**PRACTICAL 8**

**Aim: Create an android application, which displays mobile model’s images in GridView.**

**Code:**

**JAVA FILE: (MainActivity.java)**

package com.example.practical8;

import android.os.Bundle;

import android.widget.GridView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.*activity\_main*);

GridView gridView = findViewById(R.id.*gridView*);

ImageAdapter adapter = new ImageAdapter(this);

gridView.setAdapter(adapter);

}

}

**JAVA FILE: (ImageAdapter.java)**

**package com.example.practical8;**

import android.content.Context;

import android.view.View;

import android.view.ViewGroup;

import android.widget.BaseAdapter;

import android.widget.GridView;

import android.widget.ImageView;

class ImageAdapter extends BaseAdapter {

private final Context mContext;

private final Integer[] mMobileModelImages = {

R.drawable.*car1*,

R.drawable.*car2*,

R.drawable.*car3*

*// Add more image resource IDs for your mobile models*

};

public ImageAdapter(Context context) {

mContext = context;

}

@Override

public int getCount() {

return mMobileModelImages.length;

}

@Override

public Object getItem(int position) {

return mMobileModelImages[position];

}

@Override

public long getItemId(int position) {

return position;

}

@Override

public View getView(int position, View convertView, ViewGroup parent) {

ImageView imageView;

if (convertView == null) {

imageView = new ImageView(mContext);

imageView.setLayoutParams(new GridView.LayoutParams(500, 500)); *// Set the image size*

imageView.setScaleType(ImageView.ScaleType.*CENTER\_CROP*);

} else {

imageView = (ImageView) convertView;

}

*// Set the image resource for the ImageView*

imageView.setImageResource(mMobileModelImages[position]);

return imageView;

}

}

**XML FILE: (activity\_main.xml)**

*<?*xml version="1.0" encoding="utf-8"*?>*

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:text=" Name: Angat Shah \n Enrollment No: 202203103510097 \n Branch: B.Tech CSE"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.497"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

tools:ignore="MissingConstraints" />

<GridView

android:id="@+id/gridView"

android:layout\_width="150dp"

android:layout\_height="495dp"

android:columnWidth="120dp"

android:horizontalSpacing="16dp"

android:numColumns="1"

android:verticalSpacing="25dp"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

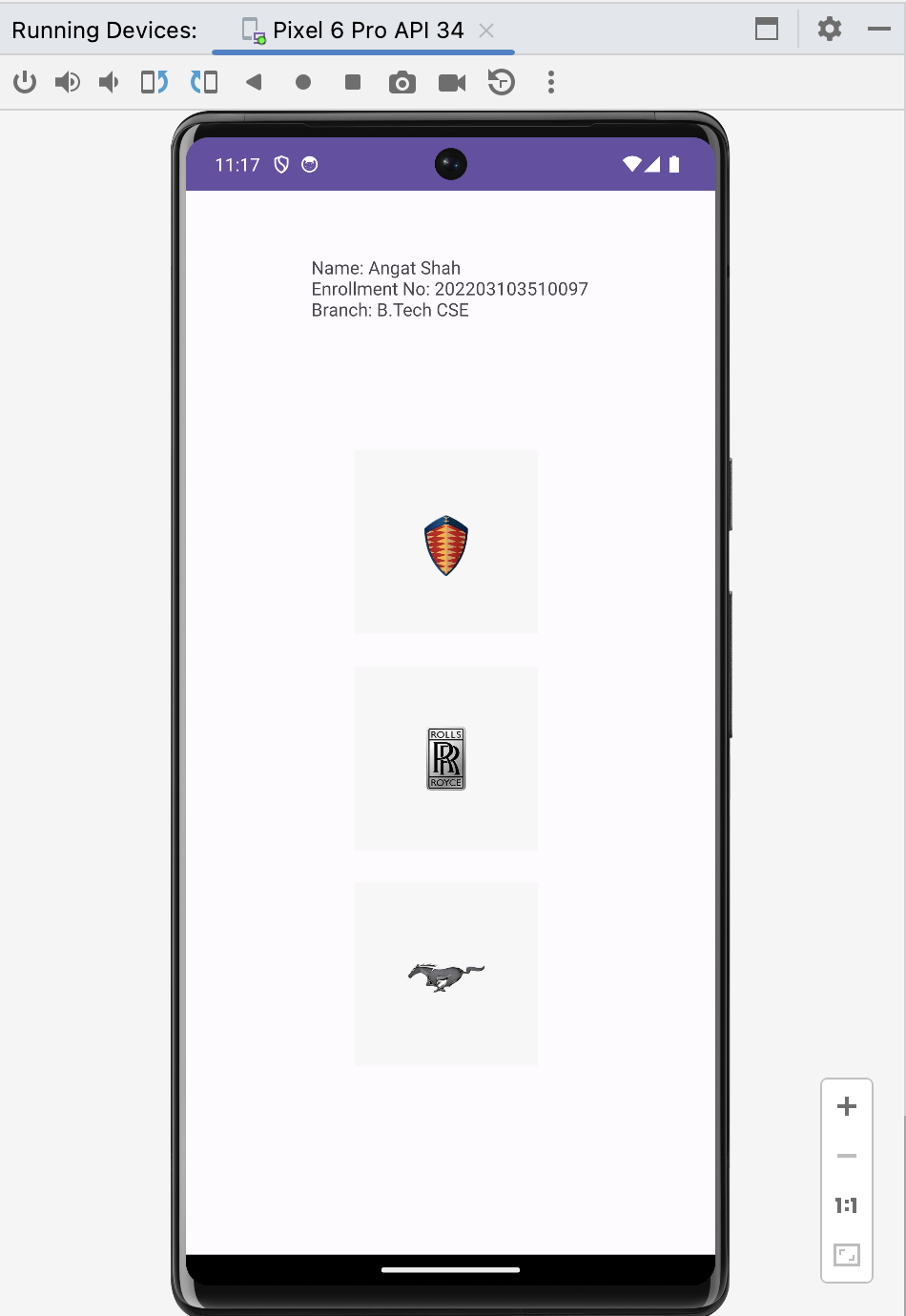
app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.61" />

</androidx.constraintlayout.widget.ConstraintLayout>

**Output:**

****