart of accounts:

Table 4: Chart of Accounts

Account #	Description	Type	Debit	Credit
1000	Cash-Checking Account	Asset		
1100	Software	Asset		
1200	Subscriptions	Asset		
1600	Computer System	Asset		
2000	Loan for Computer	Liability		
3000	Owner's Equity	Equity		

In addition, the following journal entries are written into the general journal:

Table 5: General Journal

	Account #	Description	Debit	Credit
A	1000	Cash-Checking Account	\$10,000	
	3000	Owner's Equity		\$10,000
B	1600	Computer System	\$6,000	

	Account #	Description	Debit	Credit
	1000	Cash-Checking Account		\$1,000
	2000	Loan for Computer		\$5,000
C	1100	Software	\$794	
	1200	Subscriptions	\$99	
	1000	Cash-Checking		\$893
D	1000	Cash-Checking		\$1,000
	2000	Loan for Computer	\$1,000	

Notice that, for each transaction, the total debits and credits are equal. If not, the transaction would be considered out of balance and could not be applied to the master file.

When the transactions are posted, the chart of accounts will appear as illustrated below:

Table 6: Detailed Chart of Accounts

Acc	Description	Type	Debit	Credit
1000	Cash-Checking Account	Asset		
	Beginning Balance		0	
A	Owner Investment		\$10,000	
B	Computer System Purchase			\$1,000
C	Software/Subscription purchase			\$893
D	Loan Repayment			\$1,000
	Ending Balance		\$7,107	
1100	SOFTWARE	Asset		
	Beginning Balance		0	
C	Software Purchase		\$794	
	Ending Balance		\$794	
1200	SUBSCRIPTIONS	Asset		
	Beginning Balance		0	

Acc	Description	Type	Debit	Credit
<b>C</b>	<b>Subscription Purchase</b>		<b>\$99</b>	
	Ending Balance		\$99	
1600	COMPUTER SYSTEM	Asset		
	Beginning Balance		0	
<b>B</b>	<b>Computer Purchase</b>		<b>\$6,000</b>	
	Ending Balance		\$6,000	
2000	LOAN FOR COMPUTER	Liability		
	Beginning Balance			0
<b>B</b>	<b>Computer Purchase</b>			<b>\$5,000</b>
<b>D</b>	<b>Loan Repayment</b>		<b>\$1,000</b>	
	Ending Balance			\$4,000
3000	OWNER'S EQUITY	Equity		
	Beginning Balance		0	0
<b>A</b>	<b>Owner Investment</b>			<b>\$10,000</b>
	Ending Balance			\$10,000

To test that the equation is still in balance, add up all of the ending balances for the assets accounts. Now add up all of the ending balances for the liabilities and the equity account.

### **Assets: (\$14,000)**

1000—Cash (\$7,107) + 1100—Software (\$794) + 1200—Magazine (\$99) + 1600—Computer (\$6,000)

### **Liabilities + Equity (\$14,000)**

2000—Computer Loan (\$4,000) + 3000—Owner's Equity (\$10,000)

The total ending balances above should each be \$14,000.

An accounting system's objective is to keep the primary equation true at all times. As long as the double-entry procedure (i.e., debits and credits equal at all times) is followed, the chart of accounts will stay in balance. This allows the owner of the business at any time to see the source of funds that were used to acquire the business's assets.



*Note: In this chapter, I painted the definitions of Assets, Liabilities, etc. with a broad brush. In most accounting systems, the accounts are further categorized as Current Assets (Assets likely to turn to Cash within the year), Fixed Assets (assets that will be part of the company for a long time such as cars, computers, etc.). Similarly, liabilities might be broken down as well, further categorized as Current Liabilities (due this year) or Long-Term liabilities that are not due for several years (mortgages., etc). A good accounting system offers the flexibility to categorize assets into any grouping that works for the business.*

Now, let's quickly define some of the accounting terms I used in this chapter:

- **Assets**—All items of value within the business such as cash, vehicles, computers, inventory, etc.
- **Equity**—The owner's portion of the business. How much of the assets are funded by the company owner(s) or stockholders.
- **Liabilities**—The creditor's claims against the business assets. How much of the assets must be used to pay off debt.
- **Chart of Accounts**—Itemized list of every asset, liability, and equity account in the business. It is used as a repository for the current value of each item. It is sometimes called the *General Ledger*.
- **Journals**—Transaction files recording events that happen to the various assets and liabilities in the business.
- **In Balance**—The condition where the total value of Assets equals the total value of liabilities and owner's equity.
- **Balance Sheet**—The report listing all of the assets of the business as well as all of the debt and the value of the owner's portion of the business.
- **Net Worth**—The value remaining after all of the debt is subtracted from the total value of all the assets.
- **Posting**—The process of transferring each journal entry into the Chart of Accounts.
- **Debit**—An accountant's term which means an increase in an asset account's value or a decrease in either a liability's value or an equity account value.
- **Credit**—An accountant's term which means a decrease in an asset account's value or an increase in either a liability's value or an equity account value.

## Summary

In this chapter, I've covered the basics of double entry accounting and shown how this information is recorded in the system. In the next chapter, I will expand upon these concepts to show how making money appears in the chart, and the journal entries to record revenues and expenses.



*Note: The Appendix contains some SQL scripts to create tables and procedures so you can try the accounting transactions out using Microsoft SQL Server (2005 or higher). These scripts are not meant to help you design a complete accounting system but, rather, they give you enough to let you watch the transactions through the tables and flows in a database. If you need to write your own system, feel free to use these scripts as a basic starting point.*



# Chapter 2 Revenues and Expenses

In the last chapter, I discussed how assets and liabilities of a corporation are handled. Of course, most companies are in business to make profits, not just to buy and sell assets. So, in this chapter, I will review how revenues and expenses are handled and how these accounts impact the asset, liabilities, and equity accounts.

## Revenue and Expense Accounts

To start with, let's expand the chart from the previous chapter to include revenues and expenses. The updated chart is displayed below:

*Table 7: Debit/Credit Summary for All Account Types*

Description	Debit	Credit
Assets such as cash, inventory, computers, office supplies, etc.	Increase	Decrease
Liabilities such as phone bills, car loans, sales tax collected, etc.	Decrease	Increase
Equity such as owner's contributions, common stock, etc.	Decrease	Increase
<b>Revenues:</b> Monies or IOUs received from sales of a product or service.	Decrease	Increase
<b>Expenses:</b> Expenditures related to sales such as postage, shipping supplies, etc. Also fixed expenses such as rent, phone bills, utilities, etc.	Increase	Decrease

I've drawn a line, breaking the chart into two groups. The first group (assets, liabilities, and equity) are referred to as permanent or balance sheet accounts. The second group (revenues and expenses) are referred to as temporary or income statement accounts. The major differences between the two are:

1. Balance sheet accounts are displayed on the balance sheet while income statement accounts are displayed on the income statement.
2. Permanent accounts keep a running balance for the life of the business while temporary accounts only keep a balance for one period. As a new period starts, these accounts get reset to zero. This process is called closing, which we will cover in more detail later. A period can be any length of time for which your accounting system wants to keep income.

Using the new chart, let's show a couple of examples that affect income statement accounts.

First, we will need to add a few new accounts to our general ledger:

Table 8: New Accounts

Account #	Description	Type	Debit	Credit
4000	Sales Revenue	Revenue		
5000	Rent	Expense		
5100	Postage	Expense		
5200	Shipping Supplies	Expense		
5300	Office Supplies	Expense		

The above accounts represent the accounts that a small design shop might use to record their revenues and the costs associated with selling designs and marketing materials to clients.



*Note: Our example above is a small set of expenses; most systems will have a much more detailed expense breakdown. Since taxes are paid on net profits, systems are designed to reduce net profits by accounting for all associated expenses.*

## Let's Review a Few Examples

- A. Bambi designs a new logo for a client who loves it and pays her \$250 cash for the logo file, which Bambi sends her via e-mail.
- B. Kim creates a mobile version of a website and charges the client \$595, which the client pays via a check.
- C. Kim purchases copier paper and blank DVDs for office use, which Kim pays via a check for \$75.
- D. Bambi prepares a marketing brochure and poster set, which she ships to the client. She spends \$28 on shipping supplies and \$12 on postage. She deposits a \$400 check from a client on her way back to the office.
- E. The end-of-month rent of \$600 for office space is paid from the checking account.

## Our journal entries for the above:

Table 9: General Journal Entries for Sales Activity

	Account #	Description	Debit	Credit
<b>A</b>	<b>1000</b>	<b>Cash-Checking Account</b>	<b>\$250</b>	
	<b>4000</b>	<b>Sales Revenue</b>		<b>\$250</b>
<b>B</b>	<b>1000</b>	<b>Cash-Checking Account</b>	<b>\$595</b>	
	<b>4000</b>	<b>Sales Revenue</b>		<b>\$595</b>
<b>C</b>	<b>5300</b>	<b>Office Supplies</b>	<b>\$75</b>	
	<b>1000</b>	<b>Cash-Checking Account</b>		<b>\$75</b>
<b>D</b>	<b>4000</b>	<b>Sales Revenue</b>		<b>\$400</b>
	<b>1000</b>	<b>Cash-Checking Account</b>	<b>\$360</b>	
	<b>5100</b>	<b>Postage</b>	<b>\$12</b>	
	<b>5200</b>	<b>Shipping Supplies</b>	<b>\$28</b>	
<b>E</b>	<b>5000</b>	<b>Rent Expense</b>	<b>\$600</b>	
	<b>1000</b>	<b>Cash-Checking Account</b>		<b>\$600</b>

If you review our rules from Chapter 1, you'll notice that the total debits and total credits are equal in each transaction recorded. Using double-entry accounting, this must be the case.

We can take the amounts from the Sales Revenue account:

- Entry A—New Logo: \$250
- Entry B—Mobile website: \$595
- Entry D—Brochures/Posters: \$400
- TOTAL FOR PERIOD: \$1,245

This gives us the money we earned in total for the month.

We can now take the amounts from the expense accounts:

- Entry C—Office Supplies: \$75
- Entry D—Postage/Shipping: \$40

- Entry E—Rent: \$600
- TOTAL EXPENSES: \$715

You can now take the total revenues (\$1,245) and subtract out the total expenses (\$715) to see that the company made \$530 in profits this month.

## Closing Entry

After this simple first month of business, they need to close the books and prepare for the next month's transactions. The goal of closing is to reset the income statement accounts to zero while doing something with the profit (or loss) that occurred during the period.



**Tip:** *In any accounting system, all of the journal entries must be preserved. You cannot simply set accounts to zero; you must create journal entries to accomplish it.*

To close the month, the business generates a special entry in our journals called the closing entry. It is going to take all of the revenue and expense accounts and write an entry for the exact balance. However, the entry will be debited for revenue (remember, debits reduce revenue) and credited for expenses. So, to close the sales revenue and expense accounts, we would record the following entries:

Table 10: Closing Entries for First Month

	Account #	Description	Debit	Credit
	4000	Sales Revenue	\$1,245	
	5000	Rent Expense		\$600
	5100	Postage		\$12
	5200	Shipping Supplies		\$28
	5300	Office Supplies		\$75

### Oops!

The above entry is not in balance. Accountants really frown upon out-of-balance entries! The difference of \$530 has to be recorded somewhere. This difference, if a credit, represents the net income or profit for the period. (A debit difference would represent a net loss for the period).

The net income (or net loss) is recorded in the equity section of the balance sheet. To complete the above closing entry, the net income would be recorded as:

	Account #	Description	Debit	Credit
	3000	Owner's Equity		\$530

With this final entry, the transaction is now in balance and can be posted to the general ledger.

Once the closing entry is posted, all of the temporary accounts have zero balances and are ready to receive transactions for the next period. The equity account has increased or decreased by the amount of the net income/loss.

## Equity Accounts

For a small business such as in our example, one equity account might be sufficient. However, they might want to expand the equity section a bit so they can fine-tune from where the business equity came. One approach to do this is to break equity into two accounts, the:

- 3000 Owner's Equity
- 3100 Retained Earnings

By using this approach, the Owner's Equity account represents contributions directly made by the owners and the Retained Earnings account represents accumulated profits over the life of the business.



**Tip:** While small businesses might be content with just a single Equity account, most corporate systems will have multiple equity accounts and will almost always have a retained earnings account.

## Partnerships

If a business is run as a partnership, it might use the equity section to keep track of each partner's contributions and earnings from the business. For example, Bambi and Kim must each have their own equity accounts and agree that 60 percent of the profits go to Bambi and 40 percent of the profits go to Kim.

- 3000 Bambi's Equity
- 3010 Bambi's Retained Earnings
- 3100 Kim's Equity
- 3110 Kim's Retained Earnings

In this type of situation, the final journal row (to post the profit/loss) would be split among the two owners according to the partnership agreement:

	<b>Account #</b>	<b>Description</b>	<b>Debit</b>	<b>Credit</b>
	3010	Bambi's Retained Earnings (60%)		\$438
	3110	Kim's Retained Earnings (40%)		\$292

This approach allows each partner to see how much that (a) they've invested and (b) how much they've made over the life of the business.

## Summary

Now, let us quickly define some of the accounting terms I used in this chapter:

- **Revenues**—Monies earned from selling a product or performing a service.
- **Expenses**—Monies spent for administrative overhead or direct costs of selling/delivering the product or service
- **Permanent accounts**—Accounts for assets, liabilities, and equity that are tracked for the life of the business.
- **Temporary Accounts**—Accounts for revenue and expenses that are used to track profits for a given period, then consolidated into a permanent equity account.
- **Closing**—The process of summarizing the revenue/expense accounts and moving the net profit to a permanent, balance sheet account.
- **Closing Entry**—the journal entry used to perform the closing operation.
- **Retained Earnings**—the cumulative sum of all of the profits earned over the lifetime of the business.

# Chapter 3 Revenue Recognition

In our examples so far, I've looked at a simple accounting system. Whenever cash is received, we make revenue and whenever cash is spent, we incur expenses. In this chapter, I will look at two approaches: the simple cash basis and the (more commonly used) accrual basis for determining when we made and spent money.

## Cash Basis

In the Cash Basis approach, it is simple to determine when you made revenue. As soon as you get paid! So, if you sell a product on December 19th of this year for \$4,000 but don't get paid until January 5th of next year, you don't report that \$4,000 this year (since you haven't been paid yet), you report it in the year you are paid (i.e., next year).

Your expenses are not recorded until you pay them. In essence, your checkbook can act as your accounting system.

## Simple example

If we take the entries from the first two chapters and move them into a checkbook register, our records might look like the following:

Number	Date	Description of Transaction	C	Debit (-)	Credit (+)	Balance
	1/1/07	Owner Contribution			\$10,000	\$10,000
101	10/2/14	Computer Purchase	√	\$1,000		\$9,000
102	10/3/14	Visual Studio Software	√	\$394		\$8,606
103	10/4/14	Syncfusion Library		\$400		\$8,206
104	10/5/14	Subscription	√	\$99		\$8,107
105	10/31/14	Computer Loan Payment		\$1,000		\$7,107
DEP	11/2/14	Client Logo Design			\$250	\$7,357

Number	Date	Description of Transaction	C	Debit (-)	Credit (+)	Balance
DEP	11/4/14	Invoice # 101— Website			\$595	\$7,952
106	11/6/14	Copier Paper/DVDs		\$75		\$7,877
DEP	11/8/14	Invoice #105— Brochure			\$400	\$8,277
107	11/8/14	Shipping/Postage		\$40		\$8,237
108	11/15/14	Office Rent		\$600		\$7,637

Note that, even though a loan for the computer was made, the cash basis only reflects the payment. In the cash basis, all of the deposits and payments are only recorded when they occur. A checkbook register (and most banking software) serves as the journal of activity.

While this approach is simple to understand, it does not accurately match expenses and revenues. You could easily incur a large amount of expenses in November and December but not get paid until January. So the expenses would be higher this year, with no matching revenue, while next year the revenue will be higher without matching expenses.

## Accrual Basis

The Accrual Basis approach, while a bit more involved, does a much better job of associating revenues with the expenses that belong with them. The revenue is recognized as soon as it is earned, not when payment is received. The expenses are recorded when they occur, not when you pay for them.

With the accrual basis, you will need to create additional accounts called Receivables (money owed us) and Payables (money we owe). The recording of revenue for a credit sale is now two journal entries: the first, records the sale and the receivable records it when the sale is made:

	Account #	Description	Debit	Credit
	4000	Sales		\$2,500
	1100	Accounts Receivable	\$2,500	

Accounts Receivable is considered an asset so we increase it by debiting its balance. Hopefully, within a short period of time, we will close the Accounts Receivable by moving the money into the cash/checking account:



	<b>Account #</b>	<b>Description</b>	<b>Debit</b>	<b>Credit</b>
	1000	Cash-Checking	\$2,500	
	1100	Accounts Receivable		\$2,500

The Accounts Receivable account is essentially a holding bucket for IOUs. In this approach, if you made the sale in December, you would report it as income this year and the following year would simply move the payment from the Accounts Receivable account to checking—without having had any impact on revenue.



**Note:** One question you might have is, how do you deal with non-payment (i.e., when a customer defaults on his bill)? Such a case is called a bad debt and becomes an expense when the debt is declared bad. This expense will allow you to offset the income that you recorded even if the income came in a prior period. We will cover handling bad debt in a later chapter.

You can also purchase items needed and pay for them on credit by using the Accounts Payable account. For example, you can purchase shipping supplies and put them on your credit card. The journal entry might look like this:

	<b>Account #</b>	<b>Description</b>	<b>Debit</b>	<b>Credit</b>
	5200	Shipping Supplies	\$750	
	2100	Accounts Payable—VISA Card		\$750

When you pay the credit off, you will reduce cash (by crediting it) and reduce the Accounts Payable (your debt to VISA) by debiting it:

	<b>Account #</b>	<b>Description</b>	<b>Debit</b>	<b>Credit</b>
	1000	Cash-Checking		\$750
	2100	Accounts Payable—VISA Card	\$750	

Generally, you can have multiple Accounts Payable accounts such as expenses, sales tax collected (yep, when you charge sales tax, you incur a debt to the government), possibly loans payable for that computer purchase, etc.

The Accounts Payable is simply a method to allow you to put the expenses within the same period as when the sale occurs, regardless of when the cash is actually paid out.

## Comparing Methods

To compare the two methods, consider the following transactions:

- Customer comes in store on December 21 and purchases a \$700 TV.
- Customer pays for it with a VISA card.
- The next day, the store pays \$50 to have the TV delivered (included in the price).
- On January 24, payment is received from VISA.

### Cash Basis

	Account #	Description	Debit	Credit
12/21		Nothing is Recorded		
12/22	1000	Cash-Checking		\$50
	5200	Delivery Expense	\$50	
1/24	1000	Cash-Checking	\$700	
	4000	Sales		\$700

An income statement prepared on December 31 would not show the \$700 revenue, although it would show the \$50 delivery expense:

### Accrual Basis

	Account #	Description	Debit	Credit
12/21	1100	Accounts Receivable	\$700	
	4000	Sales		\$700
12/22	1000	Cash-Checking		\$50
	5200	Delivery Expense	\$50	
1/24	1000	Cash-Checking	\$700	
	1100	Accounts Receivable		\$700

An income statement prepared on December 31 would show the \$700 revenue and the \$50 delivery expense. The net income for this transaction would be \$650 (minus the cost of the TV of course).

## Taxes

Taxes are collected by various government agencies. For example, they are collected by the Internal Revenue Service (IRS) in the United States and by HM Revenue & Customs (HMRC) in the United Kingdom. In the U.S., the IRS allows small businesses to pay their taxes by using either cash or to do so on an accrual basis. When you first start your business, you are somewhat free to use either approach. (The IRS assumes larger businesses and businesses with inventory, in particular, should use the accrual basis).

However, once you file a tax return, you must use that approach from then on. You can get approval from the IRS to change methods but the IRS will figure out the tax impact of such a change before it allows you to change methods. You can end up with a large tax bill to change methods.

Taxation rules, rates, allowances, etc., will vary for different countries throughout the world. Not all countries will allow cash basis for taxes. An accounting system should provide sufficient detail for the taxing agency to determine the proper revenue recognition and expense handling to accurately determine tax liability.

## Multiple Books

You can keep two sets of books, one for tax purposes and the other for financial reporting. It is a common feature in modern accounting systems, which allows you to run reports by using either basis. When reporting to the IRS, companies like to use any legal method to reduce the amount of taxes it owes. However, when reporting to investors, owners, senior management, etc., the accounting system typically wants to show how well the company is performing.

While multiple books are allowed in the U.S., this may not be the case in all countries. The U.S. uses Generally Accepted Accounting Principles (GAAP) to determine accounting rules while most countries (over 100 of them at the time of this writing) use the International Financial Reporting Standards (IFRS) to handle accounting principles.

## Summary

The accrual system is common for most mid to large-sized businesses and provides the most accurate matching of revenues and expenses. If you look at the chart of accounts and don't find Accounts Receivable and Accounts Payable accounts, the business most likely is using the cash basis.