

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:

