

Module:	ICE-1411/4111 - Web Technologies
Department	School of Computer Science and Electronic Engineering
Module Credit:	20
Contribution:	50%
Deadline:	02 May 20223

Assignment: *Build a personal web page*

Description

You are required to create a personal web page, which should ultimately be suitable for publication online. The site can showcase you and your interests, or something you are particularly passionate about that you can create plenty of original content for. The choice is left up to you but if you are unsure about the suitability of your idea, please ask us before you begin. A series of tasks of incremental difficulty (and corresponding overall mark contribution) are provided below to guide you.

The purpose of this assignment is to test your HTML, CSS and JavaScript skills based on the material covered in our lectures and labs throughout the semester. You should NOT make use of WYSIWYG editors of any type (e.g., Dreamweaver, WIX.com, etc.). Any evidence that you have done so (it is usually obvious!) will result in a heavy reduction of your final mark.

Follow the recommendations, references and good-practice guidance of the lab scripts. Should you find yourself in any difficulty, please ask for help in the lab sessions. Feel free to ask for clarification of anything that you do not understand.

Contribution of this assessment

This assessment contributes to **50%** of the overall module mark.

Requirements & Tasks

Task 1 - Structure and Content of Webpage [**20%**]

Many of the decisions regarding features of your personal page will be left up to you. However, there are some specific requirements:

- The website must be suitable to be hosted online, though actually hosting it online is **not compulsory** for this assignment but is recommended. Instructions for hosting your websites online will be provided in a future lab session. As a result, your site should make use of accessibility features, search-engine optimisation (SEO) and responsive Web techniques.
- Your website should consist of at least four pages (e.g., a general intro, a description of your society activities in Bangor or a portfolio/CV, and a gallery page, for the latter tasks). Even if you only attempt the basic part of the assignment you should submit at least four pages, as instructed above. If you submit only one, two or three pages, then your marks will be scaled accordingly. Look at our labs on how to create the required file structure etc.

The pages should also display the following HTML features:

- Appropriate page titles, stylesheets, scripts and meta-tags in the header.
- Correct and consistent use of semantic HTML5 elements on every page.
- Internal links to and from every page on your site (a consistent navigation across all pages).

- Some links to external webpages and resources, i.e. pages not belonging to your site.

Task 2 - Style your Webpage [25%]

In addition to the features above, you should also satisfy the following technical criteria. These are all to be completed using the appropriate CSS. Use of inline styles will not be rewarded!

- Use a single external stylesheet to describe the style of all of your pages. This will require you to link all your web pages to a single stylesheet.
- Style the overall layout of the pages using selectors formed of classes and tags where needed. The page layout should consist of the following elements:
 - A header and footer on each page.
 - A main content section that occupies most of the space on each page.
 - Consistent navigation which utilises floats or other CSS layout techniques.
- Use pseudo-classes to respond to mouse behaviour on interactive elements (E.g. links).
- Use a web font from <https://fonts.google.com> in your site.
- Show some efforts towards making your site responsive, accessible, and tailored for multiple screen sizes (E.g. mobile, tablet, desktop).

Some of the marks for this section will be awarded on design quality. This means you should choose your colours and fonts carefully to give a consistent aesthetic. Think carefully about the format of images used in your pages and their placement. Additional credit will be awarded for rich, interactive content.

Task 3 - Building an 3x3 image gallery from a JSON object [35%]

Create a separate JSON file of images and descriptions that are relevant to the theme of your site. Using JavaScript (vanilla, jQuery or other JS framework, the choice is yours), parse and display those in **ONE** of the pages of your site.

The gallery should display each image as a thumbnail, with its caption below (or overlaid), in a 3-column grid (at desktop resolution), as shown in Figure 1. Each image should act as a hyperlink to the full size image. Use CSS to style the gallery to your liking.

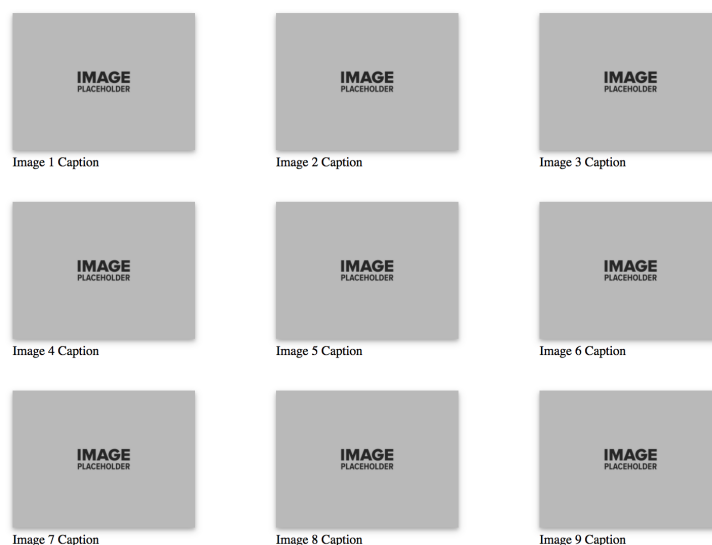


Figure 1: Example of a 3-column gallery

Task 4 - Create an interactive image carousel from a JSON object [15%]

As well as your 3x3 gallery of images, create an image carousel on one of your other pages. You may use the same JavaScript code you wrote to load the images for your 3x3 gallery from JSON, but the presentation code will need to be different. The carousel should have a button to move to the next image and a button for the previous image. Additionally you may wish to add pips to select individual images, and an autoplay function.

NOTE: You may use a pre-made carousel JS/CSS library for this task, but you **MUST** load the images that it uses from a JSON file as instructed. Creating the image carousel yourself from scratch will be rewarded with a higher mark for this task.

Task 5 - Website Testing and Validation [5%]

At this point you should include a testing report, including your findings of testing, using various methods, including the W3C HTML and CSS validators. Use the provided template, named `testing.docx`, and follow the instructions within. Describe what you have done, including screenshots if you feel it will help.

Submission procedure

By **02 May 2023**, you will need to submit:

- A URL to your website (if you hosted it online). This step is **not compulsory** but is recommended if you have time.
- An archive of your website, including directories, HTML, CSS, images and JavaScript uploaded to the assignment submission point on Blackboard. **Please only use ZIP**. Name it `username-files.zip`
- Your testing report. Name it `username-test.doc` or `username-test.pdf`

All deliverables will be checked for plagiarism.

Plagiarism and Unfair Practice

Plagiarised work will be given a mark of zero. Remember when you submit you agree to the standard agreement:

This piece of work is a result of my own work except where it is a group assignment for which approved collaboration has been granted. Material from the work of others (from a book, a journal or the Web) used in this assignment has been acknowledged and quotations and paraphrasing suitably indicated. I appreciate that to imply that such work is mine, could lead to a nil mark, failing the module or being excluded from the University. I also testify that no substantial part of this work has been previously submitted for assessment.

Late Submission

Work submitted within one week of the stated deadline will be marked but the mark will be capped at 40%. A mark of 0% will be awarded for any work submitted 1 week after the deadline.

Please note, the module lecturer does not have the right to grant extensions.

You can apply for an extension online via the **Request Centre** on **MyBangor**. Information about acceptable and unacceptable reasons for being granted an extension can be found there.

Section 08 of Regulation 1 provides a full explanation of the University's Special Circumstances procedure.