Chapter 8: Hands-on Activity – Web Page Construction

Web Page Construction software uses Web editors such as Microsoft's FrontPage and Macromedia's Dreamweaver to create web pages. The tools used to develop a Web page, include HTML or a visual Web page editor, software development kits, and Web page upload support.

Create a Web Page using a Yahoo. You have to create a free yahoo email account before you can create a website. (www.yahoo.com, click on the Mail link, walk through the steps to create a username and password):

1. In the browser, type **http://smallbusiness.yahoo.com/webhosting/sitebuilding.php**
2. You have three options:
   a. **Option 1:** Use our free site design and building tool
   b. **Option 2:** Use your own site design tools and our advanced scripting tools
   c. **Option 3:** Have an expert build your site
3. You will select **Option 1** (Use our free site design and building tool):
   a. Click on the **Download Site Builder** button
   b. When the pop-up box appears, click on **Open or Run**
   c. You will go through the **Site Builder** wizard
      - Screen 1 (Yahoo Site Builder Setup) – Click on **Next**
      - Screen 2 (License Agreement) – Click on **I Agree**
      - Screen 3 (Choose Features) – Click on **Next**
      - Screen 4 (Choose Installation Location) – Click on **Next**
      - Screen 5 – Click **Finish**
   d. Click on **Create New** button
   e. A wizard will guide you through the steps to create a new web site
   f. Click the **Start** button
   g. Type in the name of the Web site in the **Name of my web site** textbox
   h. Click the **Next** button
   i. Click the **Next** button (a template is selected)
   j. Click on a template
   k. Click the **Next** button
   l. Click the **Next** button (Select the page(s) you want to create now)
   m. Click the **Finish** button. (Congratulations page)
   n. You will see four tabs on the web page. Click on each tab and view the contents of the page
      i. aboutus.html
      ii. contactus.html
      iii. index.html
      iv. services.html
   o. Modify the contents of the four pages adding your own information
   p. When you are finished, click on File (menu) and click on Save All Pages (menu)
   q. You can not publish the website without a business account with yahoo. You can view the web pages in the browser
      i. Click on File
      ii. Click on Preview in Browser

Chapter 8: Hands-On Activity – Feasibility Analysis

A key step of the systems investigation phase is the feasibility analysis, which accesses technical, economic, legal, operational, and schedule feasibility. Schedule feasibility determines whether the project can be completed in a reasonable amount of time – a process that involves balancing the time and resource requirements of the project with other projects. Net present value is the preferred approach for ranking competing projects and for determining economic feasibility. Net present value represents the net amount by which project savings exceed project expenses, after allowing for the cost of capital and the passage of time. The cost of capital is the average cost of funds used to finance the operations of the business.

For example: You will make $20,000 for completing a project that will take 3 years to complete. What would be the value of this future payment of $20,000 today?

Use Microsoft Excel to create a spreadsheet using the Net Present Value function. The Net Present Value function requires the percentage rate, initial investment cost, and return over the years. Compute the net present value if you purchase equipment that costs $15,000 today. What will be the value of the equipment in Year 2, Year 3, Year 4, Year 5, etc? At what point will the equipment have no monetary value? **Ch8NPV.xls**.

1. Open Microsoft Excel
2. Click on **Help** on the menu
3. Click on **Microsoft Excel Help**
4. Type ***Net Present Value*** into the **Search For** box
5. Press the **Enter** key
6. Click on **Net Present Value Calculator (Templates > Calculators)** (You need to have Internet access)
7. Scroll to the bottom of the screen, click on Page 2 (the calculator you need is on the second page of the calculators)
8. Scroll until you see the Net Present Value calculator
9. Click on **Net Present Value Calculator** link
10. Click on the **Download Now** button
11. You can change the initial value of the equipment to any number
12. You will see when the amounts in the spreadsheet change to 0, the equipment has no value

Chapter 8: Hands-on Activity – Structured Programming

Some program development projects use a structured approach with three allowable structures. In the **sequence structure**, the program must have definite starting and ending points. After starting the sequence, programming statements are executed one after another until all the statements in the sequence have executed. Then the program either ends or continues on to another structure. The **decision structure** allows the computer to branch, depending on certain conditions. The **loop structure** allows the program to cycle or loop a certain number of times.

Microsoft Word includes flowcharting symbols that can be used to illustrate the programming structures:

1. In Microsoft Word, click on **Tools** on the menu
2. Click on **Toolbars**
3. Click on **Drawing**
4. Click on the **AutoShapes** drop down arrow
5. Click on **Flowchart**

Draw a flowchart to illustrate the following problem. You are given for input the student name, number of credits, and cost per credit. You need to output the student name, number of credits and total tuition.

Draw a flowchart to illustrate the following problem. You are given for input the student name, number of credits, and cost per credit. If the student takes over 12 credits, they pay $2000.00 tuition. If the student takes 12 credits and under, they pay the cost per credit that is on the input record. You need to output the student name, number of credits and total tuition.

Chapter 8: Hands-on Activity – System Controls

Most IS departments establish tight system controls to maintain data security. System controls can help prevent computer misuse, crime, and fraud by managers, employees and others.

The controls include:

- Input controls
- Output controls
- Processing controls
- Database controls
- Telecommunication controls
- Personnel controls

Use the chart below to list the controls that are already in place at your school or place of work. What types of controls do you think need to be in place at a school? Think about the equipment at the school, securing your personal information on the computer, allowing students to access and modify their grades?

Controls	
Input controls	1. 2.
Output controls	1. 2.
Processing controls	1. 2.
Database controls	1. 2.
Telecommunication controls	1. 2.

Personnel controls	1. 2.