CS 344 Final Project

As a requirement for your Final Project Web Site, the site you create for this class must be hosted on an Internet-accessible web server. A major reason for this is that you get experience in uploading and maintaining a "real" website.

You may also host your site anywhere you want. Over the years, some students have actually hosted their site on their own web server. Go Daddy is a popular option, and there are thousands of other options. The only thing I discourage is using those "free" hosting services that put advertising banners at the top of your pages. Unlike the intentional Google AdSense placement, these "added" ads generally are not Accessible and do not validate as conforming XHTML. For this year, I have made available to host your website project on my server: http://webclass.hopto.org/ . I will create separate Team sites for those who desire to use it.

Student sites are generally available (you may have to search for free sites) so that students who cannot or will not pay for hosting can successfully complete the course. Regardless of where you host, you are required to leave your website up for at least two weeks past the end of the semester to give me time to review your site.

Scenario

 Your supervisor has assigned you to develop a website on a specific topic that can serve as an internal resource in your organization for employees to consult if they have questions about that topic. The site should provide reasonably comprehensive coverage of the chosen topic.

Topics

Your team will choose a topic from the following list. Topics will be allocated on a first-come-first-served basis. While there is some overlap in some of the topic areas, *no two groups may have the same topic*. Note: You may also develop a website or revamp an existing not-for-profit organization website – upon approval of the instructor.

Building Online Communities (Especially for students, like yourselves)
1. Building buy-in
2. Recommended technology and engagement plans that work
3. Setting goals and key performance indicators (KPIs) to measure success
4. Built for engagement: Plan to Find, connect, collaborate
5. Prepare for online community moderation

Society/Business Topics
1. Corporate Accountability
2. Corporate Crime
3. Battling Sweat Shops
4. Socially Responsible Investing
5. Outsourcing of Jobs
6. Health & Safety in the workplace
7. Ergonomics

Human Resources Topics
1. Sex discrimination
2. Race discrimination
3. Ageism
4. Employee Monitoring
5. Online Bullying and Harassment issues
6. Web accessibility
7. Internet addiction
8. Maintain the Work-life balance

Environmental Topics
1. Corporate Environmentalism
2. Environmental impacts of production, use, and disposal of IT Hardware
3. Environmental impacts of Telecommuting
4. Energy use and Business-to-Consumer E-Commerce
5. Green Business

Teams

This is a team project consisting of 3 to 4 members. I suggest you assign tasks to your group members, make deadlines, make progress charts etc. (helpful document: http://www.gotomedia.com/downloads/goto_stage.pdf)

- Proposal
- Team Members detail along with email address (Project head + email address)
- Project Scope
- Project Features
- Timeline
- Task Assignment to members
- Test plans
- etc

Required Elements

1. A minimum of five (5) separate pages
2. CSS-based website (tables must NOT be used for layout)
3. Web Content Accessibility Guidelines 1.0 Compliant (ADA Section 508 Compliant at minimum)
   a. Site passes automated verification from Cynthia Says portal (http://www.CynthiaSays.com/)
   b. All pages contain "Skip to:" links and link to the Accessibility Statement page as the first element in the page
4. Interactive navigation system
   a. Must include all top-level categories
   b. All links must work
5. Content

     a. A variety of graphical optimized elements
     b. Consistent text and narrative elements
     c. Logical Information Architecture
     d. All HTML, CSS, JavaScript, PHP and XML code must be valid
     e. You should separate content (HTML) from style definitions (CSS) and behavior (JavaScript). You should have no inline styles and no inline Javascript.
     f. Must include one of the following:
          1. Flash Object (may be a Bridge Flash Web Gallery)
          2. Movie (may be an embedded YouTube video)
          3. Google Map
          4. Google Calendar
          5. JQuery script
     g. Must include appropriate Accessibility accommodations

6. Web Form
     a. A variety of input fields
     b. There must be validation on your form to protect your site from XSS.
     c. Must include appropriate Accessibility accommodations
     d. http://www.w3.org/WAI/RC/tools/complete

7. Proper page grooming
     a. Valid markup language (http://validator.w3.org/)
     b. Titles (different on each page)
     c. Meta Description (different on each page)
     d. Meta Keywords (different on each page)
     e. Meta Author

8. Web site contact information (may be a separate page or in page footers)
     a. Last updated
     b. Contact information
     c. Copyright information

9. Proper file system management
     a. Appropriately named files and folders (no spaces)
     b. Folders to group assets and file types

10. Site hosted on an Internet-accessible web server

Project Evaluation Criteria

Below, you'll find some of the criteria to be used in evaluating your project.

- The class members and other guests will evaluate your project based on the presentation given. This will account for part of the grade of your project. Since you will be evaluating other projects, you're expected to be attentive while others are presenting -- do not work on your project and/or presentation during another team's presentation as your grade will be negatively affected.
- Each student will also be evaluating their work and the work of their teammates. This evaluation will only be seen by the instructor.
- Your project will be evaluated to determine whether or not requirements are satisfied.
- Your project will be tested thoroughly after the presentation, specifically to test parts of the project that were either not demonstrated or that were minimally shown.

- The entire source code will be inspected and graded for correctness, style, consistency, etc. This includes all aspects of software writing that you would have learned about in prerequisites to this course and criteria specific to the development of websites.
- The website will be evaluated for a number of criteria, including but not limited to: quality, usability, accessibility, style, navigation, organization, appearance, appropriateness, content, etc. Your code will also be evaluated for appropriate use of HTML, CSS, JavaScript, PHP, XML.
- The project is to be completed as a team, and there will be a team grade. However, there will also be a portion of the grade that is assigned per member of the team. Thus the overall project grade may be different for each member of the team and will reflect the contributions made.

Weekly Reports

This is a team project, and as such, each student will work on this project with other classmates. Each teammate has an equal share of the responsibilities in completing the project. Teams must follow the guidelines below as they work on the project.

1. Every team must keep track of the contributions made by each of the members. **Every week each team must send a report via email stating the contributions made by each person during that week**. The report should also include meetings that have taken place, attendance at those meetings, and assigned responsibilities for the upcoming week. All weekly reports are due by 8 pm every Thursday.
2. All of these reports must be included with your final project at the end of the semester. In each report, clearly state the contributions and work accomplished by each individual.
3. Every teammate must be a recipient of all team-wide email messages -- including the weekly reports; do this in the CC line of the email. As a sender/recipient, each member of the team agrees to and accepts the contents of the email message.
4. Be sure to use an appropriate subject line that uses this pattern: `CS 344: [Project name], [concise title of email]`

Presentation

1. Each team will have at most 15 minutes to demonstrate and show their prototype. All team members need to participate in the presentation, and questions may be addressed to specific members. Be sure to take this into account during your presentation, and everyone needs to demonstrate an understanding of the website design and development.

Document

1. Project Accomplishment:
   a. Each team will need to provide a 2-page summary of their project and a description of anything interesting or unexpected that you ran into during its development.

      b. Each team member will provide a short description (sentence or two) about what each team member contributes (including themselves). It is expected that this will only affect the final grade in extraordinary cases.

2. Maintenance Document:
      a. Sitemap, including thumbnail sketches and a flow chart for the site. The thumbnails should consist of a layout of each page and a navigation chart for the site.
      b. Site design and purpose.
      c. How are structure, navigation, and technologies included, how must they be maintained, and how do you add/remove pages? Other topics:
            i. Perform backups and disaster recovery.
            ii. Conduct performance monitoring and optimization.
            iii. Update your content.
            iv. Run security updates and scans.
            v. Check links for issues.
            vi. Test your website's browser compatibility.
            vii. Review key performance metrics.
            viii. Renew your domain name and hosting plan.
      d. References:
            i. https://www.diffily.com/book/website_maintenance.pdf
            ii. https://www.wordstream.com/blog/ws/2023/07/18/website-maintenance
            iii. https://www.rosehosting.com/blog/website-maintenance-checklist/
            iv. https://www.bluehost.com/blog/website-maintenance/
            v. https://www.site123.com/learn/how-to-create-a-website-maintenance-plan-that-works