**Chapter 2 - The Actual Project**

We decided collectively to go with the pitched idea from Conor of a multi page web application that would function as an enhanced docket system that restaurants, hotels and and fast food kitchens avail of in their systems. It has to be a responsive, functional application using technologies that we already know, while we also will adapt to newer technologies if we need these systems to build the application.

After deciding to go with the idea of the ‘Dished Out’ web application, we summarised the web application that we aimed to create by the end of this group project. This summary consisted of stating that the system would have two interfaces - one for waiting staff and one for the kitchen staff. As a customers order is taken, waiting staff can use a User Interface rather than pen and paper to take the order. When the order is completed, the order will be sent into the kitchen and visible to the Kitchen staff via their unique User Interface. This can be distributed in three separate sections, and these will be starter course, main course and desserts.

At this stage we all had a clear idea on the end goal of the application, so we then summarised then many possible technologies that we could use to build this product. For the front end section of the application, there was a choice of technologies to use. It was between Jquery, a cross platform Javascript library that helps simplify the client side scripting of html, the React library, Hypertext Markup Language (HTML), Javascript (JS) & Cascading Style Sheets (CSS). Since this is a multiple page web application, we knew that each page would have its own requirements to function that may require more complex technologies to be successful. So to get the front end working efficiently, we used a combination of HTML, JS, CSS and Jquery to get the applications front end to get it up to scratch.

For the backend technology, specifically the databases that we would use for this application, it was suggested that we use Firebase technology for the database structure. The firebase application is a easy to use real time database that does not use a Structured Query Language in its design. It is hosted in the cloud and is fully compatible with JavaScript SDKs, which was very useful for us with syncing up our work. Also we initially thought that Firebase had its own server hosing technology, however we found a platform for hosting named ‘BitBalloon’ that was much more efficient and easier to use than the Firebase server hosting.

**Architectures Used**

**Front end :** Mainly HTML for the main structure of the web pages, and CSS for the styling of all the web pages. We also used JavaScript in some places, and Jquery in others.

**Database :** Firebase. This real time database structure is effective and much more convenient than other database technologies as the real time updating of the firebase technologies greatly aided us in our building of the Dished Out web application.

**Server Hosting :** While we were going to use the Firebase server hosting technology, we decided later on to use the BitBalloon server hosting technology. This was recommended to us by a demonstrator as it is a much easier technology to use than the Firebase equivalent.