# Project Proposal

## SOFT352 Client-Side Web Scripting

Proposal title: **Car Configurator**

Student number: **10443260**

## Functionality

The user can choose a model of car. They can then choose how to configure that selected car; anything from the performance aspect such as engine and transmission to the exterior and interior design. Each model of car will have a base price assigned to it and then each component they choose to add to the car will increase the cost and this will be displayed throughout the configuration process, with a final cost at the end of the process.

## Required properties

### Interactive

The user will be shown a list of car models which they can choose from. Once they have clicked on their option, another list will appear with different engines that can be built in to their chosen model. These engines will have a little information to describe what the differences are and also show a price to reflect the overall cost (with the base price in mind). They will now have a choice of exterior colours and rim styles that will load from an image once they have selected an option, this will allow the user to see what the car looks like before they make a decision, but of course the options can be changed at any time, even if they have moved on from that page. The same process follows for the interior design of the car. The user will also be able see each four sides of the car, using arrow buttons placed beside the car, to allow them a better look when creating their visuals.

### Distributed/Parallel

The overall running cost of the users’ configuration will be stored locally and displayed at all times and constantly updating with the selections that the user makes during configuration.

### Structured

I will be using several HTML and JavaScript pages for different types of configuration (exterior, interior, engine and extra tech/performance additions. I will also use the Bootstrap framework and CSS files which will be linked into each HTML page. Each category of configuration will have its own main function.

## Planned Work

### Resources

I will initially be using a laptop or desktop PC to build this program, however, if time permits I will look at adapting it for mobile use also. The main languages I will be using are HTML, CSS, JavaScript/JQuery and AJAX. As mentioned before I will also use Bootstrap as a third party framework. In addition, I will be using images from web applications that already have this program, for example, Audi, Mercedes and Ferrari.

### Testing

I plan to test my program at regular intervals to ensure that each element that has been implemented does what it is intended for. I will also test my program on actual users to see if it works the way they would expect it to and also to be able to see any errors that occur whilst they are using the program.

### Work Plan

1. I will plan out the requirements/features of this system, making a note of the most important to ensure they are completed first. **2 hours**.
2. I will then design the UI to ensure I have all the aspects needed for the user inputs. **4 hours**.
3. Thirdly, I will start incorporating the JavaScript code to make the system do what I want it to. **60 hours**
4. Development testing will be done throughout the project to ensure everything is working correctly.
5. User testing – asking users to use the web app and report back to me the issues. Collating reports will take around **4 hours**.