Web Application Development Project

For this project you are required to create a dynamic website. The theme of the website is an online website for ordering goods and/or services. The good and/or services you wish to offer for ordering on your website is up to you. For example, it might be a book store themed website, or a car repairs website offering services such as pre NCT service.

Environment Details

This website development environment should consist of the following:

- Apache Web Server with PHP plugin to interpret PHP script.
- MySQL Database or MariaDB

It is advised you use WAMP, LAMP, MAMP or XAMPP which has these. Depending on the device you are using, choose the appropriate one. If you are unsure, please discuss this with your Lecturer.

An online Code Repository such as gitHub or Bitbucket must be used to store all project related scripts (HTML, CSS, JavaScript, JQuery, PHP, SQL). Access to your repository must be granted to the Lecturer if public access to it is not your preferred option.

Core Requirements

#	Description
1	Website must include a login page, with option to register. Login details will be stored in the database where passwords will be encrypted. Consider a hash function for this purpose. Registering and validating users must be handled by PHP script.
2	When logged in / Registered on website, user should be taken to a home page where the product details can be viewed and the ordering process begins.
3	Must include an option to add products to a cart. The local storage object must be used for this purpose.
4	Have a separate page where products added to the cart can be viewed with their price details and total costs. This page must use the local storage facility to retrieve the products added to cart and display these details in a HTML structure of your choice e.g. table, ol, ul.
5	The structure on the web page must include an event listener at parent level (e.g If a table, then put event listener on table element and not sub elements such as tr, td, th).
6	The event listener must be implemented using JavaScript, and is invoked when the user clicks on an order item. The event flow must be bubble. The event will trigger a function that deletes the item clicked on. Total costs must be recalculated based on the revised list of products now in the cart. Don't forget to update the local storage object to remove the deleted item.

7	The web page which includes the event, must also include a proceed button which will take the user to a new page to enter payment details.
8	Payment details web page must include credit card validation. Numerous JQuery plugins are available for this purpose. Your lecturer can show you an example.
9	Once payment is validated, the order must be written to a database table - use PHP script for this purpose. The order id then must be displayed on a web page confirming the order was successful placed.

Additional Requirements

Installation Guide

A brief user guide – where the lecturer can check the core requirements. For example, what file includes the javascript for the event listener, and where in that file the lecturer can find it.

Must be styled with an appropriate theme. An external stylesheet referenced by all the web pages would the preferred approach.

Project web site must be accessible from the module website.

Optional Requirements

Can use a framework such as bootstrap to define web site page templates.

The core technologies are HTML, CSS, JavaScript, JQuery, PHP, and Database (MySQL or MariaDB) and must be used where stated in the core requirements. Other technologies can be used to enhance the website or to demonstrate your knowledge of these technologies. For example, Angular JS.

Marking

Module Web Site – 10% (Note: This is a mandatory requirement)

Core and Additional Requirements – 60%

Style. How does the web site look ? Is it the type of web site you would consider placing an order on if you came across it when surfing the net? – 15%

Additional Functionality, slickness of site, use of other technologies. Aim is to wow the user, and impress the user who will check the source to see how such a slick event, or some function was implemented and may learn from it. – 15%

Note, that the module web site was indicated as mandatory. The installation guide is also mandatory. If either of these requirements are not met, then the project will not be corrected. The installation guide must be exact. If the web site can't be deployed then it can't be corrected.