

IT 101: Introduction to Information Technology

Course Description

This course will introduce students to the major information technology career areas and train students in the use of Microsoft Office XP Professional. Students will receive an introduction to the areas of study for IT while learning and using Office applications including Word, Excel, Access, and Outlook.

Outcomes

By the end of this course, students should be able to:

1. Name and discuss the four emphasis areas in the IT curriculum
2. Describe the major components of a computer, the most popular modern operating systems, and the most common software applications
3. Demonstrate proficiency using Microsoft Office Professional applications, including the integration features
4. Use the systems development life cycle to manage a basic information systems design project
5. Describe the basic structure of a network, including hardware components, networking terminology, and connection types and demonstrate how a network is designed and functions
6. Use HTML and basic scripting to develop a simple Web page
7. Discuss the basics of at least three programming languages (C++, Visual Basic for Applications, and JavaScript) including operations, functions, and usage
8. Describe the importance of databases and demonstrate proficiency in creating, maintaining, and querying a database using Microsoft Access

Grade Weighting

Weekly Projects: 40% (8 projects @ 5%)

Message Board Participation: 10%

Seminar Participation: 5%

Management Project: 40%

General Participation: 5%

Lesson 1: Network Preliminaries: Online Communication and Operating Systems

Purpose

This Lesson introduces you to the effective use of Outlook as a communication tool. You will also be introduced to a variety of operating systems in use today. When you begin the Lesson, first read through both your Weekly Project and your Management Project installment. This will give you a good overview of the

skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Demonstrate use of Outlook as an organizational tool
2. Understand basic Windows XP file structure
3. Demonstrate file management skills in Windows XP
4. Understand what distinguishes the UNIX and Macintosh operating systems from Windows XP
5. Understand why different environments call for different operating systems
6. Name and describe the basic steps of the systems development life cycle and discuss how they apply to IT systems development

Lesson 1: Online Communications Guidelines

Production: Insert Resource Library Item

Lesson 1: Student Introduction

Throughout this course, many discussion opportunities come up where you need to respond to other people's opinions and comments. Please take this opportunity to introduce yourself and to learn something about each other. Be sure to include the following information:

- Your name
- Why you signed up for this particular course
- Any prior knowledge you may have about this topic
- Your current and/or future educational goals
- How you think this course will help you

Respond to these questions on the Message Board. Take time to review the responses of your classmates and provide your feedback.

Lesson 1: AOL Instant Messenger

This course will require the use of AOL Instant Messenger (AIM) for interaction among students and instructors outside the weekly Seminars. If you do not already use AIM (or if AOL is not your Internet service provider), you can download it for free from the aim.com website.

- Go to <http://www.aim.com>
- If you have never used AOL or AIM before, click the large **New Users** button on the right side of the screen
- If you are a paying AOL member but would like to use AIM (for instance, if you want to use your AOL screenname from your work computer), click the **AOL members** link on the center portion of the screen

If you already have AIM on your computer but would like to upgrade to the newest version, click **Download the latest AIM client**.

You can find more information on AIM in [The Kaplan eGuide to Office XP: Online Research and Interaction](http://www.kaplancollege.edu/coursemedia/it/it133/eGuide_XP_Online.pdf). [\[link to: http://www.kaplancollege.edu/coursemedia/it/it133/eGuide_XP_Online.pdf\]](http://www.kaplancollege.edu/coursemedia/it/it133/eGuide_XP_Online.pdf)

Lesson 1: Overview of Weekly Projects and the Management Project

This course is project based, emphasizing learning by completing tasks and solving problems. The majority of activities in this course either support or build on the projects you complete each week. There are two series of projects for the course: weekly projects and the management project.

Weekly Projects

Each week, you will be assigned one or two tasks that will help you focus on the topics you are learning in that lesson. The projects will always introduce one aspect or specialized area of the information technology field (such as computer systems, networking, Web development, databases, or programming) and one software application or skill (such as Microsoft Office, HTML, or JavaScript).

The weekly projects put you in the role of a new IT assistant at Tidmore Studios, a medium-sized marketing and advertising firm. Since this is a fairly small company, you will be called on to assist with a wide variety of IT tasks and make recommendations on technology and software improvements.

While you can go about completing the projects in any way you choose, there are certain steps that may make it easier to solve the problems each project represents:

1. Make sure you can describe, in your own words, what the final "product" will look like: What are you required to include? What choices do you have and how do you make those decisions? How long should it be? What should it look like? What graphics or other features are necessary?
2. Once you have identified what your final product will look like, pinpoint what you need to learn in order to complete the project. What questions do you have? What skills do you need to improve? What concepts do you need to pick up? What about completing the project makes you nervous?
3. Once you have identified what topics you need more information on, identify where you can find that information. Is some or all of the information in the assigned readings? What questions would you like your instructor to answer? What websites or online resources can provide more information? Are there classmates who can help you?
4. Once you have completed work on your project, take a few minutes to identify specific terms, concepts, and ideas that you want to remember or to continue exploring.

As you tackle each project, you may want to keep track of what resources you found, what questions you had, and what you learned in a learning journal. You can download a sample project page for a learning journal [here <link to coursemedia Word document>](#). You can create your own, adapt this for your own use, or simply copy it into your own learning journal for each new project. A learning journal is not required for this course, but it is highly recommended.

Management Project

The management project puts you in the role of a new employee at the McCall Southern Company, an IT consulting firm. The company was recently approached by Carlin Imports. Within the next year, Carlin Imports will be the host company for a large international conference of people in the import/export business.

Carlin is looking for someone to provide the information systems for their conference and is accepting proposals from interested parties. Your company is very interested in winning this contract and has asked you to serve on the team that is putting this proposal together. Carlin has never hosted a conference before, and has asked for a series of documents detailing what their information technology needs will be and why. Your company has never worked on conference planning before, so Mr. McCall thinks this is an ideal project for you to cut your teeth on.

The purpose of the management project is to help you bring together the skills you are learning in the course to understand how to participate in a larger information technology project, which you help to manage. The management project has six parts or installments:

Installment 1 is not graded separately, but will be posted on the Message Board.

Installments 2 and 3 are due to your instructor at the end of the midterm reading week in lieu of a separate midterm project. (You will submit them under Project Submissions for Lesson 4.)

Installments 4, 5, and 6 are due to your instructor at the end of the final reading week in lieu of a separate final project. (You will submit them under Project Submissions for Lesson 8.)

For each lesson you are assigned a project installment, you will have the option of submitting that installment to your instructor for comments, though it will not be graded.

It is strongly recommended that you keep a backup copy of each installment throughout the course. This will save you from having to recreate your work at the end if you discover your disk has been damaged or lost.

Lesson 1: Weekly Project: Using Outlook

Once you have completed all of the projects for this lesson, you will be zipping the documents into one file to submit to your instructor. If you do not know how to create a zip file, visit www.winzip.com and download an evaluation copy of WinZip. This site also has links to some basic information on using this program.

In addition to starting your IT course work, you have been hired as an information technology assistant at a small local company called Tidmore Studios. Your new boss, Ms. Tidmore, has made several requests of you on your first week, but the most important is an article she would like you to write for the company newsletter.

Tidmore has only recently started using Outlook and many non-technical employees do not understand how the email system works. Put together a short article for the company newsletter detailing ways employees can use Outlook to become more effective and efficient.

Your article should have a total of five tips, and should include at least one tip Outlook's three main features: email, calendar, and contacts. Each tip should include two sections of at least one paragraph each: "How to Do This" and "Why You Should." (You can use bullet points instead of standard paragraphs for the "How to Do This" section.)

Some possible topics include the following suggestions, but feel free to come up with your own tips if you prefer:

- How can employees save their calendars as a Web page?
- How can employees use Outlook help organize your inbox? List and explain some features
- How can employees help insure that information they send via Outlook is protected and secure?
- How can employees use Outlook to help filter out spam?
- How can employees protect themselves and the company from Outlook handle potential viruses that may come attached to an email?
- How can employees use Contacts to become more productive?
- What different ways can employees peruse their Contact lists and organize their Contacts?

Include at least two screenshots with your article. If you have never taken a screen shot before, simply display the windows you want to capture on your screen and press **ALT+Print Screen**. Then open your Word document and paste the screen shot at the end of the tip to which it relates.

In choosing which tips to include, you can consult the *The Kaplan eGuide to Office XP: Outlook*, Outlook's built-in help features, the Microsoft Office website <<http://office.microsoft.com>>, and any resources you find online.

Directions for Submitting Your Project

Place your article in a Word document and title it **lastname_project1.doc**. Zip both projects for this lesson together. Save the zip file in a location you will remember under the name **lastname_lesson1.zip**. When you are ready to submit it, go back to the lesson page and click on the **Submit Lesson 1 Project** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 1: Weekly Project 2: Computer Systems

With the addition of your group of technology interns working under the director of information technology, Tidmore needs to buy at least five new computer systems in the immediate future and eventually replace some of its older desktop computers with newer systems. Currently, the company's creative consultants (designers, writers, proofreaders) use Macintoshes and the business consultants and account managers use PCs with Windows 2000.

Since your department will be using the newest systems, Ms. Tidmore would like to know which models you recommend. Review a website like CNET.com or the site of your favorite manufacturer and find a model you would like to suggest. Write a 1-2 page paper explaining the features of the model you recommend, keeping in mind that Ms. Tidmore and her advisors will need someone to explain the technical jargon and significance of various benchmarks and measurements.

In your report, include a description of how end users utilize the operating system and how the OS you are recommending organizes its files. In lieu of a description, you can include at least two screen shots demonstrating what the operating system desktop on your recommended machine looks like, and another screen shot showing how the system organizes its files.

Despite her lack of technical expertise, Ms. Tidmore is very curious about Macintosh and Linux and how they compare to Windows. At the end of your report, include a recommendation to Ms. Tidmore on whether or not she should transition the entire company to using the same operating system (and if so, which one), or if it is workable to keep using multiple operating systems.

Directions for Submitting Your Project

Place your article in a Word document and title it **lastname_project2.doc**. Zip both projects for this lesson together. Save the zip file in a location you will remember under the name **lastname_lesson1.zip**. When you are ready to submit it, go back to the lesson page and click on the **Submit Lesson 1 Project** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 1: Outlook Resources

The Kaplan eGuide to Office XP: Outlook Basics <http://www.kaplancollege.edu/coursemedia/it/it133/eguide_XP_outlook.pdf> includes a good bit of information on setting up Outlook's email, calendar, and contacts features. You can find more information by using Outlook's built-in help feature.

Another good source of Outlook information is Microsoft's Office website <<http://office.microsoft.com>>. Click **Assistance by Product** and then **Outlook**.

Lesson 1: Computer Systems Resources

If you are not familiar with some of the concepts introduced in this lesson, the following sources will provide a quick refresher or overview on the topic of computer systems. If you are already comfortable with these concepts, you can skim these readings or simply move on to other material.

Personal Computers:

The Kaplan eGuide to Office XP: The Personal Computer

[link to:](#)

[http://www.kaplancollege.edu/coursemedia//it/it133/eGuide XP PCs.pdf](http://www.kaplancollege.edu/coursemedia//it/it133/eGuide%20XP%20PCs.pdf)

How Personal Computers Work from *How Stuff Works*

<<http://computer.howstuffworks.com/pc.htm>>

Using Windows

The Kaplan eGuide to Office XP: Windows Basics

[link to:](#)

[http://www.kaplancollege.edu/coursemedia/it/it133/eGuide XP Windows.pdf](http://www.kaplancollege.edu/coursemedia/it/it133/eGuide%20XP%20Windows.pdf)

The Kaplan eGuide to Office XP: Managing Files and Folders

[http://www.kaplancollege.edu/coursemedia/it/it133/eGuide XP Files.pdf](http://www.kaplancollege.edu/coursemedia/it/it133/eGuide%20XP%20Files.pdf)

Operating systems:

You can find more background on operating systems at "How Operating Systems Work" from *How Stuff Works*

<http://computer.howstuffworks.com/operating-system.htm>.

Two great articles on Windows include "History of MS Windows" at <http://www.computerhope.com/history/windows.htm> and "Find and Organize Your Files," at

<http://www2.pcworld.com/howto/article/0,aid,99464,00.asp>. Refer to these articles during the Seminar and the file management portion of your Weekly Project.

To find out more about the features of the Macintosh OS (including OS X), check out the Apple website description of OS X at <http://www.apple.com/macosex/>. Read the marketing information, then look for the links that target Windows and UNIX users. Also, take a look at the article "History of the Mac OS" at <http://perso.club-internet.fr/jctrotot/Perso/History.html> for a discussion of how the operating system evolved.

You can learn more about UNIX at

<http://www.ee.surrey.ac.uk/Teaching/UNIX/> and

<http://hotwired.lycos.com/webmonkey/97/02/index3a.html?tw=backend>. To get some perspective on where this operating system came from, read "A Brief History of UNIX" at http://vertigo.hsrl.rutgers.edu/ug/unix_history.html. Two other UNIX websites you can use for this Lesson are <http://cedar.intel.com/cgi-bin/ids.dll/topic.jsp?catCode=BMT> and <http://www.computerhope.com/unix.htm>.

Lesson 1: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "computer systems," "operating systems," or "Outlook features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 1: Seminar

In this first week's seminar we will discuss the evolution of current operating systems. Windows will be highlighted in this seminar. Moving from Windows 3.0 to Windows XP; what has changed and what has remained consistent, and what do you think the future holds for the Windows Operating System?

Lesson 1: Discussion Questions

- Name at least two of the tips you recommended in your Outlook article? Did you learn anything new as you explored Outlook for this project? How could you apply those skills in the future?
- Compare both UNIX and Mac OS to Microsoft Windows XP. How do these systems differ? How are they similar? What are the pros and cons of each?
- Moving from Windows 3.0 to Windows XP, what has changed and what has remained consistent? What do you think the future holds for the Windows operating system?

Lesson 1: Management Project -- Installment 1

Since you are a new employee, before you get to work on the proposal for Carlin Imports, your team members and supervisor have asked you take a crash-employee orientation. Your first orientation assignment is to learn about the **systems development life cycle (SDLC)** -- the method IT companies use to manage their projects.

The other members of your team ask you to read this article from the *Department of Justice* website at <http://www.usdoj.gov/jmd/irm/lifecycle/ch1.htm>, or see a slightly different (and simpler) approach to SDLC at <http://users.rio.com/ross/sysdevel.html> and a third at <http://srmwww.gov.bc.ca/imb/3star/sdlc/stds4.html>. You can also do some of your own research on SDLC on the Internet.

As you continue to learn more about SDLC, you will find many different definitions of the model (some with seven steps, some with four, some using different words). Your team prefers to use these six steps:

- Planning
- Analysis
- Design
- Development
- Implementation
- Support/operation/maintenance

In order to check your understanding of SDLC, your team asks you to apply it to a non-technical event in your life such as making dinner or buying shoes (you can use anything you want -- please think of your own example). Write a 250-350 word paper describing how you would apply SDLC in the situation you choose. As you discuss the stages of your plan, discuss how you can use Outlook to manage your project. You can see two brief examples by clicking [here](#). [\[Link to RL item 35134\]](#)

Do not submit the SDLC example to your instructor. Instead, post a copy of your SDLC example to the course Message Board. Read and reply to at least three other students' research. Ask questions and add suggestions wherever you see fit.

Lesson 1: SDLC Examples [RL Item 35134]

For example, if you were using SDLC to phase a new pizza into Papa Murphy's pizza chain, you might proceed as follows:

- **Planning:** Figure out what kind of pizza we might want to introduce by comparing current pizzas on the menu to ideas other people may have, while throwing in a few ideas of our own to create a brand-new pizza.
- **Analysis:** Talk to customers and people higher up on the decision-making chain about what they think in order to determine what new ingredients and other supplies we will need to make this pizza.
- **Design:** Order all the essential supplies we're going to require, finalize advertising ideas, and get everyone ready for the new pizza.
- **Implementation:** Phase the new pizza into business; teach everyone how to make it and how to sell it to customers who may be hesitant.
- **Support:** Ask customers and employees what they think of the new pizza. Figure out how well the new pizza is selling over the course of its first few months, and determine whether it is worth keeping on the menu.

Another example might be losing weight before attending a high school reunion:

- **Planning:** You decide you want to lose all the weight you've gained before your 20-year high school reunion this summer.
- **Analysis:** You determine what it will take to accomplish the goal of getting that hard body.
- **Design:** You shop around for the best gym membership rates.
- **Implementation:** You decide to join the gym down the street because it is conveniently located so that you can walk to it -- even better with the new exercise program!
- **Support:** After three months of intense workouts with a personal trainer, you are starting to notice some definition. Was it worth the investment?

Lesson 2: Networking: Presenting Hardware and Operating Systems Needs

Purpose

This Lesson introduces you to both the advanced features of PowerPoint and the basics of contemporary networking hardware and software. When you begin the Lesson, first read through both your Weekly Project and your Management Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Use PowerPoint to develop a business presentation illustrating network design
2. Define common networking hardware components and how they interconnect

3. Determine the best network operating system based on user needs
4. Explain security issues surrounding network hardware and software

Lesson 2: Weekly Project

You will be exploring some of the advanced features of Microsoft's PowerPoint:

- Transitions
- Rehearsed timings

If you like, you can also experiment with recording narration for your slide show and/or adding animated images.

Scenario

Always on the go, Ms. Tidmore has decided that she needs to get busy and develop a LAN for the Tidmore Studios home offices to improve the way employees communicate and share files.

She has had some pretty bad experiences with hiring local consultants, so before she starts talking to someone who will charge her a lot of money, she wants to get input from her own IT employees.

She has asked each of the assistants to give her a short PowerPoint presentation on how the company might network their corporate offices. Since she will be traveling to meet with clients in another city next week, she's asked that each of you upload the presentation to the company's Web server. Once your presentations are done, she would also like you to compare notes and give each other some feedback.

Task

Create a PowerPoint presentation that explains how Tidmore Studios can network its home offices. Include the following in your presentation:

- What hardware will be required? (Illustrate this portion of the presentation with pictures you download off the Internet. If you cannot find pictures in the articles you use to prepare for the presentation, look for them at <http://images.google.com>)
- What software should Tidmore Studios install for a network operating system? For security? To protect against viruses?
- Will this be a wired or wireless LAN?
- Recommend, describe, and show topology for the network (mesh, star bus, star ring, other?)
- What type of traffic will the network be able to handle? (email, file sharing, groupware, and so on)

Since you are trying to convince Ms. Tidmore to go with your suggestions, be sure to include enough information about why you are making the suggestions you are.

Make sure your presentation includes:

- No more than 10 slides
- No fewer than 5 slides
- Animated slide transitions
- Rehearsed timings of slide transition

- Appropriate design template
- Save this presentation as: **lastname_presentation.ppt**.

Directions for Submitting Your Project

Submit your PowerPoint presentation by going back to the lesson page and click on the **Submit Lesson 2 Project** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 2: Background Resources

If you are not familiar with some of the concepts introduced in this Lesson, the following sources will provide a quick refresher and overview. If you are already comfortable with these concepts, you can skim these or move on to other material.

PowerPoint Tips and Tricks

The Kaplan eGuide to Office XP: PowerPoint Basics

http://www.kaplancollege.edu/coursemedia/it/it133/eguide_XP_PowerPoint.pdf "

PowerPoint Answers, found at <Http://www.powerpointanswers.com>, is a great source of information on PowerPoint features, tools, and additional resources.

Networks and Servers:

How Hubs Work from *How Stuff Works*

<<http://computer.howstuffworks.com/lan-switch1.htm>> (this article gets fairly technical, but the first part is a good introduction to networking)

How Routers Work from *How Stuff Works*

<<http://computer.howstuffworks.com/router.htm>>

How LANs Work from *How Stuff Works*

<<http://computer.howstuffworks.com/ethernet1.htm>>

How Home Networks Work from *How Stuff Works*

<<http://electronics.howstuffworks.com/home-network.htm>>

IT Reviews discusses several network operating systems, including Windows Server 2003, Red Hat, and Mac OS X, at

<http://www.itreviews.co.uk/software/soft2.htm>

Read the following articles in the Kaplan College Reserve Library:
"The First Line of Defense" from *PC Magazine*, June 12, 2001. This article describes strategies for implementing security solutions for local area networks.
"Small Business NOS Match-up" from *CRN*, August 12, 2002. This article evaluates three networking systems for small businesses: Small Business Server 2000 from Microsoft, Novell's Small Business Suite 6, Mandrake's Linux 8.2 ProSuite Edition.

How To Use the Reserve Library

The Kaplan College library website is <http://libsys.uah.edu/kaplan/>, or you can click the **Library** link at the top of your class homepage or Lesson page. For detailed instructions regarding how to request these articles from the library, take a look at http://libsys.uah.edu/kaplan/kap.docutek_info.htm. Please print these instructions for future use. You will be prompted to enter a password to access the reserve reading for Introduction to Information Technology. The password is **byte**. If you have any questions, please call 1-800-685-1302 or email kaplan@email.uah.edu.

Lesson 2: Online Project Resources

This week's projects and discussion topics cover a broad range of topics. Use these resources to complete your various assignments.

Lesson 2: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "local area network," "networking hub," or "PowerPoint features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 2: Seminar

This week's seminar focuses on security of information. We will specifically discuss virus protection software and Firewalls as they relate to server platforms and local area networks.

Lesson 2: Discussion Questions

1. Compare Red Hat, Macintosh OS X, and Microsoft's Windows Server 2003 software in terms of their strengths and weaknesses at Network Operating Systems. Under what circumstances would you use each?
2. Post the URL for your presentation to the Message Board. Review the presentations of at least three other students and provide constructive feedback on both the presentation itself and their ideas about how to network the company.

Lesson 2: Management Project -- Installment 2

Now that you know a little bit about what SDLC is, your supervisor, Mr. McCall, would like you to participate in the planning stage by putting together a presentation on what goes on at a large conference and how to best structure a network the various elements together.

He asks you to first visit www.comdex.com and to explore the site very thoroughly. He also suggests that you use your Internet research skills to find information on the annual conference of the World Wide Web Consortium as well as other large conferences. He wants your report to address the following question:

Remembering what is involved in the SDLC, what type of things must be considered when building the kind of information system necessary to pull off a large conference?

Remember, this is the **planning** stage of SDLC. Your goal is to gain more knowledge about the situation.

Makes careful notes about details you come across. You will be able to use what you gather for other installments at other point in the project. Discuss what you are learning about these kinds of conferences with the rest of your team members using the Message Board. Do not worry about things that do not involve technology-type information, like food or motels, etc.

Using PowerPoint, develop an 8-10 slide presentation that provides details and planning information that describe the following:

- The basics of a large conference
- Various options for registration and the required information systems
- Information systems that might be used at the conference location for administrators, attendees, and vendors
- Kinds of technical problems that might occur during a conference
- Questions to ask your client about his or her needs and wants for the conference, along with some hypothetical answers
- Anything else you can think of that needs to be addressed

You will submit your Management Project during the Reading Week for the Midterm, following Lesson 4.

If you complete this portion of the project early, you may submit it to your instructor for comments and advice.

Save your presentation under the name **lastname_domain.ppt**.

Directions for Submitting Your Project (optional)

If you would like to submit your project for comments, go back to the lesson page and click on the **Submit Management Project Installment 2** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 3: Word, Web Browsers, and Web Design

Purpose

This Lesson introduces you to the advanced features of Microsoft Word and provides an overview of Web page development. When you begin the Lesson, first read through both your Weekly Project and your Management Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Use Word to create and publish Web documents

2. Determine the most appropriate browser for user needs
3. Discuss the development and features of Web browsers
4. Explain what distinguishes an e-commerce site from a basic website

Lesson 3: Weekly Project

Tidmore Studios is opening an e-business unit to better market their design services over the World Wide Web. Ms. Tidmore has enlisted a number of Web developers and designers each to work on developing the new website. These developers and designers have asked Ms. Tidmore to make sure that each machine they work at has at least three different Web browsers on it so that they can see how the websites they develop look in different browsers. As the IT assistant, Ms. Tidmore has requested that you provide her with a summary describing what different Web browsers are available and how their features differ.

Create a document that will describe the differences among four Web browsers. You will need to create a table to display your comparison in a format that is both readable and understandable.

Search the Internet for a variety of browsers. A good starting point is <http://www.dejavu.org/emulator.htm>.

Compare the following features:

- How widely used the browser is
- What platforms the browsers will work on
- Pros
- Cons
- Security issues
- Where you can download the specific browser
- Anything else you feel important

Include a screen shot of each browser you compare.

Finally, give at least two resources where readers can find more information about the browsers you are detailing.

Save this document as a Web page using Word's **Save As...** feature under the name **lastname_comparison.html**.

Directions for Submitting Your Project

Submit your project by returning to the lesson page and clicking on the **Submit Lesson 3 Project** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 3: Background Resources

If you are not familiar with some of the concepts introduced in this Lesson, the following sources will provide a quick refresher and overview. If you are already comfortable with these concepts, you can skim these or move on to other material.

Word Tips and Tricks:

The Kaplan eGuide to Office XP: Word Basics

http://www.kaplancollege.edu/coursemedia/it/it133/eguide_xp_WordBscs.pdf

The Kaplan eGuide to Office XP: Word Tables & Advanced Skills

http://www.kaplancollege.edu/coursemedia/it/it133/eGuide_XP_WordTbls_FINAL.pdf

The Kaplan eGuide to Office XP: Word Special Features

http://www.kaplancollege.edu/coursemedia/it/it133/eguide_XP_WordSpcl.pdf

Welcome to the Web:

The Kaplan eGuide to Office XP: The Internet & Internet Explorer

http://www.kaplancollege.edu/coursemedia/it/it133/eguide_XP_Internet.pdf

How Web Pages Work from *How Stuff Works*

<<http://computer.howstuffworks.com/web-page.htm>>

How E-Commerce Works from *How Stuff Works*

<<http://computer.howstuffworks.com/ecommerce.htm>>

Read the article "The Whole Web in Your Hands" at

<http://www.wired.com/news/technology/0,1282,3299,00.html>.

Read the following article in the Kaplan College Reserve Library:

"The Bionic Browser" by Sean Carroll, et al. *PC Magazine*, October 15, 2002.

How To Use the Reserve Library

The Kaplan College library website is <http://libsys.uah.edu/kaplan/>, or you can click the **Library** link at the top of your class homepage or Lesson page.

For detailed instructions regarding how to request these articles from the library, take a look at http://libsys.uah.edu/kaplan/kap.docutek_info.htm. Please print these instructions for future use.

You will be prompted to enter a password to access the reserve reading for Introduction to Information Technology. The password is **byte**.

If you have any questions, please call 1-800-685-1302 or email kaplan@email.uah.edu.

Lesson 3: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "web browsers," "building tables," or "MS Word features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 3: Seminar

Based on the research you conducted this week, be prepared to discuss how Web browsers have evolved, contemporary security issues surrounding browsers, and how browsers are used on mobile phones and handheld systems.

Lesson 3: Discussion Question

Discuss at least three issues associated with developing a website for an e-business. Some issues to consider would be security, upkeep of the website, marketing, server backup, and so on.

Lesson 3: Management Project -- Installment 3

Now that your company has some background on what providing information services for a large conference will entail, you are ready to start working with your potential client, Carlin Imports.

Carlin Imports is new to all of this "techno stuff," so they do not know everything they will need or want. Over the next few weeks, you will provide them with a proposal and cost estimate of what your company can provide.

First, though, they need you to give them an idea. Use MS Word to write a report that includes two things:

- The definition of an Information Systems Provider company. Explain what it does and every aspect of what it would generally provide clients
- What your company could do for this conference. Go into great detail about all aspects of this process. You should come up with a list of at least eight things that Carlin Imports will gain by using your ISP company

This report should be written using the APA style of formatting. You can find information on writing a paper in APA style at

http://webster.commnet.edu/apa/apa_index.htm. You can also find a template for APA papers at <http://officeupdate.microsoft.com/templategallery/> (scan down the page to find "Publications and Education" then click "Papers and Reports").

Remember, you are presenting this paper to a client to a client. Carefully check your grammar, punctuation, vocabulary, and sentence structure. It should be from two to four pages long.

Please name this document **lastname_technical.doc**.

You will submit your Management Project during the Reading Week for the Midterm, following Lesson 4.

If you complete this portion of the project early, you may submit it to your instructor for comments and advice.

Save your presentation under the name **lastname_domain.ppt**.

Directions for Submitting Your Project (optional)

If you would like to submit your project for comments, go back to the lesson page and click on the **Submit Management Project Installment 3** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 4: Developing a Web Page

Purpose

This Lesson introduces you to how to use HTML and a simply website editor to develop a Web page. When you begin the Lesson, first read through both your Weekly Project and your Management Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Use the basic principles of usability and good site design to critique a website
2. Display HTML source code in a browser window
3. Use basic HTML tags to edit and create simple Web pages
4. Publish a simple Web page to a server
5. Discuss how e-businesses use online payment systems

Lesson 4: Weekly Project

This week's project will introduce you to using HTML to edit and develop a Web page.

Scenario

Now that Tidmore Studios has developed a network and a strong website, many of the clients have started asking for assistance in developing their own websites.

One such client is the Espinoza Foundation, a non-profit organization dedicated to helping the general public easily find information on the history of computers and how computers have changed society. Ms. Tidmore is a member of the Espinoza Foundation board and has volunteered to use Tidmore Studios to develop the Espinoza Foundation's new website.

Task

Since all of the IT assistants (just like you) are also currently studying IT at the college level, she has asked each assistant to create a Web page to part of the overall website using a simply HTML editor. Since Word adds a lot of additional (and unnecessary) HTML when it saves a document as a Web page, she is asking you to use a different program (such as Netscape Composer, but you can choose different one if you prefer) to create the Web page (she suggests, though, that you type your short article in Word first so that you can check it for grammar and spelling errors and decide how to format it).

Each Web page should include one article or story. She has broken down each of the IT employees by last name and assigned them topics for the article:

A-F	G-M	N-R	S-Z
History of Computers	Computer Ethics	Effects of technology on organizations (businesses, government, etc.)	Effects of technology on culture (families, schools, entertainment, etc.)

She wants each employee to narrow down these broad topics to areas that interest them: For example, if your topic area were ethics, you might write a short story about a person whose marriage ends after she starts an affair with someone she met online or write a short essay about software piracy (i.e., making illegal copies of software). If your topic were the effect of technology on organizations, you could write a story about how one office worker's life has changed since her company started using computers 15 years ago or take a brief look at how the Internet helps one particular business or government agencies communicate with the public. You can be as creative or non-creative as you'd like. The article or story on your Web page should be about 500 words (two double-spaced pages or one solid Web page).

Remember, this is for people your boss wants to impress, so the completed Web page needs to be original, accurate, and look professional (no Star Trek backgrounds).

You can upload your paper to your Kaplan College Web server space, or you can use a free Web hosting service such as Geocities. (There are several free Web hosts available, but there are directions for using Yahoo's Geocities [here](#)) <link to RL>.

In addition, copy your article itself into a Word document. At the top of the page, type the URL of your website. Please save this file as **lastname_article.doc**.

Directions for Submitting Your Project

After uploading the Web version of your project, submit the Word document by going back to the lesson page and clicking on the **Submit Lesson 4 Project** link under Project Submissions. Follow the instructions. Make sure that you save a copy of the project.

Lesson 4: Instructions for Using Geocities (RL Item)

Begin at <http://www.geocities.com>. Click on the link that reads "Build Your Web Site!"

If you already have a Yahoo account for email or another service, go ahead and log in (in the upper right hand corner where it reads "Already have an ID? Sign In").

If you don't have a Yahoo account, you will need to create one by filling out the form. Use any available user name you desire; this will become part of your Web page's URL or address. To reduce the amount of junk email you receive, UNCHECK the box labeled "Contact me occasionally about special offers and Yahoo! features."

Once you have an account and login, a blank page will be posted at your address. You should be able to link to it by typing www.geocities.com/username as a hyperlink or browser window destination. For example, if your user name were John, your URL would be www.geocities.com/John

When you have created your account and verified your temporary page, you are ready to make it available for your professor and classmates to see. Please post your URL on the message board for Lesson 4 in the forum labeled URL.

Lesson 4: Background Resources

If you are not familiar with some of the concepts introduced in this Lesson, the following sources will provide a quick refresher and overview. If you are already comfortable with these concepts, you can skim these or move on to other material.

Website Usability & Design

Webmonkey: One Site, One Day, One Buck

<<http://hotwired.lycos.com/webmonkey/02/32/index3a.html?tw=design>>

Webmonkey: HTML Basics

<http://hotwired.lycos.com/webmonkey/authoring/html_basics/>

Webmonkey: Site Design

<http://hotwired.lycos.com/webmonkey/design/site_building/>

How to Make an Annoying Website

<<http://www.users.nac.net/falken/annoying/main.html>>

Read the following article in the Kaplan College Reserve Library:

"Assessing Web Site Usability" by Kim Guenther, *Online*, March/April 2003.

How To Use the Reserve Library

The Kaplan College library website is <http://libsys.uah.edu/kaplan/>, or you can click the **Library** link at the top of your class homepage or Lesson page.

For detailed instructions regarding how to request these articles from the library, take a look at http://libsys.uah.edu/kaplan/kap.docutek_info.htm. Please print these instructions for future use.

You will be prompted to enter a password to access the reserve reading for Introduction to Information Technology. The password is **byte**.

If you have any questions, please call 1-800-685-1302 or email kaplan@email.uah.edu.

Free Web Hosts

Visit one of the sites listed below to find free space to host your Web page for this week.

- *FortuneCity* at <http://www.fortunecity.com>
- *GeoCities* at <http://www.geocities.com>
- *Homestead* at <http://www.homestead.com>
- *Tripod* at <http://www.tripod.com>

Free Web Page/HTML Editors

The simplest free Web page editor is Mozilla Composer, part of the Mozilla browser package. Composer is a WYSIWYG editor, which means that instead of hard-coding tags, you use the program much like you use Word. You can download the latest version of Mozilla for Windows at www.mozilla.org.

While it is not technically free, you can download a trial version of HomeSite, a fairly simple but powerful Web page editor. You can use HomeSite to enter HTML tags or use its built-in WYSIWYG editor. To download the trial version, go to www.macromedia.com/software/homesite and click the **Try** button.

Lesson 4: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "web design," "web page help," or "HTML programs," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 4: Seminar

In this week's seminar, we will discuss the various ways to design and develop a Web page or site. We will consider using HTML coding, templates, and WYSIWYG editors.

Lesson 4: Discussion Questions

Why is it important to plan out a Web page or site prior to actually building it?
What are the various issues you need to keep in mind?

Post the URL of your Web page on the Message Board. Then take a look at two (or more) of your classmates' Web pages. Read their articles, look at their designs, and view their HTML code in your browser. Give them your thoughts and constructive suggestions on each of those three areas.

Lesson 5: Macros and Visual Basic for Applications

Purpose

This Lesson introduces you to Excel and the Visual Basic for Applications (VBA) programming environment by taking you through the process of creating a few small programs or "macros." When you begin the Lesson, first read through both your Weekly Project and your Management Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Understand the benefit of using macros
2. Plan and record Excel macros
3. Use Visual Basic for Applications to edit a macro
4. Create an Excel spreadsheet using programmed macros
5. Research costs and licensing terms for software purchases

Lesson 5: Weekly Project

Your Weekly Project for this lesson introduces you to the programming language Visual Basic for Applications (VBA) by instructing you to create a basic workflow management spreadsheet in Excel 2002.

The most challenging part of this assignment will be creating a macro, an automated function that allows you to record a series of keystrokes to repeat later.

Scenario

As the weeks go by, it becomes clear that Tidmore Studios is accepting more clients than its informal work-assignment system can track. Between their academic and work loads, some of the IT assistants have more work than they can comfortably handle. Meanwhile, others are getting bored.

Ms. Tidmore asks you to create a prototype workflow system in Excel that will help her monitor how many hours you (and your fellow IT assistants) are working on various tasks. Once the system is up and running, it will be simple for each IT assistant to input the amount of time spent on each project, letting Ms. Tidmore know who is overloaded and who can take on more work. As a proof of concept, you decide to use the amount of time you have spent on assignments for IT 101.

Task

Create a spreadsheet that tracks the time you have spent on each assignment for this course up through Lesson 4. Feel free to use estimated numbers -- nobody is asking you to remember how many minutes it took you to introduce yourself to your classmates back in the first week of class, for example.

Next, open Excel 2002 and create a worksheet to track each assignment you've completed in Lessons 1 to 4 of this course. Set up this sheet however you wish, but make sure to give each assignment its own row. In a separate column, include estimates of the amount of time you spent preparing each assignment (remember, these numbers can be rough guesses or even completely made up; the important thing is that you format them correctly).

Create a macro that adds the amount of time you spent on each Lesson (taking the total of every assignment that week) and places it in another part of the worksheet. In the finished workflow management system, this macro will allow Ms. Tidmore to see how many hours you are spending on each project (and how much time she can bill clients for your work).

Make sure your keyboard short cut for this macro is CTRL+A.

Directions for Submitting Your Project

Put your project in an Excel document. Save with the name lastname_macro.xls in a location you will remember. When you are ready to submit it, go back to the lesson page and click on the **Submit Lesson 5 Project** link under Project Submissions and follow the instructions. Make sure that you save a copy of the project that you submit.

Lesson 5: Background Resources

If you are not familiar with some of the concepts introduced in this Lesson, the following sources will provide a quick refresher and overview. If you are already comfortable with these concepts, you can skim these or move on to other material.

Using Excel and Visual Basic

[The Kaplan eGuide to Office XP: Excel Basics](#)

[The Kaplan eGuide to Office XP: Excel Intermediate](#)

Lesson 5: Library Resources

Read the following articles in the Kaplan College Reserve Library:

"Getting Started with VBA" by M. David Stone

"Editing Macros, Fear Not" by J. W. Olsen

How To Use the Reserve Library

The Kaplan College library website is <http://libsys.uah.edu/kaplan/>, or you can click the **Library** link at the top of your class homepage or Lesson page.

For detailed instructions regarding how to request these articles from the library, take a look at http://libsys.uah.edu/kaplan/kap.docutek_info.htm. Please print these instructions for future use.

You will be prompted to enter a password to access the reserve reading for Introduction to Information Technology. The password is **byte**.

If you have any questions, please call 1-800-685-1302 or email kaplan@email.uah.edu.

Read the manual "Excel for Windows Visual Basic for Applications 101," found at <http://support.microsoft.com/default.aspx?scid=/support/excel/content/vba101/default.asp>. As you read these chapters, make note of how the VBA language is used.

Lesson 5: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "Visual Basic features," "Excel features," or "spreadsheet options," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 5: Seminar

In this Seminar, we will discuss the history of VBA and its advantages and disadvantages.

Please prepare for this seminar by completing the following:

Design a macro that you would use in your business or personal life

Use either MS Word or MS Excel to create the macro

You will be sharing the macro with the class. Prior to the seminar you will need to email it to each member of the class.

Be prepared to discuss the specific macro you created, why you created it, and how you might refine it in the future. Be ready to answer questions from other students and your instructor.

Lesson 5: Discussion Question

What is VBA? How do you protect your workbook and others from macro viruses? Provide two examples of how a macro could be used.

Lesson 5: Management Project -- Installment 4

Carlin Imports would like to explore the prospect of collecting registration fees through its conference website. Naturally, the company is concerned about security as well.

Mr. McCall asks you to prepare a presentation for Carlin executives that lays out the options for making payments online. First, do some research on encryption and secure Web servers. Find at least three ways your potential client could go. Keep careful notes.

Next, create a PowerPoint presentation that includes the following slides:

- A title slide of the presentation with a title and your name
- One slide for each of the different online payment options you studied (minimum of 3)
- A slide describing encryption
- One slide describing secure web servers
- One slide with the method you would recommend and the reasoning involved

- A conclusion slide

Please save your presentation as **name lastname_payment.ppt**.

Directions for Submitting Your Project

When you are ready to submit the PowerPoint presentation, go back to the lesson page and click on the **Submit Management Project Installment 4** link under Project Submissions. Follow the instructions. Make sure that you save a copy of your project.

Lesson 6: The Fundamentals of Programming

Purpose

This Lesson introduces you to various computer programming languages and the basic steps involved in creating a program. When you begin the Lesson, first read through both your Weekly Project and your Capstone Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Explain the differences between major programming languages (C++, Java, C#, JavaScript, Visual Basic .Net)
2. List the steps involved in producing a program
3. Produce programming flow charts and explain why they are used
4. Use JavaScript to modify Web pages
5. Plan resources needed for an IT project

Lesson 6: Weekly Project

This assignment will show you how to use the programming language **JavaScript** in an existing Web page. You are not expected to code your own JavaScript, but will instead simply copy and paste existing public-domain script into an HTML document.

Scenario

The Espinoza Foundation has asked Ms. Tidmore to add functionality to the website you helped build for them back in Lesson 4. In particular, they want visitors to their site to be able to send them an email message regarding a predetermined subject. They would also like to add a search engine box to their site. Ms. Tidmore consults your workflow for the week and gives you the job.

Task

Search the JavaScript Source page at <http://www.javascriptsource.com> for code that will meet the client's needs. Once you have found the JavaScript you need, copy and paste it into the Web page you created in Lesson 3 Weekly Project.

For the email JavaScript, use the (fake) address info@espinozafoundation.org and the predetermined subject line "I Want More Information." If you wish, add a bit of explanatory text to the page that describes either or both of these new functions.

When done, upload the revised Web page to the Kaplan College Web Server. Ensure the scripts work as intended.

Directions for Submitting Your Project

After uploading the Web version of your project, copy the page itself into a Word document. At the top of the page, type the URL of your website. Save this document in a location and with a name that you will remember. When you are ready to submit it, go back to the lesson page and click on the **Submit Lesson 6 Project** link under Project Submissions and follow the instructions. Make sure that you save a copy of the project that you submit.

Lesson 6: Background Resources

If you are not familiar with some of the concepts introduced in this Lesson, the following sources will provide a quick refresher and overview. If you are already comfortable with these concepts, you can skim these or move on to other material.

Programming basics: Introduction to Programming from *Webmonkey*
<<http://hotwired.lycos.com/webmonkey/98/37/index3a.html?tw=backend>>

How to Steal JavaScript from *Webmonkey*
<<http://hotwired.lycos.com/webmonkey/99/30/index1a.html?tw=programming>>

Programming: JavaScript from *Webmonkey*
<<http://hotwired.lycos.com/webmonkey/programming/javascript/index.html>>

Read the following articles in the Kaplan College Reserve Library:

"C# Versus Java" by Marc Eaddy

"Java vs. .NET: Which Route to Web Services?" by Lowell Rapaport

"Object-Oriented C: Creating Application Classes" by Matthew Curreri

How To Use the Reserve Library

The Kaplan College library website is <http://libsys.uah.edu/kaplan/>, or you can click the **Library** link at the top of your class homepage or Lesson page.

For detailed instructions regarding how to request these articles from the library, take a look at http://libsys.uah.edu/kaplan/kap.docutec_info.htm. Please print these instructions for future use.

You will be prompted to enter a password to access the reserve reading for Introduction to Information Technology. The password is **byte**. If you have any questions, please call 1-800-685-1302 or email kaplan@email.uah.edu.

Lesson 6: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "programming languages," "C++ features," or "JavaScript features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 6: Seminar

This week's seminar will focus on the variety of programming languages. You will be assigned a specific language to research and give a 5-minute presentation on. You do not have to become an expert, just give the class a brief history and overview of the language. Who uses it? What it is used for? Answer questions.

When making your presentation, cite the books, websites, or other resources you used. Here is a great place to begin to learn about the language you will be assigned: <http://cgibin.erols.com/ziring/cgi-bin/cep/cep.pl>

Find the first initial of your last name in the table below. Below it is the language you will investigate and discuss.

A-F	G-M	N-R	S-Z
Visual Basic (6.0 & .NET)	Java	C++	C#

Lesson 6: Discussion Questions

What are the differences between C++ and Java? What are the similarities? Why you would use one over the other?

Lesson 6: Management Project -- Installment 5

All of the work you've accomplished for Carlin Imports so far has covered the preliminary investigation phase of the SDLC model. Now you can move on to system analysis.

Using MS Word, write a memo (proposal) to your contact at Carlin, who just happens to have the same name as your instructor. Make sure you use a professional memo format with a memo heading that includes the to/from names as well as date and subject. The body of the memo should be single spaced, no indents, with double spacing between paragraphs. The memo should also use college-level English writing skills. It should be about two pages in length.

Include a list of all the software that you propose to make available to them during the conference and provide a **Needs Assessment** (an estimate of the kinds of software that someone involved with the conference will need to be productive and efficient during the conference). This must include the following:

Windows 2000 or XP operating system software

Four different software applications (name each and outline its capabilities to demonstrate the benefit you are providing)

Web browser software (name what you will provide and why)

Virus protection software (note why this is necessary, then list two options and outline the pros and cons of each)

Firewall software (note why this is necessary, then list three options including ZoneAlarm and outline how they differ. Use the Internet to help you search)

Utility software (note why software that can provide file recovery and backup capabilities is valuable, then list two options as above)

In addition, come up with a Custom Application that might be created specifically for the purpose of this conference. Give the program a name and briefly explain what it would do. Keep in mind that you are not actually creating this software; you are just coming up with the idea. If the client adopts it, you'll probably hire a programmer to create it for you. Brainstorm with your classmates if you wish

Since many people do not understand the concept of licensing software, include licensing information for each of the above software products. What does the licensing agreement stipulate? Is there a package price or license cost per user? Even though conferences are generally short in duration, your client will use this software for more than one conference, so provide information for permanent licenses.

Please save your memo as **lastname_needs.doc**.

Directions for Submitting Your Project

Make sure that your Word document is saved in a location you will remember. When you are ready to submit it, go back to the lesson page and click on the **Submit Management Project Installment 5** link under Project Submissions. Follow the instructions. Make sure that you save a copy of your project.

Lesson 7: Database Creation and Management: Access

Purpose

This Lesson introduces you to the techniques for creating and managing a database with the Access 2002 software package. When you begin the Lesson, first read through both your Weekly Project and your Capstone Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Create effective data tables using Access
2. Design forms and reports in Access
3. Create relational queries in Access
4. Prepare reports and mailing labels in Access

Lesson 7: Weekly Project

Thanks to the hard work of everyone at Tidmore Studios, the company's list of clients has grown considerably. In order to keep track of all these new clients, Ms. Tidmore asks you to put together a database of people the company has worked for in the last year. She would like this file to include each client's billing information, including the following fields:

Client's last name

Client's first name

Accounts Payable Officer's last name

Accounts Payable Officer's first name

Client ID number

Billing address

City (in each record, the city is Gold Hill)

State (in each record, the state is OR)

ZIP (in each record, the ZIP is 97743)

Client Last Name	Client First Name	Accounts Payable Last Name	Accounts Payable First Name	Client ID	Address
Ages	Trudv	Ages	Trudv	N1S2-5000	100 Gold Dust
Apparel	Edward	Apparel	Donna Gave	N1S2-5001	102 Gold Dust
Bingham	Marv	Popstra	George	N1S2-5002	104 Gold Dust
Ho	Don	Ho	Ida	N1S2-5003	106 Gold Dust
Loone	Clare D.	Loone	C. Raze	N1S2-5004	108 Gold Dust
Peace	Warren	Peace	Dovev	N1S2-5005	110 Gold Dust
Sence	Frank N.	Sence	Nan	N1S2-5006	112 Gold Dust
Thyme	Iustin	Thyme	Iustin	N1S2-5007	104 Panner's
White	Emmet	White	Belinda	N1S2-5008	114 Gold Dust
Woods	Forest	Woods	Darlene	N1S2-5009	106 Panner's
Terrill	Richard	Terrill	Amanda	N1S2-5010	108 Panner's
Neligh	Luella	Davis	Yvonne	N1S2-5011	110 Eureka
Ioplin	Willie	Ioplin	Ianis	N1S2-5012	120 Gold Dust
Yord	Lamont	Yord	Karen	N1S2-5013	112 Eureka
Lastlev	Charles	Lastlev	Iudv	N1S2-5014	110 Panner's
Jaeger	Ellen	Jaeger	Kurt	N1S2-5015	114 Eureka
Rose	Rubv	Rose	Ben	N1S2-5016	122 Gold Dust
Yorkshire	Samuel	Yorkshire	Bettv	N1S2-5017	112 Panner's
Dillman	John	Dillman	Alice	N1S2-5018	116 Eureka
Luger	Arnold	Roberts	Amanda	N1S2-5019	114 Panner's
Tilford	Eunice	George	Louis	N1S2-5020	118 Eureka
Hutton	Clarence	Hutton	Barbara	N1S2-5021	124 Gold Dust
Hammer	Arvin	Hammer	Arvin	N1S2-5022	120 Eureka

Wilson	Watson	Wilson	Watson	N1S2-5023	124 Eureka
Steiner	Peter	Steiner	Eileen	N1S2-5024	116 Panner's

Name the database **lastname_tidmore.mdb**. Name the table TIDMORE.

Create an entry form for the TIDMORE table and then enter the data.

Next, Ms. Tidmore tells you she'd like to send a marketing newsletter to everyone on this client list as a way to publicize all of the new IT services she now provides. She wants you to create a set of mailing labels.

Use 2 across (standard Avery 5162). Print in alphabetical order by client's last name. Use only the *client's* name, not the person in accounts payable. Export this document to the file **lastname_labels.doc**.

Ms. Tidmore is so happy with your work that she asks you whether the database can also keep track of which clients have paid for the work the company has billed them. You remind her that Tidmore Studios already has accounting software that does this, but her mind seems to be set (at least until the company accountant can reason with her).

Assume that all of these clients paid a retainer of \$100 for ongoing marketing support this month, and that they all paid on the first day of the month. Create a second table to keep track of these fees. This table needs to include:

Client ID number

Client's first and last name

Accounts Payable Officer's first and last name

Amount paid

Date paid

Name the table FEES.

Create an entry form that uses both tables. *Hint:* You will need to create a relationship between the two tables.

Create a query (use both tables) that contains the client's first and last names, the date the fee was paid, and the client ID number. Sort by the client's last name.

Create a report using the report wizard. Include the client's last and first names, the client ID number, and the date the fees were paid. Make your own decisions on the various choices available. Sort alphabetically by client's last name.

Export this report as **lastname_billing.doc**.

Directions for Submitting Your Project

Place all three files into a zip file and save them in a location you will remember. Submit your report by returning to the lesson page and clicking on the **Submit Lesson 7 Project** link under Project Submissions. Follow the instructions.

Lesson 7: Background & Online Resources

Databases:

First, check out the difference between a flat file database

<http://searchdatabase.techtarget.com/sDefinition/0,,sid13_gci212131,00.html>

(the kind you build with Excel) and a relational database

<http://searchdatabase.techtarget.com/sDefinition/0,,sid13_gci212885,00.html>

(the kind you build with Access).

The Geek Girls website has two tutorials on developing databases, "Databasics" and "Database Design from Scratch," that cover terms and review building databases with Microsoft Access at

http://www.geekgirls.com/menu_databases.htm

The "Your First Database" tutorial at Webmonkey includes information on setting up basic Access tables at

<http://hotwired.lycos.com/webmonkey/backend/databases/tutorials/tutorial3.html>.

You can use Access 2002's help system by pressing **F1** to read Microsoft's materials on "Getting Started," "Creating and Working with Databases," and "Access Projects."

You can also take a look at the Template Gallery on the *Microsoft* website at <http://office.microsoft.com/templategallery>. Click **Marketing** and then **Contact Management** to download a sample database that is similar to (but not the same as!) the one you will be developing for this project. You can also browse other template areas to see what kind of databases you might borrow ideas from.

Lesson 7: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message

boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "database design," or "Access features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 7: Seminar

This week's Seminar centers on database maintenance and design. There are two major focuses:

1. Regular database maintenance can prevent tremendous problems. In this Seminar, we will look at why an ounce of maintenance is worth a pound of restoration. Be prepared to bring real examples of databases, including how they are maintained and updated, to the discussion.
2. The local library would like to create a database of all their books and periodicals to eliminate tedious card catalogue searches. How should they go about creating the database in Access 2002?

Lesson 7: Discussion Questions

What is a relational database? How does it differ from a flat database? What are some reasons you would use a relational database over a flat database?

Lesson 7: Management Project -- Installment 6

A week after you submit your Needs Assessment memo to Carlin Imports, your contact notifies you that thanks to your work, McCall Southern is one of three companies being considered for the final round of approval. Congratulations! Now the real work begins.

You have two weeks to determine what systems you will actually provide the conference and what they will cost.

Begin by sketching out a top-down view of the convention site. You can use any drawing tool to create this sketch, including Paint or even the drawing tools found in the various Office applications. Assign each vendor its own area with one of your systems provided. You will also need to assign McCall Southern a control room to make sure everything runs smoothly. Concentrate on the network and Internet servers that will be running in there. Finally, assign a resources room, an area containing several printers, scanners, and many other Input/Output devices. Be sure to label each area.

Next, use Excel to create a spreadsheet showing all the hardware you will need to run the software you proposed in your Needs Analysis. Your system must be able to handle all of that software without buckling under the load.

List each piece of hardware and its price in separate columns, then use Excel's mathematical functions to calculate your total hardware cost. Break this figure down to a price per vendor. Remember that you need to include everything to avoid underbidding the project, which would cause McCall Southern to lose money on the contract.

For help with different system units and prices, the *NexTag* website at <http://www.nextag.com/Computers~300000z0zBwzmainz5-htm> makes a great resource.

Insert your sketch of the conference area into your Excel worksheet and save it all under the name **lastname_networking.xls**. Remember, you have two weeks to complete this assignment.

Once this installment is finished, you will be ready to put the all of the installments together into a final presentation, which you will submit as the **Final Project**.

Lesson 8: IT Careers and Integrating Office XP

Purpose

This Lesson introduces you to ways Office allows you to integrate information of various types, including text, charts, PowerPoint slides, and Web content. When you begin the Lesson, first read through both your Weekly Project and your Capstone Project installment. This will give you a good overview of the skills you will want to become familiar with in completing the Lesson. After you have looked at the Projects, begin working with your Library and Online Resources and complete your Web Field Trips. Before you submit your projects, you can confer with other students about them on the Message Board or talk to your instructor in the Seminar.

Objectives

1. Integrate Office XP applications
2. Create hyperlinks between documents

3. Embed Excel charts into Word documents
4. Create Web pages from a PowerPoint presentation
5. Discuss IT disciplines and career fields
6. Create and update an online resume

Lesson 8: Weekly Project

This week's project will examine how you can integrate Word, Excel, and PowerPoint in the workplace.

Scenario

Tidmore Studios has developed such a successful IT department that it wants to add IT consulting to its roster of client services. To thoroughly market what type of services are offered, Ms Tidmore wants to know more about each of the four key IT areas its assistants are training to specialize in: Web development, networking, programming, and database administration. It also need to know more about what type of skills its staff has developed.

Task

You are to create a professional presentation to deliver to the Ms Tidmore and the marketing director that includes the following:

1. A current resume
2. A breakdown of the current types of IT jobs available in your Kaplan College emphasis area (Web development, programming, networking, or database administration). Focus on the city or state in which you live or one that you would like to relocate to.
3. A 4-6 slide presentation marketing yourself, focusing on the skills you have learned at college, here at Tidmore Studios, and at other jobs you may have held. Include a picture of yourself, links to your projects for this class, and any links to online articles you have found helpful in your emphasis area. Be sure to end with a blank, black slide that includes a single link to your resume.

You will be submitting three documents: Word, Excel, and PowerPoint. You must include all three with this presentation.

Upload your PowerPoint presentation to your Kaplan College Web space or another Web space you have used for this class. Post a link to the Message Board, then take time to review and comment on the presentations of at least three of your classmates.

Zip the files together and save them as **lastname_responses.doc**.

Lesson 8: Background and Online Resources

Office Integration

Using Hyperlinks to Integrate Applications from *PC Magazine*

<<http://www.pcmag.com/article2/0,4149,133874,00.asp>>

Sharing Information Between Programs from *PC Magazine*

<<http://www.pcmag.com/article2/0,4149,104967,00.asp>>

The *Microsoft* website has lots of articles about creating Web pages using Microsoft Office Applications. Go to <http://office.microsoft.com/Assistance/default.aspx>. Select a Microsoft Office application and in the new window, scroll down the page until you find the section titled "Office Web Components" or "Web Features." Read the articles in that section.

IT Careers

Wetfeet has career profiles on several IT areas at

<http://www.wetfeet.com/asp/careerlist.asp>. *Careers.org* also has a good bit of information on this topic at http://www.careers.org/topic/01_jobs_704.html.

Monster.com has a technology career area at <http://technology.monster.com/>.

Webmonkey has an extensive description of jobs in Internet-related fields at

<http://hotwired.lycos.com/webmonkey/jobs/tips/>.

You can find more on resumes by visiting

http://www.epistemelinks.com/Edge/Resume/center_4.asp and

<http://www.resumeedge.com/professionals/resumeadvice/samples/>.

Lesson 8: Project Resource Search

Learning where to find technology information is an important skill in and of itself! No matter how many resources to which this class directs you, there will always be later, more current information that could prove useful in any lesson's project. There are a number of reasons why you might want to do some of your own research, including:

- Locating additional information you can use in one or more of your projects
- Finding alternate explanations for concepts or applications with which you are having trouble
- Finding more current and/or more detailed information on an aspect of a project that you find especially interesting
- Finding alternate applications for skills you have learned in completing a project
- Relating information you have found on the job or in another class to your projects in this class

This class asks that each student provide at least one additional online resource (website, online article or tutorial, newsletter, etc.) and share it on the message

boards (along with reasons you think it could be useful to either yourself or your classmates). Use the information to help locate your additional resources.

Finding IT News Sites

Listed below are some resources you can use to find more information on this weeks seminar and projects.

Google News

<<http://news.google.com/news?hl=en&edition=&q=Information+Technology>>

TechWeb <<http://www.techweb.com/>>

ZDNet <<http://www.zdnet.com/>>

The Center for Women and Information Technology

<<http://www.umbc.edu/cwit/news.html>>

In addition to these resources, though, feel free to look for some of your own. To find websites that include relevant news and information, go to a search website of your choice and type in "hyperlinks," "integrating programs," or "MS Office features," or other similar terms.

Resource Discussion

When you post your resource(s) on the message board, be sure to think of the following: How does this resource apply to this week's weekly project? Seminar topic? Management project installment? How do you plan to use this resource?

Lesson 8: Seminar

The fact that Office XP applications can be used in conjunction with one another is one of the best selling points for the Microsoft product family. This week's Seminar discusses ways to integrate files from different Office applications. Why is it important to be able to integrate files? Why is this a key selling point?

We will also discuss how the Office files can be used as Web pages and how you can embed links to document files within a Web page.

Lesson 8: Discussion Questions

What IT careers are available today? How have they grown and changed over the past decade?

Lesson 8: Management Project -- Final Installment

Once you've prepared your bid for providing IT services to the Carlin Imports conference, it's time to put everything together into a comprehensive proposal.

Using PowerPoint, create a presentation that will represent every other installment you've completed for this project during the term. It must include, at a minimum, information from your report about the typical conference organizer's IT needs (Installment 2), Information System Providers (Installment 3), your software needs analysis (Installment 5), the hardware and price structure it will take to run the conference (Installment 6), and your plan for the overall layout of the conference room, control room, and the resources room (Installment 6).

If you did an acceptable job on all of the above for each of the installments, you should not need to gather additional information. Simply take what you have and put it in an appropriate format for presentation to a client. If you want to improve on or add to what you've done before, feel free to make those changes at this point.

Save the presentation under the name **lastname_proposal.ppt**, then upload it to your space on the Kaplan College Web server as **lastname_proposal.html**. Next, respond to three presentations submitted by your classmates. Pretend to be the client. Would you choose these people to handle your conference? Give them feedback on the discussion forum on the Message Board devoted to this.

Remember, this project carries a lot of weight in your overall course grade.

Directions for Submitting Your Project

After uploading the HTML portion of this assignment, make sure that both it and the PowerPoint component are saved in a location you will remember. When you are ready to submit the PowerPoint file, go back to the lesson page and click on the **Submit Management Project Final Installment** link under Project Submissions. Follow the instructions. Make sure that you save a copy of your project.