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|  | | **School of Digital Technologies**  **Manukau Campus** |
| **502.525 Front-End Web Development Project**  **Quarter 2, 2020**  Part A “Website Planning” [10 marks] Hand-in deadline is **Midnight, Fri, 12 Jun 2020** Part B “Website Implementation” [40 marks] Hand-in deadline is **Midnight, Thu, 02 Jul 2020** | | |
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| **GENERAL** **INSTRUCTIONS:**   * This Project is your own individual original coded, created and assembled work.  You may use copied elements and components on condition that they are copyright-clear, referenced, and attributed where required or appropriate. All work must comply with New Zealand copyright law as it would apply to Business Websites published on the Public Internet. You may NOT act as creating “only a student website”. * This Project is individual work by default. Students who want to form a team may request a team work variation which will need negotiation with the lecturer and lecturer approval. * Hand-ins are by uploads of zipped file collections to Canvas  The “Work Diary” is a website that your lecturers provide. Your data entry there effectively hands itself in as you save. * Use the APA referencing style for all referencing. | | |
|  | Statement of Original Authorship  I hereby confirm that this assignment is my own work, or in the case of team work it is the team work done for that learning activity. In addition, the assignment has not previously been submitted for assessment, either in whole or in part, by either myself or any other student at either Manukau Institute of Technology or at any other tertiary institution. To the best of my knowledge and belief, the assignment contains no material which has been previously published or written by another person **except where due reference has been made**. All unpublished sources of information have been acknowledged. I make this statement in full knowledge and understanding that, should it be found false, I will, in most circumstances, receive zero marks for this assignment.  Note that agreement with this statement is a condition of handing in electronically and we will consider that act of hand-in as your act of agreement. | |

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| **All 5 learning outcomes apply for this Project:**  LO1: Apply the fundamentals of web interface design using HTML and CSS  LO2: Apply the fundamentals of JavaScript  LO3: Apply the fundamentals of responsive web design  LO4: Implement visually rich Front End web applications  LO5: Test, debug, and correct Front End web applications | | | | |
|  | Part  Part 1  Part 2  Overall | **Summary of Project Marks**  Topic  Website Planning  Website Implementation  **Total** | Marks  10  40  **50** | Weighting 10%  40%  **50%** |

Task

This Project requires you to create a website of at least 6 pages using HTML5 conventions. You are to use Visual Studio 2019 to produce this website. Include an example of animated multimedia which plays using the new HTML5 element “canvas”. Include a user data entry Form which relates to your topic. Include demonstration of the use of JavaScript which can include JQuery or similar JavaScript function libraries.

You may not use complete-page HTML template files. The site must be hand-coded by you. You may use “snippets” of code which are small single purpose HTML blocks of code which are freely shared on sites like “W3Schools” or provided by us as learning resources on Canvas. When using “snippets” it is your responsibility to look for any author attribution conditions and follow them.

The topic of the website is up to you. Your topic must be approved by your lecturer before you start the planning process. For example:

* + Hobby or interest
  + Sell a product or service
  + "HOWTO" – eg how to modify a car

To get high marks you should all aim to be "Excellent" and "Exceptional" which includes showing initiative in going above and beyond the content and methods covered in lectures, course notes and course examples. Website Development is a fast advancing field where successful website creators are engaged with the latest ideas and are trying out the new technologies and opportunities being offered and discussed.

Website Plan

Before you start any website project you need to create a clear plan for the project. This is usually presented to the client so they can visualise the website in its final form. This Planning Document serves as a basis from which you can start working, outlines the requirements for the project and clarifies the final outputs.

1. Outline the topic.  
   It is not enough to state the topic eg “Car Modifications”. You need to give some sub-topic examples eg examples of different car modifications, and/or products or services related to the topic that a business can sell.
2. State your proposed URL for the website.  
   Provide evidence that the URL is available for purchase. You can do this by checking availability on a well-established website that sells domain services, take a screen shot, and include that screen shot in your Planning Document.
3. Create a site Navigation Diagram  
   A graphical representation of your whole site, with the type of structure, file names of pages to be included, as well as the title of each page.
4. Page Design

Fashion is changing and rough sketches are now not good enough for business planning meetings. A good approach is to create a clear idea of what the home page would look like using Photoshop or Microsoft Word. This design should have example text with the planned headings and some placeholder text preferably about the subject. During a business meeting discussion you would have layers (Photoshop) and/or components (Word) in this design so that you would be able to change colours, fonts and sizes as people in the meeting discuss the possibilities.

This design should also show your colour scheme, even in a simplified way. You should also have placeholder images. JPC suggests that "www.openclipart.org" is a good source for these.

A good approach for many websites is to create a detailed design for the home page then copy and adapt it to design the other pages.

Website Implementation

Create your website, following your plan.

You will also need to maintain and hand-in this documentation:

1. A “Word” Document containing your Bibliography.
2. A “Work Diary” of the time spent on this project. Use the supplied website.   
   <https://manukautech.info/workdiary>

You need to diary the time that you spend on this project in order to record the hours and other "metrics" that you or your manager would need to charge a client, and also may find useful for future planning.

For each session of work:  
Select the category of work. If you work on more than one category in a session then record this as multiple smaller sessions.

Enter start time (Time1) and end time (Time2) for each session of work. We record times to the nearest 15 min eg 13:00, 13:15, 13:30, 13:45. If you “cross midnight” then you need to enter date and time for both like this:

16/03/18 22:45

17/03/18 00:45

Add notes for each working session including work attempted, work done.  
Make sure you test your website and record what you test, the results and any corrections you make. Record notes about your challenges and successes as they happen.

1. A “Word” Document answering questions about meeting Project Requirements  
   Use the supplied template document:   
   - What have you done to “*make effective use of CSS"*? For what elements on what pages?  
   - How have you demonstrated *“Javascript .. for purposes other than form validation”*  
   and on what page?  
   - For your Form or Forms, what methods have you used to *“validate client-side data entry”?*  
   - What elements have you created in your Canvas animation(s)? On what page(s) do you demonstrate Canvas animation?

Mark Sheet

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| **Element** | **Awarded** | **Out Of** |
| **Website Planning – Hand-in deadline is Midnight, Fri, 12 Jun 2020 [LO 3, 4 ]** |  |  |
| Outline the topic |  | 2 |
| URL of the site is provided with evidence that it is available. |  | 1 |
| Navigation Diagram. |  | 1 |
| Page Designs. |  | 6 |
| Planning sub-total |  | [10] |
| **Website Implementation - Hand-in deadline is Midnight, Thu,02 Jul 2020 [LO 1, 2, 3, 4. 5 ]** |  |  |
| HTML5 |  |  |
| HTML5 good practice taking into account as relevant to your website:   * re-use of repeating code eg menus, headers * use of appropriate elements – eg div, ul, li for layout which is responsive to a wide range of screen sizes. * effective use of CSS eg external css, use of id and class. * links relative and working. * file and Folder names consistent and clear. * appropriate comments (date, initials/name, comment notes). |  | 6 |
| HTML Canvas Animation |  |  |
| Website includes at least one animation with elements created by you. Animation(s) is/are effective in adding to the value of the page(s) it/they are on. Animation(s) is/are delivered via HTML5 “canvas” elements. |  | 5 |
| Forms Page |  |  |
| Forms page - layout clear, at least 6 input fields, variety of input field types, capturing data relating to your topic rather than being a common general form. JavaScript and/or JQuery and/or HTML5 new attributes used to validate client-side data entry. |  | 5 |
| Javascript and/or Javascript Libraries |  |  |
| Demonstrate use of Javascript and/or Javascript Libraries (eg JQuery, Angular, Knockout, Aurelia) for purposes other than covered in the above elements. ie NOT Form Validation, NOT Canvas Vector Drawing or Canvas Animation and NOT shared menu file as already done in class. |  | 5 |
| Website as a whole |  |  |
| Effective communication of the topic |  | 4 |
| Website Publication to Azure |  | 2 |

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| Documentation and Reporting |  |  |
| Bibliography in APA format |  | 3 |
| Test Plan in the format of an Excel Spreadsheet including testing of:   * Navigation * Responsiveness * Form Validation   And testing of other testable particular elements of your website. |  | 4 |
| Work Diary Metrics Outputs a relevant and useful metrics report because of good quantity of sessions recorded with good quality of time recording and selection of categories. The expected good work effort on this Project is 45 hours. |  | 2 |
| Work Diary Notes  Notes effectively record your development process and your testing. |  | 4 |
| Implementation sub-total |  | [40] |
| Project Grand Total |  | **[50]** |

**Marking Guidelines – general**

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| 100% | *“Perfect”* The work demonstrates an exceptional effort to achieve excellence WITH a high level of professional product quality. |
| 90% | *“Exceptional”*  The work demonstrates student initiative in going above and beyond the content and methods covered in lectures, course notes and course examples. |
| 80% | *“Excellent”* |
| 70% | *“Exceeds the basic standard”*  An above-average effort to try for excellence. 70% examples may demonstrate excellent results in some elements but not all. |
| 60% | *“Achieves the basic standard”*  The student has done what we asked for but as an average effort needing to show more motivation and passion. |
| 50% | *“Achieves the basic standard but with minor deficiencies”* |
| 40% | *“Some Deficiencies”*  It is possible to recognise the design brief ideas in this work but with some deficiencies that make it difficult to understand what the student is trying to communicate or express. |
| 30% | *“Has Many Deficiencies”*  Many major deficiencies that make it impossible to understand all of what the student is expected to communicate although it may be possible to understand some parts of the work. |
| 20% | *“Poor”* |
| 10% | *“Demonstrates little ability”* |
| 0% | *“Not Done”* |