COIT 20268 - Responsive Web Design (RWD) (Term 1 – 2019)

- Portfolio 2
- Practical Assessment 2

Background

Robot Expo, is a government sponsored exhibition. They have contracted you to develop a website for the exhibition. You have been provided with the following initial and technical specifications.

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Memo: Website Requirements
From: Robot Expo, Senior Management
To  : WIMP Engineering R&D Consultants

Specification

Design and develop a website. The idea is to provide information to
tourists visiting the exhibition. The goal is to allow visitors to
obtain an overview of the exhibition layout and to find details of
exhibits they would like to visit.

Resources

Resources such as images and details of opening hours can be found in
ProResource.ZIP. The content of the ZIP file is:

1. Four folders named Domestic Robots, Educational Robots, Industry
Robots and Military Robots. Each folder contains images relating to
the different types of technology indicated by the name of its folder.

2. A text file Item_List.txt contains the names of the artefact
corresponding to each of the image from each folder. You need to use
these names as the official description of the artefact on your web
site.

3. A text file Business_Hours.txt containing the time-table of opening
hours and entrance fees to the exhibition.

4. Logo.png – image of the logo of the exhibition.

5. Floor_Plan.jpg – floor layout of the exhibition.
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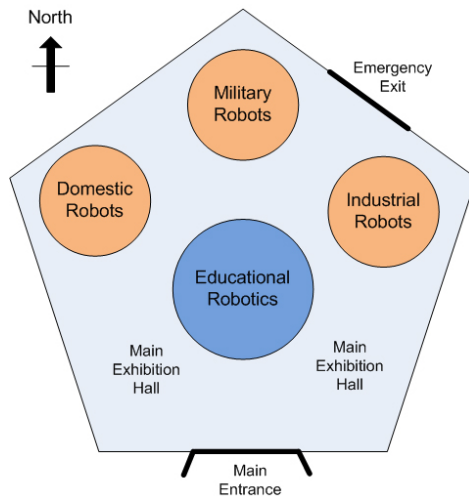
<u>General Requirements</u>

The managers of Robot Expo insist that the following requirements must be adhered to:

1. Each webpage of the website must display the Robot Expo logo. You can edit this image, but the font style, type and colour must remain as in the original image.

2. Do not change the proper names of the item. Do not rename the filenames of any of the images.

3. All images of each artefact must be presented to the visitor. This can be done within one webpage or distributed across several web pages. The idea is to ensure that visitors are made aware of the complete selection of items available for them to visit.

4. The images are to be used as it is. You can resize the images retaining the original aspect ratio, but do not crop or edit (e.g. re-colour, touch up, sharpen, etc.) or rename the images in any way.

5. Generate a separate page providing the opening and business hours. The details are found in the *Business_Hours.txt* file.

6. Text description for each item is not provided. You can provide your own 'dummy' text (i.e. lorem ipsum) to demonstrate the functionality of your web page design.

<u>Example of Users Interacting with the Website</u>

The visitor to the website will be greeted by a welcome message and the following layout of the floor plan of the exhibition. The visitor clicks on any of the exhibition hall (circles). It should bring up details of the specific hall selected with relevant artefacts. The visitor clicks on any of the images of the artefacts to obtain further information on that image. In addition, if the visitor selects an option to display opening hours and/or entrance fees, a separate page should appear to provide this information. Note this is the basic requirement, it is up to you to implement other details e.g. instructions, navigational control, etc.

North

Emergency
Exit

Military
Robots

Domestic
Robots

Industrial
Robots

Educational
Robotics

Main
Exhibition
Hall

Main
Exhibition
Hall

Main
Entrance

What to Submit

On the specified due date, you are to submit two assessment items:

    (1) Portfolio 1, and

    (2) Practical Assessment 1.

End-of-Memo

PLAGIARISM
CQUniversity regards plagiarism as a serious offence and it can have serious consequences for you as a student.

Read more:
https://www.cqu.edu.au/student-life/services-and-facilities/referencing/what-is-plagiarism

What You Need to Do

The Individual Case Project specified in Portfolio 2 is a continuation from Portfolio 1.

At the end of each week, you will complete a different section of the given project as specified in the above section. Each of the weekly Individual Case Project will contribute progressively toward the completion of the given website project. Each Individual Case Project corresponds with the textbook chapters from each week's lesson plan. You are to document and report on each of these Individual Case Project, cumulating in a final portfolio (i.e. Portfolio 2). Portfolio 2 should be submitted along with Practical Assessment 2.

Weekly Individual Case Project	Marks
Portfolio 2.1 (Chapter 7) Use your design sketches from Portfolio 1 and start to build wireframe page mock-ups for the different page levels of your site. Your website should adopt a flexible design. Using the skills you learned in this chapter, build and submit page layouts for the different levels of information your site will contain. For example, you need to build a home page mock-up, an article page mock-up, and a section page mock-up. Remember to test your page mock-ups with some text content and at different browser sizes and screen resolutions as specified in the details for Practical Assessment 2.	1.5
Portfolio 2.2 (Chapter 8) Gather the graphics to use on the different pages of your site. This is provided in the PRORESOURCE.ZIP folder. For other graphics that are not included, please exercise your creativity to create graphics that you will use in the project. These include banner, navigation, section, or identifying graphics. Add these graphics to the test pages of your site. Test the images in multiple browsers to make sure they are displayed properly. Think about the different color requirements for your content, and decide how you can enhance the legibility of the content. Can color help communicate the structure of your information? Determine the color choices for your web site. Pick the colors for text, table	1.5

backgrounds, and page backgrounds. Establish graphics standards for your web site, including but not limited to the following:

- Decide whether you will use a standard amount of white space around each graphic.
- Determine exactly which img attributes should be included in all <img> tags.
- Formulate a standard for all alt and title attributes.
- Formulate a basic set of image standards for your site. Use this as the display standard for testing your graphics.
- Determine colors of links and visited links.
- Write a short standards document that can be provided to anyone who contributes to the site.

Portfolio 2.3 (Chapter 9) Examine the flowchart you created for your web site. Consider the requirements of both internal and external navigation. Create a revised flowchart that shows the variety of navigation options you are planning for the web site. Using your HTML editor, mark up examples of navigation bars for your content. Make sure your filenames are intact before you start coding. Save the various navigation bars as separate HTML5 files for later inclusion in your web pages. Plan the types of navigation graphics you want to create. Use graphics from Portfolio 2.2 for your page banners, navigation buttons, and related graphics. * Do not include the HTML5 script files in your portfolio. Include only a selection of examples of the work you have carried out at this stage. It is assumed that the HTML5 script files will subsequently be improved and expanded and becomes part of your final project for Practical Assessment 2.	1.5
Portfolio 2.4 (Chapter 10) Examine the content of BUSINESS_HOURS.TXT provided in the PRORESOURCE.ZIP. Design and implement the data contained in this file to be appropriately displayed.	1.5

Portfolio 2.5(Chapter 11) Design and include forms in the project website. The forms will be used to gather contact details of visitors to the website. (Note: For the purpose of this project, the form need not have a backend server nor functionality. No actual record will be saved.) Include the following fields: • Name • Age • Gender • Country of Origin • Personal Interest • Comments	1.5
Portfolio 2.6 (Chapter 12) Finalise your project web site by testing the finished design in multiple browsers and devices (simulators) and making any necessary adjustments or changes to support compatibility. If possible, enlist three to five people to review your web site. Ask for their recommendation. Compile the feedback and analyse the results the test. What do the results indicate about the effectiveness of your design. Point out the areas that you feel could benefit from user recommendations. List any assumptions you made about the web site and how users either confirmed or denied these assumptions.	1.5
Portfolio 2 Summary Consolidate and combine all your previous efforts from Portfolio 2.1 to 2.6 into a DOC or DOCX report. Present this as a formal report to the client that contracted you for this project. For the purpose of this project you are assumed to be a professional. As such, you should attempt at your best to reflect this quality in the preparation of the report. All sketches, diagrams and figures should be embedded as part of the report. Do not submit external files. For webpage renderings of HTML5 or CSS3, please include screen captures of example of your web pages. Do not submit HTML5 or CSS3 script files in your Portfolio. The format of your report should be as follows: A4 size paper, 2.5cm	1.0

margins on all sides, single-sided, Time Romans or New Time Romans font, 12pt font size, DOC or DOCX format. Submit this report as DOC or DOCX into your course website Moodle online submission portal.	
Total Marks:	10

What to Submit

Submit <u>one</u> DOC or DOCX file to your Moodle course site online submission portal for this course.

Please name this file as **PORTFOLIO_2.DOC** or **PORTFOLIO_2.DOCX**.

What You Need to Do

To complete the given project specified in the Background section above, you are to create a prototype of a stand-alone website for a *desktop computer* and *mobile device.* Design your website to be rendered by a web browser to fit a desktop computer display between 1024x768 to 1280x1024 pixels. The website should also adapt responsively to mobile devices. The *breakpoint* between the display sizes for desktop computer and mobile device should be approximately 500x720 pixels. The mobile device should also adapt responsively when it is rotated to a landscape orientation.

The site must have pages that display at least three levels of information. The contents and resources have been provided in the above specification. The website will be assessed for cohesiveness, accessibility, design and development effort. Responsiveness of each of the webpages will be tested using Google Chrome's developers device simulator. The breakpoint for the simulated mobile device will be set to approximately 500x720 pixels.

The complete stand-alone website should be created progressively as specified by each week's activities. These activities are to be documented and reported in Portfolio 2.

Use any combination of HTML5 and CSS3 to develop this website. Remember to indicate which desktop browser (i.e. IE, Firefox, Safari, Chrome, etc.) you are targeting as the main working platform for desktop computers. As for mobile devices, please use a generic device with a display of approximately 500x720 pixels to be tested using Google Chrome's developers device simulator.

Do not use Rapid Application Prototyping (RAD) tools or any other type of scripting languages or services, e.g. Python, Lua, AJAX, Dreamweaver, etc. You are required to demonstrate your knowledge of HTML5 and CSS3 independently and without the assistance of automated development and visual design tools.

Your website should be developed to be capable of launching directly from localised desktop computers. That is, the *landing page* (i.e. the first page or top page) of your website can be launched by calling or opening *main.html* or *index.html* directly from within a web browser. No web server is required for Practical Assessment 1 and 2.

What to Submit

Submit one ZIP file folder to your Moodle course site online submission portal for this course. Please name this ZIP folder as **PRACASSN_2.ZIP.** This ZIP folder should contain the following:

All necessary files, images, scripts, coding and resources should reside in a single main folder. It is up to you to organise the files and sub-folders within the main folder. Ensure that all your scripts and coding is stand-alone and portable. That is, your marker or instructor should be able to run your scripts from the type of browser you have specified by clicking on the `main.html` or `index.html` startup file. The web browser you specified should render your markup and scripts without problems.

Assessment Criteria

The following criteria will be used to assess your assignment:

Criteria	Marks
• Overall functionality. Web pages function as intended.	5
• Website demonstrates all aspects of a responsive web implementation.	10
• The completed website sufficiently demonstrates the main features of the initial design and its intended purpose.	5
• Quality of HTML5 and CSS3 coding techniques. Demonstrates proficiency in HTML5 and CSS3.	5
• Website and associated webpage design corresponds closely to the work reported in Portfolio 2. Conversely, the details presented in Portfolio 2 should be supportive of the prototype implementation as demonstrated in Practical Assessment 2.	3
• Inline comments, filename convention and overall file and folder structure.	2
Total marks:	**30**

Marker's Guideline

- To obtain 76-100% of the marks allocated for a specific section of the assessment, the student's work is expected to demonstrate a ***very high*** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.

- To obtain 51-75% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a ***high*** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.

- To obtain 26-50% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a ***sound*** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.

- To obtain 1-25% of the marks allocated for a specific section of the assessment, the student's work typically demonstrate a ***limited*** level of knowledge and understanding of concepts, facts and procedures, and application of knowledge within the scope of the course.

- 0 marks will be allocated for a specific section of the assessment, where an erroneous or no attempt has been made by the student.

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