Developing Web Applications

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The software development cycle has been used for years as a systematic way to develop application software. The same organized techniques can be used to develop effective web applications. Begin by interfacing with the user and an **analysis** of the requirements and the site mission. Once major requirements are determined, **design** the web site including page layout and navigation. Using web development tools, **implement** the site including usability testing. Finally, after the site is up and running, determine **maintenance** requirements.

An actual case study based on a fictitious company is used to demonstrate the guidelines to follow for this web development.

Target Audience: Those teaching or planning to teach classes on web site development.

Goals: To share with other Information Systems faculty an effective approach to teaching web site development. Most students learn the tools—HTML, Java, FrontPage, Dreamweaver—but yet do not know where to begin in developing an *effective* site. This seminar will cover a systematic approach to go from the user requirements to the finalized site and the maintenance that follows.

During the Analysis and Design of the site, the students are also doing exercises in FrontPage or Dreamweaver to be used during the Implementation phase. My main goal is to teach the steps and techniques to follow in development vs. the tools.

Topic Outline:

1. Analysis Phase
    a. Focus on user
    b. Determine site mission
    c. Site audience
    d. Requirements Gathering
    e. General Content
2. Design Phase
    a. Web site characteristics
    b. Navigation
    c. Technical issues
    d. Types of pages and content
    e. Standardized format of entire site
3. Implementation
    a. Tools available and characteristics of each
    b. Develop pages for site using a tool
    c. Database interface for pages (ASP)
    d. Test links
    e. Usability testing
    f. Housing the web site
    g. Final test of site
4. Maintenance
    a. General upkeep
    b. User feedback