

# ICP 10

Name: Aqduş Charolia Email: [aacy5x@mail.umkc.edu](mailto:aacy5x@mail.umkc.edu)

Github: [https://github.com/Aqduş/WebDevCourse/tree/main/Mobile\\_Development/ICP10](https://github.com/Aqduş/WebDevCourse/tree/main/Mobile_Development/ICP10)

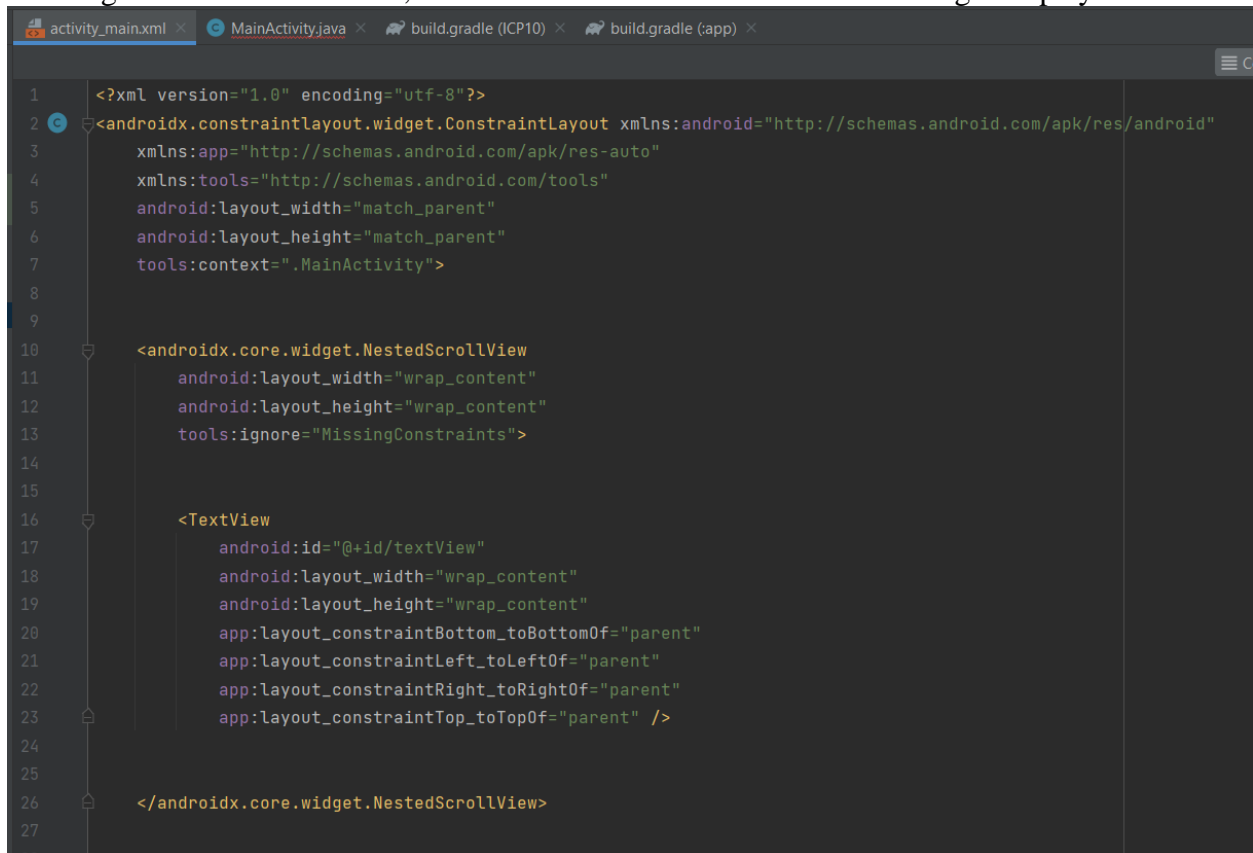
Name: Affan Charolia Email: [aacbb8@mail.umkc.edu](mailto:aacbb8@mail.umkc.edu)

Github: [https://github.com/Affancharolia/WebDevCourse/tree/main/Mobile\\_Development/ICP10](https://github.com/Affancharolia/WebDevCourse/tree/main/Mobile_Development/ICP10)

Aim: The goal of this ICP is to create a mobile application which makes api calls to show github profiles.

Explanation:

Creating a nested scroller view, where all the user id and their names will get displayed of users.



```
1  <?xml version="1.0" encoding="utf-8"?>
2  <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
3      xmlns:app="http://schemas.android.com/apk/res-auto"
4      xmlns:tools="http://schemas.android.com/tools"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent"
7      tools:context=".MainActivity">
8
9
10     <androidx.core.widget.NestedScrollView
11         android:layout_width="wrap_content"
12         android:layout_height="wrap_content"
13         tools:ignore="MissingConstraints">
14
15
16         <TextView
17             android:id="@+id/textView"
18             android:layout_width="wrap_content"
19             android:layout_height="wrap_content"
20             app:layout_constraintBottom_toBottomOf="parent"
21             app:layout_constraintLeft_toLeftOf="parent"
22             app:layout_constraintRight_toRightOf="parent"
23             app:layout_constraintTop_toTopOf="parent" />
24
25     </androidx.core.widget.NestedScrollView>
26
27
```

First we import the retrofit2 so that it can be imported and used in our java file.

```
activity_main.xml x MainActivity.java x build.gradle (ICP10) x build.gradle (app) x
19  release {
20      minifyEnabled false
21      proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'
22  }
23  }
24  compileOptions {
25      sourceCompatibility JavaVersion.VERSION_1_8
26      targetCompatibility JavaVersion.VERSION_1_8
27  }
28  }
29
30  dependencies {
31
32      implementation 'com.squareup.retrofit2:retrofit:2.1.0'
33      implementation 'com.squareup.retrofit2:converter-gson:2.1.0'
34      implementation 'androidx.appcompat:appcompat:1.4.1'
35      implementation 'com.google.android.material:material:1.5.0'
36      implementation 'androidx.constraintlayout:constraintlayout:2.1.3'
37      testImplementation 'junit:junit:4.13.2'
38      androidTestImplementation 'androidx.test.ext:junit:1.1.3'
39      androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'
40      // Junit
41      testImplementation('org.junit.jupiter:junit-jupiter-api:5.0.0')
42  }
```

First we import all the libraries, then we define the textView and link it using its id. We call the api of github using the retrofit object. Then we store the data we got from it in the user list.

```
package com.example.icp10;

import ...

public class MainActivity extends AppCompatActivity {

    TextView textView;

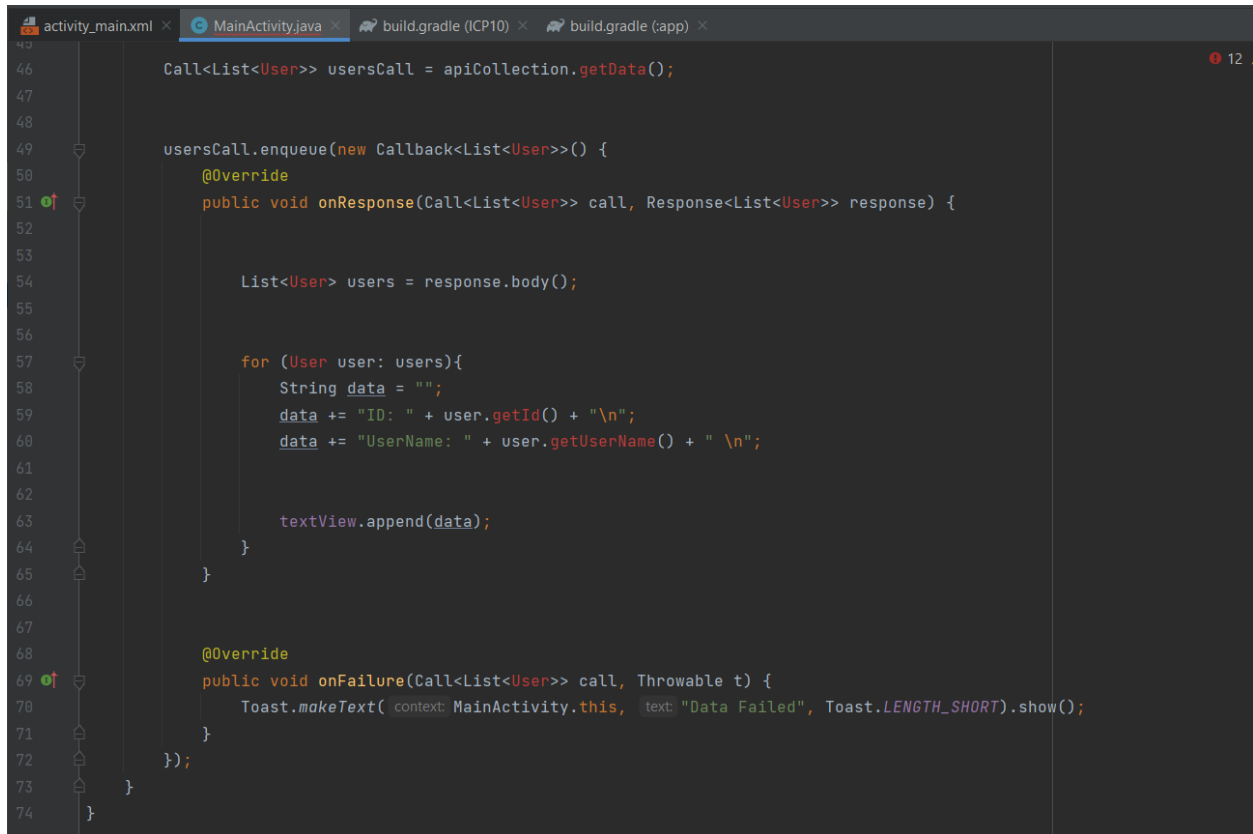
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        textView = findViewById(R.id.textView);

        Retrofit retrofit = new Retrofit.Builder()
            .baseUrl("https://api.github.com/")
            .addConverterFactory(GsonConverterFactory.create())
            .build();

        ApiCollection apiCollection = retrofit.create(ApiCollection.class);
```

From the list we get the `userId` and its name and append it to the `textView` list for it to be displayed.



```
45
46 Call<List<User>> usersCall = apiCollection.getData();
47
48
49 usersCall.enqueue(new Callback<List<User>>() {
50     @Override
51     public void onResponse(Call<List<User>> call, Response<List<User>> response) {
52
53
54         List<User> users = response.body();
55
56
57         for (User user: users){
58             String data = "";
59             data += "ID: " + user.getId() + "\n";
60             data += "UserName: " + user.getUserName() + " \n";
61
62
63             textView.append(data);
64         }
65     }
66
67
68     @Override
69     public void onFailure(Call<List<User>> call, Throwable t) {
70         Toast.makeText(context, MainActivity.this, text: "Data Failed", Toast.LENGTH_SHORT).show();
71     }
72 }
73
74 }
```