School of Science, Computing and Engineering Technologies

Interface Design and Development

Distinction Task 6.2: Custom Web Application

Overview

At this stage you should have enough understanding of interface design and development to start thinking about creating your own custom web application.

Purpose:	Demonstrate that you can design and implement your own web application using Bootstrap and VueJS frameworks.
Task:	Create your own web application that recognizes accessibility, wireframe design and design document.
Time:	This task should be completed before the end of the semester, but progress should be submitted periodically.
Resources:	■ Lecture notes

Note: If you are not currently up to date you should skip this task and return to it once you are up to date with the Pass Tasks. Do not allow Distinction Tasks to delay you in keeping up with the unit's Pass Tasks.

Submission Details

You must submit the following files (periodically):

- The HTML code for your web application (concatenate multiple files into a single file for submission)
- The JavaScript code for your web application (concatenate multiple files into a single file for submission)
- Three pictures of your wireframe design supporting mobile portrait, mobile landscape and desktop with the row-column and context labeling for each wireframe (photo or scan, if not electronically created).
- A short design / usage document outlining what your web application does and how it works.

Instructions

You have now completed tasks related to all of the unit's learning outcomes, and can work toward demonstrating these in your own web application. If you are aiming for a Distinction or higher grade you should start working on this web application now. Aim to create something of around the combined complexity of the calculator, units and units web applications. Specifically it should:

1. Demonstrate the use of context view grouping - implement the web application with a structure of row-column grid system
2. Demonstrate the use of modules - implement the web application with a number of components, router and custom directives
3. Demonstrate the use of arrays
4. Demonstrate the use of directives (selection, and repetition)
5. Demonstrate the mobile first design concept supporting mobile portrait, mobile landscape and desktop
6. Demonstrate accessibility support more specifically on input forms and tables
7. Demonstrate appropriate use HTML 5 coding conventions - case, indentation

Here are some steps to get you started:

1. Think about what you want the web application to do. Maybe write up a paragraph or two to explain it to others. Draw the 3 wireframe designs of what you want it to look like.
2. Show your plans to your tutor, lecturer, and/or friends to get some feedback.
3. Start thinking about the data - what records will you need?

Tip: Start small, you can easily add to records at a later stage. Try to identify what records you will need, then add just the basic data - enough to get something working. Once that first part is working, add additional fields as they are needed. Accessing external data sources is not required for this task.

4. Get something working quickly. You want to see it running ASAP. Once it is working build it a little at a time, get one thing working then move on to the next aspect.

You should periodically submit your work to be checked by your tutor. They can then let you know if you have done enough to meet the Distinction (and High Distinction) criteria.

Note: Your web application should be different from the calculator and the two units web application and the lecture demonstration applications. You want to demonstrate that you have learnt from these tasks and can apply what you have learnt to some other web application design.
If you are aiming for a High Distinction, review the related High Distinction Project document for details on how you can ensure this web application meets the HD requirements.