

Web Development

Module Leader: Martin Cooper		Level:4
Module Name: Web Development		Module Code: 55-407821
Assignment Title: Web Site Project		
Individual Task	Weighting: 100%	
Submission date/time: Thursday 4 th January 2024	Blackboard submission	Provide a ZIP file that includes all the files that make up the website, plus evidence of planning and testing.
Planned feedback date: Friday 25 th January 2024	Mode of feedback: Blackboard	In-module retrieval available: Yes/No

Module Learning Outcomes

- Demonstrate understanding of the relationship between client and server-side technologies in web application development.
- Design web User Interfaces (UI) with the latest standards in HTML and CSS.
- Identify when and where to apply JavaScript to enhance interactivity and User Experience (UX).
- Implement basic server-side scripting with a backend database to provide dynamic content to a web application.
- Explain and apply techniques to create web content that can be accessed from various devices including mobiles and assistive technologies.

Assessment Brief

For this assignment, you will design and develop a website for a fictional college, “Cantor College”. The site you design and develop will be built with HTML, CSS, JavaScript and may include a simple connection to a backend database.

All the assets for the website have been provided by the fictional College Dean in a mix of file types. They are attached along with this assignment brief.

You should use **all the text** provided and as many of the images as are appropriate for your choice of design. You can choose to add your own images along with those provided, if they are appropriate for the context of the project.

For the purposes of this assignment, you are **not permitted** to use CSS frameworks such as Bootstrap or Foundation. All the HTML and CSS should be original, although it can take inspiration from the lab materials provided in this module.

Similarly, you are **not permitted** to use Javascript libraries such as jQuery or frameworks such as ReactJS.

If you provide a backend database and server-side logic, this should be built on PHP/MySQL, as demonstrated in the lab sessions. Again, you are **not permitted** to use PHP frameworks.

The following criteria will be used to assess your application:

Planning and Resources

The first task you should tackle, and record is wireframing. This will help you plan your project. Review the documentation provided in the file bundle and consider the way in which you envisage your final pages will look in terms of layout. You should provide evidence of your design processes. This should take the form of screenshots or digital images to evidence that you have considered the design of the site before starting. These could be electronic or hand-drawn but please include electronic evidence.

Place all your wireframing documents in a folder named **evidence** in your submission.

Ensure you build a sensible file structure, that uses common naming conventions and that all images are appropriately edited (in terms of scale and file size) for web use.

HTML Quality

Your HTML should be correctly structured, with modern HTML semantic elements. You should demonstrate an understanding of the role of HTML. Your HTML should include such features as links, lists, titles and correctly deployed semantic elements. The use of deprecated HTML (ie out of date elements) and poor practice such as using HTML for presentation as opposed to structure will be penalized.

CSS Quality

CSS should be used to style your pages in a consistent fashion. CSS rules should be placed in external files and applied following the mobile first paradigm. You should demonstrate a range of CSS selectors techniques such as HTML, classes, IDs selectors, along with pseudo-classes and attribute selectors. You are **not permitted** to use CSS framework such as Bootstrap or Foundation. The CSS should be your own and not copied from a design template.

Javascript Quality

You should use Javascript functionality to add some user interaction to the pages. This may include features such as an animated menus, form validation and any other related features that improve the user experience.

Use of Database

You should attempt to connect your code to a backend MySQL database via PHP. You should use data to populate pages in your application. Marks are available based on how much use of the backend database you make. We would like you to showcase your understanding of server-side technologies. You should indicate in a readme markdown file how your database is hosted – ie XAMPP, Virtual Machine.

User Interface, User Experience and Accessibility

The user interface of your website should be pleasant to look at and suitable for the topic domain. The features you develop, for example with Javascript and PHP, should enhance, not hinder the user experience. Your pages should also be audited for accessibility compliance using the Google Chrome Lighthouse. To evidence this use screenshots of before and after feedback from Lighthouse. Provide **three examples** of improvements made to enhance accessibility. Please place this evidence inside the *evidence* folder previously mentioned in relation to wireframing. Name the testing screenshots as 'Problem1.png' and then 'Fix1.png' etc.

If you are unsure about the assignment requirements, please speak to the module team.

In-module retrieval

Following first-sit assessment, In-Module Retrieval (IMR) will be offered to students achieving below 40% for either (or both) of these assessment tasks.

IMR means that you will have an opportunity to resubmit a reworked version of your original assignment, following feedback, within a short space of time (usually 5-10 working days) in order to achieve a pass grade. The maximum mark available is 40%.

You will need to look out for an email from your Module Leader (to your SHU email address) shortly after the marks have been released. This will give you more details and tell you what you need to do next.

If you decide not to participate in the In-Module Retrieval attempt and subsequently do not pass the module, you will be referred which means you will have an opportunity to resubmit an assignment during the reassessment period (usually July for students on standard courses).

The time available to you to submit an IMR attempt will be less for those students who submit after the original submission deadline date (with or without an approved extension).

Further information about IMR is available on Assessment 4 Students on [shuspace](#)

[illegible]

	FAIL (insufficient)				THIRD (sufficient)			LOWER SECOND (good)			UPPER SECOND (very good)			FIRST (excellent)				
	Zero		Low Fail	Mid Fail	Borderline Fail	Low 3rd	Mid 3rd	High 3rd	Low 2.2	Mid 2.2	High 2.2	Low 2.1	Mid 2.1	High 2.1	Low 1st	Mid 1st	High 1st	Exceptional 1st
Criteria and weighting	<10		25-39			40-49			50-59			60–69			70-89			96
Javascript Quality 15%	Demonstrates poor understanding of the use of Javascript.		Some attempt to add Javascript functionality but application has errors.			Javascript used to add at least one element of user interaction to a sufficient standard.			Javascript used to add at least two elements of user interaction to a good standard.			Very good use of Javascript with code held external to the HTML pages.			Excellent high-quality features. Demonstrates excellent understanding of the use of Javascript.			All the previous criteria met to an exceptional level, as well as innovative techniques.
✓																		
Use of Database 15%	No database or server-side script attempted.		Some evidence of an attempt to connect the application to a database.			Basic database usage with data presented in a simple table.			Good use of data, using SQL queries to filter data.			Clearly demonstrates benefits of server-side technologies with search and details pages.			Excellent use of server-side technologies to rationalize page maintenance.			All the previous criteria met to an exceptional level, as well as innovative techniques.
✓																		
User Interface, User Experience, Accessibility 15%	Broken user interface and/or user experience. Accessibility issues ignored.		Poor user experience. Little evidence that accessibility issues have been addressed.			Workable application with some attempt to address the user experience. Some accessibilities issues unresolved.			Good UI/UX and evidence of some accessibility testing.			Demonstrates very good understanding of UI/UX issues. Strong evidence of accessibility testing and understanding of required improvements.			Excellent professional level of UI/UX. Excellent evidence of accessibility testing and understanding of required improvements.			All the previous criteria met to an exceptional level, as well as innovative techniques.
✓																		
Overall mark:																		