**google-services.json**

{

"project\_info": {

"project\_number": "5040201927958",

"firebase\_url": "https://automobile-10502.firebaseio.com",

"project\_id": "automobile-10502",

"storage\_bucket": "automobile-10502.appspot.com"

},

"client": [

{

"client\_info": {

"mobilesdk\_app\_id": "1:1020330918429:android:3657b30eef9e2874a93cf4",

"android\_client\_info": {

"package\_name": "com.auto.automobile"

}

},

"oauth\_client": [

{

"client\_id": "1020330918429-dvbb7njn6toj324pkncitk0brv859oe8.apps.googleusercontent.com",

"client\_type": 1,

"android\_info": {

"package\_name": "com.auto.automobile",

"certificate\_hash": "27e353ff4278b2b4ade5c1dcc87e15efca24d666"

}

},

{

"client\_id": "1020330918429-tn22h4cjjdqoopt8deub6au3go8tq32f.apps.googleusercontent.com",

"client\_type": 3

}

],

"api\_key": [

{

"current\_key": "AIzaSyAFl1SsAO5zxuDQZkOa-xER-y67IAl9GG0"

}

],

"services": {

"appinvite\_service": {

"other\_platform\_oauth\_client": [

{

"client\_id": "1020330918429-tn22h4cjjdqoopt8deub6au3go8tq32f.apps.googleusercontent.com",

"client\_type": 3

}

]

}

}

}

],

"configuration\_version": "1"

}

**XML Files:**

**AndroidManifest.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 package="com.iqrauniversity.automobile"**>  
  
 <**uses-permission android:name="android.permission.READ\_EXTERNAL\_STORAGE"** />  
 <**uses-permission android:name="android.permission.Write\_EXTERNAL\_STORAGE"** />  
 <**uses-permission android:name="android.permission.INTERNET"** />  
  
 <**application  
 android:allowBackup="true"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/AppTheme"**>  
 <**activity android:name=".SellActivity"**></**activity**>  
 <**activity android:name=".LoginActivity"**></**activity**>  
 <**activity android:name=".RegisterActivity"** />  
 <**activity android:name=".VehicleDetailScreen"** />  
 <**activity android:name=".FilterResults"** />  
 <**activity android:name=".FilterScreen"** />  
 <**activity android:name=".SplashScreen"**>  
 <**intent-filter**>  
 <**action android:name="android.intent.action.MAIN"** />  
  
 <**category android:name="android.intent.category.LAUNCHER"** />  
 </**intent-filter**>  
 </**activity**>  
 <**activity  
 android:name=".MainActivity"  
 android:theme="@style/AppTheme.NoActionBar"** />  
 </**application**>  
  
</**manifest**>

**Activity\_filtre\_results.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=".FilterResults"**>  
  
  
 <**androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recycler\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Activity\_filtre\_screen.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=".FilterScreen"**>  
  
 <**RelativeLayout  
 android:id="@+id/make\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginEnd="16dp"  
 android:layout\_marginTop="50dp"  
 android:background="@drawable/edit\_txt\_bg"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"**>  
  
  
 <**androidx.appcompat.widget.AppCompatSpinner  
 android:id="@+id/make\_spinner"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:hint="select age"  
 android:layout\_marginStart="1dp"  
 android:spinnerMode="dropdown"  
 android:layout\_centerVertical="true"**/>  
  
 </**RelativeLayout**>  
  
 <**RelativeLayout  
 android:id="@+id/model\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginEnd="16dp"  
 android:layout\_marginTop="20dp"  
 android:background="@drawable/edit\_txt\_bg"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@id/make\_layout"  
 app:layout\_constraintStart\_toStartOf="parent"**>  
  
  
 <**androidx.appcompat.widget.AppCompatSpinner  
 android:id="@+id/model\_spinner"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:hint="select age"  
 android:layout\_marginStart="1dp"  
 android:spinnerMode="dropdown"  
 android:layout\_centerVertical="true"**/>  
  
 </**RelativeLayout**>  
  
 <**RelativeLayout  
 android:id="@+id/tramission\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginEnd="16dp"  
 android:layout\_marginTop="20dp"  
 android:background="@drawable/edit\_txt\_bg"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@id/model\_layout"  
 app:layout\_constraintStart\_toStartOf="parent"**>  
  
  
 <**androidx.appcompat.widget.AppCompatSpinner  
 android:id="@+id/tramission\_spinner"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:hint="select age"  
 android:layout\_marginStart="1dp"  
 android:spinnerMode="dropdown"  
 android:layout\_centerVertical="true"**/>  
  
 </**RelativeLayout**>  
  
 <**RelativeLayout  
 android:id="@+id/mileage\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="40dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginEnd="16dp"  
 android:layout\_marginTop="20dp"  
 android:background="@drawable/edit\_txt\_bg"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@id/tramission\_layout"  
 app:layout\_constraintStart\_toStartOf="parent"**>  
  
  
 <**androidx.appcompat.widget.AppCompatSpinner  
 android:id="@+id/mileage\_spinner"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:hint="select age"  
 android:layout\_marginStart="1dp"  
 android:spinnerMode="dropdown"  
 android:layout\_centerVertical="true"**/>  
  
 </**RelativeLayout**>  
  
 <**Button  
 android:id="@+id/submit\_button"  
 android:layout\_width="150dp"  
 android:layout\_height="wrap\_content"  
 android:text="Submit"  
 android:layout\_marginBottom="50dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Activity\_login.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollView  
 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"  
 android:fillViewport="true"  
 tools:context=".LoginActivity"**>  
  
 <**androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/white"**>  
  
 <**de.hdodenhof.circleimageview.CircleImageView  
 android:id="@+id/imageView"  
 android:layout\_width="95dp"  
 android:layout\_height="95dp"  
 android:layout\_marginTop="30dp"  
 android:layout\_marginBottom="80dp"  
 android:src="@drawable/add\_user\_icon"  
 app:layout\_constraintBottom\_toTopOf="@+id/email\_login"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 <**androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidLine"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintGuide\_percent="0.5"  
 android:orientation="horizontal"**/>  
  
 <**EditText  
 android:id="@+id/email\_login"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Email"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="textPersonName"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/guidLine"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/password\_login"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Password"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="textPassword"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/guidLine"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**Button  
 android:id="@+id/login\_btn"  
 android:layout\_width="166dp"  
 android:layout\_height="wrap\_content"  
 android:text="Login"  
 android:background="@drawable/register\_btn\_bg"  
 android:textColor="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/password\_login"**/>  
  
  
  
 <**ProgressBar  
 android:id="@+id/progress\_bar"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:visibility="gone"  
 app:layout\_constraintBottom\_toBottomOf="@+id/login\_btn"  
 app:layout\_constraintStart\_toStartOf="@+id/login\_btn"  
 app:layout\_constraintEnd\_toEndOf="@+id/login\_btn"  
 app:layout\_constraintTop\_toTopOf="@+id/login\_btn"**/>  
  
 <**TextView  
 android:id="@+id/or\_sign\_up"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="or signup"  
 android:textSize="18sp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/login\_btn"** />  
  
  
 </**androidx.constraintlayout.widget.ConstraintLayout**>  
  
</**ScrollView**>

**Activity\_register.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollView  
 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"  
 android:fillViewport="true"  
 tools:context=".RegisterActivity"**>  
  
 <**androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/white"**>  
  
 <**androidx.constraintlayout.widget.Guideline  
 android:id="@+id/guidLine"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintGuide\_percent="0.5"  
 android:orientation="horizontal"**/>  
  
  
 <**de.hdodenhof.circleimageview.CircleImageView  
 android:id="@+id/user\_image"  
 android:layout\_width="95dp"  
 android:layout\_height="95dp"  
 android:layout\_marginTop="30dp"  
 android:layout\_marginBottom="80dp"  
 android:src="@drawable/add\_user\_icon"  
 app:layout\_constraintBottom\_toTopOf="@+id/name"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 <**EditText  
 android:id="@+id/name"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Name"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:maxLines="1"  
 android:layout\_marginBottom="20dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/email"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/email"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Email"  
 android:paddingStart="16dp"  
 android:maxLines="1"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="textEmailAddress"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/guidLine"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**EditText  
 android:id="@+id/number"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="number"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="number"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 android:maxLines="1"  
 app:layout\_constraintTop\_toBottomOf="@+id/guidLine"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/address"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="address"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:maxLines="1"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/number"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Password"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="textPassword"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 android:maxLines="1"  
 app:layout\_constraintTop\_toBottomOf="@+id/address"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
  
 <**EditText  
 android:id="@+id/conf\_password"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Confirm Password"  
 android:paddingStart="16dp"  
 android:maxLines="1"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="textPassword"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/password"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**Button  
 android:id="@+id/register\_btn"  
 android:layout\_width="166dp"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/register\_btn\_bg"  
 android:text="Register"  
 android:textColor="@color/white"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginBottom="20dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/conf\_password"** />  
  
 <**ProgressBar  
 android:id="@+id/progress\_bar"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="@+id/register\_btn"  
 app:layout\_constraintStart\_toStartOf="@+id/register\_btn"  
 app:layout\_constraintEnd\_toEndOf="@+id/register\_btn"  
 app:layout\_constraintTop\_toTopOf="@+id/register\_btn"**/>  
  
 </**androidx.constraintlayout.widget.ConstraintLayout**>  
  
  
  
</**ScrollView**>

**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"  
 android:background="@color/white"  
 tools:context=".MainActivity"**>  
  
 <**androidx.appcompat.widget.Toolbar  
 android:id="@+id/tool\_bar"  
 android:layout\_width="match\_parent"  
 android:layout\_height="?actionBarSize"  
 android:background="@color/colorPrimaryDark"  
 android:elevation="4dp"  
 app:popupTheme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"  
 app:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"**/>  
  
 <**FrameLayout  
 android:id="@+id/fragment\_container"  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/tool\_bar"**>  
  
 </**FrameLayout**>  
  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Activity\_sell.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollView  
 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"  
 android:fillViewport="true"  
 tools:context=".SellActivity"**>  
  
 <**androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@color/white"**>  
  
 <**EditText  
 android:id="@+id/make"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="make"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginBottom="20dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/add\_photos\_btn"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/model"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="model"  
 android:paddingStart="16dp"  
 android:layout\_marginTop="10dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="number"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/make"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/mileage"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="mileage"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/model"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/description"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="description"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/mileage"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**EditText  
 android:id="@+id/specs"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Transmission"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/description"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**EditText  
 android:id="@+id/features"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="features"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/specs"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**EditText  
 android:id="@+id/city"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="city"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/features"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
  
 <**EditText  
 android:id="@+id/area"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="area"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="text"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/city"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**EditText  
 android:id="@+id/contactnumber"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="contact number"  
 android:paddingStart="16dp"  
 android:background="@drawable/edit\_text\_bg"  
 android:inputType="number"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginEnd="50dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/area"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**androidx.recyclerview.widget.RecyclerView  
 android:id="@+id/recycler\_view"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"**/>  
  
 <**Button  
 android:id="@+id/add\_photos\_btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Add Photos"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintTop\_toBottomOf="@+id/recycler\_view"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**Button  
 android:id="@+id/submit\_photos\_btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:text="Submit"  
 android:layout\_marginBottom="10dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/contactnumber"** />  
  
  
 </**androidx.constraintlayout.widget.ConstraintLayout**>  
  
  
  
</**ScrollView**>

**Activity\_splach\_screen.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"  
 android:background="@drawable/car"  
 tools:context=".SplashScreen"**>  
  
 <**TextView  
 android:id="@+id/imageView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="20dp"  
 android:text="Splash Screen"  
 android:gravity="center"  
 android:textSize="22sp"  
 app:layout\_constraintBottom\_toTopOf="@+id/textView"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Name :Sanaullah \nRegister no : 37784\n "  
 android:textSize="29sp"  
 android:textColor="@color/white"  
 android:layout\_marginBottom="40dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Activity\_Vehicle\_detail\_Screen.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollView  
 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"  
 android:fillViewport="true"  
 tools:context=".VehicleDetailScreen"**>  
  
  
 <**androidx.constraintlayout.widget.ConstraintLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**ImageView  
 android:id="@+id/detail\_image"  
 android:layout\_width="match\_parent"  
 android:layout\_height="300dp"  
 android:layout\_marginTop="10dp"  
 android:scaleType="centerCrop"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/mark\_favourite"** />  
  
 <**TextView  
 android:id="@+id/txt\_details"  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:text="vehicle detail"  
 android:textSize="18dp"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginStart="10dp"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginEnd="10dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/detail\_image"** />  
  
 <**ImageView  
 android:id="@+id/mark\_favourite"  
 android:layout\_width="30dp"  
 android:layout\_height="30dp"  
 android:text="Mark Favourite"  
 android:src="@drawable/like\_icon"  
 android:layout\_marginStart="20dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 </**androidx.constraintlayout.widget.ConstraintLayout**>  
  
</**ScrollView**>

**Add\_photos.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
  
 <**ImageView  
 android:id="@+id/post\_img"  
 android:layout\_width="120dp"  
 android:layout\_height="120dp"  
 android:layout\_centerHorizontal="true"  
 android:scaleType="centerCrop"**/>  
  
</**RelativeLayout**>

**Background.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**shape  
 android:shape="rectangle"  
 xmlns:android="http://schemas.android.com/apk/res/android"**>  
  
 <**gradient  
 android:startColor="#ff8080"  
 android:endColor="#ccccff"  
 android:angle="90"  
 android:type="linear"**/>  
  
</**shape**>

**Add\_user\_icon.xml**

<**vector xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:aapt="http://schemas.android.com/aapt"  
 android:width="512dp"  
 android:height="512dp"  
 android:viewportWidth="512"  
 android:viewportHeight="512"**>  
 <**path  
 android:pathData="m512,256c0,141.387 -114.613,256 -256,256s-256,-114.613 -256,-256 114.613,-256 256,-256 256,114.613 256,256zM512,256"**>  
 <**aapt:attr name="android:fillColor"**>  
 <**gradient   
 android:startY="256"  
 android:startX="0"  
 android:endY="256"  
 android:endX="512"  
 android:type="linear"**>  
 <**item android:offset="0" android:color="#FF00F38D"**/>  
 <**item android:offset="1" android:color="#FF009EFF"**/>  
 </**gradient**>  
 </**aapt:attr**>  
 </**path**>  
 <**path  
 android:pathData="m353.133,171.449c0,-53.457 -43.492,-96.949 -96.953,-96.949 -53.457,0 -96.949,43.492 -96.949,96.949 0,31.637 15.23,59.777 38.746,77.488 -62.961,23.633 -107.895,84.445 -107.895,155.563h30c0,-75.047 61.055,-136.098 136.098,-136.098 53.461,0 96.953,-43.492 96.953,-96.953zM256.18,238.402c-36.918,0 -66.949,-30.035 -66.949,-66.953s30.031,-66.949 66.949,-66.949c36.918,0 66.953,30.031 66.953,66.949s-30.035,66.953 -66.953,66.953zM256.18,238.402"  
 android:fillColor="#fff"**/>  
 <**path  
 android:pathData="m422.918,322.914h-53.781v-53.781h-30v53.781h-53.781v30h53.781v53.781h30v-53.781h53.781zM422.918,322.914"  
 android:fillColor="#fff"**/>  
</**vector**>

**Edit\_text\_bg.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**shape  
 android:shape="rectangle"  
 xmlns:android="http://schemas.android.com/apk/res/android"**>  
  
 <**solid  
 android:color="#fafafa"**/>  
  
 <**corners  
 android:radius="32dp"**/>  
  
 <**padding  
 android:top="12dp"  
 android:left="12dp"  
 android:bottom="12dp"  
 android:right="12dp"**/>  
  
</**shape**>

**Edit\_txt\_bg.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**shape  
 android:shape="rectangle"  
 xmlns:android="http://schemas.android.com/apk/res/android"**>  
  
 <**stroke  
 android:color="#226F2F"  
 android:width="1dp"**/>  
  
 <**solid  
 android:color="#FFFFFF"** />  
  
 <**corners  
 android:radius="10dp"**/>  
  
</**shape**>

**Ic\_launcher\_background**

*<?***xml version="1.0" encoding="utf-8"***?>*<**vector xmlns:android="http://schemas.android.com/apk/res/android"  
 android:width="108dp"  
 android:height="108dp"  
 android:viewportWidth="108"  
 android:viewportHeight="108"**>  
 <**path  
 android:fillColor="#3DDC84"  
 android:pathData="M0,0h108v108h-108z"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M9,0L9,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,0L19,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M29,0L29,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M39,0L39,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M49,0L49,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M59,0L59,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M69,0L69,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M79,0L79,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M89,0L89,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M99,0L99,108"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,9L108,9"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,19L108,19"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,29L108,29"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,39L108,39"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,49L108,49"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,59L108,59"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,69L108,69"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,79L108,79"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,89L108,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M0,99L108,99"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,29L89,29"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,39L89,39"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,49L89,49"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,59L89,59"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,69L89,69"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M19,79L89,79"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M29,19L29,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M39,19L39,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M49,19L49,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M59,19L59,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M69,19L69,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
 <**path  
 android:fillColor="#00000000"  
 android:pathData="M79,19L79,89"  
 android:strokeWidth="0.8"  
 android:strokeColor="#33FFFFFF"** />  
</**vector**>

**Ic\_launcher\_foreground.xml**

<**vector xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:aapt="http://schemas.android.com/aapt"  
 android:width="108dp"  
 android:height="108dp"  
 android:viewportWidth="108"  
 android:viewportHeight="108"**>  
 <**path android:pathData="M31,63.928c0,0 6.4,-11 12.1,-13.1c7.2,-2.6 26,-1.4 26,-1.4l38.1,38.1L107,108.928l-32,-1L31,63.928z"**>  
 <**aapt:attr name="android:fillColor"**>  
 <**gradient  
 android:endX="85.84757"  
 android:endY="92.4963"  
 android:startX="42.9492"  
 android:startY="49.59793"  
 android:type="linear"**>  
 <**item  
 android:color="#44000000"  
 android:offset="0.0"** />  
 <**item  
 android:color="#00000000"  
 android:offset="1.0"** />  
 </**gradient**>  
 </**aapt:attr**>  
 </**path**>  
 <**path  
 android:fillColor="#FFFFFF"  
 android:fillType="nonZero"  
 android:pathData="M65.3,45.828l3.8,-6.6c0.2,-0.4 0.1,-0.9 -0.3,-1.1c-0.4,-0.2 -0.9,-0.1 -1.1,0.3l-3.9,6.7c-6.3,-2.8 -13.4,-2.8 -19.7,0l-3.9,-6.7c-0.2,-0.4 -0.7,-0.5 -1.1,-0.3C38.8,38.328 38.7,38.828 38.9,39.228l3.8,6.6C36.2,49.428 31.7,56.028 31,63.928h46C76.3,56.028 71.8,49.428 65.3,45.828zM43.4,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2c-0.3,-0.7 -0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C45.3,56.528 44.5,57.328 43.4,57.328L43.4,57.328zM64.6,57.328c-0.8,0 -1.5,-0.5 -1.8,-1.2s-0.1,-1.5 0.4,-2.1c0.5,-0.5 1.4,-0.7 2.1,-0.4c0.7,0.3 1.2,1 1.2,1.8C66.5,56.528 65.6,57.328 64.6,57.328L64.6,57.328z"  
 android:strokeWidth="1"  
 android:strokeColor="#00000000"** />  
</**vector**>

**Register\_btn\_bg.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**shape  
 android:shape="rectangle"  
 xmlns:android="http://schemas.android.com/apk/res/android"**>  
  
 <**solid  
 android:color="@color/colorPrimary"**/>  
  
 <**corners  
 android:radius="32dp"**/>  
  
</**shape**>

**Colors.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**resources**>  
 <**color name="colorPrimary"**>#00b0ff</**color**>  
 <**color name="colorPrimaryDark"**>#00b0ff</**color**>  
 <**color name="colorAccent"**>#00b0ff</**color**>  
 <**color name="white"**>#FFFFFF</**color**>  
 <**color name="black"**>#000000</**color**>  
 <**color name="view\_color"**>#ADADAD</**color**>  
</**resources**>

**Style.xml**

<**resources**>  
 *<!-- Base application theme. -->* <**style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar"**>  
 *<!-- Customize your theme here. -->* <**item name="colorPrimary"**>@color/colorPrimary</**item**>  
 <**item name="colorPrimaryDark"**>@color/colorPrimaryDark</**item**>  
 <**item name="colorAccent"**>@color/colorAccent</**item**>  
 </**style**>  
  
 <**style name="AppTheme.NoActionBar"**>  
 <**item name="windowActionBar"**>false</**item**>  
 <**item name="windowNoTitle"**>true</**item**>  
 </**style**>  
  
</**resources**>

**String.xml**

<**resources**>  
 <**string name="app\_name"**>Automobile</**string**>  
 *<!--* ***TODO: Remove or change this placeholder text*** *-->* <**string name="hello\_blank\_fragment"**>Hello blank fragment</**string**>  
  
  
 <**string name="navigation\_drawer\_open"**>Open navigation drawer</**string**>  
 <**string name="navigation\_drawer\_close"**>Close navigation drawer</**string**>  
 <**string name="nav\_header\_title"**>Android Studio</**string**>  
 <**string name="nav\_header\_subtitle"**>android.studio@android.com</**string**>  
 <**string name="nav\_header\_desc"**>Navigation header</**string**>  
 <**string name="action\_settings"**>Settings</**string**>  
  
 <**string name="menu\_home"**>Home</**string**>  
 <**string name="menu\_gallery"**>Gallery</**string**>  
 <**string name="menu\_slideshow"**>Slideshow</**string**>  
 <**string name="menu\_tools"**>Tools</**string**>  
 <**string name="menu\_share"**>Share</**string**>  
 <**string name="menu\_send"**>Send</**string**>  
</**resources**>

**Kotlin Files:**

**AddphotoAdapter**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Context  
**import** android.os.Parcel  
**import** android.os.Parcelable  
**import** android.view.LayoutInflater  
**import** android.view.View  
**import** android.view.ViewGroup  
**import** android.widget.ImageView  
**import** androidx.recyclerview.widget.RecyclerView  
**import** java.util.\*  
  
**class** AddPhotoAdapter(**private val context**: Context, **private val data**: ArrayList<PostModel>) : RecyclerView.Adapter<AddPhotoAdapter.MyViewHolder>() {  
  
 **override fun** onCreateViewHolder(parent: ViewGroup, viewType: Int): MyViewHolder {  
 **val** view = LayoutInflater.from(**context**).inflate(R.layout.*add\_photos*, parent, **false**)  
 **return** MyViewHolder(view)  
 }  
  
 **override fun** onBindViewHolder(holder: MyViewHolder, position: Int) {  
 **val** bitmap = **data**[position].**bitmap** holder.**post\_img**.setImageBitmap(bitmap)  
 }  
  
 **override fun** getItemCount(): Int {  
 **return data**.**size** }  
  
 **inner class** MyViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {  
 **val post\_img**: ImageView = itemView.findViewById(R.id.*post\_img*)  
  
 }  
  
}

**FavAdapter**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Context  
**import** android.content.Intent  
**import** android.net.Uri  
**import** android.view.LayoutInflater  
**import** android.view.View  
**import** android.view.ViewGroup  
**import** android.widget.Button  
**import** android.widget.ImageView  
**import** androidx.recyclerview.widget.RecyclerView  
**import** com.bumptech.glide.Glide  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.iqrauniversity.automobile.FavAdapter.FavViewHolder  
  
**internal class** FavAdapter(**private val context**: Context, **private val listPostModel**: MutableList<PostModel?>?) : RecyclerView.Adapter<FavViewHolder>() {  
 **override fun** onCreateViewHolder(parent: ViewGroup, viewType: Int): FavViewHolder {  
 **val** view = LayoutInflater.from(**context**).inflate(R.layout.*item\_fav*, parent, **false**)  
 **return** FavViewHolder(view)  
 }  
  
 **override fun** onBindViewHolder(holder: FavViewHolder, position: Int) {  
 **val** imageurl = **listPostModel**?.get(position)?.**imageurl** Glide.with(**context**).load(imageurl).into(holder.**img\_car**)  
 holder.**dial\_btn**.setOnClickListener **{  
 val** contactNumber = **listPostModel**?.get(position)?.**contactNumber  
 val** intent = Intent(Intent.*ACTION\_DIAL*)  
 intent.*data* = Uri.parse(**"tel:$**contactNumber**"**)  
 **context**.startActivity(intent)  
 **}** holder.**email\_btn**.setOnClickListener **{  
 val** firebaseUser = FirebaseAuth.getInstance().*currentUser* **val** email = firebaseUser!!.*email* **val** intent = Intent(Intent.*ACTION\_SEND*)  
 **val** recipients = *arrayOf*(email)  
 intent.putExtra(Intent.*EXTRA\_EMAIL*, recipients)  
 intent.putExtra(Intent.*EXTRA\_SUBJECT*, **"Car Ad"**)  
 intent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(Intent.*EXTRA\_CC*, **"mailcc@gmail.com"**)  
 intent.*type* = **"text/html"** intent.setPackage(**"com.google.android.gm"**)  
 **context**.startActivity(Intent.createChooser(intent, **"Send mail"**))  
 **}** holder.**share\_btn**.setOnClickListener **{  
 val** txtIntent = Intent(Intent.*ACTION\_SEND*)  
 txtIntent.*type* = **"text/plain"** txtIntent.putExtra(Intent.*EXTRA\_SUBJECT*, **listPostModel**?.get(position)?.**city**)  
 txtIntent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 **context**.startActivity(Intent.createChooser(txtIntent, **"Share"**))  
 **}** holder.**img\_car**.setOnClickListener **{  
 val** intent = Intent(**context**, VehicleDetailScreen::**class**.*java*)  
 intent.putExtra(**"AREA"**, **listPostModel**?.get(position)?.**area**)  
 intent.putExtra(**"CITY"**, **listPostModel**?.get(position)?.**city**)  
 intent.putExtra(**"Description"**, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(**"FEATURES"**, **listPostModel**?.get(position)?.**features**)  
 intent.putExtra(**"IMAGEURL"**, **listPostModel**?.get(position)?.**imageurl**)  
 intent.putExtra(**"MAKE"**, **listPostModel**?.get(position)?.**make**)  
 intent.putExtra(**"MILEAGE"**, **listPostModel**?.get(position)?.**mileage**)  
 intent.putExtra(**"MODEL"**, **listPostModel**?.get(position)?.**model**)  
 intent.putExtra(**"SPECS"**, **listPostModel**?.get(position)?.**specs**)  
 intent.putExtra(**"PUSHID"**, **listPostModel**?.get(position)?.**pushId**)  
 **context**.startActivity(intent)  
 **}** }  
  
 **override fun** getItemCount(): Int {  
 **return listPostModel**!!.**size** }  
  
 **inner class** FavViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {  
 **val img\_car**: ImageView  
 **val dial\_btn**: Button  
 **val email\_btn**: Button  
 **val share\_btn**: Button  
  
 **init** {  
 **img\_car** = itemView.findViewById(R.id.*img\_car*)  
 **dial\_btn** = itemView.findViewById(R.id.*dial\_btn*)  
 **email\_btn** = itemView.findViewById(R.id.*email\_btn*)  
 **share\_btn** = itemView.findViewById(R.id.*share\_btn*)  
 }  
 }  
  
}

**FilteResultAdapter**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Context  
**import** android.content.Intent  
**import** android.net.Uri  
**import** android.view.LayoutInflater  
**import** android.view.View  
**import** android.view.ViewGroup  
**import** android.widget.Button  
**import** android.widget.ImageView  
**import** androidx.recyclerview.widget.RecyclerView  
**import** com.bumptech.glide.Glide  
**import** com.google.firebase.auth.FirebaseAuth  
**import** java.util.\*  
  
**class** FilterResultAdapter(**private val context**: Context, listPostModel: MutableList<PostModel?>?) : RecyclerView.Adapter<FilterResultAdapter.MyViewHolder>() {  
 **private var listPostModel**: MutableList<PostModel?>? = ArrayList()  
 **override fun** onCreateViewHolder(parent: ViewGroup, viewType: Int): MyViewHolder {  
 **val** view = LayoutInflater.from(**context**).inflate(R.layout.*filter\_result\_item*, parent, **false**)  
 **return** MyViewHolder(view)  
 }  
  
 **override fun** onBindViewHolder(holder: MyViewHolder, position: Int) {  
 **val** imageurl = **listPostModel**?.get(position)?.**imageurl** Glide.with(**context**).load(imageurl).into(holder.**img\_car**)  
 holder.**dial\_btn**.setOnClickListener **{  
 val** contactNumber = **listPostModel**?.get(position)?.**contactNumber  
 val** intent = Intent(Intent.*ACTION\_DIAL*)  
 intent.*data* = Uri.parse(**"tel:$**contactNumber**"**)  
 **context**.startActivity(intent)  
 **}** holder.**email\_btn**.setOnClickListener **{  
 val** firebaseUser = FirebaseAuth.getInstance().*currentUser* **val** email = firebaseUser!!.*email* **val** intent = Intent(Intent.*ACTION\_SEND*)  
 **val** recipients = *arrayOf*(email)  
 intent.putExtra(Intent.*EXTRA\_EMAIL*, recipients)  
 intent.putExtra(Intent.*EXTRA\_SUBJECT*, **"Car Ad"**)  
 intent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(Intent.*EXTRA\_CC*, **"mailcc@gmail.com"**)  
 intent.*type* = **"text/html"** intent.setPackage(**"com.google.android.gm"**)  
 **context**.startActivity(Intent.createChooser(intent, **"Send mail"**))  
 **}** holder.**share\_btn**.setOnClickListener **{  
 val** txtIntent = Intent(Intent.*ACTION\_SEND*)  
 txtIntent.*type* = **"text/plain"** txtIntent.putExtra(Intent.*EXTRA\_SUBJECT*, **listPostModel**?.get(position)?.**city**)  
 txtIntent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 **context**.startActivity(Intent.createChooser(txtIntent, **"Share"**))  
 **}** holder.**img\_car**.setOnClickListener **{  
 val** intent = Intent(**context**, VehicleDetailScreen::**class**.*java*)  
 intent.putExtra(**"AREA"**, **listPostModel**?.get(position)?.**area**)  
 intent.putExtra(**"CITY"**, **listPostModel**?.get(position)?.**city**)  
 intent.putExtra(**"Description"**, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(**"FEATURES"**, **listPostModel**?.get(position)?.**features**)  
 intent.putExtra(**"IMAGEURL"**, **listPostModel**?.get(position)?.**imageurl**)  
 intent.putExtra(**"MAKE"**, **listPostModel**?.get(position)?.**make**)  
 intent.putExtra(**"MILEAGE"**, **listPostModel**?.get(position)?.**mileage**)  
 intent.putExtra(**"MODEL"**, **listPostModel**?.get(position)?.**model**)  
 intent.putExtra(**"SPECS"**, **listPostModel**?.get(position)?.**specs**)  
 intent.putExtra(**"PUSHID"**, **listPostModel**?.get(position)?.**pushId**)  
 **context**.startActivity(intent)  
 **}** }  
  
 **override fun** getItemCount(): Int {  
 **return listPostModel**?.**size**!!  
 }  
  
 **inner class** MyViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {  
 **val img\_car**: ImageView  
 **val dial\_btn**: Button  
 **val email\_btn**: Button  
 **val share\_btn**: Button  
  
 **init** {  
 **img\_car** = itemView.findViewById(R.id.*img\_car*)  
 **dial\_btn** = itemView.findViewById(R.id.*dial\_btn*)  
 **email\_btn** = itemView.findViewById(R.id.*email\_btn*)  
 **share\_btn** = itemView.findViewById(R.id.*share\_btn*)  
 }  
 }  
  
 **init** {  
 **this**.**listPostModel** = listPostModel  
 }  
}

**FiltreResult**

**package** com.iqrauniversity.automobile  
  
**import** android.os.Bundle  
**import** android.widget.Toast  
**import** androidx.appcompat.app.AppCompatActivity  
**import** androidx.recyclerview.widget.LinearLayoutManager  
**import** androidx.recyclerview.widget.RecyclerView  
**import** com.google.firebase.database.\*  
**import** java.util.\*  
  
**class** FilterResults : AppCompatActivity() {  
 **private var** recyclerView: RecyclerView? = **null  
 private var** filterResultAdapter: FilterResultAdapter? = **null  
 private var** lstPost: MutableList<PostModel?>? = **null  
 private var** make: String? = **null  
 private var** model: String? = **null  
 private var** mileage: String? = **null  
 private var** transmission: String? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.activity\_filter\_results)  
 make = intent.extras!!.getString(**"MAKE"**)  
 model = intent.extras!!.getString(**"MODEL"**)  
 transmission = intent.extras!!.getString(**"TRANSMISSION"**)  
 mileage = intent.extras!!.getString(**"MILEAGE"**)  
 recyclerView = findViewById(R.id.recycler\_view)  
 recyclerView?.layoutManager = LinearLayoutManager(**this**)  
 query()  
 }  
  
 **private fun** query() {  
 Toast.makeText(**this**, **""** + make, Toast.LENGTH\_SHORT).show()  
 lstPost = ArrayList()  
 **val** databaseReference = FirebaseDatabase.getInstance().getReference(**"Post"**)  
 databaseReference.addValueEventListener(**object** : ValueEventListener {  
 **override fun** onDataChange(dataSnapshot: DataSnapshot) {  
 **if** (dataSnapshot.exists()) {  
  
 **for** (childsnapshot **in** dataSnapshot.children) {  
 **val** postModel = childsnapshot.getValue(PostModel::**class**.java)  
 **if** (postModel?.make == make || postModel?.mileage == mileage || postModel?.model == model || postModel?.specs == transmission) {  
 (lstPost **as** ArrayList<PostModel?>).add(postModel)  
 } **else** {  
 Toast.makeText(**this**@FilterResults, **"wait"**, Toast.LENGTH\_SHORT).show()  
 }  
 }  
 filterResultAdapter = FilterResultAdapter(**this**@FilterResults, lstPost)  
 recyclerView!!.adapter = filterResultAdapter  
 filterResultAdapter!!.notifyDataSetChanged()  
 }  
 }  
  
 **override fun** onCancelled(databaseError: DatabaseError) {}  
 })  
 }  
}

**FiltreScreen**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.os.Bundle  
**import** android.view.View  
**import** android.widget.\*  
**import** android.widget.AdapterView.OnItemSelectedListener  
**import** androidx.appcompat.app.AppCompatActivity  
**import** com.google.firebase.auth.FirebaseUser  
**import** com.google.firebase.database.DatabaseReference  
  
**class** FilterScreen : AppCompatActivity() {  
 **private var** submit\_btn: Button? = **null  
 private var** make\_spinner: Spinner? = **null  
 private var** model\_spinner: Spinner? = **null  
 private var** transmission\_spinner: Spinner? = **null  
 private var** mileage\_spinner: Spinner? = **null  
 private val** make = arrayOf(**"select make"**, **"Toyota"**, **"Honda"**, **"Suzuki"**)  
 **private val** model = arrayOf(**"select model"**, **"2018"**, **"2019"**, **"2020"**)  
 **private val** transmission = arrayOf(**"select transmission"**, **"manual"**, **"auto"**)  
 **private val** mileage = arrayOf(**"select mileage"**, **"1.5"**, **"2.5"**, **"3.5"**, **"1.5"**)  
 **private var** select\_make: String? = **null  
 private var** select\_model: String? = **null  
 private var** select\_transmission: String? = **null  
 private var** select\_mileage: String? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.activity\_filter\_screen)  
 submit\_btn = findViewById(R.id.submit\_button)  
 make\_spinner = findViewById(R.id.make\_spinner)  
 model\_spinner = findViewById(R.id.model\_spinner)  
 transmission\_spinner = findViewById(R.id.tramission\_spinner)  
 mileage\_spinner = findViewById(R.id.mileage\_spinner)  
 **val** makeAdapter = ArrayAdapter(**this**, android.R.layout.simple\_spinner\_dropdown\_item, make)  
 make\_spinner?.adapter = makeAdapter  
 **val** modelAdapter = ArrayAdapter(**this**, android.R.layout.simple\_spinner\_dropdown\_item, model)  
 model\_spinner?.adapter = modelAdapter  
 **val** transmissionAdapter = ArrayAdapter(**this**, android.R.layout.simple\_spinner\_dropdown\_item, transmission)  
 transmission\_spinner?.adapter = transmissionAdapter  
 **val** mileageAdapter = ArrayAdapter(**this**, android.R.layout.simple\_spinner\_dropdown\_item, mileage)  
 mileage\_spinner?.adapter = mileageAdapter  
 submit\_btn?.setOnClickListener(View.OnClickListener **{  
 if** (select\_make != **null**) {  
 **if** (select\_model != **null**) {  
 **if** (select\_transmission != **null**) {  
 **if** (select\_mileage != **null**) {  
 **val** intent = Intent(**this**@FilterScreen, FilterResults::**class**.java)  
 intent.putExtra(**"MAKE"**, select\_make)  
 intent.putExtra(**"MODEL"**, select\_model)  
 intent.putExtra(**"TRANSMISSION"**, select\_transmission)  
 intent.putExtra(**"MILEAGE"**, select\_mileage)  
 startActivity(intent)  
 } **else** {  
 Toast.makeText(**this**@FilterScreen, **"null transmission selected"**, Toast.LENGTH\_SHORT).show()  
 }  
 } **else** {  
 Toast.makeText(**this**@FilterScreen, **"null transmission selected"**, Toast.LENGTH\_SHORT).show()  
 }  
 } **else** {  
 Toast.makeText(**this**@FilterScreen, **"null model selected"**, Toast.LENGTH\_SHORT).show()  
 }  
 } **else** {  
 Toast.makeText(**this**@FilterScreen, **"null selected"**, Toast.LENGTH\_SHORT).show()  
 }  
 **}**)  
 make\_spinner?.onItemSelectedListener = **object** : OnItemSelectedListener {  
 **override fun** onItemSelected(parent: AdapterView<\*>, view: View, position: Int, id: Long) {  
 select\_make = parent.getItemAtPosition(position).toString()  
 **if** (select\_make == **"select make"**) {  
 select\_make = **null** }  
 }  
  
 **override fun** onNothingSelected(parent: AdapterView<\*>?) {}  
 }  
 model\_spinner?.onItemSelectedListener = **object** : OnItemSelectedListener {  
 **override fun** onItemSelected(parent: AdapterView<\*>, view: View, position: Int, id: Long) {  
 select\_model = parent.getItemAtPosition(position).toString()  
 **if** (select\_model == **"select model"**) {  
 select\_model = **null** }  
 }  
  
 **override fun** onNothingSelected(parent: AdapterView<\*>?) {}  
 }  
 transmission\_spinner?.onItemSelectedListener = **object** : OnItemSelectedListener {  
 **override fun** onItemSelected(parent: AdapterView<\*>, view: View, position: Int, id: Long) {  
 select\_transmission = parent.getItemAtPosition(position).toString()  
 **if** (select\_transmission == **"select transmission"**) {  
 select\_transmission = **null** }  
 }  
  
 **override fun** onNothingSelected(parent: AdapterView<\*>?) {}  
 }  
 mileage\_spinner?.onItemSelectedListener = **object** : OnItemSelectedListener {  
 **override fun** onItemSelected(parent: AdapterView<\*>, view: View, position: Int, id: Long) {  
 select\_mileage = parent.getItemAtPosition(position).toString()  
 **if** (select\_mileage == **"select mileage"**) {  
 select\_mileage = **null** }  
 }  
  
 **override fun** onNothingSelected(parent: AdapterView<\*>?) {}  
 }  
 }  
}

**LoginActivity**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.os.Bundle  
**import** android.view.View  
**import** android.widget.\*  
**import** androidx.appcompat.app.AppCompatActivity  
**import** com.google.firebase.auth.FirebaseAuth  
  
**class** LoginActivity : AppCompatActivity() {  
 **private var email**: EditText? = **null  
 private var password**: EditText? = **null  
 private var login\_btn**: Button? = **null  
 private var progressBar**: ProgressBar? = **null  
 private var firebaseAuth**: FirebaseAuth? = **null  
 private var homeActivity**: Intent? = **null  
 private var imageView**: ImageView? = **null  
 private var or\_sign\_up**: TextView? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_login*)  
  
 *//init views* initViews()  
  
 *//get fire base instance* **firebaseAuth** = FirebaseAuth.getInstance()  
 **homeActivity** = Intent(**this**@LoginActivity, MainActivity::**class**.*java*)  
  
 *//clock btn and login user with correct email,password* **login\_btn**!!.setOnClickListener **{** submitData() **}** *//click image view and register user* **imageView**!!.setOnClickListener **{  
 val** intent = Intent(**this**@LoginActivity, RegisterActivity::**class**.*java*)  
 startActivity(intent)  
 finish()  
 **}  
 or\_sign\_up**!!.setOnClickListener **{  
 val** intent = Intent(**this**@LoginActivity, RegisterActivity::**class**.*java*)  
 startActivity(intent)  
 **}** }  
  
 **private fun** email(): Boolean {  
 **val** email\_r = **email**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (email\_r.*isEmpty*()) {  
 **email**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **email**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** password(): Boolean {  
 **val** password\_r = **password**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (password\_r.*isEmpty*()) {  
 **password**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **password**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** submitData() {  
 **if** (!email() or !password()) {  
 showMessage(**"Please fill all fields."**)  
 **progressBar**!!.*visibility* = View.*INVISIBLE* **login\_btn**!!.*visibility* = View.*VISIBLE* **return** } **else** {  
 loginUser()  
 }  
 }  
  
 **private fun** loginUser() {  
 **val** email\_login = **email**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 val** password\_login = **password**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 firebaseAuth**!!.signInWithEmailAndPassword(email\_login, password\_login)  
 .addOnCompleteListener **{** task **->  
 if** (task.*isSuccessful*) {  
 **progressBar**!!.*visibility* = View.*INVISIBLE* **login\_btn**!!.*visibility* = View.*VISIBLE* updateUI()  
 } **else** {  
 **progressBar**!!.*visibility* = View.*INVISIBLE* **login\_btn**!!.*visibility* = View.*VISIBLE* showMessage(task.*exception*!!.**message**)  
 }  
 **}** }  
  
 **private fun** updateUI() {  
 startActivity(**homeActivity**)  
 finish()  
 }  
  
 **private fun** showMessage(s: String?) {  
 Toast.makeText(**this**@LoginActivity, s, Toast.*LENGTH\_SHORT*).show()  
 }  
  
 **override fun** onStart() {  
 **super**.onStart()  
 **val** user = **firebaseAuth**!!.*currentUser* **if** (user != **null**) {  
 updateUI()  
 }  
 }  
  
 **private fun** initViews() {  
 **email** = findViewById(R.id.*email\_login*)  
 **password** = findViewById(R.id.*password\_login*)  
 **progressBar** = findViewById(R.id.*progress\_bar*)  
 **login\_btn** = findViewById(R.id.*login\_btn*)  
 **imageView** = findViewById(R.id.*imageView*)  
 **or\_sign\_up** = findViewById(R.id.*or\_sign\_up*)  
 }  
}

**MainActivity**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.os.Bundle  
**import** android.view.MenuItem  
**import** android.widget.ImageView  
**import** android.widget.TextView  
**import** androidx.appcompat.app.ActionBarDrawerToggle  
**import** androidx.appcompat.app.AppCompatActivity  
**import** androidx.appcompat.widget.Toolbar  
**import** androidx.core.view.GravityCompat  
**import** androidx.drawerlayout.widget.DrawerLayout  
**import** com.bumptech.glide.Glide  
**import** com.google.android.material.navigation.NavigationView  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.google.firebase.auth.FirebaseUser  
**import** com.google.firebase.database.\*  
  
**class** MainActivity : AppCompatActivity(), NavigationView.OnNavigationItemSelectedListener {  
 **private var drawerLayout**: DrawerLayout? = **null  
 private var navigationView**: NavigationView? = **null  
 private var toolbar**: Toolbar? = **null  
 private var firebaseUser**: FirebaseUser? = **null  
 private var databaseReference**: DatabaseReference? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*nav\_drawer\_layout*)  
 **drawerLayout** = findViewById(R.id.*drawer\_layout*)  
 **navigationView** = findViewById(R.id.*nav\_view*)  
 **firebaseUser** = FirebaseAuth.getInstance().*currentUser* **databaseReference** = FirebaseDatabase.getInstance().*reference* **toolbar** = findViewById(R.id.*tool\_bar*)  
 setSupportActionBar(**toolbar**)  
 navViewAnimation()  
 **navigationView**?.setNavigationItemSelectedListener(**this**)  
 **if** (savedInstanceState == **null**) {  
 *supportFragmentManager*.beginTransaction().replace(R.id.*fragment\_container*, SearchFilter()).commit()  
 **navigationView**?.setCheckedItem(R.id.*search\_filter*)  
 }  
 **userData** }  
  
 **private fun** navViewAnimation() {  
 *//nav drawer animation* **val** toggle = ActionBarDrawerToggle(**this**, **drawerLayout**, **toolbar**, R.string.*navigation\_drawer\_open*, R.string.*navigation\_drawer\_close*)  
 **drawerLayout**!!.addDrawerListener(toggle)  
 toggle.syncState()  
 }  
  
 **override fun** onBackPressed() {  
 **if** (**drawerLayout**!!.isDrawerOpen(GravityCompat.*START*)) {  
 **drawerLayout**!!.closeDrawer(GravityCompat.*START*)  
 } **else** {  
 **super**.onBackPressed()  
 }  
 }  
  
 *//Toast.makeText(MainActivity.this, "name"+dataSnapshot.child("name").getValue(), Toast.LENGTH\_SHORT).show();* **private val userData**: Unit  
 **private get**() {  
 **firebaseUser**?.*uid*?.*let* **{  
 databaseReference**?.child(**"User"**)?.child(**it**)?.addValueEventListener(**object** : ValueEventListener {  
 **override fun** onDataChange(dataSnapshot: DataSnapshot) {  
 **if** (dataSnapshot.exists()) {  
 **if** (**firebaseUser**!!.*uid* == dataSnapshot.child(**"userId"**).*value*) {  
 **val** headerView = **navigationView**!!.getHeaderView(0)  
 **val** user\_name = headerView.findViewById<TextView>(R.id.*nav\_user\_name*)  
 **val** user\_image = headerView.findViewById<ImageView>(R.id.*nav\_user\_img*)  
 user\_name.*text* = **""** + dataSnapshot.child(**"name"**).*value* **val** imageurl = dataSnapshot.child(**"imageUrl"**).*value*;  
 Glide.with(**this**@MainActivity).load(imageurl).into(user\_image)  
 *//Toast.makeText(MainActivity.this, "name"+dataSnapshot.child("name").getValue(), Toast.LENGTH\_SHORT).show();* }  
 }  
 }  
  
 **override fun** onCancelled(databaseError: DatabaseError) {}  
 })  
 **}** }  
  
 **override fun** onNavigationItemSelected(menuItem: MenuItem): Boolean {  
 **when** (menuItem.*itemId*) {  
 R.id.*search\_filter* -> {  
 *supportActionBar*!!.*title* = **"Home"** *supportFragmentManager*.beginTransaction().replace(R.id.*fragment\_container*, SearchFilter()).commit()  
 }  
 R.id.*profile* -> {  
 *supportActionBar*!!.*title* = **"Home"** *supportFragmentManager*.beginTransaction().replace(R.id.*fragment\_container*, ProfileFragment()).commit()  
 }  
 R.id.*favourite* -> {  
 *supportActionBar*!!.*title* = **"Profile"** *supportFragmentManager*.beginTransaction().replace(R.id.*fragment\_container*, FavouriteFragmnet()).commit()  
 }  
 R.id.*mypost* -> {  
 *supportActionBar*!!.*title* = **"Settings"** *supportFragmentManager*.beginTransaction().replace(R.id.*fragment\_container*, MyPostFragment()).commit()  
 }  
 R.id.*logout* -> {  
 FirebaseAuth.getInstance().signOut()  
 **val** intent = Intent(**this**@MainActivity, LoginActivity::**class**.*java*)  
 startActivity(intent)  
 finish()  
 }  
 }  
 **drawerLayout**!!.closeDrawer(GravityCompat.*START*)  
 **return true** }  
}

**MyPostAdapter**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Context  
**import** android.content.Intent  
**import** android.net.Uri  
**import** android.view.LayoutInflater  
**import** android.view.View  
**import** android.view.ViewGroup  
**import** android.widget.Button  
**import** android.widget.ImageView  
**import** androidx.recyclerview.widget.RecyclerView  
**import** com.bumptech.glide.Glide  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.iqrauniversity.automobile.MyPostAdapter.MyPostViewHolder  
**import** java.util.\*  
  
**class** MyPostAdapter(**private val context**: Context, listPostModel: MutableList<PostModel?>?) : RecyclerView.Adapter<MyPostViewHolder>() {  
 **private var listPostModel**: MutableList<PostModel?>? = ArrayList()  
 **override fun** onCreateViewHolder(parent: ViewGroup, viewType: Int): MyPostViewHolder {  
 **val** view = LayoutInflater.from(**context**).inflate(R.layout.*my\_post\_item*, parent, **false**)  
 **return** MyPostViewHolder(view)  
 }  
  
 **override fun** onBindViewHolder(holder: MyPostViewHolder, position: Int) {  
 **val** imageurl = **listPostModel**?.get(position)?.**imageurl** Glide.with(**context**).load(imageurl).into(holder.**img\_car**)  
 holder.**dial\_btn**.setOnClickListener **{  
 val** contactNumber = **listPostModel**?.get(position)?.**contactNumber  
 val** intent = Intent(Intent.*ACTION\_DIAL*)  
 intent.*data* = Uri.parse(**"tel:$**contactNumber**"**)  
 **context**.startActivity(intent)  
 **}** holder.**email\_btn**.setOnClickListener **{  
 val** firebaseUser = FirebaseAuth.getInstance().*currentUser* **val** email = firebaseUser!!.*email* **val** intent = Intent(Intent.*ACTION\_SEND*)  
 **val** recipients = *arrayOf*(email)  
 intent.putExtra(Intent.*EXTRA\_EMAIL*, recipients)  
 intent.putExtra(Intent.*EXTRA\_SUBJECT*, **"Car Ad"**)  
 intent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(Intent.*EXTRA\_CC*, **"mailcc@gmail.com"**)  
 intent.*type* = **"text/html"** intent.setPackage(**"com.google.android.gm"**)  
 **context**.startActivity(Intent.createChooser(intent, **"Send mail"**))  
 **}** holder.**share\_btn**.setOnClickListener **{  
 val** txtIntent = Intent(Intent.*ACTION\_SEND*)  
 txtIntent.*type* = **"text/plain"** txtIntent.putExtra(Intent.*EXTRA\_SUBJECT*, **listPostModel**?.get(position)?.**city**)  
 txtIntent.putExtra(Intent.*EXTRA\_TEXT*, **listPostModel**?.get(position)?.**description**)  
 **context**.startActivity(Intent.createChooser(txtIntent, **"Share"**))  
 **}** holder.**img\_car**.setOnClickListener **{  
 val** intent = Intent(**context**, VehicleDetailScreen::**class**.*java*)  
 intent.putExtra(**"AREA"**, **listPostModel**?.get(position)?.**area**)  
 intent.putExtra(**"CITY"**, **listPostModel**?.get(position)?.**city**)  
 intent.putExtra(**"Description"**, **listPostModel**?.get(position)?.**description**)  
 intent.putExtra(**"FEATURES"**, **listPostModel**?.get(position)?.**features**)  
 intent.putExtra(**"IMAGEURL"**, **listPostModel**?.get(position)?.**imageurl**)  
 intent.putExtra(**"MAKE"**, **listPostModel**?.get(position)?.**make**)  
 intent.putExtra(**"MILEAGE"**, **listPostModel**?.get(position)?.**mileage**)  
 intent.putExtra(**"MODEL"**, **listPostModel**?.get(position)?.**model**)  
 intent.putExtra(**"SPECS"**, **listPostModel**?.get(position)?.**specs**)  
 intent.putExtra(**"PUSHID"**, **listPostModel**?.get(position)?.**pushId**)  
 **context**.startActivity(intent)  
 **}** }  
  
 **override fun** getItemCount(): Int {  
 **return listPostModel**!!.**size** }  
  
 **inner class** MyPostViewHolder(itemView: View) : RecyclerView.ViewHolder(itemView) {  
 **val img\_car**: ImageView  
 **val dial\_btn**: Button  
 **val email\_btn**: Button  
 **val share\_btn**: Button  
  
 **init** {  
 **img\_car** = itemView.findViewById(R.id.*img\_car*)  
 **dial\_btn** = itemView.findViewById(R.id.*dial\_btn*)  
 **email\_btn** = itemView.findViewById(R.id.*email\_btn*)  
 **share\_btn** = itemView.findViewById(R.id.*share\_btn*)  
 }  
 }  
  
 **init** {  
 **this**.**listPostModel** = listPostModel  
 }  
}

**PostModel**

**package** com.iqrauniversity.automobile  
  
**import** android.graphics.Bitmap  
**import** android.net.Uri  
**import** java.util.\*  
  
**class** PostModel {  
 **var make**: String? = **null  
 var model**: String? = **null  
 var description**: String? = **null  
 var mileage**: String? = **null  
 var specs**: String? = **null  
 var features**: String? = **null  
 var city**: String? = **null  
 var area**: String? = **null  
 var userId**: String? = **null  
 var pushId**: String? = **null  
 var imageurl**: String? = **null  
  
 var contactNumber**: String? = **null  
 var image**: Uri? = **null  
 var bitmap**: Bitmap? = **null  
 var paths**: ArrayList<String?>? = **null  
  
 constructor**() {}  
 **constructor**(bitmap: Bitmap?, image: Uri?) {  
 **this**.**image** = image  
 **this**.**bitmap** = bitmap  
 }  
  
 **constructor**(userId: String?, make: String?, model: String?, description: String?, mileage: String?, specs: String?, features: String?, city: String?, area: String?, paths: ArrayList<String?>?, pushId: String?, imageurl: String?, contactNumber: String?) {  
 **this**.**make** = make  
 **this**.**model** = model  
 **this**.**description** = description  
 **this**.**mileage** = mileage  
 **this**.**specs** = specs  
 **this**.**features** = features  
 **this**.**city** = city  
 **this**.**area** = area  
 **this**.**paths** = paths  
 **this**.**userId** = userId  
 **this**.**pushId** = pushId  
 **this**.**imageurl** = imageurl  
 **this**.**contactNumber** = contactNumber  
 }  
  
}

**RegisterActivity**

**package** com.iqrauniversity.automobile  
  
**import** android.Manifest  
**import** android.content.Intent  
**import** android.content.pm.PackageManager  
**import** android.net.Uri  
**import** android.os.Build  
**import** android.os.Bundle  
**import** android.provider.MediaStore  
**import** android.view.View  
**import** android.widget.\*  
**import** androidx.appcompat.app.AppCompatActivity  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.google.firebase.auth.FirebaseAuthUserCollisionException  
**import** com.google.firebase.auth.FirebaseUser  
**import** com.google.firebase.database.DatabaseReference  
**import** com.google.firebase.database.FirebaseDatabase  
**import** com.google.firebase.storage.FirebaseStorage  
**import** com.google.firebase.storage.StorageReference  
**import** com.iqrauniversity.automobile.RegisterActivity  
  
**class** RegisterActivity : AppCompatActivity() {  
 **var imageView**: ImageView? = **null  
 var userName**: EditText? = **null  
 var email**: EditText? = **null  
 var password**: EditText? = **null  
 var confPassword**: EditText? = **null  
 var number**: EditText? = **null  
 var address**: EditText? = **null  
 var progressBar**: ProgressBar? = **null  
 var registerBtn**: Button? = **null  
 var firebaseAuth**: FirebaseAuth? = **null  
 var storageReference**: StorageReference? = **null  
 var imageUri**: Uri? = **null  
 private var databaseReference**: DatabaseReference? = **null  
 private val firebaseUser**: FirebaseUser? = **null  
 var mGranted** = **false  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_register*)  
 **databaseReference** = FirebaseDatabase.getInstance().*reference  
  
 //initialize views* initViews()  
  
 *//get fire base auth instance* **firebaseAuth** = FirebaseAuth.getInstance()  
  
 *//get fire base storage instance and reference* **storageReference** = FirebaseStorage.getInstance().getReference(**"Gallery/"**)  
 **imageView**!!.setOnClickListener **{** pickImage() **}** *//register btn click events* **registerBtn**!!.setOnClickListener **{  
 registerBtn**!!.*visibility* = View.*INVISIBLE* **progressBar**!!.*visibility* = View.*VISIBLE* submitData()  
 **}** }  
  
 **private fun** initViews() {  
 **userName** = findViewById(R.id.*name*)  
 **email** = findViewById(R.id.*email*)  
 **password** = findViewById(R.id.*password*)  
 **confPassword** = findViewById(R.id.*conf\_password*)  
 **progressBar** = findViewById(R.id.*progress\_bar*)  
 **imageView** = findViewById(R.id.*user\_image*)  
 **registerBtn** = findViewById(R.id.*register\_btn*)  
 **number** = findViewById(R.id.*number*)  
 **address** = findViewById(R.id.*address*)  
 }  
  
 **private fun** userName(): Boolean {  
 **val** name\_r = **userName**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (name\_r.*isEmpty*()) {  
 **userName**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **userName**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** email(): Boolean {  
 **val** email\_r = **email**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (email\_r.*isEmpty*()) {  
 **email**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **email**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** number(): Boolean {  
 **val** number\_r = **number**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (number\_r.*isEmpty*()) {  
 **number**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **number**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** address(): Boolean {  
 **val** address\_r = **address**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (address\_r.*isEmpty*()) {  
 **address**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **address**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** password(): Boolean {  
 **val** password\_r = **password**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (password\_r.*isEmpty*()) {  
 **password**!!.*error* = **"Name is required cannot be empty."  
 false** } **else** {  
 **password**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** conf\_password(): Boolean {  
 **val** password\_r = **password**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 val** confPassword\_r = **confPassword**!!.*text*.toString().*trim* **{ it** <= **' ' }  
 return if** (confPassword\_r.*isEmpty*()) {  
 **confPassword**!!.*error* = **"Name is required cannot be empty."  
 false** } **else if** (confPassword\_r != password\_r) {  
 **confPassword**!!.*error* = **"Confirm password is not correct"  
 false** } **else** {  
 **confPassword**!!.*error* = **null  
 true** }  
 }  
  
 **private fun** submitData() {  
 **if** (!userName() or !email() or !number() or !address() or !password() or !conf\_password()) {  
 showMessage(**"Please fill all fields."**)  
 **registerBtn**!!.*visibility* = View.*VISIBLE* **progressBar**!!.*visibility* = View.*INVISIBLE* **return** } **else** {  
 createUserAccount()  
 }  
 }  
  
 **private fun** pickImage() {  
 **if** (Build.VERSION.*SDK\_INT* >= Build.VERSION\_CODES.*M*) {  
 **if** (!**mGranted**) {  
 **if** (checkSelfPermission(Manifest.permission.*READ\_EXTERNAL\_STORAGE*) != PackageManager.*PERMISSION\_GRANTED*) {  
 requestPermissions(*arrayOf*(Manifest.permission.*READ\_EXTERNAL\_STORAGE*), **STORAGE\_PERMISSION\_CODE**)  
 **return** }  
 }  
 }  
 **val** intent = Intent()  
 intent.*type* = **"image/\*"** intent.*action* = Intent.*ACTION\_GET\_CONTENT* startActivityForResult(Intent.createChooser(intent, **"Select an image"**), **PICK\_IMAGE\_REQUEST**)  
 }  
  
 **private fun** createUserAccount() {  
 **val** name = **userName**!!.*text*.toString()  
 **val** email = **email**!!.*text*.toString()  
 **val** number = **number**!!.*text*.toString()  
 **val** address = **address**!!.*text*.toString()  
 **val** password = **password**!!.*text*.toString()  
 **firebaseAuth**!!.createUserWithEmailAndPassword(email, password)  
 .addOnCompleteListener **{** task **->  
 if** (task.*isSuccessful*) {  
 updateUserInfo(name, email, number, address)  
 showMessage(**"Account Created"**)  
 } **else** {  
 showMessage(**"Account Created Failed"** + task.*exception*!!.**message**)  
 **registerBtn**!!.*visibility* = View.*VISIBLE* **progressBar**!!.*visibility* = View.*INVISIBLE* }  
 **}** .addOnFailureListener **{** e **->  
 if** (e **is** FirebaseAuthUserCollisionException) {  
 Toast.makeText(**this**@RegisterActivity, **"Email already in use."**, Toast.*LENGTH\_SHORT*).show()  
 }  
 **}** }  
  
 **private fun** updateUserInfo(name: String, email: String, number: String, address: String) {  
 **if** (**imageUri** != **null**) {  
 **val** picRef = **storageReference**!!.child(**imageUri**!!.*path*!!)  
 picRef.putFile(**imageUri**!!).continueWithTask **{** task **->  
 if** (!task.*isSuccessful*) {  
 **throw** task.*exception*!!  
 }  
  
 *// Continue with the task to get the download URL* picRef.*downloadUrl* **}**.addOnCompleteListener **{** task **->  
 if** (task.*isSuccessful*) {  
 **val** downloadUri = task.*result* userInfo(name, email, downloadUri, number, address)  
 }  
 **}** } **else** {  
 Toast.makeText(**this**@RegisterActivity, **"Please select image"**, Toast.*LENGTH\_SHORT*).show()  
 }  
 }  
  
 **private fun** userInfo(name: String, email: String, downloadUri: Uri?, number: String, address: String) {  
 **val** firebaseUser = FirebaseAuth.getInstance().*currentUser* **val** userModel = UserModel(name, email, downloadUri.*toString*(), firebaseUser!!.*uid*, number, address)  
 **databaseReference**!!.child(**"User"**).child(firebaseUser.*uid*).setValue(userModel)  
 startActivity(Intent(**this**@RegisterActivity, SellActivity::**class**.*java*))  
 **progressBar**!!.*visibility* = View.*INVISIBLE* finish()  
 }  
  
 **private fun** showMessage(message: String) {  
 Toast.makeText(**this**@RegisterActivity, message, Toast.*LENGTH\_SHORT*).show()  
 }  
  
 **override fun** onRequestPermissionsResult(requestCode: Int, permissions: Array<String>, grantResults: IntArray) {  
 **if** (requestCode == **STORAGE\_PERMISSION\_CODE** && grantResults.**size** > 0) {  
 **if** (grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {  
 Toast.makeText(**this**@RegisterActivity, **"Permission Granted"**, Toast.*LENGTH\_SHORT*).show()  
 **mGranted** = **true** } **else** {  
 Toast.makeText(**this**@RegisterActivity, **"Please allow permission"**, Toast.*LENGTH\_SHORT*).show()  
 }  
 }  
 }  
  
 **override fun** onActivityResult(requestCode: Int, resultCode: Int, data: Intent?) {  
 **super**.onActivityResult(requestCode, resultCode, data)  
 **if** (requestCode == **PICK\_IMAGE\_REQUEST** && data != **null**) {  
 **imageUri** = data.*data* **try** {  
 **val** bitmap = MediaStore.Images.Media.getBitmap(*contentResolver*, **imageUri**)  
 **imageView**!!.setImageBitmap(bitmap)  
 } **catch** (e: Exception) {  
 e.printStackTrace()  
 }  
 }  
 }  
  
 **companion object** {  
 **const val STORAGE\_PERMISSION\_CODE** = 100  
 **const val PICK\_IMAGE\_REQUEST** = 1001  
 }  
}

**SearchFiltr**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.os.Bundle  
**import** android.view.LayoutInflater  
**import** android.view.View  
**import** android.view.ViewGroup  
**import** android.widget.Button  
**import** androidx.fragment.app.Fragment  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.google.firebase.auth.FirebaseUser  
  
**class** SearchFilter : Fragment() {  
 **private var search**: Button? = **null  
 private var sell**: Button? = **null  
 private var firebaseUser**: FirebaseUser? = **null  
 override fun** onCreateView(inflater: LayoutInflater, container: ViewGroup?,  
 savedInstanceState: Bundle?): View? {  
 **val** view = inflater.inflate(R.layout.*fragment\_search\_filter*, container, **false**)  
 *// Inflate the layout for this fragment* **search** = view.findViewById(R.id.*search\_btn*)  
 **sell** = view.findViewById(R.id.*sell\_btn*)  
 **firebaseUser** = FirebaseAuth.getInstance().*currentUser* **sell**?.setOnClickListener(View.OnClickListener **{  
 if** (**firebaseUser** != **null**) {  
 **val** intent = Intent(*context*, SellActivity::**class**.*java*)  
 startActivity(intent)  
 } **else** {  
 startActivity(Intent(*context*, LoginActivity::**class**.*java*))  
 }  
 **}**)  
 **search**?.setOnClickListener(View.OnClickListener **{** startActivity(Intent(*context*, FilterScreen::**class**.*java*)) **}**)  
 **return** view  
 }  
}

**UserModel**

**package** com.iqrauniversity.automobile  
  
**internal class** UserModel {  
 **var name**: String  
 **var email**: String  
 **var imageUrl**: String? = **null  
 var userId**: String  
 **var number**: String? = **null  
 var address**: String? = **null  
  
 constructor**(name: String, email: String, imageUrl: String?, userId: String, number: String?, address: String?) {  
 **this**.**name** = name  
 **this**.**email** = email  
 **this**.**imageUrl** = imageUrl  
 **this**.**userId** = userId  
 **this**.**number** = number  
 **this**.**address** = address  
 }  
  
 **constructor**(name: String, email: String, userId: String) {  
 **this**.**name** = name  
 **this**.**email** = email  
 **this**.**userId** = userId  
 }  
  
}

**VehicleDetailScreen**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.os.Bundle  
**import** android.view.View  
**import** android.widget.ImageView  
**import** android.widget.TextView  
**import** androidx.appcompat.app.AppCompatActivity  
**import** com.bumptech.glide.Glide  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.google.firebase.auth.FirebaseUser  
**import** com.google.firebase.database.\*  
  
**class** VehicleDetailScreen : AppCompatActivity() {  
 **private var detail\_image**: ImageView? = **null  
 private var txt\_details**: TextView? = **null  
 private var mark\_fav**: ImageView? = **null  
 private var databaseReference**: DatabaseReference? = **null  
 private var firebaseUser**: FirebaseUser? = **null  
 private var pushId**: String? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_vehicle\_detail\_screen*)  
 **firebaseUser** = FirebaseAuth.getInstance().*currentUser* **detail\_image** = findViewById(R.id.*detail\_image*)  
 **txt\_details** = findViewById(R.id.*txt\_details*)  
 **mark\_fav** = findViewById(R.id.*mark\_favourite*)  
 **val** area = *intent*.*extras*!!.getString(**"AREA"**)  
 **val** city = *intent*.*extras*!!.getString(**"CITY"**)  
 **val** description = *intent*.*extras*!!.getString(**"Description"**)  
 **val** features = *intent*.*extras*!!.getString(**"FEATURES"**)  
 **val** imageurl = *intent*.*extras*!!.getString(**"IMAGEURL"**)  
 **val** make = *intent*.*extras*!!.getString(**"MAKE"**)  
 **val** mileage = *intent*.*extras*!!.getString(**"MILEAGE"**)  
 **val** model = *intent*.*extras*!!.getString(**"MODEL"**)  
 **val** specs = *intent*.*extras*!!.getString(**"SPECS"**)  
 **pushId** = *intent*.*extras*!!.getString(**"PUSHID"**)  
 **try** {  
 **if** (**firebaseUser** != **null**) {  
 isSaved(**pushId**, **mark\_fav**)  
 } **else** {  
 startActivity(Intent(**this**@VehicleDetailScreen, LoginActivity::**class**.*java*))  
 }  
 } **catch** (e: NullPointerException) {  
 e.printStackTrace()  
 }  
 **mark\_fav**?.setOnClickListener(View.OnClickListener **{  
 try** {  
 **if** (**firebaseUser** != **null**) {  
 **if** (**mark\_fav**?.getTag() == **"save"**) {  
 FirebaseDatabase.getInstance().*reference*.child(**"Fav"**).child(**firebaseUser**!!.*uid*).child(**pushId**!!).setValue(**true**)  
 } **else** {  
 FirebaseDatabase.getInstance().*reference*.child(**"Fav"**).child(**firebaseUser**!!.*uid*).child(**pushId**!!).removeValue()  
 }  
 } **else** {  
 startActivity(Intent(**this**@VehicleDetailScreen, LoginActivity::**class**.*java*))  
 }  
 } **catch** (e: NullPointerException) {  
 e.printStackTrace()  
 }  
 **}**)  
 Glide.with(**this**@VehicleDetailScreen).load(imageurl).into(**detail\_image**!!)  
 **txt\_details**?.setText(**"Area = $**area**\nCity = $**city**\nDescription = $**description**\nFeatures = $**features**\nMake = $**make**\nMileage = $**mileage**\nModel = $**model**\nSpecs = $**specs**"**)  
 }  
  
 **private fun** isSaved(postId: String?, imageView: ImageView?) {  
 **databaseReference** = FirebaseDatabase.getInstance().*reference*.child(**"Fav"**).child(**firebaseUser**!!.*uid*)  
 **databaseReference**!!.addValueEventListener(**object** : ValueEventListener {  
 **override fun** onDataChange(dataSnapshot: DataSnapshot) {  
 **if** (dataSnapshot.child(postId!!).exists()) {  
 imageView!!.setImageResource(R.drawable.*highlight\_like\_icon*)  
 imageView.*tag* = **"saved"** } **else** {  
 imageView!!.setImageResource(R.drawable.*like\_icon*)  
 imageView.*tag* = **"save"** }  
 }  
  
 **override fun** onCancelled(databaseError: DatabaseError) {}  
 })  
 }  
}

**Sell Activity**

**package** com.iqrauniversity.automobile  
  
**import** android.Manifest  
**import** android.app.Activity  
**import** android.app.ProgressDialog  
**import** android.content.Intent  
**import** android.content.pm.PackageManager  
**import** android.net.Uri  
**import** android.os.Build  
**import** android.os.Bundle  
**import** android.provider.MediaStore  
**import** android.util.Log  
**import** android.view.View  
**import** android.widget.Button  
**import** android.widget.EditText  
**import** android.widget.Toast  
**import** androidx.appcompat.app.AppCompatActivity  
**import** androidx.recyclerview.widget.LinearLayoutManager  
**import** androidx.recyclerview.widget.RecyclerView  
**import** com.google.firebase.auth.FirebaseAuth  
**import** com.google.firebase.auth.FirebaseUser  
**import** com.google.firebase.database.DatabaseReference  
**import** com.google.firebase.database.FirebaseDatabase  
**import** com.google.firebase.storage.FirebaseStorage  
**import** com.google.firebase.storage.StorageReference  
**import** java.util.\*  
  
**class** SellActivity : AppCompatActivity() {  
 **private var recyclerView**: RecyclerView? = **null  
 private var addPhotoAdapter**: AddPhotoAdapter? = **null  
 private var make**: EditText? = **null  
 private var model**: EditText? = **null  
 private var description**: EditText? = **null  
 private var mileage**: EditText? = **null  
 private var specs**: EditText? = **null  
 private var features**: EditText? = **null  
 private var city**: EditText? = **null  
 private var area**: EditText? = **null  
 private var contactnumber**: EditText? = **null  
 private var add\_photos\_btn**: Button? = **null  
 private var submit\_photos\_btn**: Button? = **null  
 private var databaseReference**: DatabaseReference? = **null  
 private var storage**: FirebaseStorage? = **null  
 private var storageReference**: StorageReference? = **null  
 private var progressDialog**: ProgressDialog? = **null  
 private var myPhotosBitmapsArrayList**: ArrayList<PostModel>? = **null  
 private val PICK\_IMAGE\_MULTIPLE** = 1  
 **private var imagesEncodedList**: ArrayList<String>? = **null  
 private var myUri**: Uri? = **null  
 private lateinit var uri**: Array<Uri?>  
 **private var uniqueid**: String? = **null  
 private var paths**: ArrayList<String?>? = **null  
 private var firebaseUser**: FirebaseUser? = **null  
 private var imageurl**: String? = **null  
 override fun** onCreate(savedInstanceState: Bundle?) {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_sell*)  
 **firebaseUser** = FirebaseAuth.getInstance().*currentUser* **databaseReference** = FirebaseDatabase.getInstance().*reference* **storage** = FirebaseStorage.getInstance()  
 **storageReference** = **storage**!!.*reference* **if** (Build.VERSION.*SDK\_INT* > Build.VERSION\_CODES.*M* && checkSelfPermission(Manifest.permission.*READ\_EXTERNAL\_STORAGE*) != PackageManager.*PERMISSION\_GRANTED*) {  
 requestPermissions(*arrayOf*(Manifest.permission.*READ\_EXTERNAL\_STORAGE*), 1001)  
 }  
 **make** = findViewById(R.id.*make*)  
 **model** = findViewById(R.id.*model*)  
 **description** = findViewById(R.id.*description*)  
 **mileage** = findViewById(R.id.*mileage*)  
 **specs** = findViewById(R.id.*specs*)  
 **features** = findViewById(R.id.*features*)  
 **city** = findViewById(R.id.*city*)  
 **area** = findViewById(R.id.*area*)  
 **contactnumber** = findViewById(R.id.*contactnumber*)  
 **add\_photos\_btn** = findViewById(R.id.*add\_photos\_btn*)  
 **submit\_photos\_btn** = findViewById(R.id.*submit\_photos\_btn*)  
 **recyclerView** = findViewById(R.id.*recycler\_view*)  
 **recyclerView**?.*layoutManager* = LinearLayoutManager(**this**, LinearLayoutManager.*HORIZONTAL*, **true**)  
 **add\_photos\_btn**?.setOnClickListener(View.OnClickListener **{  
 val** intent = Intent()  
 intent.*type* = **"image/\*"** intent.putExtra(Intent.*EXTRA\_ALLOW\_MULTIPLE*, **true**)  
 intent.*action* = Intent.*ACTION\_GET\_CONTENT* startActivityForResult(Intent.createChooser(intent, **"Select Picture"**), PICK\_IMAGE\_MULTIPLE)  
 **}**)  
 submit\_photos\_btn?.setOnClickListener(View.OnClickListener **{** submitData() **}**)  
 }  
  
 **private fun** produceANewTaskObject(paths: ArrayList<String?>?) {  
 **val** userId = firebaseUser!!.uid  
 **val** makeSell: String  
 **val** modelSell: String  
 **val** descriptionSell: String  
 **val** mileageSell: String  
 **val** specsSell: String  
 **val** featuresSell: String  
 **val** citySell: String  
 **val** areaSell: String  
 **val** contactNumber: String  
 makeSell = make!!.text.toString()  
 modelSell = model!!.text.toString()  
 descriptionSell = description!!.text.toString()  
 specsSell = specs!!.text.toString()  
 featuresSell = features!!.text.toString()  
 mileageSell = mileage!!.text.toString()  
 citySell = city!!.text.toString()  
 areaSell = area!!.text.toString()  
 contactNumber = contactnumber!!.text.toString()  
 uniqueid = databaseReference!!.push().key  
 **val** postModel = PostModel(userId, makeSell, modelSell, descriptionSell, mileageSell, specsSell, featuresSell, citySell, areaSell, paths, uniqueid, imageurl, contactNumber)  
 databaseReference!!.child(**"UserPost"**).child(userId).child(uniqueid!!).setValue(postModel)  
 databaseReference!!.child(**"Post"**).child(uniqueid!!).setValue(postModel)  
 make!!.setText(**""**)  
 model!!.setText(**""**)  
 description!!.setText(**""**)  
 specs!!.setText(**""**)  
 features!!.setText(**""**)  
 mileage!!.setText(**""**)  
 city!!.setText(**""**)  
 area!!.setText(**""**)  
 contactnumber!!.setText(**""**)  
 }  
  
 **override fun** onActivityResult(requestCode: Int, resultCode: Int, data: Intent?) {  
 **super**.onActivityResult(requestCode, resultCode, data)  
 **try** {  
 *// When an Image is picked* **if** (requestCode == PICK\_IMAGE\_MULTIPLE && resultCode == Activity.RESULT\_OK && **null** != data) {  
 *// Get the Image from data  
  
 // String[] filePathColumn = {MediaStore.Images.Media.DATA};* imagesEncodedList = ArrayList()  
 **if** (data.data != **null**) {  
 myPhotosBitmapsArrayList = ArrayList()  
 myUri = data.data  
 **val** bitmapImage = MediaStore.Images.Media.getBitmap(contentResolver, myUri)  
 **val** postModel = PostModel(bitmapImage, myUri)  
 myPhotosBitmapsArrayList!!.add(postModel)  
 addPhotoAdapter = AddPhotoAdapter(**this**@SellActivity, myPhotosBitmapsArrayList!!)  
 recyclerView!!.adapter = addPhotoAdapter  
 } **else** {  
 **if** (data.clipData != **null**) {  
 myPhotosBitmapsArrayList = ArrayList()  
 **for** (i **in** 0 until data.clipData!!.itemCount) {  
 **val** bitmap = MediaStore.Images.Media.getBitmap(contentResolver,  
 data.clipData!!.getItemAt(i).uri)  
 myUri = data.clipData!!.getItemAt(i).uri  
 **val** postModel = PostModel(bitmap, myUri)  
 postModel.bitmap = bitmap  
 myPhotosBitmapsArrayList!!.add(postModel)  
 addPhotoAdapter = AddPhotoAdapter(**this**@SellActivity, myPhotosBitmapsArrayList!!)  
 recyclerView!!.adapter = addPhotoAdapter  
 }  
 Log.v(**"LOG\_TAG"**, **"Selected Images"** + data.clipData!!.itemCount)  
 }  
 }  
 } **else** {  
 Toast.makeText(**this**, **"You haven't picked Image"**, Toast.LENGTH\_LONG).show()  
 }  
 } **catch** (e: Exception) {  
 Toast.makeText(**this**, **"Something went wrong"**, Toast.LENGTH\_LONG).show()  
 }  
 **super**.onActivityResult(requestCode, resultCode, data)  
 }  
  
 **override fun** onRequestPermissionsResult(requestCode: Int, permissions: Array<String>, grantResults: IntArray) {  
 **when** (requestCode) {  
 1001 -> {  
 **if** (grantResults[0] == PackageManager.PERMISSION\_GRANTED) {  
 Toast.makeText(**this**@SellActivity, **"Permission Granted!"**, Toast.LENGTH\_SHORT).show()  
 } **else** {  
 Toast.makeText(**this**@SellActivity, **"Permission Not Granted!"**, Toast.LENGTH\_SHORT).show()  
 }  
 }  
 }  
 }  
  
 **private fun** uploadImage() {  
 **if** (myUri != **null**) {  
 progressDialog = ProgressDialog(**this**@SellActivity)  
 progressDialog!!.setTitle(**"Sending..."**)  
 progressDialog!!.show()  
 }  
 uri = arrayOfNulls(myPhotosBitmapsArrayList!!.size)  
 **for** (i **in** myPhotosBitmapsArrayList!!.indices) {  
 uri[i] = Uri.parse(myPhotosBitmapsArrayList!![i].image.toString())  
 storageReference = storage!!.reference  
 storageReference!!.child(**"Photos"**).child(firebaseUser!!.uid)  
 **val** ref = storageReference!!.child(uri[i]?.getLastPathSegment()!!)  
 uri[i]?.let **{** ref.putFile(it).addOnSuccessListener **{** taskSnapshot **->  
 val** imageuri = taskSnapshot.metadata!!.reference!!.downloadUrl  
 imageuri.addOnCompleteListener **{** task **->  
 if** (task.isSuccessful) {  
 imageurl = task.result.toString()  
 produceANewTaskObject(paths)  
 }  
 **}** progressDialog!!.dismiss()  
 Toast.makeText(**this**@SellActivity, **"Sent"**, Toast.LENGTH\_SHORT).show()  
 **}**.addOnFailureListener **{** progressDialog!!.dismiss()  
 Toast.makeText(**this**@SellActivity, **"Failed to send"**, Toast.LENGTH\_SHORT).show()  
 **}**.addOnProgressListener **{** taskSnapshot **->  
 val** progress = (100 \* taskSnapshot.bytesTransferred / taskSnapshot.totalByteCount).toDouble()  
 progressDialog!!.setMessage(**"Sending "** + progress.toInt() + **"%"**)  
 **}  
 }** }  
 }  
  
 **fun** clearData() {  
 myPhotosBitmapsArrayList!!.clear()  
 addPhotoAdapter!!.notifyDataSetChanged()  
 }  
  
 **private fun** make(): Boolean {  
 **val** make\_r = make!!.text.toString().trim **{** it <= **' ' }  
 return if** (make\_r.isEmpty()) {  
 make!!.error = **"Company name is required cannot be empty."  
 false** } **else** {  
 make!!.error = **null  
 true** }  
 }  
  
 **private fun** model(): Boolean {  
 **val** model\_r = model!!.text.toString().trim **{** it <= **' ' }  
 return if** (model\_r.isEmpty()) {  
 model!!.error = **"Model is required cannot be empty."  
 false** } **else** {  
 model!!.error = **null  
 true** }  
 }  
  
 **private fun** description(): Boolean {  
 **val** description\_r = description!!.text.toString().trim **{** it <= **' ' }  
 return if** (description\_r.isEmpty()) {  
 description!!.error = **"Description is required cannot be empty."  
 false** } **else** {  
 description!!.error = **null  
 true** }  
 }  
  
 **private fun** mileage(): Boolean {  
 **val** mileage\_r = mileage!!.text.toString().trim **{** it <= **' ' }  
 return if** (mileage\_r.isEmpty()) {  
 mileage!!.error = **"Mileage is required cannot be empty."  
 false** } **else** {  
 mileage!!.error = **null  
 true** }  
 }  
  
 **private fun** specs(): Boolean {  
 **val** specs\_r = specs!!.text.toString().trim **{** it <= **' ' }  
 return if** (specs\_r.isEmpty()) {  
 specs!!.error = **"Specs is required cannot be empty."  
 false** } **else** {  
 specs!!.error = **null  
 true** }  
 }  
  
 **private fun** features(): Boolean {  
 **val** features\_r = features!!.text.toString().trim **{** it <= **' ' }  
 return if** (features\_r.isEmpty()) {  
 features!!.error = **"Features is required cannot be empty."  
 false** } **else** {  
 features!!.error = **null  
 true** }  
 }  
  
 **private fun** city(): Boolean {  
 **val** city\_r = city!!.text.toString().trim **{** it <= **' ' }  
 return if** (city\_r.isEmpty()) {  
 city!!.error = **"City is required cannot be empty."  
 false** } **else** {  
 city!!.error = **null  
 true** }  
 }  
  
 **private fun** area(): Boolean {  
 **val** area\_r = area!!.text.toString().trim **{** it <= **' ' }  
 return if** (area\_r.isEmpty()) {  
 area!!.error = **"Area is required cannot be empty."  
 false** } **else** {  
 area!!.error = **null  
 true** }  
 }  
  
 **private fun** contactnumber(): Boolean {  
 **val** contact = contactnumber!!.text.toString().trim **{** it <= **' ' }  
 return if** (contact.isEmpty()) {  
 area!!.error = **"Area is required cannot be empty."  
 false** } **else** {  
 area!!.error = **null  
 true** }  
 }  
  
 **private fun** submitData() {  
 **if** (!make() or !model() or !description() or !mileage() or !specs() or !features() or !city() or !area() or !contactnumber()) {  
 Toast.makeText(**this**, **"Please fill all fields"**, Toast.LENGTH\_SHORT).show()  
 **return** } **else** {  
 uploadImage()  
 paths = ArrayList()  
 **for** (i **in** myPhotosBitmapsArrayList!!.indices) {  
 paths!!.add(i, uri[i]!!.lastPathSegment)  
 }  
 clearData()  
 }  
 }  
}

**SplashActivity**

**package** com.iqrauniversity.automobile  
  
**import** android.content.Intent  
**import** android.graphics.Color  
**import** android.os.Bundle  
**import** android.widget.ImageView  
**import** androidx.appcompat.app.AppCompatActivity  
  
**class** SplashScreen : AppCompatActivity() {  
 **private var thread**: Thread? = **null  
  
 override fun** onCreate(savedInstanceState: Bundle?)  
 {  
 **super**.onCreate(savedInstanceState)  
 setContentView(R.layout.*activity\_splash\_screen*)  
 *supportActionBar*!!.hide()  
 *window*.*statusBarColor* = Color.*TRANSPARENT* **val** intent = Intent(**this**, MainActivity::**class**.*java*)  
 **thread** = **object** : Thread() {  
 **override fun** run() {  
 **try** {  
 sleep(3000)  
 } **catch** (e: InterruptedException) {  
 e.printStackTrace()  
 } **finally** {  
 startActivity(intent)  
 finish()  
 }  
 }  
 }  
 (**thread as** Thread).start()  
 }  
}

**Gradle:**

**Build.gradle(project)**

*// Top-level build file where you can add configuration options common to all sub-projects/modules.*buildscript **{** ext.kotlin\_version = **'1.3.72'** repositories **{** google()  
 jcenter()  
 **}** dependencies **{** classpath **"com.android.tools.build:gradle:4.0.0"** classpath **'com.google.gms:google-services:4.2.0'** classpath **"org.jetbrains.kotlin:kotlin-gradle-plugin:**$kotlin\_version**"** *// NOTE: Do not place your application dependencies here; they belong  
 // in the individual module build.gradle files* **}  
}**allprojects **{** repositories **{** google()  
 jcenter()  
 **}  
}**task clean(**type**: Delete) **{** delete rootProject.buildDir  
**}**

**Buil.graddle(App)**

apply **plugin**: **'com.android.application'**apply **plugin**: **'kotlin-android'**apply **plugin**: **'com.google.gms.google-services'**android **{** compileSdkVersion 29  
  
 defaultConfig **{** applicationId **"com.iqrauniversity.automobile"** minSdkVersion 21  
 targetSdkVersion 29  
 versionCode 1  
 versionName **"1.0"** testInstrumentationRunner **"androidx.test.runner.AndroidJUnitRunner"  
 }** buildTypes **{** release **{** minifyEnabled **false** proguardFiles getDefaultProguardFile(**'proguard-android-optimize.txt'**), **'proguard-rules.pro'  
 }  
 }  
}**dependencies **{** implementation fileTree(**dir**: **"libs"**, **include**: [**"\*.jar"**])  
 implementation **'androidx.appcompat:appcompat:1.1.0'** implementation **'androidx.constraintlayout:constraintlayout:1.1.3'** implementation **'androidx.legacy:legacy-support-v4:1.0.0'** implementation **'com.google.firebase:firebase-database:16.0.4'** implementation **'com.google.firebase:firebase-storage:16.0.4'** implementation **'com.google.firebase:firebase-auth:16.0.5'** testImplementation **'junit:junit:4.12'** androidTestImplementation **'androidx.test.ext:junit:1.1.1'** androidTestImplementation **'androidx.test.espresso:espresso-core:3.2.0'** implementation **'de.hdodenhof:circleimageview:3.0.1'** implementation **'com.google.android.material:material:1.1.0'** implementation **'com.github.bumptech.glide:glide:4.8.0'** annotationProcessor **'com.github.bumptech.glide:compiler:4.8.0'** implementation **'androidx.lifecycle:lifecycle-extensions:2.0.0'** implementation **"androidx.core:core-ktx:+"** implementation **"androidx.lifecycle:lifecycle-viewmodel-ktx:2.0.0"** implementation **"org.jetbrains.kotlin:kotlin-stdlib-jdk7:**$kotlin\_version**"  
  
}**repositories **{** mavenCentral()  
**}**