**Design Document**

**Mobile Applications**

**Introduction**

The MyWeather App is an essential tool for gaging the weather and temperature of the user’s location or a location that the user specifies in the provided prompted entry box.

The user can convert their temperature into the imperial and back to Celsius as they wish. When the user retrieves the current weather and temperature of either their entered location or of their location, they can view a five-day forecast.

**Background / Purpose of App**

The purpose of this app is to be able to track the weather and five-day forecast at any given time. I wanted this to be viable for the user location and for any place that the user might wish to check the weather. I also wanted this app to be able to be used by users who live in countries where the imperial format for the weather is most common.

**How will the app work?**

The app will give the user the option to either enter a location that the user wishes to provide to the app, or to track the current location of the user and to retrieve the weather for that area. For users that maybe visually impaired the app will use a text to speech function and will report the weather to the user in spoken form. The user will have the option to change the format of the temperature from default Celsius to Fahrenheit and back again once they switch on or off the “Use Imperial” option as appropriate, they user must click on the “Get Weather” option to refresh the page to see the changes that they made. After the user is able to retrieve the weather, the user will be able to click on the “Forecast” tab and will be able to see the forecast foe the next five days at every three-hour interval.

**Research**

<https://azure.microsoft.com/en-us/resources/samples/functions-xamarin-getting-started/>

<https://openweathermap.org/>

<https://docs.microsoft.com/en-us/xamarin/xamarin-forms/user-interface/listview/>

<https://stackoverflow.com/questions/6229504/inconsistent-accessibility-parameter-type-is-less-accessible-than-method>

<https://docs.microsoft.com/en-us/xamarin/xamarin-forms/app-fundamentals/dependency-service/text-to-speech>

<https://docs.microsoft.com/en-us/xamarin/xamarin-forms/app-fundamentals/navigation/tabbed-page>

<https://docs.microsoft.com/en-us/xamarin/android/user-interface/splash-screen>

<https://docs.microsoft.com/en-us/xamarin/xamarin-forms/user-interface/images?tabs=windows>

<https://forums.xamarin.com/discussion/100469/how-can-i-read-json-embeded-resource>

Course Content