Version 1.1

The Version 1.1 receive Three more classes one that its able to parse the Json string, and another one that will hold the Weather values received from the API.

This class use a library called GSON, version 2.8.2, that have the methods necessary to parse a JSON file.

The class Json Parser allow us extract the information some Map and ArrayLists from Json into a Java data structure. This make it possible to later create an a Weather Object with de data necessary.

The Class Weather hold some variables that we evaluate necessary for further comparison in order to the Chatbot give advice for the user. The Class Location complete the Weather class holding the location that user wants to know the weather.

Screenshots – Json Parser

```
package avenger.weather.jsonParser;

import com.google.gson.Gson;

public class jsonParser {

//  This method parser the Json String and create the Weather Object
    public Weather jsonStringParser(String jsonString) {
        //Transform the string received from the API in a MAP
        Map<String, Object> respMap = jsonToMap(jsonString.toString());
        //Breakdown to get all the information
        Map<String, Object> mainMap = (Map<String, Object >)respMap.get("main");
        Map<String, Object> windMap = (Map<String, Object >)respMap.get("wind");
        //One of the parts of Json is a list and them transform to map
        List<Map<String, Object >> weather = (List<Map<String, Object>>) (respMap.get("weather"));
        //Then you can transform as a MAP
        Map<String, Object> weatherMap = weather.get(0);

        //Here you can create an Weather Object to return it
        return new Weather(mainMap, windMap, weatherMap);

    }

//  Get the jsonString and extract to a MAP
   private static Map<String, Object> jsonToMap(String str) {
        Map<String, Object> map = new Gson().fromJson(str, new TypeToken<HashMap<String, Object>>() {
        }.getType());
        return map;
    }


}
```

Screenshots – Weather

```java
package avenger.weather.weatherRequested;

import java.util.Map;

public class Weather {
    private String main;
    private String description;
    private double temp;
    private double min;
    private double max;
    private double feelsLike;
    private double windSpeed;
    private Location location;

//  Constructor
    public Weather(Map<String, Object> mainMap, Map<String, Object> windMap, Map<String, Object> weatherMap) {
        this.main = (String) weatherMap.get("main");
        this.description = (String)  weatherMap.get("description");
        this.temp = (double)  mainMap.get("temp") ;
        this.min = (double) mainMap.get("temp_min");
        this.max = (double) mainMap.get("temp_max") ;
        this.feelsLike = (double) mainMap.get("feels_like");
        this.windSpeed = (double) windMap.get("speed");
    }
//  Getters and Setters
    public String getMain() {

    public String getDescription() {

    public double getTemp() {

    public double getMin() {

    public double getMax() {

    public double getFeelsLike() {

    public double getWindSpeed() {

    public void setLocation(String city) {

    public Location getLocation() {

}
```

Screenshots – Location

```java
package avenger.weather.weatherRequested;

public class Location {
    String city;
    String country;

    public Location(String city) {
        this.city = city;
        this.country = "Ireland";
    }

    public String getCity() {
        return city;
    }

    public String getCountry() {
        return country;
    }

}
```