COMP.6210

Web Services & Design Methodologies

Web Application Design Assignment

Assignment 1 – Semester 2 2019

**Due Date: Thursday 05th September 2019 at 5.00 p.m.**

**Weighting: 30%**

**Marks: 42 marks**

**Aim:**

To create a design, build and test a small web application using both client and server side technologies and a web server scripting language.

**Learning outcomes covered:**

1. Use a server side scripting language to create web applications incorporating data base connectivity; dynamic page generation, authentication and demonstrating data security.

6. Perform testing and maintenance on Web Applications.

**Notes:**

This is an individual assignment and must be the product of your own work. Students are reminded to read pages related to assessment rules including rules for dishonest work in the Toi Ohomai Student Guide.

**Part A** - design document and source code must be submitted using GitHub Classroom as a single PDF in the docs folder of your project.

**Part B** - The HTML/CSS and imagery should be uploaded to the same repository in their respective folders that represent a good folder structure.

**Part C** - The testing document should be part of the design document that you created in part A.

You will find the link to the classroom repository on Moodle.

**Requirements**

Once you accepted the assignment on GitHub Classroom, you will be presented with a starter repository that you will need to clone down to your PC. In this repository you will find 3 options that you can base your project on and you will need **to choose one** for your project.

This selected project will be the one you are working on for both assignment 1 and 2.

Read the options carefully and create a website that meets the requirements. You will find any resources and assets you need with the options in their folder.

From the information you have received you are to create the following:

* SQL File that creates the tables and 6 records **FOR EACH** table that populate the database
* Create HTML and CSS template pages that will get the information from your webservice that you are going to create in Assessment 2. For assessment 1, you are allowed to add hard coded content on the page, but this must all be removed for assessment 2.
* You are to create a High Fidelity Wireframe and a Mood board for your selected project.
* The wireframes should be labelled with the following format:  
  **page-type** for example: **home-mobile**

**PART A – Wireframe, Moodboard and Design Document (16 marks)**

For **Part A** you must write up document that clearly shows your chosen project, but **do not explain** why you chose this over the others, because you have to write it as if it is being presented to a real client. This means the document requires the following:

* A title page (with your name and student ID).
* A table of contents page.
* A summary of the project paraphrasing the brief you have been given – so no copy and pasting.
* You are to discuss an appropriate software methodology and make a plan that you will stick too. You must have regular catchups with your tutor to make sure you are on track and these must be documented in your report.
* Explain the scope of your project.
* Create a sitemap of your entire site.
* Any flow diagrams and storyboards to explain a sequence of events.
* Display the wireframes.
* Display the Mood boards – write up a brief explanation of how you mood board relates to what you want to create.

**PART B – Coding the HTML, CSS, SQL files (18 marks)**

For **Part B** you are to code the HTML and CSS files for each page that you have been asked to create in the brief. The HTML pages can contain hard coded content for now to display the intent of the final website.

You will also need to create the SQL file that will populate the database. This file must be as close to the final version as possible, so very little if any changes need to be made in assessment 2.

The files submitted for part B must follow the following constraints:

* The pages must be responsive for 3 devices (mobile phone, portrait tablet, landscape desktop).
* The data is to be hard coded, no PHP is to be written in any of the HTML files.
* The pages are to serve as templates, so if you want to generate the same page with different content to illustrate a design – please do.
* You are not to create any templates that are not wireframed.
* HTML files must be validated, tidy and include appropriate semantic tags.
* CSS files must be validated and tidy.
* You must use a framework or a library (such bootstrap, tailwindcss).
* The SQL file must execute or be imported into PHPMyAdmin without errors.

**PART C – Testing Document (8 marks)**

You are to create a testing document that tests the following:

* HTML files and CSS are validated (pass / fail).
* SQL file can be executed without errors (pass / fail).
* No PHP code is in the project (files must also not use a PHP extension) (pass / fail).
* Webpages must match the wireframe (pass / fail).
* Framework / Libraries is included into project (pass / fail).

**This document must be tested by 2 real people in the classroom**

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| **Marking Rubric Part A  (Wireframe, Moodboard and Design Document)** | **Achieved**  **2** | **Some Issues**  **1** | **Unacceptable**  **0** | **Marks Attained**  **/2** |
| Site Outline Document with requested formatting (Title Page, TOC and Headers) |  |  |  |  |
| Project Summary included in document and clear, concise and appropriate |  |  |  |  |
| Development Methodology Identified |  |  |  |  |
| Scope Correctly Identified and Explained |  |  |  |  |
| Sitemap included |  |  |  |  |
| Flow diagrams and storyboards to explain sequence of events |  |  |  |  |
| Wireframes included |  |  |  |  |
| Moodboards included |  |  |  |  |
| **Part A Total Marks: /16** | | | | |

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| **Marking Rubric Part B  (Coding HTML, CSS, SQL)** | **Achieved**  **2** | **Some Issues**  **1** | **Unacceptable**  **0** | **Marks Attained**  **/2** |
| Template matches design from Part A |  |  |  |  |
| The pages must be responsive for 3 devices (mobile phone, portrait tablet, landscape desktop) |  |  |  |  |
| HTML files produced has been validated is tidy and includes appropriate semantic tags |  |  |  |  |
| CSS files produced has been validated and code is tidy |  |  |  |  |
| Included and used a CSS library or Framwork (such as bootstrap, tailwindcss), and packages are loaded using npm |  |  |  |  |
| Site folder tree structured correctly |  |  |  |  |
| Site files in correct folders |  |  |  |  |
| Identified Tables(s) and Records created |  |  |  |  |
| SQL can be imported and executed in PHPMyAdmin without errors |  |  |  |  |
| **Part A Total Marks: /18** | | | | |

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| **Marking Rubric Part C  (Testing)** | **Achieved**  **2** | **Some Issues**  **1** | **Unacceptable**  **0** | **Marks Attained**  **/2** |
| Testing document supplied (appended to the design document in Part A) |  |  |  |  |
| All Testing questions answered that are listed |  |  |  |  |
| Project tested by 2 people in the classroom |  |  |  |  |
| Development has continued to the point that all tests have passed |  |  |  |  |
| **Part B Total Marks: /8** | | | | |