Weather App

Weather app basically retrieves the location of the user using the GPS. It is done using Location Manager Sensor and then GPS_PROVIDER is used for requesting location updates. Location is refreshed after every 2 minutes of time duration. Once the City name and State name of the location is retrieved then a query is sent to openweathermap.org (http://api.openweathermap.org/data/2.5/weather?q=Dallas,TX for example). Once this query is triggered a JSON file is returned. This file is processed to get the exact temperature, humidity, Pressure and Wind details of the weather. Once these details are extracted they are updated on the GUI of the app and then you are ready to read all the retrieved information.

Some Snaps of the app:

1) When your app is loading:

It reminds you to turn on your GPS (considering your Internet connection is always ON) by a simple Toast message when you start your app as follows:

As seen in the screen shot above, initially while tracking the location of your mobile device, it will display a message saying "Loading.." and a more specific message can be seen right below, the "City Loading", where it says "Getting Location Updates" while it is waiting for Location Manager to get the exact location through GPS tracking. Once the we get the location this message will be replaced by "Getting Weather Updates" while it is waiting to get a response from openweathermap.org website.



2) Once the app is loaded:

The two screen shots below show you how the app works in day time and during the night time. From 8AM to 8PM it will show you the day time images as seen in the figure at left side, whereas from 8PM to 8AM in the morning it will show you the night time images as seen in the right side figure.

It also changes the images at the top right corner. It varies for Clear, Cloudy, Mist, Rain, Snow, Shower etc.





3) Weather Forecast:

Option to click for weather forecast can be seen on the right side of the screen. Forecast for 5 days is displayed on the next screen.





TESTING

This app is successfully tested on Samsung Galaxy Note II, Nexus 5 and Samsung Galaxy S3.