

Assignment 1--Static Site with Javascript

Overview

The assignments in this course build upon one another and ultimately evolve into the final project. The purpose of this assignment is to create a static website (html css). This will later be converted into servlets, interact with a database, and be given other additional functionality. Although you can technically change your final project at any time, doing so would require significant rework since each assignment builds on the prior assignment. Therefore, you are encouraged to select your final project now. Don't worry about understanding how to do this stuff now. We will cover how to do it in this course. Here are three options:

Option 1: Online Stock Exchange Website.

This option involves designing a simple online stock exchange website. This website will ultimately allow account registration, login/logoff and contain the following two pages:

Content Page 1- Stocks Overview: This page will contain a table. This table will list 4 stocks with made up stock prices per share. It will contain a buy button and sell button for each stock. It will also contain a field for each stock where a user can enter a number of shares (to sell or to buy). The site will accept the purchase if the user has enough money in their account and it will refuse it if otherwise. It will accept sales of stocks if the user has enough shares to sale. (You can't sell shares you haven't purchased). When a sale is accepted, the site will display a success message and the corresponding amount of funds will be removed from the account and the shares added to the user's account. The site will not actually interact with a real stock exchange.

Content Page 2-User Holdings: This page will list out the current user information. This means it will display the logged in user's username, first name, last name, email address, and all other information created at account creation time except the password. It will also display the current stocks the user holds, how many shares of each they hold, and the total value of their holdings. Likewise, it will show the remaining balance of their account. It will also have a field for adding money to their account and a button called "add money" that adds the money to their account. For the purposes of this project, we will pretend that whatever amount of money the user places into the field is given to them for free when they click the add money button.

Option 2: Online Marketplace Website

This option involves designing a simple online marketplace (think amazon). This website will ultimately allow account registration, login/logoff and contain the following three pages (to balance the workload with the stock exchange website project):

Content Page 1- Online Store: This page will show at least 6 items for sale. Each item will contain a picture, a price, and an item description (3 or more sentences). It will also contain a quantity field for each item. Each item will also have an "add to cart" button which will be used to add the chosen quantity of that item to the cart.

Content Page 2- Cart: This page will contain the user's current cart. It will show the name of each item in the cart, the quantity of that item in the cart, and the total cost of the item (item price x quantity of item). It will also show a grand total and contain two buttons, one called "Clear Cart" and

one called “Checkout.” Choosing the “Clear Cart” option will clear out the cart. Choosing the Checkout option if the user has enough money in their account will clear the cart and present a success message and add the order to the user's order history. It will also subtract the cost from the user's account balance. If enough money is not in the user's account, it will not clear out the cart and will not add the order to the user's order history. Additionally, the page will contain a field for adding money to their account and a button called “add money” that adds the money to their account. For the purposes of this project, we will pretend that whatever amount of money the user places into the field is given to them for free when they click the add money button.

Content Page 3 -Order History: This page will show the user's history for each item ordered. It will show each order, the items and quantity of items in each order, and the total cost of each item. It will also show the total for each order. The page will also distinguish between each order and display a grand total for all orders combined.

Option 3: Your Choice

Since this is an advanced course and the projects are somewhat complex, it may be difficult to create your own project with sufficient functionality, while avoiding unattainable goals. However, if you have a really cool idea for a project and don't like either of the two options above, you may submit your idea to me via email. I must respond back with an approval before the project is approved. Once the project is approved, it will apply to assignment 1 and all assignments going forward. If you are interested in this option, send me an email with subject line “4166 project proposal” without the quotes. In this email, provide all the details of what you intend to do. The project must contain the same user account registration and login/logout of the other project options. This proposal must contain the following components to possibly warrant acceptance:

1. It must contain two or more pages
2. The pages must contain sufficient server side functionality to be equivalent to the other projects
3. The pages must use sessions in a relevant manner
4. The pages must use databases in a relevant manner
5. The pages must contain functionality involving ajax.

Assignment 1 Requirements

You should choose one of the project options above and design a static website with the following elements. Note that if you choose option 1 or 2, you do not need to seek approval before submitting the assignment.

1. User account registration page

The user account creation page should contain a form for creating a user account. It should include, at a minimum, fields for username, first name, last name, email, password, and one additional form element (this could be a checkbox, select drop down, or radio button choice). The page should also contain a create account button

2. Home/Login page

This page should contain a title for the site, as well as a short description. It should also contain

username and password fields and a login button. The page should use Javascript to visibly modify some element on the page when the mouse touches the login button. Alternatively, javascript could display an alert when the page loads.

3. Content Page 1

This page should contain content which will later become dynamic. If you choose the stock exchange project, this should contain all of the buttons, stocks, fields, etc, mentioned above. However, it doesn't actually have to do anything (no functionality). If you choose the marketplace option, this should have all of the item pictures and descriptions, as well as the quantity fields and buttons, but the buttons don't have to do anything (no functionality).

4. Content page 2.

This page should contain other content which will later become dynamic. In the case of the stock exchange website, it should contain information for a fake user and all of the buttons, fields, and other static content. In the case of the marketplace, it should be a fake cart, with all of the appropriate buttons and fields mentioned above.

5. Content page 3. (if option 2 is chosen)

If option 2 is chosen, this page should contain a fake order history. See above for details.

The site should use css to implement some sort of simple color scheme and be reasonably aesthetically pleasing. (Basically it should not look 'tacky').

All pages should be linked to all the other pages. Links should be in a consistent position. They should not move or break from page to page.

The assignment should be exported to a zip file using netbeans and then uploaded into moodle. If you are using Eclipse, zip your files and name the zipped file "EELastname" where Lastname is your last name.

Grading Rubric

40 points -All site content present. Submission directions followed

30 points- Css styles implemented. Site has color scheme and has a good look and feel

20 points- Links working and in consistent position

10 points- Javascript implemented correctly on home page

Total 100 points