

DURHAM
COLLEGE

DCCONNECT

CW-1

INFT 3101-01

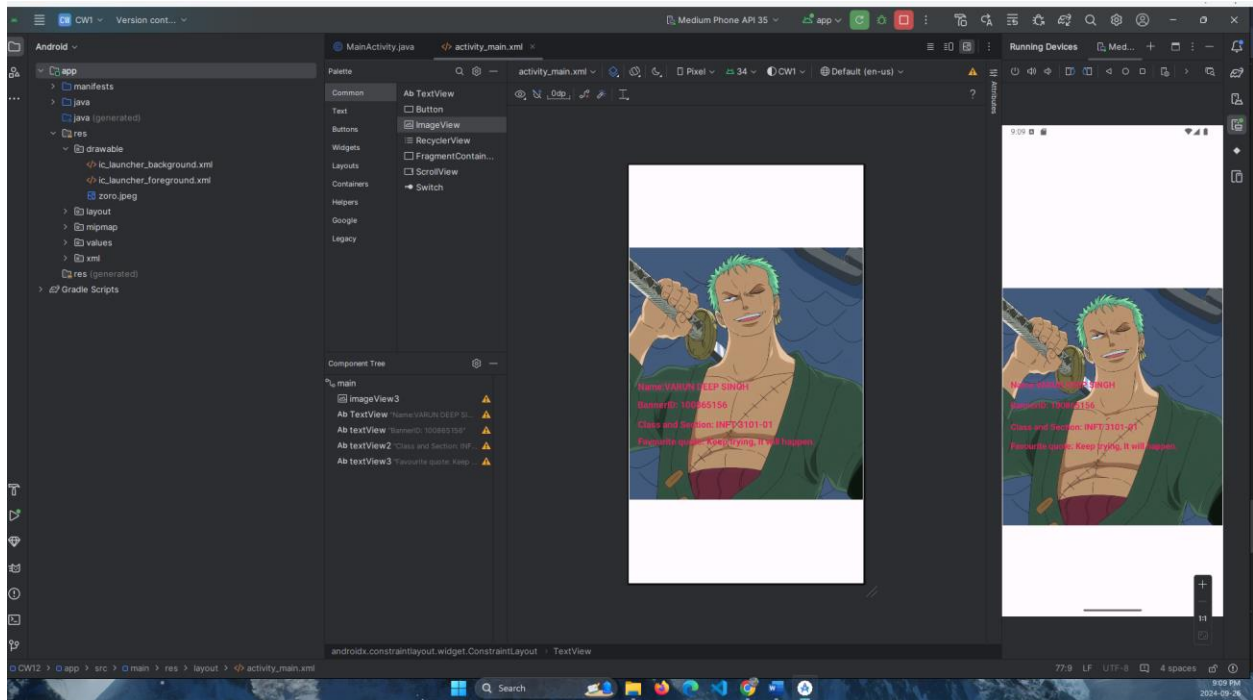
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App preview in Android Studio

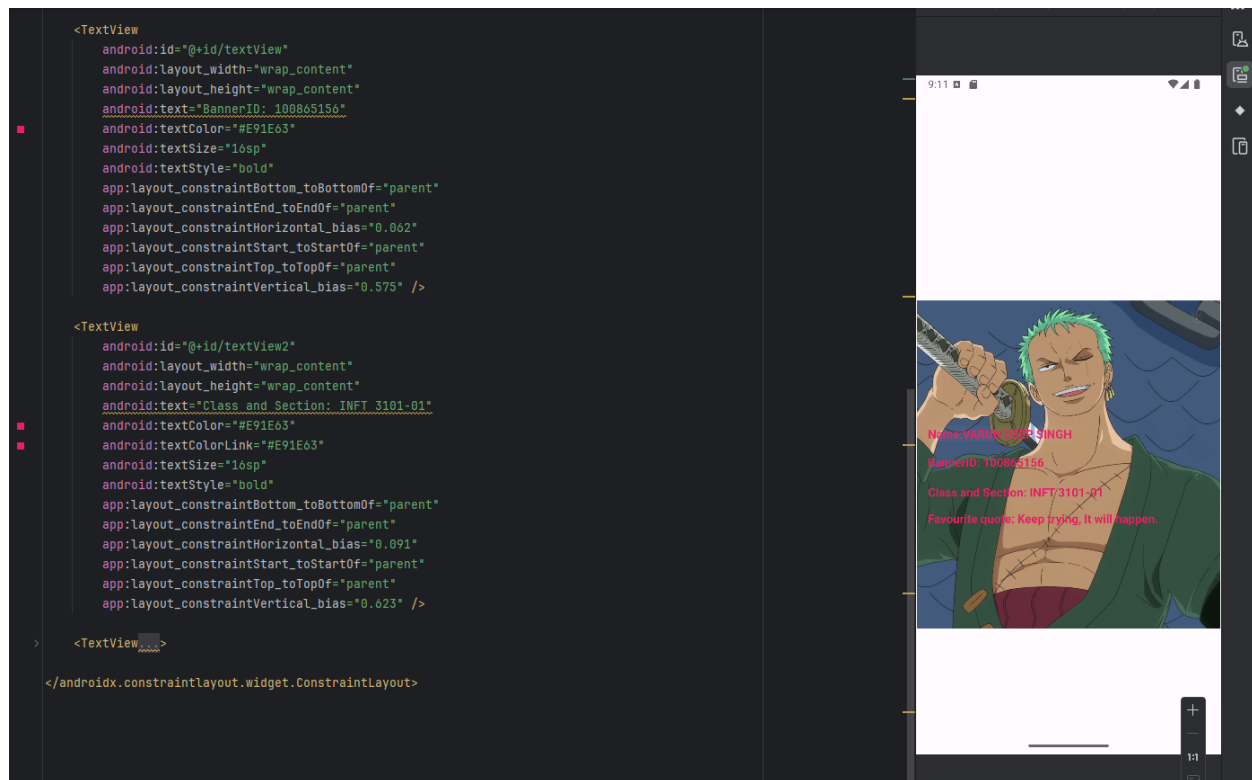


Copy of App Code

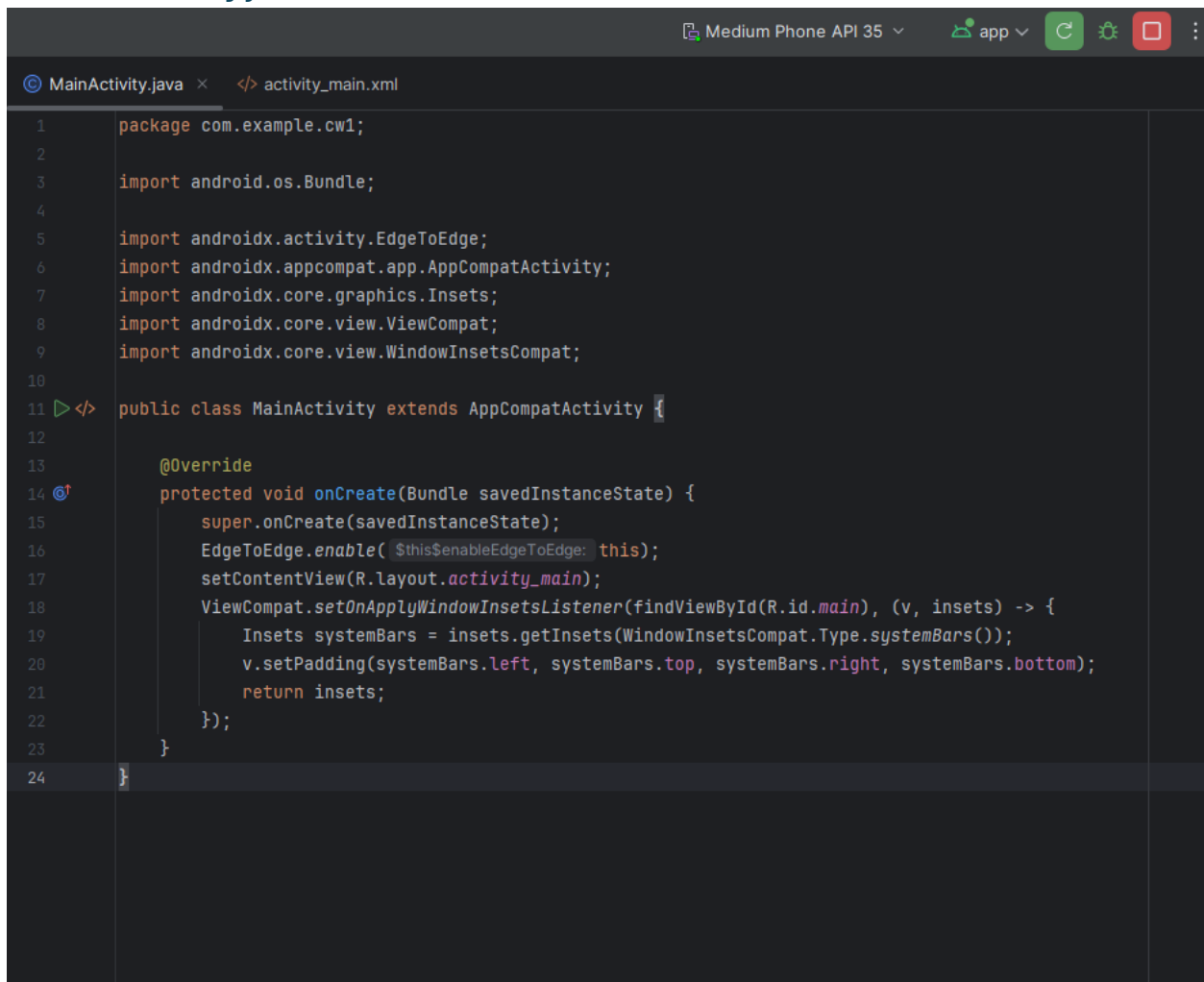
```
Medium Phone API 35  app  [refresh] [debug] [stop] [run] [search] [help]

MainActivity.java  </> activity_main.xml

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:id="@+id/main"
6      android:layout_width="match_parent"
7      android:layout_height="match_parent"
8      tools:context=".MainActivity">
9
10     <ImageView
11         android:id="@+id/imageView3"
12         android:layout_width="409dp"
13         android:layout_height="729dp"
14         android:layout_marginStart="1dp"
15         android:layout_marginEnd="1dp"
16         android:layout_marginBottom="2dp"
17         app:layout_constraintBottom_toBottomOf="parent"
18         app:layout_constraintEnd_toEndOf="parent"
19         app:layout_constraintHorizontal_bias="0.0"
20         app:layout_constraintStart_toStartOf="parent"
21         app:layout_constraintTop_toTopOf="parent"
22         app:layout_constraintVertical_bias="1.0"
23         app:srcCompat="@drawable/zoro"
24         tools:srcCompat="@drawable/zoro" />
25
26     <TextView
27         android:layout_width="wrap_content"
28         android:layout_height="wrap_content"
29         android:foreground="#08FFFFFF"
30         android:text="Name:VARUN DEEP SINGH"
31         android:textColor="#E91E63"
32         android:textSize="16sp"
33         android:textStyle="bold"
34         app:layout_constraintBottom_toBottomOf="parent"
35         app:layout_constraintEnd_toEndOf="parent"
36         app:layout_constraintHorizontal_bias="0.074"
37         app:layout_constraintStart_toStartOf="parent"
38         app:layout_constraintTop_toTopOf="parent"
39         app:layout_constraintVertical_bias="0.53" />
40
41     <TextView
```

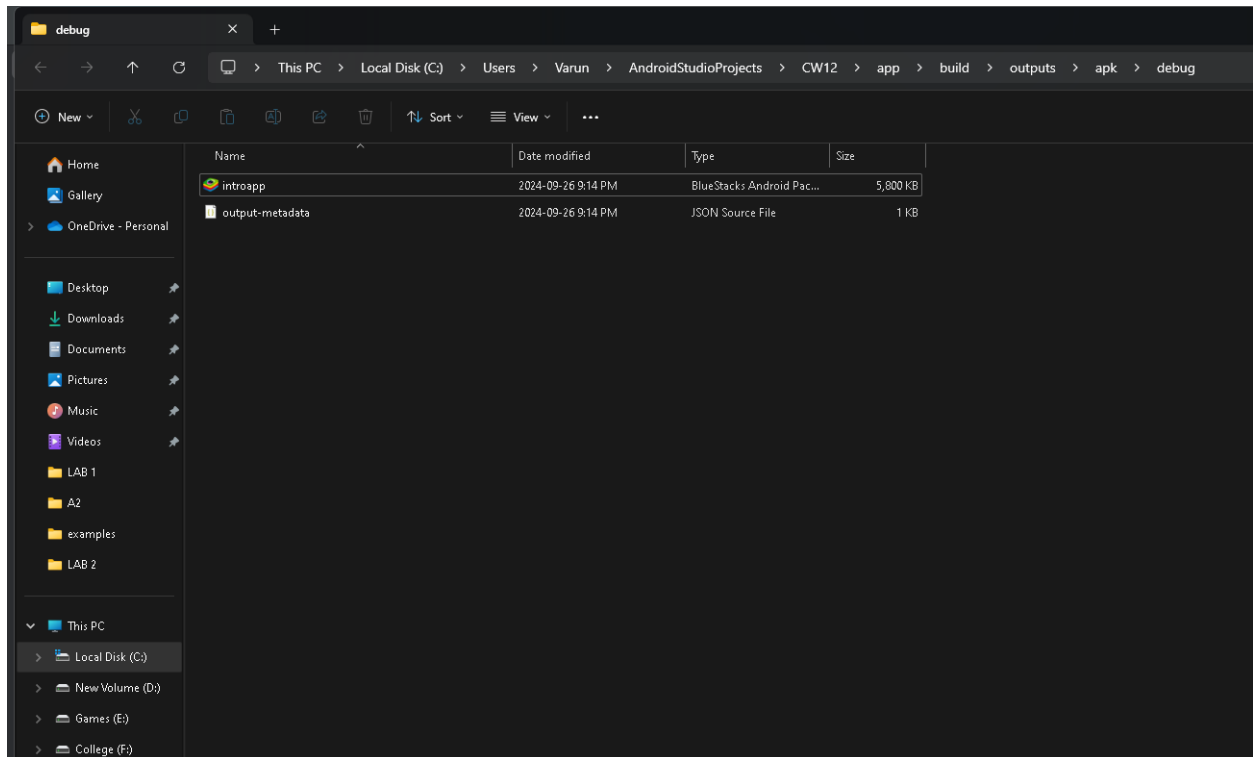


The MainActivity.java

The image shows a screenshot of an IDE window with a dark theme. The title bar at the top indicates 'Medium Phone API 35' and 'app'. The editor shows the file 'MainActivity.java' with line numbers 1 through 24. The code is in Java and implements the MainActivity class, extending AppCompatActivity. It includes imports for Bundle, EdgeToEdge, Insets, ViewCompat, and WindowInsetsCompat. The onCreate method is overridden, calling super.onCreate, enabling EdgeToEdge, setting the content view to R.layout.activity_main, and applying a WindowInsetsListener to the main view to set padding for system bars. The code is as follows:

```
1 package com.example.cw1;
2
3 import android.os.Bundle;
4
5 import androidx.activity.EdgeToEdge;
6 import androidx.appcompat.app.AppCompatActivity;
7 import androidx.core.graphics.Insets;
8 import androidx.core.view.ViewCompat;
9 import androidx.core.view.WindowInsetsCompat;
10
11 public class MainActivity extends AppCompatActivity {
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         EdgeToEdge.enable(this);
17         setContentView(R.layout.activity_main);
18         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
19             Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
20             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
21             return insets;
22         });
23     }
24 }
```

Folder containing the generated APK file.



App preview in the external emulator (Blue Stacks)



REFLECTION:

This class activity aimed to get hands-on experience with Android Studio as it covered building an APK application for Android from scratch. We started with setting up the development environment which included downloading Android Studio and installing it with the JDK (Java development kit). I was already familiar with JDK and Java, which made me better understand the topics the professor covered in the class. The steps were simple and straightforward, so I did not face any difficulties in generating the app. The emulator in Android Studio provides us with a preview tab where styling and insertion of elements can be done simply by dragging and dropping components. The class work helped me gain experience with navigating through different sections of the app. We also had to

test our APK file in an external emulator and check if the out matches the one in Android Studio. To conclude, I can say that It was a fun activity with a lot of fruitful outcomes in terms of knowledge and experience.