GUI and Web Development

Business Website Development Assignment

Due Date: Monday 30th April @ 6pm

THIS IS WORTH 40% OF THE MARKS FOR THE MODULE

For this assignment, you must create a business e-commerce website that employs the principles of HTML5, CSS and JavaScript which meets the requirements specified below.

The business or subject matter can be of your choosing. Make sure to run it by your lab supervisor or lecturer to ensure that it is suitable. You must employ a common design theme and colour scheme throughout.

You must complete this assignment in groups of (up to) <u>3 people</u>. You'll be assigned a group on March 19th. (If you wish, you can form your own group. If so, please notify me by Monday March 19th with the names of the group members).

Requirements:

Your website should:
- Store customer details
- Store product details
- Allow the user to "purchase" items from the site (eg., a basket with a summary of their order, and a total price)
- Allow the customer to enter their login details and have login details validated (Using pre coded usernames and passwords within JavaScript is fine for this)
- Allow the user to enter a coupon code and get a discount if the coupon code is valid. (Maybe the coupon is valid before a particular date)
- Allow the customer to change their details
- Perform Form validation to include:
    - text fields not empty
    - check for number for telephone number
    - valid email address
- Include a slideshow which displays a different random image each time the page is loaded
- Access and change HTML elements on the web page through the DOM.
- Access and change styling through the DOM.
- Demonstrate the use of events

Implementation Requirements:

Your site should:

- Use *at least* 10 objects created using a constructor function – for example, 10 objects containing customer data, or 10 products stored as objects
- Use an array
- Use web storage (session storage and/or local storage)
- Be responsive (For this, bootstrap can be used – we will cover bootstrap in the remaining weeks)

    Note: When using events, you should include DOM level 2 event listeners

Presentations:

Presentations are to be completed on May 1st (Tuesday) and 2nd (Wednesday). There will be 20 minutes allocated to each group.

You will be allocated your time slot and notified by email on Thursday March 22nd.

Your group will be required to present your project to the three GUI lab supervisors. You are not required to have slides for the presentation. The presentation should include the following:

- A quick "Tour" of your site. Explain how it works, how to navigate, and show relevant pages
- A brief description of how you and your group created the site: for example, show the code, where you used functions, objects, arrays, web storage, and show off your site!

    Allow 10 minutes for your presentation. Following that, there will be approximately 10 minutes for any questions.