Faculty of Science, Engineering and Technology

Interface Design and Development

Custom Web App High Distinction (HD Requirements)

# Overview

To be eligible for a High Distinction grade you must demonstrate that you can use the skills you have learnt to create high quality web application solutions that demonstrate the highest programming and design standards.

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| **Purpose:** | Demonstrate that you can create high quality web application, using both the Bootstrap and AngularJS frameworks as the base. |
| **Task:** | Tidy and extend your custom web application, demonstrating that you can create high quality software and use other Bootstrap and AngularJS frameworks. |
| **Time:** | This must be completed before you submit your portfolio, but it is advisable to submit progress for feedback at earlier stages. |
| **Resources:** | * Lecture notes * Stack overflow (note some solutions may be for older versions) * Search engines |

**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 Distinction Tasks. Do not allow High Distinction Tasks to delay you in keeping up with the unit's work.

Submission Details

You must submit the following files to Blackboard (periodically / upon request):

* All submission details from Distinction level
* Design document & journal of the web development ideas.
* This task is to be signed off by your Lecturer / Convener

# Instructions

Demonstrate that you can design web application and implement them to a very high standard.

It is recommended that you do this by ensuring that your Custom Web Application for Distinction meets both the Distinction and High Distinction Standards. However, you can design and implement a second web application to meet these standards if desired.

**Tip**: Show your web application to tutors and lecturers and ask "How can I make this better?". This task is more about quality than it is about quantity.

Your web application must demonstrate the following:

* Ability to design and implement a web application of reasonable complexity.
  + Web application does more than have the user respond to random data (e.g. number guessing game), or simply manipulate data (e.g. calculator, units and units2).
  + The web application must demonstrate the need to think about its view structure, model and module implementation.
* Effective use of decomposition.
  + The web application consists of custom filter, custom directive, and config with little code duplication.
  + Data from external sources or data APIs is used intelligently to minimise the amount of code required.
* Effective use of structure design.
  + HTML structure elements represent meaningful context grouping and row-column system that supports at least three device sizes.
  + Input forms and tables are usable and accessible.
* Use of good programming practices.
  + Code is correctly indented, with meaningful names assigned to all model identifiers
  + Code is commented to help the reader understand the abstractions and how they work.
  + HTML code is HTML 5 compliant, JavaScript code adhere to JSLint rules.

**Tip**: Consider accessing external data sources and data APIs things which can help you increase the complexity of the web application.

**Tip**: Keep a journal of the web development ideas you have and notes on your design decisions. These can help you explain how your web application meets these criteria in your portfolio.