What’s the Weather

**Module: Mobile Programming 2**

**Year: Third Year**

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**GitLink: https://github.com/puckball86/Windows-10-Application**

**StoreLink:**

**Publisher Name:**

**Introduction**

The following application is my first attempt at a weather app. I used Visual Studio 2015 to design this universal Windows 10 application. My application uses the location on your device alongside an weather API to find where in the world you are and what the weather is like outside.

**App Structure**

MainPage.xaml

This is the page that is loaded when the application is ran. It contains all the information displayed when the application is running. This information is weather information such as description of weather, temperature, wind-speed and location along with an image reflecting the description.

MainPage.xaml.cs

In this page the main functionality is to update the weather. When navigated to, this classes onNavigatedTo() function will call the updateWeather() function. This function receives the latitude and longitude of the users current position.

Then it passes the latitude and longitude into a function called getWeather() (this function is defined in WebsiteConnect.cs) which then returns a custom object created by myself called RootObject. This object holds all weather information received from the API. We then call the properties of this object to get the weather information that will be displayed to the user.

WebsiteConnect.cs

This class contains the GetWeather() function. This function use a HttpClient object to handle the client related functionality. I used a format String on the API. A variable response sends a Get request to the API and the variable result hold the serialized content in a String. I used the DataContractJsonSerializer to create an object graph type RootObject. A memoryStream is created. Then the serializer is read into a RootObject and the data is returned.

Location.cs

This class contains the Getposition function. In this function GetGeopositionAsync return a GeoPositon object which contain a Geocoordinate property(coordinate) that can be used to get the latitude and longitude.

Resources

API: [http://api.openweathermap.org/data/2.5/weather](http://api.openweathermap.org/data/2.5/weather?lat=53.74&lon=-9.05&units=metric&appid)

To view this API you need to register but I recommend having a look sometime.

References

<http://www.iconarchive.com>

<http://www.msdn.com>

<http://superdevresources.com/weather-forecast-api-for-developing-apps>

<http://api.openweathermap.org/data/2.5/weather>

<https://www.youtube.com/>