UNIVERSITY OF AGRICULTURE FAISALABAD

DEPARTMENT OF COMPUTER SCIENCE

Degree	**BS Software Engineering**
Semester	**6**th
Course Title	**Mobile App Development**
Course Code	**SE – 512**
Project Name:	**Unique Cars**
Presented By:	**Aima Arif**
Present To:	**Dr.Kareem Ullah**

Frontned:

Unique Cars Ever Made

1970 Lancia Bertone Stratos HF Zero

1942 L'oeuf Electrique

1948 Norman Timbs Special

1970 Lancia Bertone Stratos HF Zero

Unique Cars Ever Made

1934 Voisin C-25 Aerodyne

1935 Bugatti Type 57SC Atlantic

1973 Reliant Robin

1935 Bugatti Type 57SC Atlantic

1961 Amphicar Model 700

1955 Chrysler Ghia Streamline

BMW Isetta 1955

1961 Amphicar Model 700

2020 Porsche Taycan Turbo S

1953 General Motors Firebird 1 XP-

1956 Buick Centurion

1953 General Motors Firebird 1 XP-

MainActivity.java File:

```java
package com.example.cardviewapp;

import androidx.appcompat.app.AppCompatActivity;
import androidx.cardview.widget.CardView;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.Toast;

import com.example.cardviewapp.Adapters.CarAdapter;
import com.example.cardviewapp.Models.CarModel;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity implements
SelectListener{

    RecyclerView recyclerView;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        recyclerView=findViewById(R.id.reView);

        ArrayList<CarModel> arrlist = new ArrayList<>();
        arrlist.add(new CarModel(R.drawable.bertone  , "1970 Lancia Bertone
Stratos HF Zero"));
        arrlist.add(new CarModel(R.drawable.electriq  , "1942 L'oeuf
Electrique"));
        arrlist.add(new CarModel(R.drawable.timbs  , "1948 Norman Timbs
Special"));
        arrlist.add(new CarModel(R.drawable.lancia  , "2021 Tesla
Roadster"));
        arrlist.add(new CarModel(R.drawable.gmd, "2021 GMD T.50"));
        arrlist.add(new CarModel(R.drawable.delorean, "1981 DeLorean DMC-
12"));
        arrlist.add(new CarModel(R.drawable.tesla, "2020 Porsche Taycan Turbo
S"));
        arrlist.add(new CarModel(R.drawable.motor, "1953 General Motors
Firebird 1 XP-"));
        arrlist.add(new CarModel(R.drawable.loeuf, "1956 Buick Centurion"));
        arrlist.add(new CarModel(R.drawable.voisin, "1934 Voisin C-25
Aerodyne"));
        arrlist.add(new CarModel(R.drawable.norman, "1935 Bugatti Type 57SC
Atlantic"));
        arrlist.add(new CarModel(R.drawable.robin, "1973 Reliant Robin"));
        arrlist.add(new CarModel(R.drawable.amphicar, "1961 Amphicar Model
700"));
        arrlist.add(new CarModel(R.drawable.ghia, "1955 Chrysler Ghia
```

```
Streamline"));
        arrlist.add(new CarModel(R.drawable.bmw, "BMW Isetta 1955"));



        CarAdapter adapter = new CarAdapter(arrlist, this, this);
        recyclerView.setAdapter((adapter));

        LinearLayoutManager layoutManager = new LinearLayoutManager(this);
        recyclerView.setLayoutManager(layoutManager);



    }

    @Override
    public void onItemClicked(CarModel carModel) {
        Toast.makeText(this, carModel.getText(), Toast.LENGTH_SHORT).show();
        Toast.makeText(this, String.valueOf(carModel.getImages1()),
Toast.LENGTH_SHORT).show();
    }
}
```

CarAdapter.java:

```
package com.example.cardviewapp.Adapters;

import android.annotation.SuppressLint;
import android.content.Context;
import android.text.Layout;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import com.example.cardviewapp.Models.CarModel;
import com.example.cardviewapp.R;
import com.example.cardviewapp.SelectListener;
import androidx.cardview.widget.CardView;

import java.util.ArrayList;

public class CarAdapter extends RecyclerView.Adapter<CarAdapter.viewHolder> {
    ArrayList<CarModel> arrlist;
    Context context;
    private SelectListener listener;


    public CarAdapter(ArrayList<CarModel> arrlist,  Context context,
SelectListener listener){
        this.arrlist = arrlist;
        this.context = context;
        this.listener = listener;
```

```java
        }

    @NonNull
    @Override
    public viewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
        View view =
LayoutInflater.from(context).inflate(R.layout.sample_recyclerview,parent,fals
e);
        return new viewHolder(view);
    }

    @Override
    public void onBindViewHolder(@NonNull viewHolder holder,
@SuppressLint("RecyclerView") int position) {
        CarModel model = arrlist.get(position);
        holder.imgview.setImageResource(model.getImages1());
        holder.txtview.setText(model.getText());
        holder.cardView.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                listener.onItemClicked(arrlist.get(position));
            }
        });

    }

    @Override
    public int getItemCount() {
        return arrlist.size();
    }

    public class viewHolder extends RecyclerView.ViewHolder{
        ImageView imgview;
        TextView txtview;
        CardView cardView;

        public viewHolder(@NonNull View itemView){
            super(itemView);
            imgview = itemView.findViewById(R.id.imageView);
            txtview = itemView.findViewById(R.id.textView);
            cardView = itemView.findViewById(R.id.c1);
        }

    }
}
```

CarModel.java:

```java
package com.example.cardviewapp.Models;

public class CarModel {
    private int images1;
    private String text;

    public CarModel(int images1, String text) {
        this.images1 = images1;
```

```java
        this.text = text;
    }

    public int getImages1() {
        return images1;
    }

    public void setImages1(int images1) {
        this.images1 = images1;
    }

    public String getText() {
        return text;
    }

    public void setText(String text) {
        this.text = text;
    }
}
```