

TooBo, application météo

développée en Java pour Android

Furkan KARA, Hacer AKTURK, Kenza BENDOU

API et technologies utilisées

- OpenWeatherMap API
 - Firebase (NoSQL)
 - Android Studio
 - Postman
 - Github

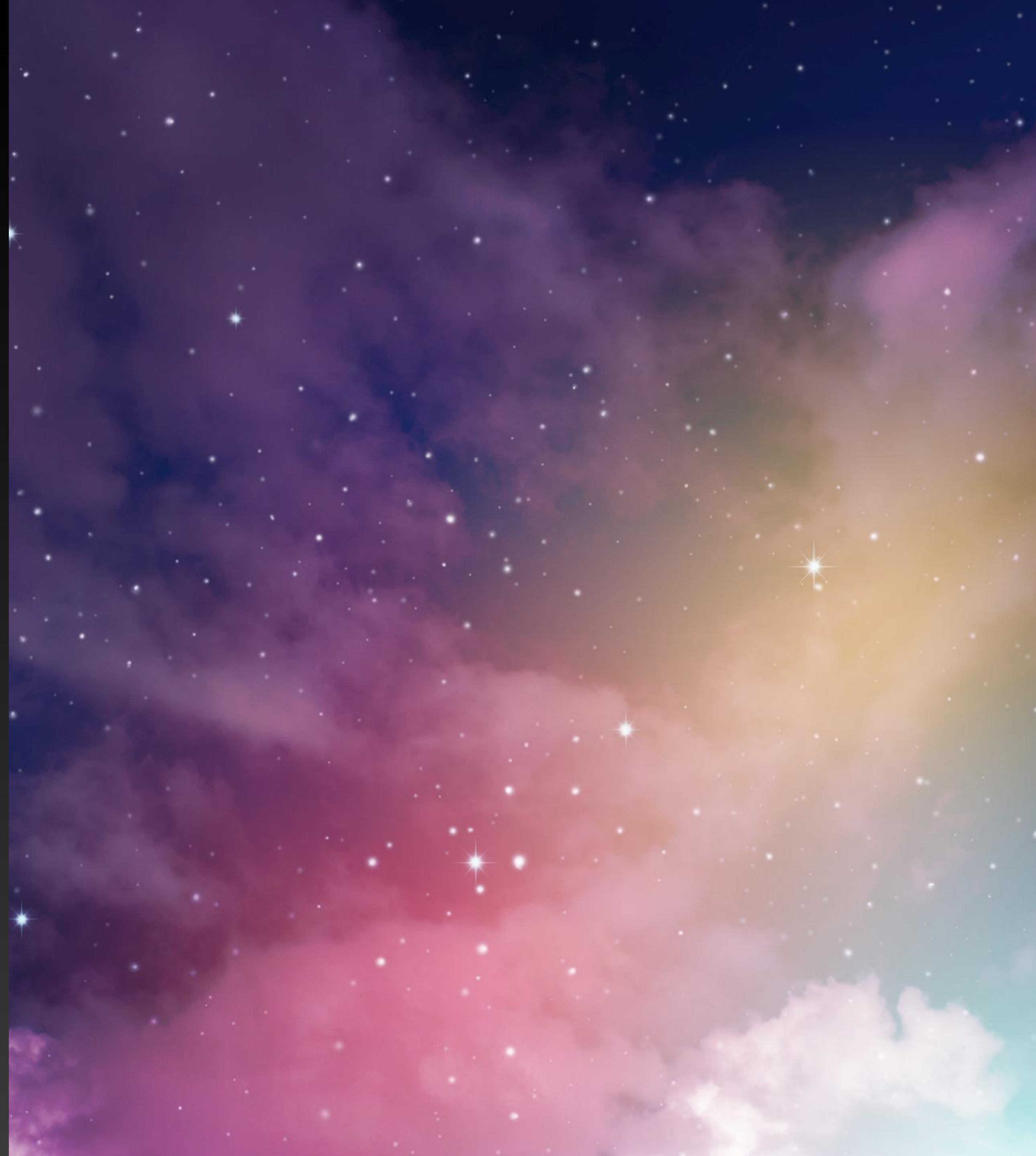


Diagramme de classe 1ère version

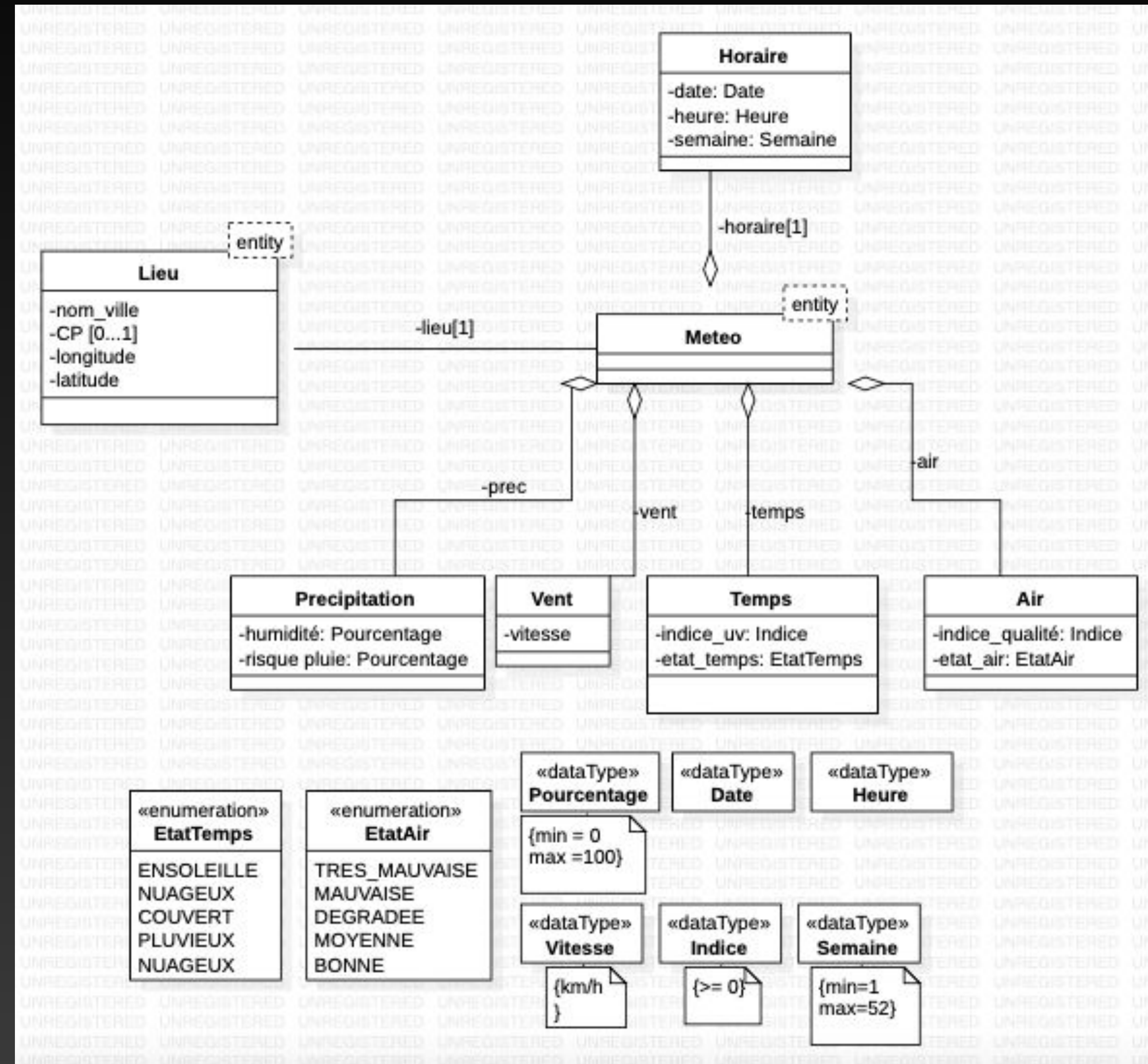
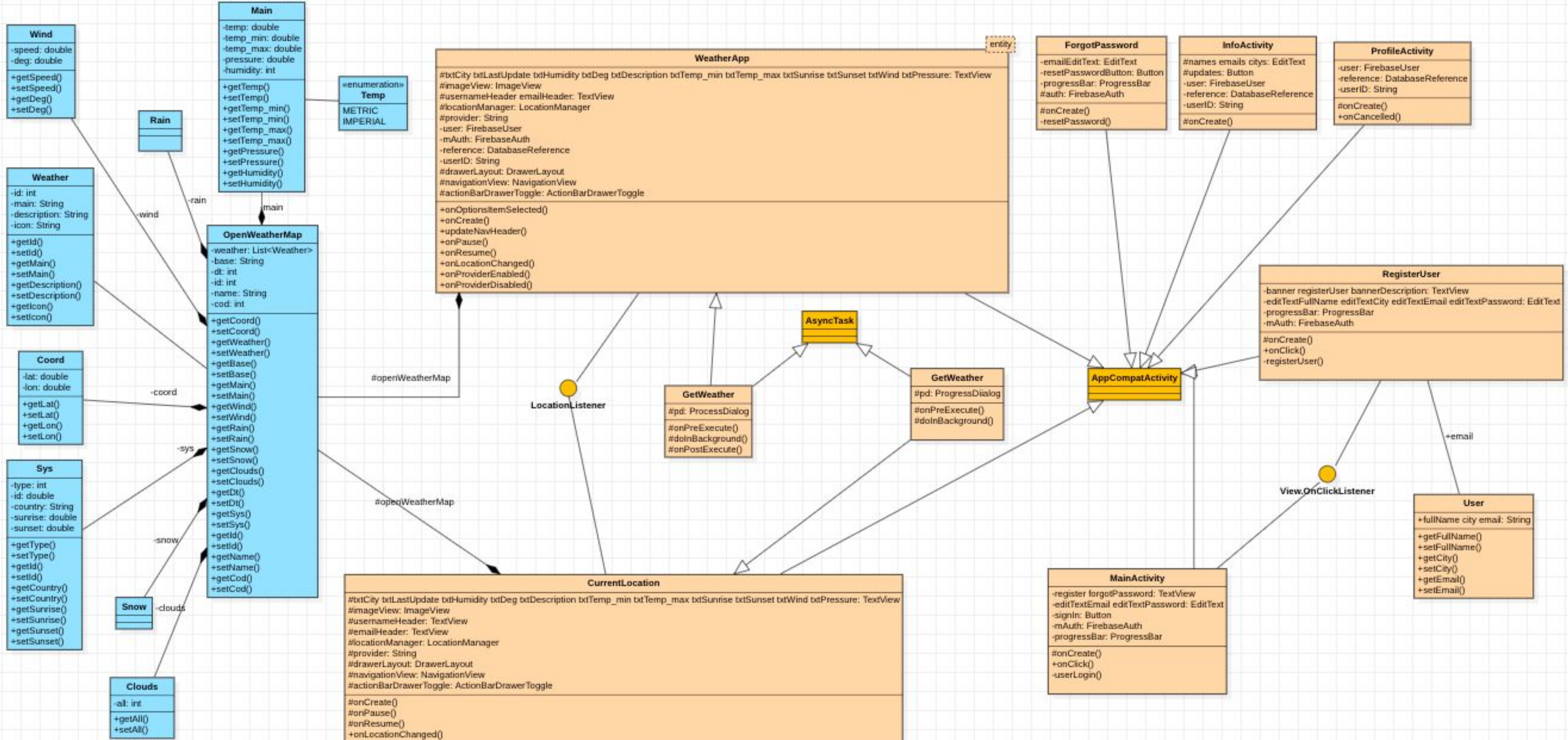
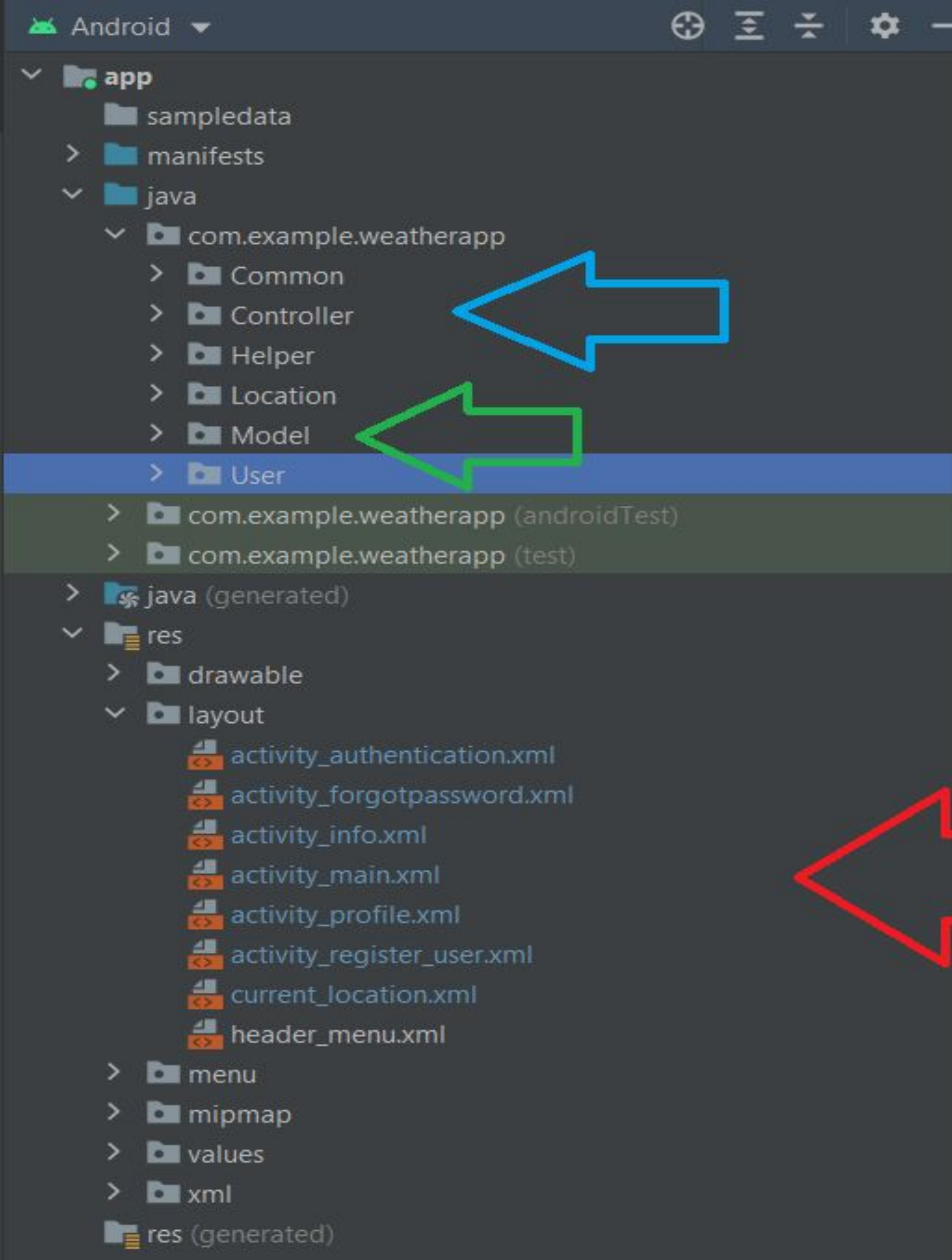


Diagramme de classe 2ème version

toobo_class_diagram.mdj — StarUML (UNREGISTERED)





CONTROLLER

MODEL

VIEW

***La structure
de
notre app***

USER

User.java

```
1 package com.example.weatherapp.User;
2
3
4 public class User {
5
6     public String fullName, city, email;
7     public User(){
8     }
9     public User(String fullName, String city, String email){
10         this.fullName = fullName;
11         this.city = city;
12         this.email = email;
13     }
14     public String getFullName() { return fullName; }
17     public void setFullName(String fullName) { this.fullName = fullName; }
20     public String getCity() { return city; }
23     public void setCity(String city) { this.city = city; }
26     public String getEmail() { return email; }
29     public void setEmail(String email) { this.email = email; }
32 }
```



Firebase

auth-ac9ef-default-rtdb

Users

```
+ 3FyMU5vF44XnmFG7JpRtRs5kok93
+ VRwkaA4leATVsxhh8EqsS93wZX42
+ VkJ7RSF1Cc00xvl32r0FuVrU9A3
+ WanWTwlELBWxzEdeDEHb6gtRwvA2
- ZZKwyTnx4dXUUdhUImvWVTz6FB82
  city: "Istanbul"
  email: "louis@gmail.com"
  fullName: "Louis de funes"
```

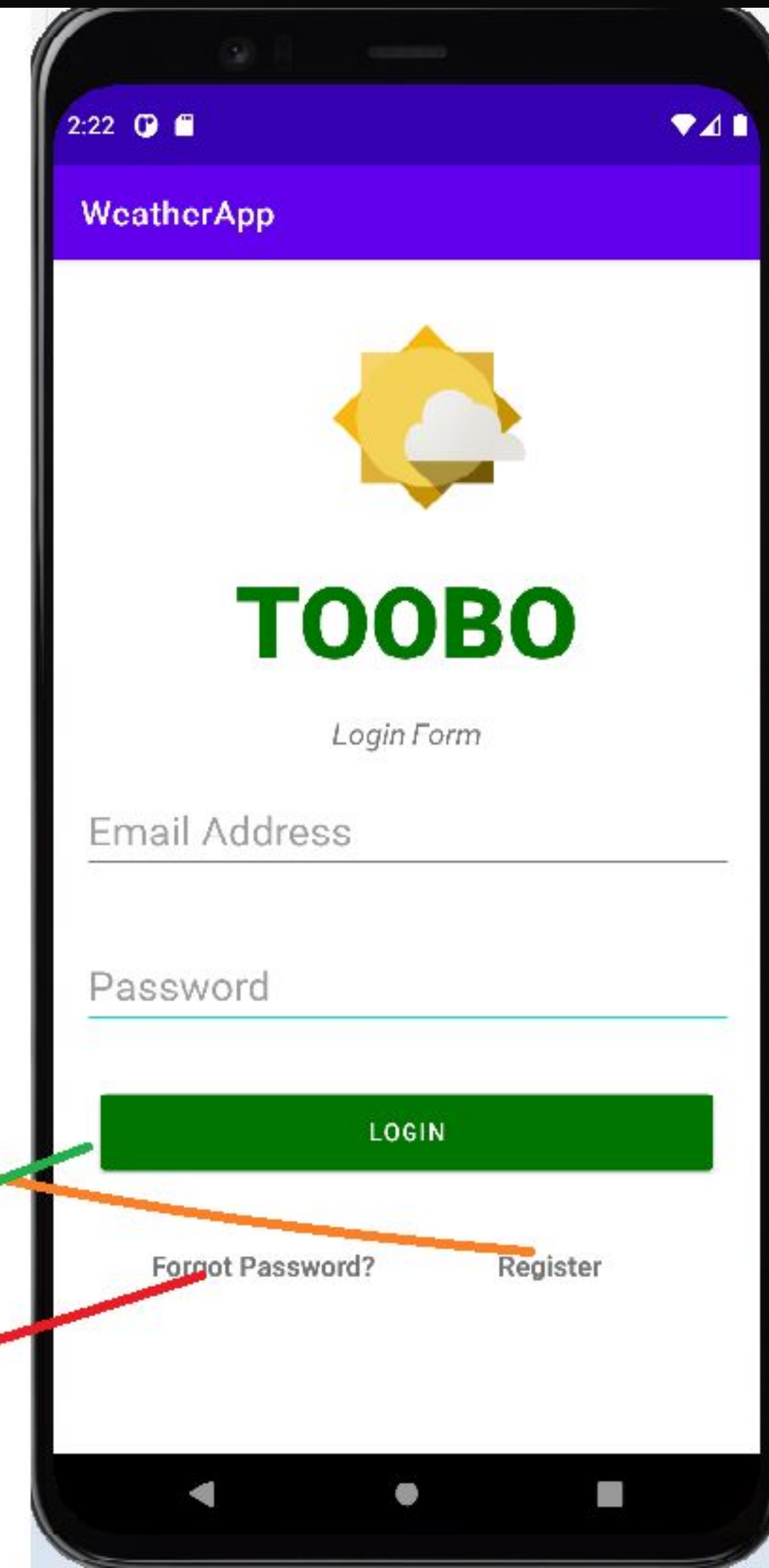
Base de données



<div><div><div><div></div></div><div>Search by email address, phone number, or user UID</div></div><div>Add user</div><div><div></div><div></div></div></div>				
Identifier	Providers	Created ↓	Signed In	User UID
hacer@gmail.com		Jan 30, 2022	Jan 30, 2022	3FyMU5vF44XnmFG7JpRtRs5kok...
louis@gmail.com		Jan 27, 2022	Jan 30, 2022	ZZKwyTnx4dXUUdhUImvWVTz6FB...
furkankara.9528@gmail.co...		Dec 30, 2021	Jan 30, 2022	WanWTwIELBWxzEdeDEHb6gtRw...
<div>Rows per page: 50 ▾ 1 – 3 of 3</div> <div><div></div><div></div></div>				

MainActivity

```
MainActivity.java x
23
24 public class MainActivity extends AppCompatActivity implements View.OnClickListener {
25
26     private TextView register, forgotPassword;
27     private EditText editTextEmail, editTextPassword;
28     private Button signIn;
29
30     private FirebaseAuth mAuth;
31     private ProgressBar progressBar;
32
33     @Override
34     protected void onCreate(Bundle savedInstanceState) {...}
35
36     @Override
37     public void onClick(View v){
38         switch(v.getId()){
39             case R.id.register:
40                 startActivity(new Intent( packageContext: this, RegisterUser.class));
41                 break;
42             case R.id.signIn:
43                 userLogin();
44                 break;
45             case R.id.forgotPassword:
46                 startActivity(new Intent( packageContext: this, ForgotPassword.class));
47                 break;
48         }
49     }
50     private void userLogin() {...}
51
52 }
```



Common

```
9 public class Common {
10
11     public static String API_KEY = "d293fd094ba23743cd8205c2ea54f25f";
12     public static String API_LINK = "http://api.openweathermap.org/data/2.5/weather";
13     public static Main.Temp temp = Main.Temp.METRIC;
14
15     @NonNull
16     public static String apiRequest(String city){
17
18         StringBuilder sb = new StringBuilder(API_LINK);
19         sb.append(String.format("?q=%s&appid=%s&units=%s", city, API_KEY, temp));
20         return sb.toString();
21     }
22
23     @ public static String unixTimeStampToDateTime(double unixTimeStamp){
24         DateFormat dateFormat = new SimpleDateFormat("HH:mm");
25         Date date = new Date();
26         date.setTime((long)unixTimeStamp*1000);
27         return dateFormat.format(date);
28     }
29
30     @ public static String getImage(String icon){
31         return String.format("http://openweathermap.org/img/w/%s.png", icon);
32     }
33
34     @ public static String getDateNow(){
35         DateFormat dateFormat = new SimpleDateFormat("dd MM yyyy HH:mm");
36         Date date = new Date();
37         return dateFormat.format(date);
38     }
39 }
```

```
public enum Temp {
    METRIC,
    IMPERIAL;
}
```

Enumeration

GET <http://api.openweathermap.org/data/2.5/weather?q=Paris&units=imperial&appid=d293fd094ba23743cd8205c2ea54f25f>

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Body Cookies Headers (9) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "coord": {
3     "lon": 2.3488,
4     "lat": 48.8534
5   },
6   "weather": [
7     {
8       "id": 803,
9       "main": "Clouds",
10      "description": "broken clouds",
11      "icon": "04d"
12    }
13  ],
14  "base": "stations",
15  "main": {
16    "temp": 49.33,
17    "feels_like": 49.33,
18    "temp_min": 46.99,
19    "temp_max": 51.96,
20    "pressure": 1030,
21    "humidity": 67
22  },
23 }
```



ForgotPassword

```
19 public class ForgotPassword extends AppCompatActivity {
20     private EditText emailEditText;
21     private Button resetPasswordButton;
22     private ProgressBar progressBar;
23     FirebaseAuth auth;
24
25     @Override
26     protected void onCreate(Bundle savedInstanceState) {
27         // ...
28     }
29     private void resetPassword() {
30         String email = emailEditText.getText().toString().trim();
31
32         if(email.isEmpty()){
33             emailEditText.setError("Email is required");
34             emailEditText.requestFocus();
35             return;
36         }
37         if(!Patterns.EMAIL_ADDRESS.matcher(email).matches()){
38             emailEditText.setError("Please provide valid email!");
39             emailEditText.requestFocus();
40             return;
41         }
42         progressBar.setVisibility(View.VISIBLE);
43         auth.sendPasswordResetEmail(email).addOnCompleteListener(new OnCompleteListener<Void>() {
44             @Override
45             public void onComplete(@NonNull Task<Void> task) {
46                 if(task.isSuccessful()){
47                     Toast.makeText(context, ForgotPassword.this, text: "Check your email to reset your password!", Toast.LENGTH_LONG).show();
48                 }else{
49                     Toast.makeText(context, ForgotPassword.this, text: "Try again! Something wrong happened!", Toast.LENGTH_LONG).show();
50                 }
51             }
52         });
53     }
54 }
```

Reset your password for project-267324361753



noreply@auth-ac9ef.firebaseio.com

Alıcı: ben



İngilizce



Türkçe

İletiyi çevir

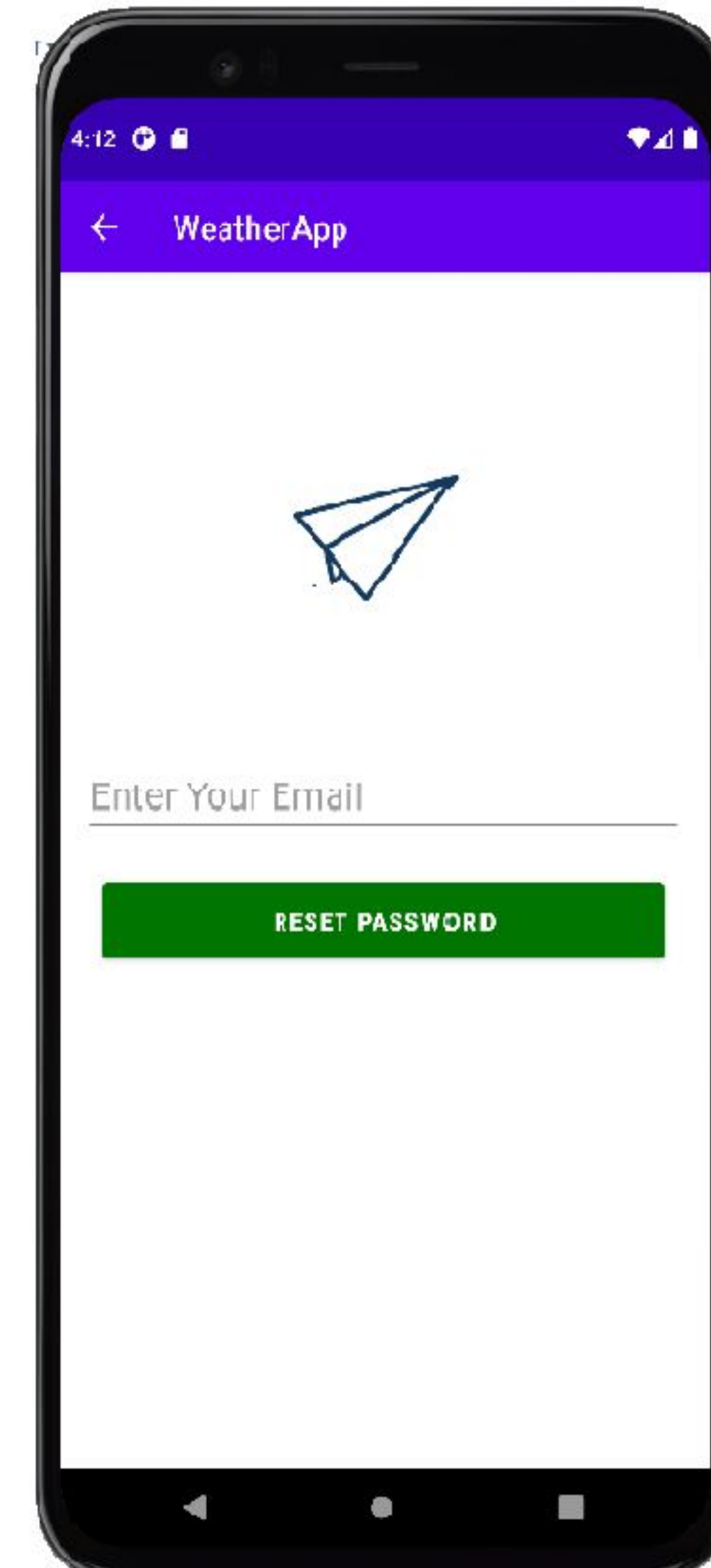
Hello,

Follow this link to reset your project-267324361753 password for your furkankara.9528@gmail.com
https://auth-ac9ef.firebaseio.com/_/auth/action?mode=resetPassword&oobCode=zj3BmCSQpu8A&lang=en

If you didn't ask to reset your password, you can ignore this email.

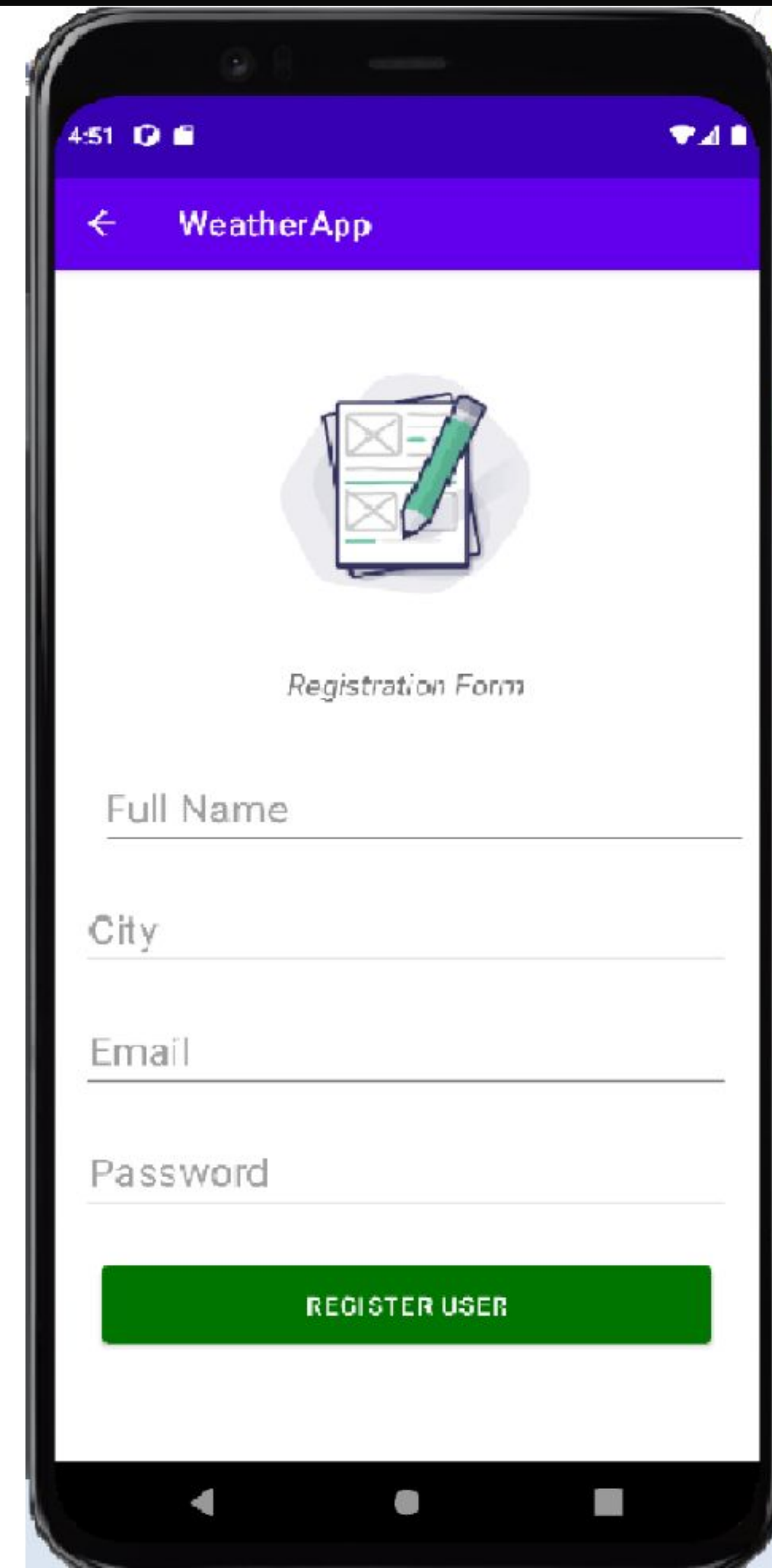
Thanks,

Your project-267324361753 team



RegisterUser

```
mAuth.createUserWithEmailAndPassword(email,password)
    .addOnCompleteListener(new OnCompleteListener<AuthResult>() {
        @Override
        public void onComplete(@NonNull Task<AuthResult> task) {
            if(task.isSuccessful()){
                User user = new User(fullName, city, email);
                FirebaseDatabase.getInstance().getReference( path: "Users").child(FirebaseAuth.getInstance().get
                    .setValue(user).addOnCompleteListener(new OnCompleteListener<Void>() {
                        @Override
                        public void onComplete(@NonNull Task<Void> task) {
                            if(task.isSuccessful()){
                                Toast.makeText( context: RegisterUser.this, text: "User has been registered successfully"
                                    progressBar.setVisibility(View.GONE);
                            }else{
                                Toast.makeText( context: RegisterUser.this, text: "Failed to register!", Toast.LENGTH_L
                                    progressBar.setVisibility(View.GONE);
                            }
                        }
                    });
            } else{
                Toast.makeText( context: RegisterUser.this, text: "Failed to register!", Toast.LENGTH_LONG).show();
                progressBar.setVisibility(View.GONE);
            }
        }
    });
}
```



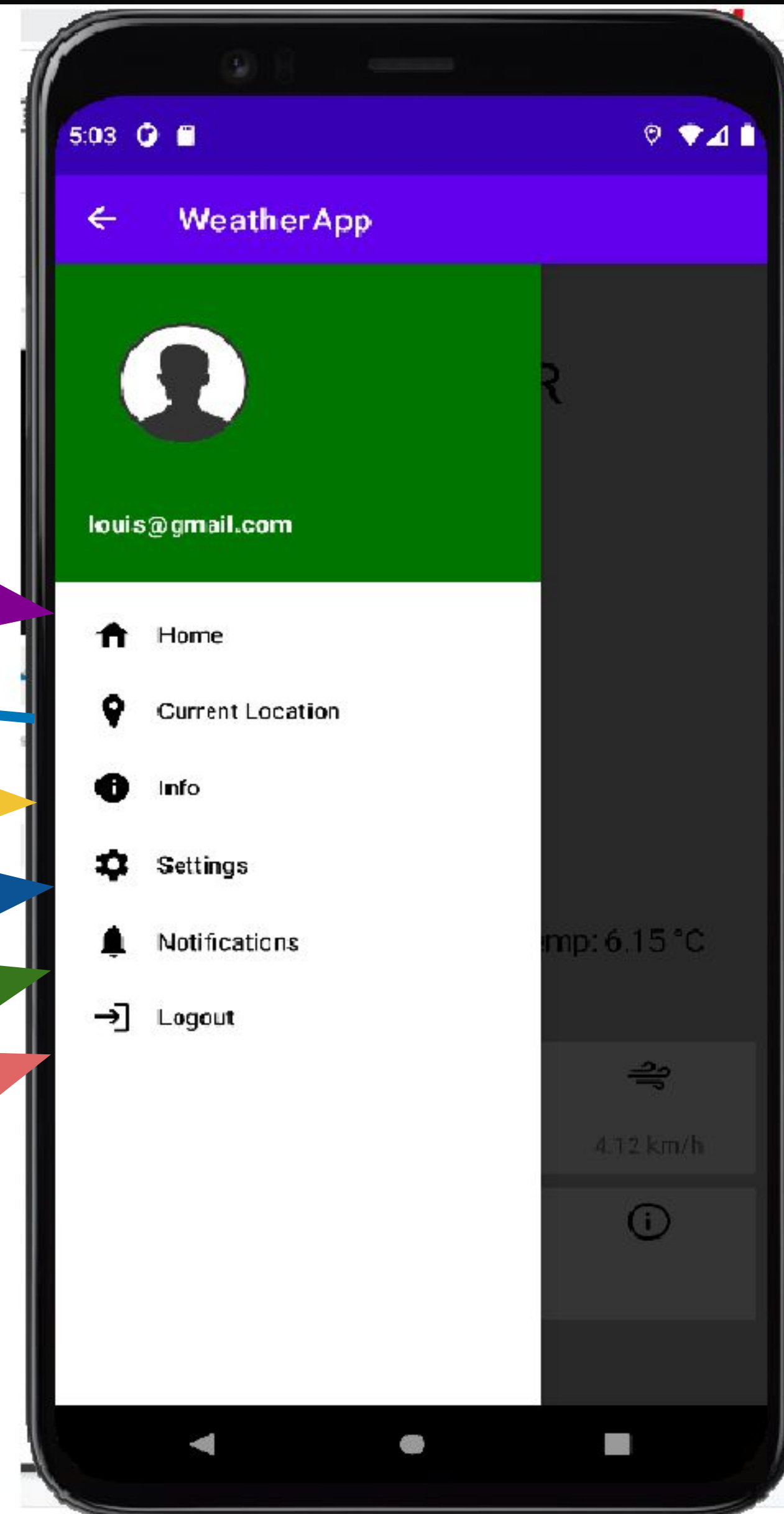
WeatherApp

```
if(Common.temp == Main.Temp.METRIC) {
    txtCity.setText(String.format("%s,%s", openWeatherMap.getName(), openWeatherMap.getSys().getCountry()));
    txtLastUpdate.setText(String.format("%s", Common.getDateNow()));
    txtDescription.setText(String.format("%s", openWeatherMap.getWeather().get(0).getDescription()));
    txtHumidity.setText(String.format("%d %%", openWeatherMap.getMain().getHumidity()));
    txtSunrise.setText(String.format("%.7s AM", Common.unixTimeStampToDateTime(openWeatherMap.getSys().getSunrise())));
    txtSunset.setText(String.format("%.7s PM", Common.unixTimeStampToDateTime(openWeatherMap.getSys().getSunset())));
    txtDeg.setText(String.format("%.0f °C", openWeatherMap.getMain().getTemp()));
    txtTemp_min.setText(String.format("Min temp: %.2f °C", openWeatherMap.getMain().getTemp_min()));
    txtTemp_max.setText(String.format("Max temp: %.2f °C", openWeatherMap.getMain().getTemp_max()));
    txtWind.setText(String.format("%.2f km/h", openWeatherMap.getWind().getSpeed()));
    txtPressure.setText(String.format("%.1f hPa", openWeatherMap.getMain().getPressure()));
}
else{
    txtCity.setText(String.format("%s,%s", openWeatherMap.getName(), openWeatherMap.getSys().getCountry()));
    txtLastUpdate.setText(String.format("%s", Common.getDateNow()));
    txtDescription.setText(String.format("%s", openWeatherMap.getWeather().get(0).getDescription()));
    txtHumidity.setText(String.format("%d %%", openWeatherMap.getMain().getHumidity()));
    txtSunrise.setText(String.format("%.7s AM", Common.unixTimeStampToDateTime(openWeatherMap.getSys().getSunrise())));
    txtSunset.setText(String.format("%.7s PM", Common.unixTimeStampToDateTime(openWeatherMap.getSys().getSunset())));
    txtDeg.setText(String.format("%.0f °F", openWeatherMap.getMain().getTemp()));
    txtTemp_min.setText(String.format("Min temp: %.2f °F", openWeatherMap.getMain().getTemp_min()));
    txtTemp_max.setText(String.format("Max temp: %.2f °F", openWeatherMap.getMain().getTemp_max()));
    txtWind.setText(String.format("%.2f m/h", openWeatherMap.getWind().getSpeed()));
    txtPressure.setText(String.format("%.1f hPa", openWeatherMap.getMain().getPressure()));
}
```



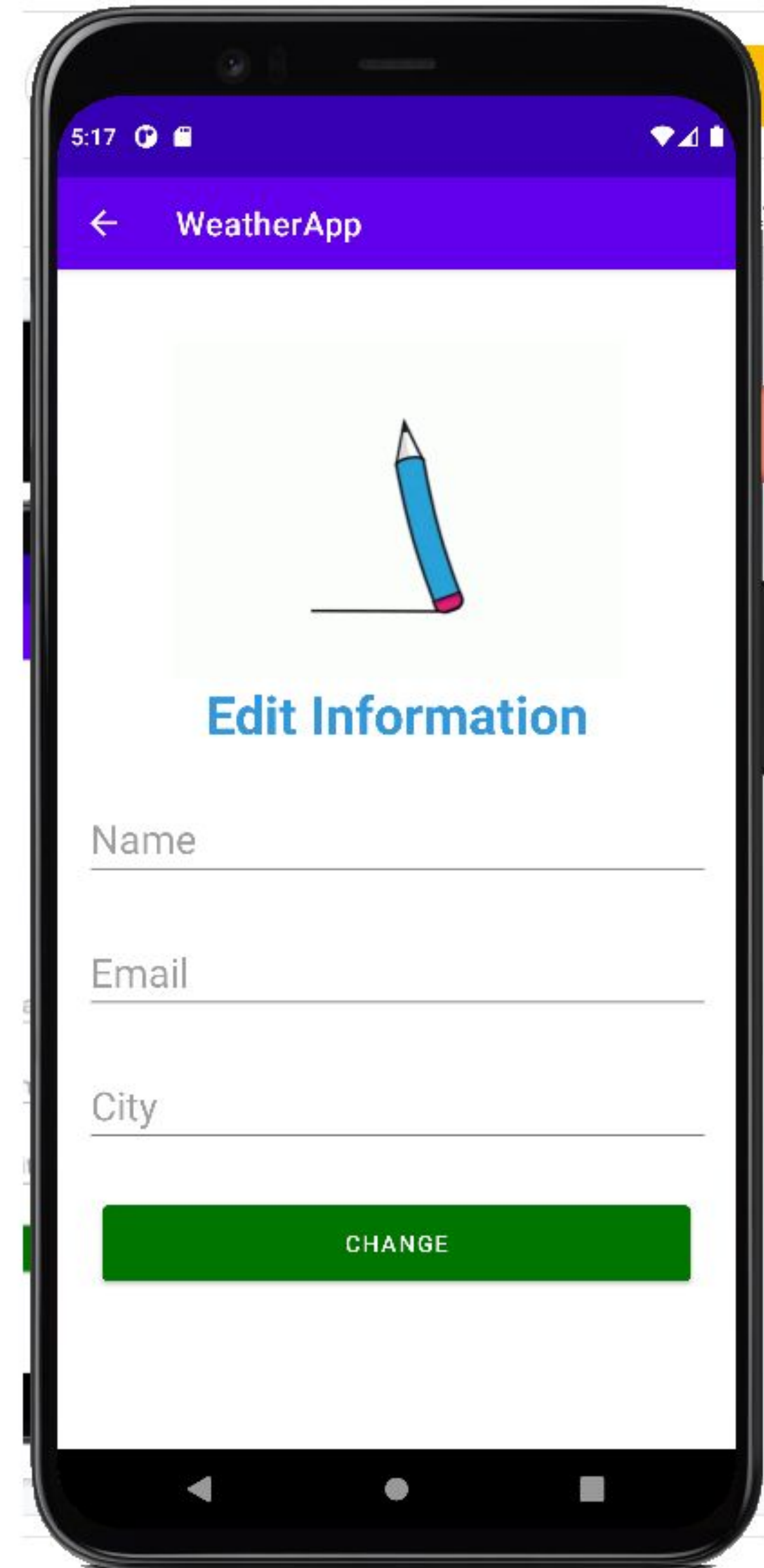
Main_menu.xml

```
1  <?xml version="1.0" encoding="utf-8"?>
2  <menu xmlns:android="http://schemas.android.com/apk/res/android">
3
4      <group android:checkableBehavior="single">
5          <item
6              android:id="@+id/nav_home"
7              android:icon="@drawable/ic_baseline_home_24"
8              android:title="Home" />
9
10         <item
11             android:id="@+id/current_location"
12             android:icon="@drawable/ic_baseline_location_on_24"
13             android:title="Current Location" />
14
15         <item
16             android:id="@+id/info"
17             android:icon="@drawable/ic_baseline_info_24"
18             android:title="Info" />
19
20         <item
21             android:id="@+id/settings"
22             android:icon="@drawable/ic_baseline_settings_24"
23             android:title="Settings" />
24
25         <item
26             android:id="@+id/notifications"
27             android:icon="@drawable/ic_baseline_notifications_24"
28             android:title="Notifications" />
29
30         <item
31             android:id="@+id/signOut"
32             android:icon="@drawable/ic_logout"
33             android:title="Logout" />
34     </group>
35 </menu>
```



InfoActivity

```
updates.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        String email = emails.getText().toString();  
        String name = names.getText().toString();  
        String city = citys.getText().toString();  
  
        HashMap hashMap = new HashMap();  
        hashMap.put("city",city);  
        hashMap.put("email",email);  
        hashMap.put("fullName",name);  
  
        reference.child(userID).updateChildren(hashMap).addOnSuccessListener(new OnSuccessListener())  
        {  
            @Override  
            public void onSuccess(Object o) {  
  
                Toast.makeText(context, InfoActivity.this, text: "Data is Successfully Updated", Toast.L  
  
            }  
        });  
    }  
});
```



Le lien Github

<https://github.com/kbendo89/TooBo>

Nos mails

hacer.akturk@etu.u-paris.fr
kenza.bendou@etu.u-paris.fr
furkan.kara@etu.u-paris.fr

DEMO