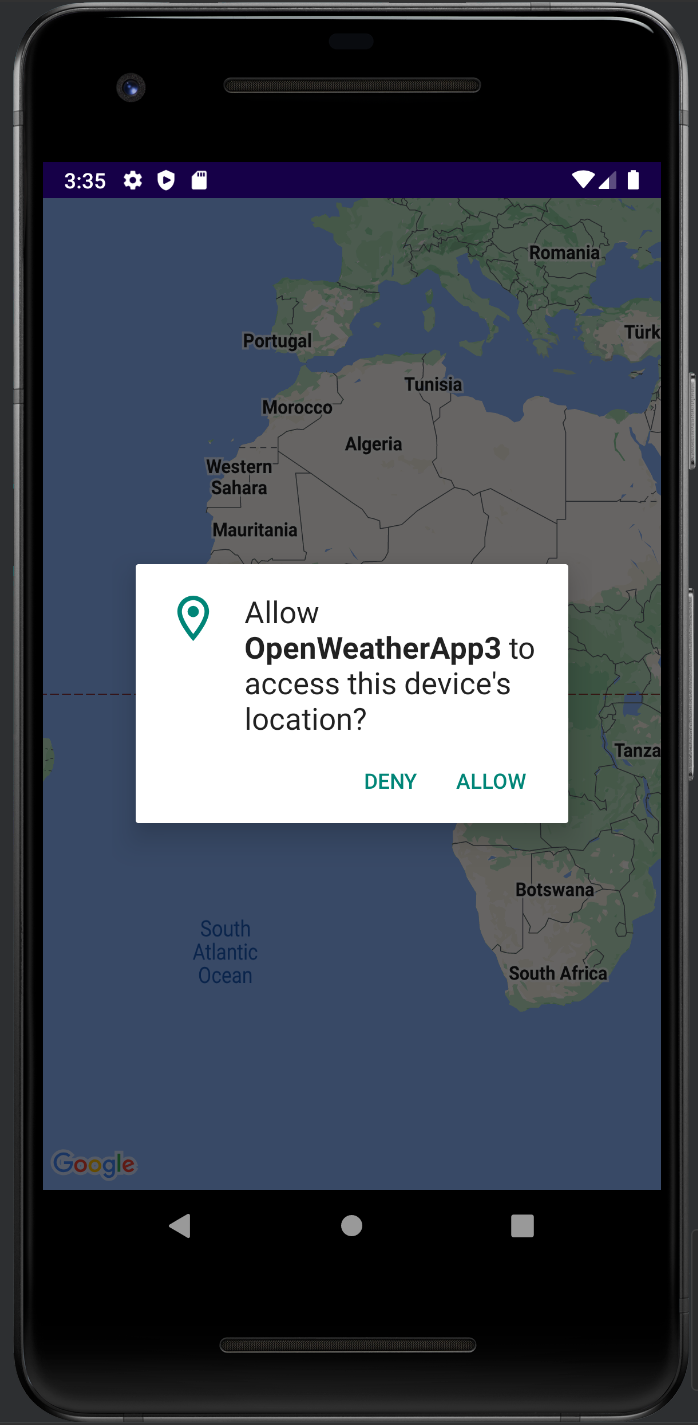
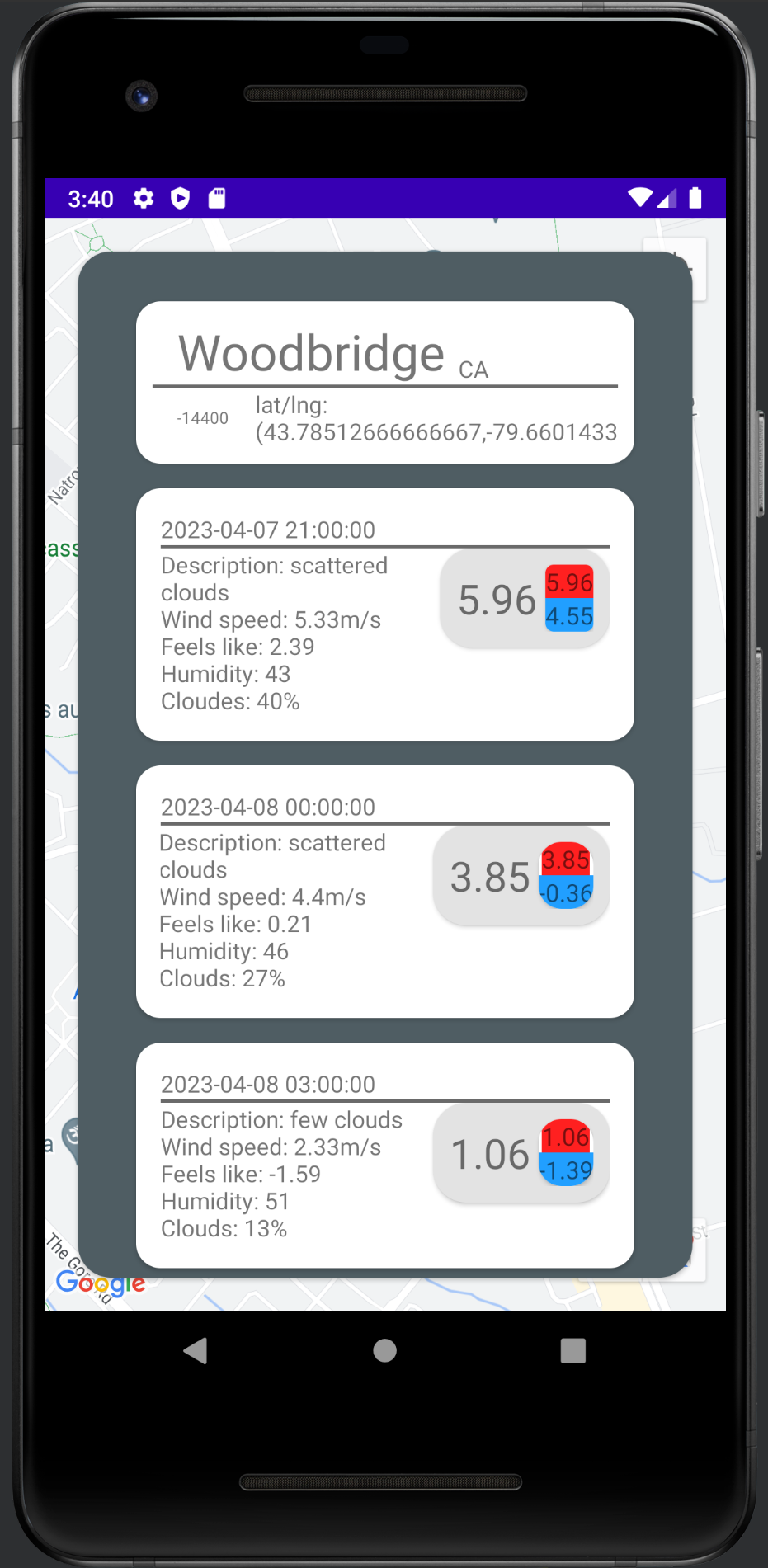
Open Weather Map – Android Dev 2

A screenshot of a map

Description automatically generated with medium confidence

The way it is setup:

1 – take you current location

2 – click to add marker

3 – click marker to get weather information

Then to return you use the back button.

I did not implement 5 days, I only did forecast for 5 instances of 3h. Ill take the deduction to my marks for trying to make something more visually better, but even so, this isn’t he best design I could do.

If I wanted everything, I could have done a recycler view, but getting all the information to show like this was confusing to me because of all the internal xml calls

package com.example.openweatherapp3;  
  
import androidx.annotation.NonNull;  
import androidx.core.app.ActivityCompat;  
import androidx.fragment.app.FragmentActivity;  
import androidx.fragment.app.FragmentManager;  
  
import android.content.Context;  
import android.content.pm.PackageManager;  
import android.location.Location;  
import android.location.LocationManager;  
import android.os.Bundle;  
import android.widget.Toast;  
  
import com.google.android.gms.maps.CameraUpdateFactory;  
import com.google.android.gms.maps.GoogleMap;  
import com.google.android.gms.maps.OnMapReadyCallback;  
import com.google.android.gms.maps.SupportMapFragment;  
import com.google.android.gms.maps.model.LatLng;  
import com.google.android.gms.maps.model.Marker;  
import com.google.android.gms.maps.model.MarkerOptions;  
import com.example.openweatherapp3.databinding.ActivityMapsBinding;  
  
public class MapsActivity extends FragmentActivity implements OnMapReadyCallback {  
  
 private GoogleMap mMap;  
 private ActivityMapsBinding binding;  
 private SupportMapFragment supportMapFragment;  
 private static final int *LOCATION\_PERMISSION\_REQUEST\_CODE* = 1;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
  
 binding = ActivityMapsBinding.*inflate*(getLayoutInflater());  
 setContentView(binding.getRoot());  
 FragmentManager fragmentManager = getSupportFragmentManager();  
 supportMapFragment = (SupportMapFragment) fragmentManager.findFragmentById(R.id.*map*);  
  
 // Obtain the SupportMapFragment and get notified when the map is ready to be used.  
 SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager()  
 .findFragmentById(R.id.*map*);  
 mapFragment.getMapAsync(this);  
  
 }  
  
 @Override  
 public void onMapReady(GoogleMap googleMap) {  
 mMap = googleMap;  
 // Add a marker in Sydney and move the camera  
 if (checkSelfPermission(android.Manifest.permission.*ACCESS\_FINE\_LOCATION*) == PackageManager.*PERMISSION\_GRANTED*) {  
 // Enable the my-location layer on the map  
 mMap.setMyLocationEnabled(true);  
 } else {  
 // Request permission to access the user's location  
 requestPermissions(new String[]{android.Manifest.permission.*ACCESS\_FINE\_LOCATION*}, *LOCATION\_PERMISSION\_REQUEST\_CODE*);  
 }  
  
 if (ActivityCompat.*checkSelfPermission*(this, android.Manifest.permission.*ACCESS\_FINE\_LOCATION*) == PackageManager.*PERMISSION\_GRANTED*) {  
 // Get the user's current location  
 LocationManager locationManager = (LocationManager) getSystemService(Context.*LOCATION\_SERVICE*);  
 Location lastKnownLocation = locationManager.getLastKnownLocation(LocationManager.*GPS\_PROVIDER*);  
 if (lastKnownLocation != null) {  
 // Move the camera to the user's current location  
 LatLng currentLocation = new LatLng(lastKnownLocation.getLatitude(), lastKnownLocation.getLongitude());  
 mMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(currentLocation, 9));  
 }  
 }  
 mMap.setOnMapClickListener(new GoogleMap.OnMapClickListener() {  
 @Override  
 public void onMapClick(@NonNull LatLng latLng) {  
 mMap.addMarker(new MarkerOptions().position(latLng));  
 }  
 });  
 mMap.setOnMarkerClickListener(new GoogleMap.OnMarkerClickListener() {  
 @Override  
 public boolean onMarkerClick(@NonNull Marker marker) {  
 //send to fragment and show location weather  
 Bundle bundle = new Bundle();  
  
 bundle.putDouble("latitude", marker.getPosition().latitude);  
 bundle.putDouble("longitude", marker.getPosition().longitude);  
  
 WeatherListFragment weatherListFragment = new WeatherListFragment(marker.getPosition(), supportMapFragment);  
 weatherListFragment.setArguments(bundle);  
 getSupportFragmentManager().beginTransaction()  
 .replace(R.id.*map*, weatherListFragment)  
 .commit();  
 return false;  
 }  
 });  
 }  
  
 @Override  
 public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions, @NonNull int[] grantResults) {  
 super.onRequestPermissionsResult(requestCode, permissions, grantResults);  
 if (requestCode == *LOCATION\_PERMISSION\_REQUEST\_CODE*) {  
 if (grantResults.length > 0 && grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {  
 // Permission was granted, enable the my-location layer on the map  
 if (ActivityCompat.*checkSelfPermission*(this, android.Manifest.permission.*ACCESS\_FINE\_LOCATION*) != PackageManager.*PERMISSION\_GRANTED* && ActivityCompat.*checkSelfPermission*(this, android.Manifest.permission.*ACCESS\_COARSE\_LOCATION*) != PackageManager.*PERMISSION\_GRANTED*) {  
 // *TODO: Consider calling* // *ActivityCompat#requestPermissions* // here to request the missing permissions, and then overriding  
 // public void onRequestPermissionsResult(int requestCode, String[] permissions,  
 // int[] grantResults)  
 // to handle the case where the user grants the permission. See the documentation  
 // for ActivityCompat#requestPermissions for more details.  
 return;  
 }  
 mMap.setMyLocationEnabled(true);  
 // Get the user's current location  
 LocationManager locationManager = (LocationManager) getSystemService(Context.*LOCATION\_SERVICE*);  
 Location lastKnownLocation = locationManager.getLastKnownLocation(LocationManager.*GPS\_PROVIDER*);  
 if (lastKnownLocation != null) {  
 // Add a marker at the user's current location and move the camera there  
 LatLng currentLocation = new LatLng(lastKnownLocation.getLatitude(), lastKnownLocation.getLongitude());  
 mMap.addMarker(new MarkerOptions().position(currentLocation));  
 mMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(currentLocation, 15));  
 }  
 } else {  
 // Permission was denied, show a message to the user  
 Toast.*makeText*(this, "Location permission denied", Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 }  
  
}

package com.example.openweatherapp3;  
  
import java.util.List;  
  
public class WeatherData {  
 private String code;  
 private int message;  
 private City city;  
 private List<Forecast> list;  
  
 public String getCode() {  
 return code;  
 }  
  
 public int getMessage() {  
 return message;  
 }  
  
 public City getCity() {  
 return city;  
 }  
  
 public List<Forecast> getForecasts() {  
 return list;  
 }  
  
 public static class City {  
 private int id;  
 private String name;  
 private Coord coord;  
 private String country;  
 private int timezone;  
 private int sunrise;  
 private int sunset;  
  
 public int getId() {  
 return id;  
 }  
  
 public String getName() {  
 return name;  
 }  
  
 public Coord getCoord() {  
 return coord;  
 }  
  
 public String getCountry() {  
 return country;  
 }  
  
 public int getTimezone() {  
 return timezone;  
 }  
  
 public int getSunrise() {  
 return sunrise;  
 }  
  
 public int getSunset() {  
 return sunset;  
 }  
 }  
  
 public static class Coord {  
 private double lat;  
 private double lon;  
  
 public double getLat() {  
 return lat;  
 }  
  
 public double getLon() {  
 return lon;  
 }  
 }  
  
 public static class Forecast {  
 private int dt;  
 private Main main;  
 private List<Weather> weather;  
 private Clouds clouds;  
 private Wind wind;  
 private Rain rain;  
 private Snow snow;  
 private Sys sys;  
 private String dt\_txt;  
  
 public int getDt() {  
 return dt;  
 }  
  
 public Main getMain() {  
 return main;  
 }  
  
 public List<Weather> getWeather() {  
 return weather;  
 }  
  
 public Clouds getClouds() {  
 return clouds;  
 }  
  
 public Wind getWind() {  
 return wind;  
 }  
  
 public Rain getRain() {  
 return rain;  
 }  
  
 public Snow getSnow() {  
 return snow;  
 }  
  
 public Sys getSys() {  
 return sys;  
 }  
  
 public String getDtTxt() {  
 return dt\_txt;  
 }  
 }  
  
 public static class Main {  
 private double temp;  
 private double feels\_like;  
 private double temp\_min;  
 private double temp\_max;  
 private int pressure;  
 private int sea\_level;  
 private int grnd\_level;  
 private int humidity;  
 private double temp\_kf;  
  
 public double getTemp() {  
 return temp;  
 }  
  
 public double getFeelsLike() {  
 return feels\_like;  
 }  
  
 public double getTempMin() {  
 return temp\_min;  
 }  
  
 public double getTempMax() {  
 return temp\_max;  
 }  
  
 public int getPressure() {  
 return pressure;  
 }  
  
 public int getSeaLevel() {  
 return sea\_level;  
 }  
  
 public int getGrndLevel() {  
 return grnd\_level;  
 }  
  
 public int getHumidity() {  
 return humidity;  
 }  
  
 public double getTempKf() {  
 return temp\_kf;  
 }  
 }  
  
 public static class Weather {  
 private int id;  
 private String main;  
 private String description;  
 private String icon;  
  
 public int getId() {  
 return id;  
 }  
  
 public String getMain() {  
 return main;  
 }  
  
 public String getDescription() {  
 return description;  
 }  
  
 public String getIcon() {  
 return icon;  
 }  
 }  
  
 public static class Clouds {  
 private int all;  
  
 public int getAll() {  
 return all;  
 }  
 }  
  
 public static class Wind {  
 private double speed;  
 private int deg;  
  
 public double getSpeed() {  
 return speed;  
 }  
  
 public int getDeg() {  
 return deg;  
 }  
 }  
  
 public static class Rain {  
 private double threeHourVolume;  
  
 public double getThreeHourVolume() {  
 return threeHourVolume;  
 }  
 }  
  
 public static class Snow {  
 private double threeHourVolume;  
  
 public double getThreeHourVolume() {  
 return threeHourVolume;  
 }  
 }  
  
 public static class Sys {  
 private String pod;  
  
 public String getPod() {  
 return pod;  
 }  
 }  
}

package com.example.openweatherapp3;  
  
import android.os.Bundle;  
  
import androidx.activity.OnBackPressedCallback;  
import androidx.fragment.app.Fragment;  
  
import android.util.Log;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.LinearLayout;  
import android.widget.TextView;  
  
import com.android.volley.RequestQueue;  
import com.android.volley.toolbox.StringRequest;  
import com.android.volley.toolbox.Volley;  
import com.google.android.gms.maps.SupportMapFragment;  
import com.google.android.gms.maps.model.LatLng;  
import com.google.gson.GsonBuilder;  
  
import org.w3c.dom.Text;  
  
import java.util.List;  
import java.util.concurrent.atomic.AtomicReference;  
  
public class WeatherListFragment extends Fragment {  
 private final LatLng latLng;  
 private final SupportMapFragment supportMapFragment;  
 LinearLayout linearLayout;  
 public WeatherListFragment(LatLng latLng, SupportMapFragment supportMapFragment) {  
 this.latLng = latLng;  
 this.supportMapFragment = supportMapFragment;  
 }  
  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 OnBackPressedCallback callback = new OnBackPressedCallback(true) {  
 @Override  
 public void handleOnBackPressed() {  
 requireActivity().getSupportFragmentManager().beginTransaction().remove(WeatherListFragment.this).show(supportMapFragment).commit();  
 }  
 };  
 requireActivity().getOnBackPressedDispatcher().addCallback(this, callback);  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 // Inflate the layout for this fragment  
 View view = inflater.inflate(R.layout.*fragment\_weather\_list*, container, false);  
 linearLayout = view.findViewById(R.id.*weatherList*);  
 Bundle bundle = getArguments();  
 double latitude = 0, longitude = 0;  
 if (bundle != null) {  
 // Retrieve the latitude and longitude data from the bundle  
 latitude = bundle.getDouble("latitude");  
 longitude = bundle.getDouble("longitude");  
 }  
 Log.*d*("@Harman - lat", String.*valueOf*(latitude));  
 Log.*d*("@Harman - long", String.*valueOf*(longitude));  
  
  
 String apiKey = "2967b336cde2985d755e487555ddb18e";  
 String url = "https://api.openweathermap.org/data/2.5/forecast?lat=" + latitude + "&lon=" + longitude + "&appid=2967b336cde2985d755e487555ddb18e&units=metric";  
 AtomicReference<WeatherData> weatherData = new AtomicReference<>(new WeatherData());  
 Log.*d*("@Harman - url", url);  
 StringRequest stringRequest = new StringRequest(url, response -> {  
// System.out.println(response);  
 GsonBuilder builder = new GsonBuilder();  
 builder.setPrettyPrinting();  
 weatherData.set(builder.create().fromJson(response, WeatherData.class));  
  
 List<WeatherData.Forecast> forcasts = weatherData.get().getForecasts();  
 linearLayout = view.findViewById(R.id.*weatherList*);  
  
 TextView city, country, timezone, latlongfinal;  
  
 city = view.findViewById(R.id.*cityName\_tv*);  
 city.setText(weatherData.get().getCity().getName());  
  
 country = view.findViewById(R.id.*countryName\_tv*);  
 country.setText(weatherData.get().getCity().getCountry());  
  
 timezone = view.findViewById(R.id.*timeZone\_tv*);  
 timezone.setText(String.*valueOf*(weatherData.get().getCity().getTimezone()));  
  
 latlongfinal = view.findViewById(R.id.*latlng\_tv*);  
 latlongfinal.setText(String.*valueOf*(latLng));  
  
  
 //h1 and so on  
 TextView h1, h1temp\_description;  
  
 h1 = view.findViewById(R.id.*h1*);  
 h1.setText(forcasts.get(0).getDtTxt());  
  
 TextView h1temp, h1temp\_high, h1temp\_low;  
 h1temp = view.findViewById(R.id.*h1temp*);  
 h1temp.setText(String.*valueOf*(forcasts.get(0).getMain().getTemp()));  
  
 h1temp\_high = view.findViewById(R.id.*h1temp\_high*);  
 h1temp\_high.setText(String.*valueOf*(forcasts.get(0).getMain().getTempMax()));  
  
 h1temp\_low = view.findViewById(R.id.*h1temp\_low*);  
 h1temp\_low.setText(String.*valueOf*(forcasts.get(0).getMain().getTempMin()));  
  
 h1temp\_description= view.findViewById(R.id.*h1Description*);  
 StringBuilder sbh1 = new StringBuilder();  
 sbh1.append("Description: ")  
 .append(forcasts.get(0).getWeather().get(0).getDescription())  
 .append("\n")  
 .append("Wind speed: ")  
 .append(forcasts.get(0).getWind().getSpeed())  
 .append("m/s")  
 .append("\n")  
 .append("Feels like: ")  
 .append(forcasts.get(0).getMain().getFeelsLike())  
 .append("\n")  
 .append("Humidity: ")  
 .append(forcasts.get(0).getMain().getHumidity())  
 .append("\n")  
 .append("Cloudes: ")  
 .append(forcasts.get(0).getClouds().getAll() + "%");  
 h1temp\_description.setText(sbh1);  
  
 TextView h2, h2temp\_description;  
 TextView h2temp, h2temp\_high, h2temp\_low;  
 h2temp = view.findViewById(R.id.*h2temp*);  
 h2temp.setText(String.*valueOf*(forcasts.get(1).getMain().getTemp()));  
  
 h2temp\_high = view.findViewById(R.id.*h2temp\_high*);  
 h2temp\_high.setText(String.*valueOf*(forcasts.get(1).getMain().getTempMax()));  
  
 h2temp\_low = view.findViewById(R.id.*h2temp\_low*);  
 h2temp\_low.setText(String.*valueOf*(forcasts.get(1).getMain().getTempMin()));  
  
 h2 = view.findViewById(R.id.*h2*);  
 h2.setText(forcasts.get(1).getDtTxt());  
  
 h2temp\_description= view.findViewById(R.id.*h2Description*);  
 StringBuilder sbh2 = new StringBuilder();  
 sbh2.append("Description: ").append(forcasts.get(1).getWeather().get(0).getDescription()).append("\n")  
 .append("Wind speed: ").append(forcasts.get(1).getWind().getSpeed()).append("m/s\n")  
 .append("Feels like: ").append(forcasts.get(1).getMain().getFeelsLike()).append("\n")  
 .append("Humidity: ").append(forcasts.get(1).getMain().getHumidity()).append("\n")  
 .append("Clouds: ").append(forcasts.get(1).getClouds().getAll() + "%");  
 h2temp\_description.setText(sbh2);  
  
 TextView h3, h3temp\_description;  
 TextView h3temp, h3temp\_high, h3temp\_low;  
 h3temp = view.findViewById(R.id.*h3temp*);  
 h3temp.setText(String.*valueOf*(forcasts.get(2).getMain().getTemp()));  
  
 h3temp\_high = view.findViewById(R.id.*h3temp\_high*);  
 h3temp\_high.setText(String.*valueOf*(forcasts.get(2).getMain().getTempMax()));  
  
 h3temp\_low = view.findViewById(R.id.*h3temp\_low*);  
 h3temp\_low.setText(String.*valueOf*(forcasts.get(2).getMain().getTempMin()));  
  
 h3 = view.findViewById(R.id.*h3*);  
 h3.setText(forcasts.get(2).getDtTxt());  
  
 h3temp\_description= view.findViewById(R.id.*h3Description*);  
 StringBuilder sbh3 = new StringBuilder();  
 sbh3.append("Description: ").append(forcasts.get(2).getWeather().get(0).getDescription()).append("\n")  
 .append("Wind speed: ").append(forcasts.get(2).getWind().getSpeed()).append("m/s\n")  
 .append("Feels like: ").append(forcasts.get(2).getMain().getFeelsLike()).append("\n")  
 .append("Humidity: ").append(forcasts.get(2).getMain().getHumidity()).append("\n")  
 .append("Clouds: ").append(forcasts.get(2).getClouds().getAll() + "%");  
 h3temp\_description.setText(sbh3);  
  
 TextView h4, h4temp\_description;  
 TextView h4temp, h4temp\_high, h4temp\_low;  
 h4temp = view.findViewById(R.id.*h4temp*);  
 h4temp.setText(String.*valueOf*(forcasts.get(3).getMain().getTemp()));  
  
 h4temp\_high = view.findViewById(R.id.*h4temp\_high*);  
 h4temp\_high.setText(String.*valueOf*(forcasts.get(3).getMain().getTempMax()));  
  
 h4temp\_low = view.findViewById(R.id.*h4temp\_low*);  
 h4temp\_low.setText(String.*valueOf*(forcasts.get(3).getMain().getTempMin()));  
  
 h4 = view.findViewById(R.id.*h4*);  
 h4.setText(forcasts.get(3).getDtTxt());  
  
 h4temp\_description= view.findViewById(R.id.*h4Description*);  
 StringBuilder sbh4 = new StringBuilder();  
 sbh4.append("Description: ").append(forcasts.get(3).getWeather().get(0).getDescription()).append("\n")  
 .append("Wind speed: ").append(forcasts.get(3).getWind().getSpeed()).append("m/s").append("\n")  
 .append("Feels like: ").append(forcasts.get(3).getMain().getFeelsLike()).append("\n")  
 .append("Humidity: ").append(forcasts.get(3).getMain().getHumidity()).append("\n")  
 .append("Clouds: ").append(forcasts.get(3).getClouds().getAll() + "%");  
 h4temp\_description.setText(sbh4);  
  
 TextView h5, h5temp\_description;  
 TextView h5temp, h5temp\_high, h5temp\_low;  
 h5temp = view.findViewById(R.id.*h5temp*);  
 h5temp.setText(String.*valueOf*(forcasts.get(4).getMain().getTemp()));  
  
 h5temp\_high = view.findViewById(R.id.*h5temp\_high*);  
 h5temp\_high.setText(String.*valueOf*(forcasts.get(4).getMain().getTempMax()));  
  
 h5temp\_low = view.findViewById(R.id.*h5temp\_low*);  
 h5temp\_low.setText(String.*valueOf*(forcasts.get(4).getMain().getTempMin()));  
  
 h4 = view.findViewById(R.id.*h4*);  
 h4.setText(forcasts.get(3).getDtTxt());  
  
 h5 = view.findViewById(R.id.*h5*);  
 h5.setText(forcasts.get(4).getDtTxt());  
  
 h5temp\_description= view.findViewById(R.id.*h5Description*);  
 StringBuilder sbh5 = new StringBuilder();  
 sbh5.append("Description: ")  
 .append(forcasts.get(4).getWeather().get(0).getDescription()).append("\n")  
 .append("Wind speed: ").append(forcasts.get(4).getWind().getSpeed()).append("m/s\n")  
 .append("Feels like: ").append(forcasts.get(4).getMain().getFeelsLike()).append("\n")  
 .append("Humidity: ").append(forcasts.get(4).getMain().getHumidity()).append("\n")  
 .append("Clouds: ").append(forcasts.get(4).getClouds().getAll() + "%");  
 h5temp\_description.setText(sbh5);  
  
 }, error -> System.*out*.println(error.getMessage()));  
 RequestQueue queue = Volley.*newRequestQueue*(requireContext());  
 queue.add(stringRequest);  
 return view;  
 }  
  
}

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 tools:context=".WeatherListFragment">  
  
 <androidx.cardview.widget.CardView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:cardCornerRadius="20dp"  
 android:layout\_margin="20dp"  
 android:backgroundTint="#4F5D63"  
 >  
 <ScrollView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content">  
  
 <LinearLayout  
 android:id="@+id/weatherList"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_margin="20dp"  
 android:orientation="vertical">  
  
 <androidx.cardview.widget.CardView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginHorizontal="15dp"  
 android:layout\_marginVertical="10dp"  
 app:cardCornerRadius="15dp">  
  
 <androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:padding="10dp">  
  
 <TextView  
 android:id="@+id/cityName\_tv"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center|top"  
 android:layout\_marginLeft="15dp"  
 android:text="City"  
 android:textSize="30dp"  
  
 app:layout\_constraintBottom\_toTopOf="@+id/titleCard\_line"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/countryName\_tv"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center|top"  
 android:layout\_marginStart="8dp"  
 android:text="Country"  
 app:layout\_constraintBottom\_toTopOf="@+id/titleCard\_line"  
 app:layout\_constraintStart\_toEndOf="@+id/cityName\_tv"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="1.0" />  
  
 <View  
 android:id="@+id/titleCard\_line"  
 android:layout\_width="300dp"  
 android:layout\_height="2dp"  
 android:background="#6A6A6A"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/cityName\_tv" />  
  
 <TextView  
 android:id="@+id/timeZone\_tv"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center|top"  
 android:layout\_marginLeft="15dp"  
 android:text="TimeZone"  
 android:textSize="10dp"  
  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/titleCard\_line" />  
  
 <TextView  
 android:id="@+id/latlng\_tv"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center|top"  
 android:layout\_marginStart="16dp"  
 android:text="latLng"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toEndOf="@+id/timeZone\_tv"  
 app:layout\_constraintTop\_toBottomOf="@+id/titleCard\_line"  
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