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Initial proposal

My proposal for my work placement project is to use a new framework I discovered in my first month of my work placement. The framework is called Ionic ([Ionic](https://ionicframework.com/)) it allows developers to create cross platform mobile applications using angular 2. This framework creates a more web based app but has plugins which allow developers to access all the features like push notifications, Bluetooth etc. I plan on turning a CA completed for Web design and Development in semester five ([WEB CA](https://ittd-my.sharepoint.com/personal/elee_stf_it-tallaght_ie/_layouts/15/WopiFrame.aspx?guestaccesstoken=IFrrC6z%2belrynPlF4jAD5tCPLSVFS4iFxis%2b6hHMbRU%3d&docid=050edfb4c6f3a4b0b80235f96fe5032c0&action=view)) as well as create a to do list the idea was taken from a lab in one of last semesters modules Web Design.

These two parts will come together to create a cross platform app for IOS, android and windows. The temperature converter and BMI calculator will allow me to demonstrate the how a developer can implement a basic angular 2 web page in the new framework. The new to do list will allow me to truly immerse myself in the new framework as I will need to implement a basic storage array and then display the tasks in the application.

The user will be able to add and remove tasks also. I have taken the idea from an Ionic tutorial ([tutorial](http://ionicframework.com/docs/guide/building.html)) but I will take the idea farther by implementing a reminder system which will implement a Cordova plugin for push notifications.

The challenges presented by this project involve learning a new framework and trying to implement an existing angular 2 project into an ionic application. The application will consist of the same component files and HTML files but in a different file structure. The ionic framework also requires added files to enable the application to run on a mobile device.

A reminder system also adds extra challenges by requiring access to the systems date and time to run an event that send the push notification. This should also be possible using a plugin. Plugins have their down side as they require a physical device to test whether they work.

In my placement we are using this framework to develop an application for new hires to learn about company policies and the facilities in the office. I missed the initial development of the application but I have been tasked with the debugging of the smaller problems. This project will allow me to learn a new framework that I feel will become a widely used style of developing applications for non-resource dependent applications for example a news application could be developed using this framework. Whereas a game would be better developed in a native development environment rather than cross platform.