**ID512 2022 website assignment**

**Due Date:** Friday, 24th June, midnight – code freeze

**Value:** 70% of your final mark

**Group Size:** Individual

**Learning Outcomes:**

1. Use fundamental components of web pages and basic client/server communication.
2. Develop simple web-based applications using industry relevant client/server-side programming languages.
3. Use industry relevant tools and workflows in the development of web-based applications.

**Assessment details:**

You are going to **build a website**. The point of this assignment is to **demonstrate your competency** in the areas outlined in this course - so your site is going to have to demonstrate your skills in:

* **HTML**
* **CSS**
* **JavaScript**
* **AJAX**
* the use of **APIs** and **JSON**
* **modern design** including **responsive design**
* server-side technologies such as **Node.js**
* development tools such as **VS Code** and **Git**
* elegant **coding practices**
* **workflows/best practices** when it comes to development, such as **attendance, research**, **handling errors** and **continuous work** on your site over the semester

You will **be assigned a design** from five options. Your task is to **reproduce** the given design as closely as possible, in terms of **visual design** and **functionality**. You need to demonstrate **competency** in the various areas of the course; elegantly implementing the material taught in the lectures will be enough to **pass** the assessment. Higher marks can be attained from implementing the **optional advanced** material, but this is highly self-directed (although I am happy to assist at **any time**).

**>> YOU MAY NOT USE A PRE-BUILT TEMPLATE (e.g. BOOTSTRAP).**

**Milestone schedule:**

There are no **required** milestones or due dates that any part of your site needs to be completed by. We will work on a **practical in-class website** that will give you a good foundation for tackling your individual assignment sites. However, most importantly, you are encouraged to work **continuously** and **at the pace you feel comfortable with –** if you wish to work **faster** or **slower** than we progress in class, this is fine. It would be good to **discuss with me** if you start to drift ahead or behind the general pace of the class, just so I can keep an eye on your progress.

**Marking Rubric:**

Attached at the end of this document.

**Submission:**

* You will hand in **two things:** a link to your **code repository on Github**, and a **URL for your deployed site**. If I cannot find either of these, you might risk losing marks.
* You will create your own Github repository – make this public for easy viewing, or **add me as a collaborator** under settings if private.

**Passing Criteria:**

This assessment is criterion-referenced with a cumulative pass mark of 50%.

**OTHER REQUIREMENTS:**

* **You must use Heroku for your deployment… not Eleventy or other such hosting service… Heroku.**
* **You must have a README in your Git repo that details how to run the app locally and deploy… we will cover this more in-class.**
* **You must use exclusively ES6 JavaScript – if you are unclear what this means, ask!**
* **The quality of your code will also affect marks – so including HTML, CSS or JS that does not adhere to good development practices such as DRY, will affect your marks.**
* **Attendance (and other things too) will affect the ‘best practices in development’ component of the rubric – so make sure you let me know if you won’t be at class, or want to work remotely (it is advisable to NOT miss many classes though… historically, students that do not show up regularly do not perform as well).**

**Marking rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **10-9** | **8-7** | **6-5** | **4-0** |
| **Fundamentals (HTML & CSS)** | Has coded a complex and engaging website using advanced HTML and CSS. | Has coded a functional website using HTML and CSS proficiently. | Has coded a basic website using simple HTML and CSS. | Has failed to use HTML and CSS to code a website.  Has attempted to use some HTML and CSS to code a messy or dysfunctional website. |
| **Site design** | Has fully recreated provided design, including examples of advanced interactive and engaging design features. | Has recreated most aspects of provided design to create a coherent and professional-looking website. | Has recreated provided design to bare specifications. | Has failed to recreate provided design.  Has attempted to recreate provided design, but result is messy, incomplete or incoherent. |
| **JavaScript use** | Has coded an interactive and engaging website using complex JavaScript. | Has coded a functional website using JavaScript proficiently. | Has coded a basic website using simple JavaScript. | Has failed to use JavaScript to code a website.  Has attempted to use some JavaScript to code a messy or dysfunctional website. |
| **AJAX/asynchronous programming** | Has demonstrated advanced use of AJAX/async programming. | Has used AJAX/async programming proficiently in a logical and meaningful way. | Has incorporated simple example of AJAX/async programming in website. | Has failed to incorporate any AJAX or asynchronous programming in website.  Has attempted to incorporate AJAX/async programming in website but functionality is broken. |
| **Server-side technologies** | Has incorporated server-side technologies to a professional standard, to deploy a complex website. | Has incorporated server-side technologies proficiently to deploy a functional website. | Has incorporated simple server-side technologies to deploy a simple website. | Has failed to incorporate server-side technologies in development.  Has made bare attempt to incorporate server-side technologies in development, but deployment broken or incomplete. |
| **Git** | Has used Git in a professional manner, and modelled appropriate industry behaviours. | Has used Git consistently to manage code. | Has used Git semi-regularly to manage code. | Has failed to use Git to manage code.  Has made bare attempt to use Git to manage code. |
| **Code commenting** | Has made consistent and thorough commenting throughout, with comprehensive detail. | Has made consistent commenting throughout with moderate detail. | Has made consistent, minimal commenting throughout. | Has not commented code.  Has made bare attempt to comment some code. |
| **Workflows/best practices in development** | Consistently used workflows to a high standard throughout semester, including the use of industry best practices and professional behaviour. | Consistently used workflows to an effective and useful standard throughout semester (such as problem solving, communication, responding to feedback, etc). | Used workflows throughout semester to a minimally effective standard (such as problem solving, communication, seeking feedback, etc). | Has not demonstrated observable professional behaviours or workflows throughout semester (such as problem solving, communication, seeking feedback, etc). |