VIEWPAY SOURCE CODE

```
MainActivity.java:
package com.example.viewpay1;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Context;
import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;
import android.view.WindowManager;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
  private static int SPLASH_SCREEN=2500;
  ImageView imageView;
  TextView textView;
  Animation top, bottom;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
```

```
getWindow().setFlags(WindowManager.LayoutParams.FLAG_FULLSCREEN,
WindowManager.LayoutParams.FLAG_FULLSCREEN);
    setContentView(R.layout.activity_main);
    imageView=findViewById(R.id.imageView);
    textView=findViewById(R.id.textView);
    top=AnimationUtils.loadAnimation(this, R.anim.top);
    bottom=AnimationUtils.loadAnimation(this, R.anim.bottom);
    imageView.setAnimation(top);
    textView.setAnimation(bottom);
    new Handler().postDelayed(new Runnable() {
       @Override
      public void run() {
         Intent i = new Intent(MainActivity.this,Login.class);
         startActivity(i);
         finish();
       }
    },SPLASH_SCREEN);
  }
}
```

```
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:layout_gravity="center"
  android:background="@color/light"
  android:gravity="center"
  tools:context=".MainActivity">
  <ImageView
    android:id="@+id/imageView"
    android:layout_width="367dp"
    android:layout_height="675dp"
    android:layout_marginLeft="8dp"
    android:layout_marginTop="8dp"
    android:layout_marginRight="8dp"
    android:layout_marginBottom="8dp"
    app: layout\_constraintBottom\_toBottomOf = "parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.447"
    app:srcCompat="@drawable/vp"/>
```

```
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="80dp"
    android:fontFamily="cursive"
    android:text="Use ViewPay To View Your Pay"
    android:textAlignment="center"
    android:textColor="@color/black"
    android:textSize="20dp"
    android:textStyle="bold"
    app: layout\_constraintBottom\_toBottomOf = "parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.498"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.647" />
</androidx.constraintlayout.widget.ConstraintLayout>
Animation File:
Top.xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <translate
    android:duration="1500"
```

```
android:fromXDelta="0%"
    android:fromYDelta="-50%"/>
  <alpha
    android:duration="1500"
    android:fromAlpha="0.1"
    android:toAlpha="1.0"/>
</set>
Bottom.xml:
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <translate
    android:duration="1500"
    android:fromXDelta="0%"
    android:fromYDelta="-50%"/>
  <alpha
    android:duration="1500"
    android:fromAlpha="0.1"
    android:toAlpha="1.0"/>
</set>
```

```
Login.java:
package com.example.viewpay1;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import android.content.DialogInterface;
import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import\ and roid. view. Layout Inflater;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.firestore.DocumentReference;
```

import com.google.firebase.firestore.DocumentSnapshot;

import com.google.firebase.firestore.FirebaseFirestore;

```
public class Login extends AppCompatActivity {
  EditText email, password;
  TextView gotoRegister,forget_password;
  Button loginBtn;
  boolean valid = true;
  FirebaseAuth fAuth;
  FirebaseFirestore fStore;
  AlertDialog.Builder reset_alert;
  LayoutInflater inflater;
  FirebaseUser user;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_login);
    fAuth=FirebaseAuth.getInstance();
    fStore=FirebaseFirestore.getInstance();
    reset_alert=new AlertDialog.Builder(this);
    inflater=this.getLayoutInflater();
    email = findViewById(R.id.loginEmail);
    password = findViewById(R.id.loginPassword);
    loginBtn = findViewById(R.id.loginBtn);
    gotoRegister = findViewById(R.id.gotoRegister);
```

```
forget_password = findViewById(R.id.forget_password);
    forget_password.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         View view1=inflater.inflate(R.layout.reset_pop,null);
         reset_alert.setTitle("Reset Forget password")
              .setMessage("Enter your Email Id to get password reset link")
              .setPositiveButton("Reset", new
DialogInterface.OnClickListener() {
                 @Override
                public void onClick(DialogInterface dialogInterface, int i) {
                   EditText
email=view1.findViewById(R.id.reset_email_pop);
                   if(email.getText().toString().isEmpty()){
                     email.setError("Required Field");
                     return;
                   }
fAuth.sendPasswordResetEmail(email.getText().toString()).addOnSuccessListe
ner(new OnSuccessListener<Void>() {
                     @Override
                     public void onSuccess(Void aVoid) {
                        Toast.makeText(Login.this,"Reset Email
sent",Toast.LENGTH_SHORT).show();
                     }
                   }).addOnFailureListener(new OnFailureListener() {
```

```
@Override
                     public void onFailure(@NonNull Exception e) {
Toast.makeText(Login.this,e.getMessage(),Toast.LENGTH_SHORT).show();
                     }
                   });
                }
              }).setNegativeButton("Cancel",null)
              .setView(view1)
              .create().show();
       }
    });
    loginBtn.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         checkField(email);
         checkField(password);
         Log.d("TAG","onClick" + email.getText().toString());
         if(valid)
         {
fAuth.signInWithEmailAndPassword(email.getText().toString(),password.getT
ext().toString()).addOnSuccessListener(new OnSuccessListener<AuthResult>()
              @Override
```

```
public void onSuccess(AuthResult authResult) {
                Toast.makeText(Login.this,"Logged In
Successfully", Toast. LENGTH_SHORT). show();
                checkUserAccessLevel(authResult.getUser().getUid());
            }).addOnFailureListener(new OnFailureListener() {
              @Override
              public void onFailure(@NonNull Exception e) {
Toast.makeText(Login.this,e.getMessage(),Toast.LENGTH_SHORT).show();
            });
         }
    });
    gotoRegister.setOnClickListener(new\ View.OnClickListener()\ \{
       @Override
       public void onClick(View view) {
         startActivity(new Intent(getApplicationContext(), Register.class));
       }
    });
  }
  private void checkUserAccessLevel(String uid) {
```

```
DocumentReference df=fStore.collection("User").document(uid);
    df.get().addOnSuccessListener(new
OnSuccessListener<DocumentSnapshot>() {
       @Override
       public void onSuccess(DocumentSnapshot documentSnapshot) {
         Log.d("TAG","OnSuccess:" + documentSnapshot.getData());
         if(documentSnapshot.getString("isRetailer") != null){
            startActivity(new Intent(getApplicationContext(),Admin.class));
            finish();
         }
         if(documentSnapshot.getString("isCustomer") != null){
            startActivity(new Intent(getApplicationContext(),User.class));
            finish();
         }
       }
     });
  public boolean checkField(EditText textField){
    if(textField.getText().toString().isEmpty()){
       textField.setError("Error");
```

```
valid = false;
     }else {
       valid = true;
     }
    return valid;
  }
  @Override
  protected void onStart(){
    super.onStart();
    if(FirebaseAuth.getInstance().getCurrentUser() != null){
       DocumentReference
df=FirebaseFirestore.getInstance().collection("Users").document(FirebaseAuth.
getInstance().getCurrentUser().getUid());
       df.get().addOnSuccessListener(new
OnSuccessListener<DocumentSnapshot>() {
          @Override
         public void onSuccess(DocumentSnapshot documentSnapshot) {
            if(documentSnapshot.getString("isRetailer") != null){
              startActivity(new Intent(getApplicationContext(),Admin.class));
              finish();
            }
            if(documentSnapshot.getString("isCustomer") != null){
              startActivity(new Intent(getApplicationContext(),User.class));
              finish();
            }
```

```
}).addOnFailureListener(new OnFailureListener() {
         @Override
         public void onFailure(@NonNull Exception e) {
           FirebaseAuth.getInstance().signOut();
           startActivity(new Intent(getApplicationContext(),Login.class));
           finish();
       });
Activity_login.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=".Login">
  <androidx.cardview.widget.CardView
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
```

```
android:layout_marginTop="8dp"
android:layout_marginEnd="8dp"
android:layout_marginBottom="8dp"
app:cardCornerRadius="5dp"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent">
<androidx.constraintlayout.widget.ConstraintLayout
  android:layout_width="match_parent"
  android:layout_height="416dp"
  android:background="@color/white">
  <TextView
    android:id="@+id/textView3"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginStart="171dp"
    android:layout_marginTop="24dp"
    android:layout_marginEnd="166dp"
    android:layout_marginBottom="25dp"
    android:text="ViewPay"
    android:textColor="@color/black"
    android:textStyle="bold"
    android:fontFamily="cursive"
```

```
android:textSize="30dp"
  app:layout_constraintBottom_toTopOf="@+id/loginEmail"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent" />
<EditText
  android:id="@+id/loginEmail"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="68dp"
  android:layout_marginEnd="16dp"
  android:ems="10"
  android:backgroundTint="@android:color/black"
  android:hint="Email Id"
  android:textColorHint="@color/grey"
  android:textColor="@color/black"
  android:inputType="textEmailAddress"
  app: layout\_constraintEnd\_toEndOf = "parent"
  app:layout_constraintHorizontal_bias="1.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent"
  android:focusableInTouchMode="true"/>
<EditText
  android:id="@+id/loginPassword"
```

```
android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:ems="10"
  android:backgroundTint="@android:color/black"
  android:hint="Password"
  android:textColorHint="@color/grey"
  android:textColor="@color/black"
  android:inputType="textPassword"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/loginEmail"
  android:focusableInTouchMode="true"/>
<Button
  android:id="@+id/loginBtn"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="16dp"
  android:layout_marginEnd="16dp"
  android:backgroundTint="@color/light"
  android:text="LOGIN"
  android:textColor="@color/black"
  android:textSize="20dp"
```

```
app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/loginPassword"/>
<TextView
  android:id="@+id/gotoRegister"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="32dp"
  android:layout_marginEnd="16dp"
  android:textColor="@color/purple_500"
  android:text="Create Account"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.962"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/loginBtn"/>
<TextView
  android:id="@+id/forget_password"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:text="Forget Password?"
  android:textColor="@color/purple_500"
```

```
app:layout_constraintBottom_toBottomOf="parent"
         app:layout_constraintEnd_toEndOf="@+id/gotoRegister"
         app:layout_constraintHorizontal_bias="0.0"
         app:layout_constraintStart_toStartOf="parent"
         app:layout_constraintTop_toBottomOf="@+id/loginBtn"
         app:layout_constraintVertical_bias="0.15" />
    </androidx.constraintlayout.widget.ConstraintLayout>
  </androidx.cardview.widget.CardView>
</androidx.constraintlayout.widget.ConstraintLayout>
Reset_pop.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">
  <EditText
    android:id="@+id/reset_email_pop"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    android:layout_marginTop="8dp"
```

```
android:layout_marginEnd="8dp"
    android:ems="10"
    android:hint="Email Id"
    android:inputType="textEmailAddress"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
Register.java:
package com.example.viewpay1;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.CheckBox;
import android.widget.CompoundButton;
import android.widget.EditText;
import android.widget.Toast;
```

```
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.firestore.DocumentReference;
import com.google.firebase.firestore.FirebaseFirestore;
import java.util.HashMap;
import java.util.Map;
public class Register extends AppCompatActivity {
  Edit Text\ full Name, email, password, phone;
  Button registerBtn,goToLogin;
  boolean valid = true;
  FirebaseAuth fAuth;
  FirebaseFirestore fStore;
  CheckBox isRetailerBox,isCustomerBox;
  @SuppressLint("MissingInflatedId")
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_register);
    fAuth = FirebaseAuth.getInstance();
```

```
fStore = FirebaseFirestore.getInstance();
    fullName = findViewById(R.id.registerName);
    email = findViewById(R.id.registerEmail);\\
    password = findViewById(R.id.registerPassword);
    phone = findViewById(R.id.registerPhone);
    registerBtn = findViewById(R.id.registerBtn);
    goToLogin = findViewById(R.id.gotoLogin);
    isRetailerBox = findViewById(R.id.isRetailer);
    isCustomerBox = findViewById(R.id.isCustomer);
    isCustomerBox.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
       @Override
       public void on Checked Changed (Compound Button, compound Button,
boolean b) {
         if(compoundButton.isChecked()){
           isRetailerBox.setChecked(false);
         }
     });
    registerBtn.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         checkField(fullName);
```

```
checkField(email);
         checkField(password);
         checkField(phone);
         if(!(isRetailerBox.isChecked() || isCustomerBox.isChecked())){
           Toast.makeText(Register.this, "Select The Account
Type",Toast.LENGTH_SHORT).show();
           return;
         }
         if(valid){
fAuth.createUserWithEmailAndPassword(email.getText().toString(),password.
getText().toString()).addOnSuccessListener(new
OnSuccessListener<AuthResult>() {
              @Override
              public void onSuccess(AuthResult authResult) {
                FirebaseUser user=fAuth.getCurrentUser();
                Toast.makeText(Register.this,"Account
Created",Toast.LENGTH_SHORT).show();
                DocumentReference
df=fStore.collection("User").document(user.getUid());
                Map<String,Object>userInfo=new HashMap<>();
                userInfo.put("FullName",fullName.getText().toString());
                userInfo.put("UserEmail",email.getText().toString());
                userInfo.put("PhoneNumber",phone.getText().toString());
                userInfo.put("isUser","1");
```

```
if(isRetailerBox.isChecked()){
                   userInfo.put("isRetailer","1");
                 if(isCustomerBox.isChecked()){
                   userInfo.put("isCustomer","1");
                 }
                 df.set(userInfo);
                 if(isRetailerBox.isChecked()){
                   startActivity(new
Intent(getApplicationContext(),Admin.class));
                   finish();
                 if(isCustomerBox.isChecked()){
                   startActivity(new
Intent(getApplicationContext(),User.class));
                   finish();
                 }
              }
            }).addOnFailureListener(new OnFailureListener(){
               @Override
              public void onFailure(@NonNull Exception e){
                 Toast.makeText(Register.this, "Failed to
create",Toast.LENGTH_SHORT).show();
              }
            });
```

```
}
     });
     goToLogin.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         startActivity(new Intent(getApplicationContext(),Login.class));
       }
     });
  }
  public boolean checkField(EditText textField){
     if(textField.getText().toString().isEmpty()){
       textField.setError("Error");
       valid = false;
     }else {
       valid = true;
     }
    return valid;
  }
Activity_register.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=".Register">
<androidx.cardview.widget.CardView
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="8dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="8dp"
  app:cardCornerRadius="5dp"
  android:background="@color/white"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent">
  <androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/white">
    <TextView
      android:id="@+id/textView3"
      android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
  android:layout_marginStart="171dp"
  android:layout_marginTop="24dp"
  android:layout_marginEnd="166dp"
  android:layout_marginBottom="25dp"
  android:text="ViewPay"
  android:textColor="@color/black"
  android:textStyle="bold"
  android:fontFamily="cursive"
  android:textSize="30dp"
  app:layout_constraintBottom_toTopOf="@+id/registerName"
  app: layout\_constraintEnd\_toEndOf = "parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent" />
<EditText
  android:id="@+id/registerName"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="68dp"
  android:layout_marginEnd="16dp"
  android:backgroundTint="@android:color/black"
  android:ems="10"
  android:hint="Full Name"
  android:inputType="textPersonName"
```

```
android:textColor="@color/black"
  android:textColorHint="@color/grey"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toTopOf="parent" />
<EditText
  android:id="@+id/registerEmail"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:ems="10"
  android:textColor="@color/black"
  android:textColorHint="@color/grey"
  android:backgroundTint="@android:color/black"
  android:hint="Email Id"
  android:inputType="textEmailAddress"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/registerName"/>
<EditText
  android:id="@+id/registerPassword"
  android:layout_width="0dp"
```

```
android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:ems="10"
  android:backgroundTint="@android:color/black"
  android:hint="Password"
  android:textColor="@color/black"
  android:textColorHint="@color/grey"
  android:inputType="textPassword"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/registerEmail" />
<EditText
  android:id="@+id/registerPhone"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:ems="10"
  android:backgroundTint="@android:color/black"
  android:hint="Phone Number"
  android:inputType="phone"
  android:textColorHint="@color/grey"
  android:textColor="@color/black"
```

```
app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/registerPassword"/>
<CheckBox
  android:id="@+id/isRetailer"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:text="Register As Retailer"
  android:textColor="@color/black"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/registerPhone"/>
<CheckBox
  android:id="@+id/isCustomer"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:text="Register as Customer"
  android:textColor="@color/black"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toEndOf="@+id/isRetailer"
  app:layout_constraintTop_toBottomOf="@+id/registerPhone"/>
```

```
<TextView
  android:id="@+id/textView7"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="24dp"
  android:layout_marginTop="36dp"
  android:layout_marginEnd="64dp"
  android:layout_marginBottom="45dp"
  android:text="Are you Merchant too?"
  android:textColor="@color/black"
  app:layout_constraintBottom_toTopOf="@+id/registerBtn"
  app: layout\_constraintEnd\_toStartOf = "@+id/radioButton"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/isRetailer"
  app:layout_constraintVertical_bias="0.0" />
< Radio Button
  android:id="@+id/radioButton"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="44dp"
  android:layout_marginTop="16dp"
  android:text="Yes"
  android:textColor="@color/black"
  app:layout_constraintStart_toEndOf="@+id/textView7"
  app:layout_constraintTop_toBottomOf="@+id/isCustomer"/>
```

```
< Radio Button
  android:id="@+id/radioButton2"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginStart="49dp"
  android:layout_marginTop="19dp"
  android:layout_marginEnd="13dp"
  android:layout_marginBottom="33dp"
  android:text="No"
  android:textColor="@color/black"
  app:layout_constraintBottom_toTopOf="@+id/registerBtn"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintHorizontal_bias="0.0"
  app:layout_constraintStart_toEndOf="@+id/radioButton"
  app:layout_constraintTop_toBottomOf="@+id/isCustomer"
  app:layout_constraintVertical_bias="1.0" />
<Button
  android:id="@+id/registerBtn"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="40dp"
  android:layout_marginEnd="16dp"
  android:backgroundTint="@color/light"
  android:text="Create Account"
```

```
android:textColor="@color/black"
  android:textSize="15dp"
  app: layout\_constraintEnd\_toEndOf = "parent"
  app:layout_constraintHorizontal_bias="0.0"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/radioButton2"/>
<Button
  android:id="@+id/gotoLogin"
  android:layout_width="0dp"
  android:layout_height="wrap_content"
  android:layout_marginStart="16dp"
  android:layout_marginTop="8dp"
  android:layout_marginEnd="16dp"
  android:layout_marginBottom="16dp"
  android:text="Login"
  app:layout_constraintBottom_toBottomOf="parent"
  app:layout_constraintEnd_toEndOf="parent"
  app:layout_constraintStart_toStartOf="parent"
  app:layout_constraintTop_toBottomOf="@+id/registerBtn"/>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
</androidx.cardview.widget.CardView>
</androidx.constraintlayout.widget.ConstraintLayout>
```

```
Admin.java:
package com.example.viewpay1;
import android.os.Bundle;
import android.view.View;
import android.view.Menu;
import com.google.android.material.snackbar.Snackbar;
import com.google.android.material.navigation.NavigationView;
import androidx.navigation.NavController;
import androidx.navigation.Navigation;
import androidx.navigation.ui.AppBarConfiguration;
import androidx.navigation.ui.NavigationUI;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.appcompat.app.AppCompatActivity;
import com.example.viewpay1.databinding.ActivityAdminBinding;
public class Admin extends AppCompatActivity {
  private AppBarConfiguration mAppBarConfiguration;
  private ActivityAdminBinding binding;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
```

```
binding = ActivityAdminBinding.inflate(getLayoutInflater());
    setContentView(binding.getRoot());
    setSupportActionBar(binding.appBarAdmin.toolbar);
    binding.appBarAdmin.fab.setOnClickListener(new
View.OnClickListener() {
       @Override
       public void onClick(View view) {
         Snackbar.make(view, "Replace with your own action",
Snackbar.LENGTH_LONG)
             .setAction("Action", null).show();
       }
    });
    DrawerLayout drawer = binding.drawerLayout;
    NavigationView navigationView = binding.navView;
    mAppBarConfiguration = new AppBarConfiguration.Builder(
         R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow)
         .setOpenableLayout(drawer)
         .build();
    NavController navController = Navigation.findNavController(this,
R.id.nav_host_fragment_content_admin);
    NavigationUI.setupActionBarWithNavController(this, navController,
mAppBarConfiguration);
    NavigationUI.setupWithNavController(navigationView, navController);
  }
```

```
@Override
  public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.admin, menu);
    return true:
  }
  @Override
  public boolean onSupportNavigateUp() {
    NavController navController = Navigation.findNavController(this,
R.id.nav_host_fragment_content_admin);
    return NavigationUI.navigateUp(navController, mAppBarConfiguration)
         || super.onSupportNavigateUp();
  }
}
Activity_admin.xml:
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
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:id="@+id/drawer_layout"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:fitsSystemWindows="true"
  android:backgroundTint="@color/black"
  android:background="@color/black"
```

```
tools:openDrawer="start">
  <include
    android:id="@+id/app_bar_admin"
    layout="@layout/app_bar_admin"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />
  <com.google.android.material.navigation.NavigationView</p>
    android:id="@+id/nav_view"
    android:layout_width="wrap_content"
    android:layout_height="match_parent"
    android:layout_gravity="start"
    android:fitsSystemWindows="true"
    app:itemIconTint="#000000"
    app:headerLayout="@layout/nav_header_admin"
    app:menu="@menu/activity_main_drawer"/>
</androidx.drawerlayout.widget.DrawerLayout>
App_bar_admin.xml:
<?xml version="1.0" encoding="utf-8"?>
<androidx.coordinatorlayout.widget.CoordinatorLayout
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/black"
```

```
tools:context=".Admin">
<com.google.android.material.appbar.AppBarLayout</p>
  android:id="@+id/appBarLayout"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:background="@color/black"
  android:theme="@style/Theme.ViewPay1.AppBarOverlay">
</com.google.android.material.appbar.AppBarLayout>
<include layout="@layout/content_admin" />
<com.google.android.material.floatingactionbutton.FloatingActionButton</p>
  android:id="@+id/fab"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_gravity="bottom|end"
  android:layout_marginEnd="@dimen/fab_margin"
  android:backgroundTint="@color/light"
  android:layout_marginBottom="16dp"
  android:background="@color/black"
  app:srcCompat="@drawable/ic_baseline_chat_24"/>
<androidx.appcompat.widget.Toolbar
```

```
android:id="@+id/toolbar"
android:layout_width="match_parent"
android:layout_height="?attr/actionBarSize"
android:background="@color/light"
app:layout_anchor="@+id/appBarLayout"
app:layout_anchorGravity="center"
app:popupTheme="@style/Theme.ViewPay1.PopupOverlay">
<ImageView
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:src="@drawable/ic_baseline_menu_24"/>
<TextView
  android:layout_width="150dp"
  android:layout_height="wrap_content"
  android:fontFamily="cursive"
  android:text="ViewPay"
  android:textAlignment="center"
  android:textColor="@color/black"
  android:textSize="30dp"
  android:textStyle="bold" />
<ImageView
  android:layout_width="100dp"
  android:layout_height="wrap_content"
  android:src="@drawable/ic_baseline_search_24"/>
```

```
<ImageView
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:src="@drawable/ic_baseline_mic_24"/>
  </androidx.appcompat.widget.Toolbar>
</androidx.coordinatorlayout.widget.CoordinatorLayout>
Nav_header_admin.xml:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:layout_width="match_parent"
  android:layout_height="@dimen/nav_header_height"
  android:background="@color/light"
  android:gravity="bottom"
  android:orientation="vertical"
  android:paddingLeft="@dimen/activity_horizontal_margin"
  android:paddingTop="@dimen/activity_vertical_margin"
  android:paddingRight="@dimen/activity_horizontal_margin"
  android:paddingBottom="@dimen/activity_vertical_margin"
  android:theme="@style/ThemeOverlay.AppCompat.Dark">
  <ImageView
    android:id="@+id/imageView"
```

```
android:layout_width="125dp"
    android:layout_height="90dp"
    android:background="@color/white"
    android:contentDescription="@string/nav_header_desc"
    android:paddingTop="@dimen/nav_header_vertical_spacing"
    app:srcCompat="@drawable/profile"/>
  <TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingTop="@dimen/nav_header_vertical_spacing"
    android:textColor="@color/black"
    android:text="Suganya"
    android:textAppearance="@style/TextAppearance.AppCompat.Body1" />
  <TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textColor="@color/black"
    android:text="@string/nav_header_subtitle"/>
</LinearLayout>
User.java:
package com.example.viewpay1;
```

```
import android.os.Bundle;
import android.view.View;
import android.view.Menu;
import com.google.android.material.snackbar.Snackbar;
import com.google.android.material.navigation.NavigationView;
import androidx.navigation.NavController;
import androidx.navigation.Navigation;
import androidx.navigation.ui.AppBarConfiguration;
import androidx.navigation.ui.NavigationUI;
import androidx.drawerlayout.widget.DrawerLayout;
import androidx.appcompat.app.AppCompatActivity;
import com.example.viewpay1.databinding.ActivityUserBinding;
public class User extends AppCompatActivity {
  private AppBarConfiguration mAppBarConfiguration;
  private ActivityUserBinding binding;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    binding = ActivityUserBinding.inflate(getLayoutInflater());
    setContentView(binding.getRoot());
```

```
setSupportActionBar(binding.appBarUser.toolbar);
    binding.appBarUser.fab.setOnClickListener(new View.OnClickListener()
{
       @Override
       public void onClick(View view) {
         Snackbar.make(view, "Replace with your own action",
Snackbar.LENGTH LONG)
              .setAction("Action", null).show();
       }
    });
    DrawerLayout drawer = binding.drawerLayout;
    NavigationView navigationView = binding.navView;
         mAppBarConfiguration = new AppBarConfiguration.Builder(
         R.id.nav_home, R.id.nav_gallery, R.id.nav_slideshow)
         .setOpenableLayout(drawer)
         .build();
    NavController navController = Navigation.findNavController(this,
R.id.nav_host_fragment_content_user);
    NavigationUI.setupActionBarWithNavController(this, navController,
mAppBarConfiguration);
    NavigationUI.setupWithNavController(navigationView, navController);
  }
  @Override
  public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.user, menu);
    return true;
```

```
}
  @Override
  public boolean onSupportNavigateUp() {
    NavController navController = Navigation.findNavController(this,
R.id.nav_host_fragment_content_user);
    return NavigationUI.navigateUp(navController, mAppBarConfiguration)
         || super.onSupportNavigateUp();
  }
}
Activity_user.xml:
<?xml version="1.0" encoding="utf-8"?>
<androidx.drawerlayout.widget.DrawerLayout
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:id="@+id/drawer_layout"
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:fitsSystemWindows="true"
  tools:openDrawer="start">
  <include
    android:id="@+id/app_bar_user"
    layout="@layout/app_bar_user"
    android:layout_width="match_parent"
    android:layout_height="match_parent" />
```

```
<com.google.android.material.navigation.NavigationView</p>
    android:id="@+id/nav_view"
    android:layout_width="wrap_content"
    android:layout_height="match_parent"
    android:layout_gravity="start"
    and roid: fits System Windows = "true" \\
    app:headerLayout="@layout/nav_header_user"
    app:menu="@menu/activity_admin_drawer"/>
</androidx.drawerlayout.widget.DrawerLayout>
Nav_header_user.xml:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  xmlns:app="http://schemas.android.com/apk/res-auto"
  android:layout_width="match_parent"
  android:layout_height="@dimen/nav_header_height"
  android:background="@color/light"
  android:gravity="bottom"
  android:orientation="vertical"
  android:paddingLeft="@dimen/activity_horizontal_margin"
  android:paddingTop="@dimen/activity_vertical_margin"
  android:paddingRight="@dimen/activity_horizontal_margin"
  android:paddingBottom="@dimen/activity_vertical_margin"
  android:theme="@style/ThemeOverlay.AppCompat.Dark">
  <ImageView
```

```
android:id="@+id/imageView"
    android:layout_width="125dp"
    android:layout_height="90dp"
    android:background="@color/white"
    android:contentDescription="@string/nav_header_desc"
    android:paddingTop="@dimen/nav_header_vertical_spacing"
    app:srcCompat="@drawable/profile"/>
  <TextView
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:paddingTop="@dimen/nav_header_vertical_spacing"
    android:textColor="@color/black"
    android:text="Suganya"
    android:textAppearance="@style/TextAppearance.AppCompat.Body1" />
  <TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:textColor="@color/black"
    android:text="@string/nav_header_subtitle"/>
</LinearLayout>
```

```
Activity.chat.xml:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  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:orientation="vertical"
  tools:context=".Chat">
  <androidx.recyclerview.widget.RecyclerView
    android:id="@+id/recyclerView"
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:layout_weight="1"
    android:background="@color/textBackground"/>
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:background="@color/inputBackground"
    android:padding="5dp">
    <EditText
       android:id="@+id/msgInput"
       android:layout_width="0dp"
```

```
android:padding="10dp"
      android:layout_weight="1"
       android:maxLines="2"
      android:hint="@string/message"
      android:inputType="text"
      android:textSize="14sp"
      android:background="@drawable/rounded_corner"/>
    <ImageButton
      and roid: id = "@+id/msgButton"\\
      android:layout_width="40dp"
      android:layout_height="40dp"
       android:layout_marginLeft="5dp"
      android:background="@drawable/circular_button"
      android:src="@drawable/outline_send_white_24dp"
      android:padding="5dp"
      android:scaleType="fitCenter"/>
  </LinearLayout>
</LinearLayout>
Activity_message.xml:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
```

android:layout_height="wrap_content"

```
xmlns:android="http://schemas.android.com/apk/res/android"
android:orientation="vertical"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:padding="5dp"
android:background="@color/textBackground">
<LinearLayout
  android:id="@+id/receivedLayout"
  android:orientation="vertical"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_gravity="left"
  android:background="@drawable/message_received">
  <TextView
    android:id="@+id/receivedTextView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_margin="10dp"
    android:textColor="#fff"/>
</LinearLayout>
<LinearLayout
  android:id="@+id/sentLayout"
```

```
android:orientation="vertical"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="right"
    android:background="@drawable/message_sent">
    <TextView
       android:id="@+id/sentTextView"
       android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_gravity="center"
       android:layout_margin="10dp"
       android:textColor="#fff"/>
  </LinearLayout>
</LinearLayout>
getRequest.java:
import android.content.Context;
import android.util.Log;
import android.widget.Toast;
import com.android.volley.Request;
import com.android.volley.RequestQueue;
import com.android.volley.Response;
import com.android.volley.VolleyError;
```

```
import com.android.volley.toolbox.JsonObjectRequest;
import com.android.volley.toolbox.Volley;
import org.json.JSONException;
import org.json.JSONObject;
public class getRequest {
  private RequestQueue queue;
  private String APIkey = "[API Key]";
  private String brainID = "[Brain id]";
  private String reply;
  private char[] illegalChars = {'#', '<', '>', '$', '+', '%', '!', '`', '&',
       '*', '\", '\"', '|', '\{', '\}', '\', '\\', ':', '@'\};
  public getRequest(Context context){
     queue = Volley.newRequestQueue(context);
   }
  public interface VolleyResponseListener {
     void onError(String message);
     void onResponse(String reply);
   }
  private String formatMessage(String message){
     message = message.replace(' ', '-');
```

```
for(char illegalChar : illegalChars){
       message = message.replace(illegalChar, '-');
    return message;
  }
  public void getResponse(String message, final VolleyResponseListener
volleyResponseListener){
    message = formatMessage(message);
    String url = "http://api.brainshop.ai/get?bid=" + brainID+ "&key=" +
APIkey + "&uid=1&msg=" + message;
    Log.d("URL", url);
    JsonObjectRequest request = new
JsonObjectRequest(Request.Method.GET, url, null,
         new Response.Listener<JSONObject>(){
            @Override
           public void onResponse(JSONObject response){
              try {
                reply = response.getString("cnt");
                Log.d("RESPONSE", reply);
                volleyResponseListener.onResponse(reply);
              } catch (JSONException e) {
                e.printStackTrace();
                volleyResponseListener.onError("JSON Exception");
```

```
},
         new Response.ErrorListener(){
            @Override
            public void onErrorResponse(VolleyError error){
              error.printStackTrace();
              volley Response Listener. on Error ("Volley Error");\\
            }
          });
    queue.add(request);
  }
}
Chat.java:
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ImageButton;
import java.util.ArrayList;
public class MainActivity extends AppCompatActivity {
  private ArrayList<Message> messages;
  private RecyclerView recyclerView;
  private recyclerAdapter adapter;
```

```
private ImageButton sendButton;
  private EditText msgInput;
  private getRequest request;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    request = new getRequest(this);
    recyclerView = findViewById(R.id.recyclerView);
    // Set RecyclerView layout manager.
    RecyclerView.LayoutManager layoutManager = new
LinearLayoutManager(this);
    recyclerView.setLayoutManager(layoutManager);
    // Set an animation
    recyclerView.setItemAnimator(new DefaultItemAnimator());
    messages = new ArrayList<>();
    adapter = new recyclerAdapter(messages);
    recyclerView.setAdapter(adapter);
    sendButton = (ImageButton) findViewById(R.id.msgButton);
    msgInput = (EditText) findViewById(R.id.msgInput);
    sendButton.setOnClickListener(new View.OnClickListener() {
       @Override
```

```
public void onClick(View v) {
         String message = msgInput.getText().toString();
         if(message.length() != 0){
           messages.add(new Message(true, message));
           int newPosition = messages.size() - 1;
           adapter.notify Item Inserted (new Position);\\
           recyclerView.scrollToPosition(newPosition);
           msgInput.setText("");
           getReply(message);
       }
    });
  }
  private void getReply(String message) {
    request.getResponse(message, new getRequest.VolleyResponseListener()
{
       @Override
       public void onError(String message) {
         Log.d("REQUEST ERROR", message);
       }
       @Override
       public void onResponse(String reply) {
         messages.add(new Message(false, reply));
         int newPosition = messages.size() - 1;
```

```
adapter.notifyItemInserted(newPosition);
          recyclerView.scrollToPosition(newPosition);
       }
     });
}
Message.java:
public class Message {
  // Type 0 for sent, 1 for received
  private boolean type;
  // Message content
  private String message;
  public Message(boolean type, String message) {
    this.type = type;
    this.message = message;
  }
  public String getMessage() {
    return message;
  }
  public boolean getType() {
    return this.type;
  }
```

```
public void setMessage(String message) {
    this.message = message;
  }
  public void setType(boolean type) {
    this.type = type;
  }
}
recycleAdapter.java:
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.LinearLayout;
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import java.util.ArrayList;
public class recyclerAdapter extends
RecyclerView.Adapter<recyclerAdapter.MessageViewHolder> {
  private ArrayList<Message> messages;
  public recyclerAdapter(ArrayList<Message> messages){
```

```
this.messages = messages;
  }
  public class MessageViewHolder extends RecyclerView.ViewHolder {
    private LinearLayout sentLayout;
    private LinearLayout receivedLayout;
    private TextView sentText;
    private TextView receivedText;
    public MessageViewHolder(final View itemView) {
      super(itemView);
      sentLayout = itemView.findViewById(R.id.sentLayout);
      receivedLayout = itemView.findViewById(R.id.receivedLayout);
      sentText = itemView.findViewById(R.id.sentTextView);
      receivedText= itemView.findViewById(R.id.receivedTextView);
    }
  @NonNull
  @Override
  public recyclerAdapter.MessageViewHolder
onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
    View itemView =
LayoutInflater.from(parent.getContext()).inflate(R.layout.message, parent,
false);
    return new MessageViewHolder(itemView);
  }
```

```
@Override
  public void onBindViewHolder(@NonNull
recyclerAdapter.MessageViewHolder holder, int position) {
    String message = messages.get(position).getMessage();
    boolean type = messages.get(position).getType();
    if(type){
       //If a message is sent
       holder.sentLayout.setVisibility(LinearLayout.VISIBLE);
       holder.sentText.setText(message);
       // Set visibility as GONE to remove the space taken up
       holder.receivedLayout.setVisibility(LinearLayout.GONE);
     }
    else{
       //Message is received
       holder.receivedLayout.setVisibility(LinearLayout.VISIBLE);
       holder.receivedText.setText(message);
       // Set visibility as GONE to remove the space taken up
       holder.sentLayout.setVisibility(LinearLayout.GONE);
  @Override
  public int getItemCount() {
    return messages.size();
```

```
Profile_main.xml:
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  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/grey"
  android:orientation="vertical"
  tools:context=".ProfileActivity">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="240dp"
    android:background="#293859" />
  <!--Top Header Layout-->
  <LinearLayout
    android:id="@+id/topbar"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:gravity="center_vertical"
    android:padding="16dp">
    <ImageView
       android:layout_width="40dp"
```

```
android:layout_height="40dp"
  android:padding="10dp"
  android:src="@drawable/ic_arrow_back_24dp"/>
<Space
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="1" />
<TextView
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:text="Profile"
  android:textColor="@color/white"
  android:textSize="20sp"
  android:textStyle="bold" />
<Space
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="1" />
<RelativeLayout
  android:layout_width="50dp"
  android:layout_height="50dp">
  <ImageView
```

```
android:layout_width="40dp"
      android:layout_height="40dp"
      android:layout_centerInParent="true"
      android:padding="6dp"
      android:src="@drawable/ic_notifications_white_24dp"/>
    <ImageView
      android:layout_width="20dp"
      android:layout_height="20dp"
      android:layout_alignParentTop="true"
      android:layout_alignParentEnd="true"
      android:layout_margin="8dp"
      android:padding="4dp"
      android:src="@drawable/circleyellowfil"/>
  </RelativeLayout>
</LinearLayout>
<ScrollView
  android:layout_width="match_parent"
  android:layout_height="match_parent"
  android:scrollbars="none"
  android:layout_below="@+id/topbar">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent"
```

```
android:paddingLeft="20dp"
android:paddingTop="10dp"
android:paddingRight="20dp">
<!--Top Profile Section -->
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:background="@drawable/circularbordersolid"
  android:gravity="center"
  android:orientation="vertical"
  android:padding="16dp">
  <androidx.cardview.widget.CardView
    android:layout_width="150dp"
    android:layout_height="90dp"
    app:cardCornerRadius="6dp"
    app:cardElevation="0dp">
    <ImageView
      android:layout_width="150dp"
      android:layout_height="90dp"
      android:scaleType="centerCrop"
      android:src="@drawable/pp"/>
  </androidx.cardview.widget.CardView>
```

android:orientation="vertical"

```
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:orientation="vertical">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="10dp"
    android:fontFamily="@font/proximanovaregular"
    android:text="Sanskar Tiwari"
    android:textColor="#424242"
    android:textSize="21sp"
    android:textStyle="bold" />
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/proximanovaregular"
    android:text="Android Developer"
    android:textSize="14sp"/>
</LinearLayout>
<LinearLayout
```

```
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="10dp"
android:paddingBottom="10dp">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center"
  android:padding="8dp">
  <ImageView
    android:layout_width="35dp"
    android:layout_height="35dp"
    android:background="@drawable/circular_grey_bordersolid"
    android:padding="10dp"
    android:src="@drawable/tickinsidecircle"/>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:orientation="vertical">
    <TextView
       android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
       android:text="97%"
       android:textSize="12sp"
      android:textStyle="bold" />
    <TextView
      android:layout_width="wrap_content"
       android:layout_height="wrap_content"
       android:layout_marginTop="2dp"
      android:text="@string/job_success"
       android:textSize="12sp"/>
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center"
  android:padding="8dp">
  <ImageView
    android:layout_width="35dp"
    android:layout_height="35dp"
    android:background="@drawable/circular_grey_bordersolid"
    android:padding="10dp"
    android:src="@drawable/star"/>
```

```
<LinearLayout
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_marginLeft="10dp"
         android:orientation="vertical">
         <TextView
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:text="4.8/5"
           android:textSize="12sp"
           android:textStyle="bold" />
         <TextView
           android:layout_width="wrap_content"
           android:layout_height="wrap_content"
           android:layout_marginTop="2dp"
           android:text="@string/ratings"
           android:textSize="12sp"/>
      </LinearLayout>
    </LinearLayout>
  </LinearLayout>
</LinearLayout>
<!--Option Bar-->
```

```
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
  android:layout_marginBottom="10dp"
  android:background="@drawable/circularbordersolid"
  android:gravity="center"
  android:orientation="horizontal">
  <TextView
    android:id="@+id/personalinfobtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="2"
    android:fontFamily="@font/proximanovaregular"
    android:gravity="center"
    android:padding="13dp"
    android:text="User Info"
    android:textAllCaps="true"
    android:textColor="@color/blue"
    android:textSize="14sp"
    android:textStyle="bold" />
  <LinearLayout
    android:layout_width="1dp"
    android:layout_height="match_parent"
```

```
android:background="@color/lightgrey"/>
<TextView
  android:id="@+id/experiencebtn"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:fontFamily="@font/proximanovaregular"
  android:gravity="center"
  android:padding="13dp"
  android:text="Experience"
  android:textAllCaps="true"
  android:textColor="@color/lightgrey"
  android:textSize="14sp"
  android:textStyle="bold" />
<LinearLayout
  android:layout_width="1dp"
  android:layout_height="match_parent"
  android:background="@color/lightgrey"/>
<TextView
  android:id="@+id/reviewbtn"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
```

android:fontFamily="@font/proximanovaregular"

```
android:gravity="center"
    android:padding="13dp"
    android:text="Review"
    android:textAllCaps="true"
    android:textColor="@color/lightgrey"
    android:textSize="14sp"
    android:textStyle="bold" />
</LinearLayout>
<!--Bootom Cards with sections-->
<LinearLayout
  android:id="@+id/personalinfo"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="vertical">
  <!--About Me Card-->
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/circularbordersolid"
    android:orientation="vertical"
    android:padding="16dp">
    <LinearLayout
       android:layout_width="match_parent"
```

```
android:layout_height="wrap_content"
android:orientation="vertical">
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/about_me"
    android:fontFamily="@font/proximanovaregular"
    android:textSize="17sp"
    android:textStyle="bold" />
  <Space
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1" />
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Edit"
    android:fontFamily="@font/proximanovaregular"
    android:textColor="#FFCF66"
    android:layout_marginEnd="10dp"
```

```
android:textSize="14sp"/>
    </LinearLayout>
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginTop="10dp"
      android:text="@string/my_desc"/>
  </LinearLayout>
</LinearLayout>
<!--Contact Details-->
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
  android:background="@drawable/circularbordersolid"
  android:orientation="vertical"
  android:padding="16dp">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <TextView
      android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
    android:text="@string/contact"
    android:textSize="17sp"
    android:fontFamily="@font/proximanovaregular"
    android:textStyle="bold" />
  <Space
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1" />
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Edit"
    android:textColor="#FFCF66"
    android:layout_marginEnd="10dp"
    android:textSize="14sp"/>
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
  android:orientation="vertical">
  <LinearLayout
```

```
android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:gravity="center_vertical"
                android:paddingRight="8dp">
                <ImageView
                  android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/ic_call_24dp"/>
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:text="+91 7999193854"
                  android:textSize="15sp"
                  android:textColor="@color/goodgrey"
                  android:fontFamily="@font/proximanovaregular" />
             </LinearLayout>
             <LinearLayout
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginTop="10dp"
                android:gravity="center_vertical"
```

```
android:paddingRight="8dp">
               <ImageView
                  android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/ic_email_24dp"/>
               <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:textColor="@color/goodgrey"
                  android:text="sanskar@theindianappguy.com"
                  android:textSize="15sp"
                  android:fontFamily="@font/proximanovaregular"/>
             </LinearLayout>
             <LinearLayout
               android:layout_width="wrap_content"
               android:layout_height="wrap_content"
               android:layout_marginTop="10dp"
               android:gravity="center_vertical"
               android:paddingRight="8dp">
               <ImageView
```

```
android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/ic_location_24dp"/>
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:text="Leeds, United Kingdom"
                  android:textSize="15sp"
                  android:textColor="@color/goodgrey"
                  android:fontFamily="@font/proximanovaregular"/>
             </LinearLayout>
           </LinearLayout>
         </LinearLayout>
         <!--Skills Details-->
         <LinearLayout
           android:layout_width="match_parent"
           android:layout_height="wrap_content"
           android:layout_marginTop="10dp"
           android:background="@drawable/circularbordersolid"
           android:orientation="vertical"
           android:padding="16dp">
```

```
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="@string/skills"
    android:textSize="17sp"
    android:textStyle="bold" />
  <Space
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="1" />
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Edit"
    android:textColor="#FFCF66"
    android:textSize="14sp"/>
</LinearLayout>
<LinearLayout
```

```
android:layout_width="match_parent"
             android:layout_height="wrap_content"
             android:layout_marginTop="10dp"
             android:orientation="vertical">
             <LinearLayout
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:gravity="center_vertical"
                android:paddingRight="8dp">
                <ImageView
                  android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/paintbrush"/>
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:text="Expert in Photoshop, Adobe XD"
                  android:textSize="15sp"/>
             </LinearLayout>
             <LinearLayout
```

```
android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginTop="10dp"
                android:gravity="center_vertical"
                android:paddingRight="8dp">
                <ImageView
                  android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/ic_email_24dp"/>
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:text="sanskar@theindianappguy.com"
                  android:textSize="15sp" />
             </LinearLayout>
             <LinearLayout
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_marginTop="10dp"
                android:gravity="center_vertical"
                android:paddingRight="8dp">
```

```
<ImageView
                  android:layout_width="40dp"
                  android:layout_height="40dp"
android:background="@drawable/circular_grey_bordersolid"
                  android:padding="10dp"
                  android:src="@drawable/ic_location_24dp"/>
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginLeft="20dp"
                  android:text="Leeds, United Kingdom"
                  android:textSize="15sp"/>
             </LinearLayout>
           </LinearLayout>
         </LinearLayout>
       </LinearLayout>
       <!--Experience Bottom Cards-->
       <LinearLayout
         android:id="@+id/experience"
         android:layout_width="match_parent"
         android:layout_height="wrap_content"
         android:orientation="vertical">
```

```
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:background="@drawable/circularbordersolid"
  android:orientation="horizontal"
  android:padding="20dp">
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="2"
    android:gravity="center_vertical">
    <ImageView
      android:layout_width="40dp"
      android:layout_height="40dp"
      android:padding="6dp"
      android:src="@drawable/playstore"/>
    <LinearLayout
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginLeft="10dp"
      android:orientation="vertical">
      <TextView
```

```
android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:fontFamily="@font/proximanovaregular"
      android:text="Android Developer"
      android:textSize="14sp"
      android:textStyle="bold" />
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginTop="3dp"
      android:fontFamily="@font/proximanovaregular"
      android:text="at TheIndianAppGuy"
      android:textSize="12sp" />
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginLeft="10dp"
  android:gravity="center_vertical">
  <ImageView
    android:layout_width="9dp"
    android:layout_height="9dp"
    android:padding="1dp"
```

```
android:src="@drawable/circleyellowfil"/>
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginStart="5dp"
      android:text="Sep 2010 - Jan 2013"
      android:textSize="12sp"
      android:textStyle="bold" />
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
  android:background="@drawable/circularbordersolid"
  android:orientation="horizontal"
  android:padding="20dp">
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_weight="2"
    android:gravity="center_vertical">
```

```
<ImageView
  android:layout_width="40dp"
  android:layout_height="40dp"
  android:padding="6dp"
  android:src="@drawable/android"/>
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginLeft="10dp"
  android:orientation="vertical">
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="@font/proximanovaregular"
    android:text="Android Developer"
    android:textSize="14sp"
    android:textStyle="bold" />
  <TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="3dp"
    android:fontFamily="@font/proximanovaregular"
    android:text="at TheIndianAppGuy"
    android:textSize="12sp" />
```

```
</LinearLayout>
  </LinearLayout>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:gravity="center_vertical">
    <ImageView
      android:layout_width="9dp"
      android:layout_height="9dp"
      android:padding="1dp"
      android:src="@drawable/circleyellowfil"/>
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginStart="5dp"
      android:text="Sep 2010 - Jan 2013"
      android:textSize="12sp"
      android:textStyle="bold" />
  </LinearLayout>
</LinearLayout>
<LinearLayout
```

```
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_marginTop="10dp"
android:background="@drawable/circularbordersolid"
android:orientation="horizontal"
android:padding="20dp">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center_vertical">
  <ImageView
    android:layout_width="40dp"
    android:layout_height="40dp"
    android:padding="6dp"
    android:src="@drawable/search"/>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:orientation="vertical">
    <TextView
       android:layout_width="wrap_content"
```

```
android:layout_height="wrap_content"
      android:fontFamily="@font/proximanovaregular"
      android:text="Android Developer"
      android:textSize="14sp"
      android:textStyle="bold" />
    <TextView
      android:layout_width="wrap_content"
      android:layout_height="wrap_content"
      android:layout_marginTop="3dp"
      android:fontFamily="@font/proximanovaregular"
      android:text="at TheIndianAppGuy"
      android:textSize="12sp" />
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_marginLeft="10dp"
  android:gravity="center_vertical">
  <ImageView
    android:layout_width="9dp"
    android:layout_height="9dp"
    android:padding="1dp"
    android:src="@drawable/circleyellowfil"/>
```

```
<TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_marginStart="5dp"
         android:text="Sep 2010 - Jan 2013"
         android:textSize="12sp"
         android:textStyle="bold" />
    </LinearLayout>
  </LinearLayout>
</LinearLayout>
<!--Review Bottom Cards-->
<LinearLayout
  android:id="@+id/review"
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:orientation="vertical">
  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@drawable/circularbordersolid"
    android:orientation="horizontal"
```

```
android:padding="20dp">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center_vertical">
  <androidx.cardview.widget.CardView
    android:layout_width="70dp"
    android:layout_height="70dp"
    app:cardCornerRadius="6dp"
    app:cardElevation="0dp">
    <ImageView
      android:layout_width="70dp"
      android:layout_height="70dp"
      android:scaleType="centerCrop"
      android:src="@drawable/person1"/>
  </androidx.cardview.widget.CardView>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="10dp"
    android:orientation="vertical">
```

```
<TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:fontFamily="@font/proximanovaregular"
         android:maxLines="3"
         android:text="@string/samplereview"
         android:textSize="14sp" />
      <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_marginTop="3dp"
         android:fontFamily="@font/proximanovaregular"
         android:text="Saswat Tiwari"
         android:textSize="12sp"
         android:textStyle="bold" />
    </LinearLayout>
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
```

```
android:background="@drawable/circularbordersolid"
android:orientation="horizontal"
android:padding="20dp">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center_vertical">
  <androidx.cardview.widget.CardView
    android:layout_width="70dp"
    android:layout_height="70dp"
    app:cardCornerRadius="6dp"
    app:cardElevation="0dp">
    <ImageView
      android:layout_width="70dp"
      android:layout_height="70dp"
      android:scaleType="centerCrop"
      android:src="@drawable/person2"/>
  </androidx.cardview.widget.CardView>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```
android:layout_marginLeft="10dp"
      android:orientation="vertical">
      <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:maxLines="3"
         android:text="@string/samplereview"
         android:textSize="14sp" />
      <TextView
         android:layout_width="wrap_content"
         android:layout_height="wrap_content"
         android:layout_marginTop="3dp"
         android:text="Mr Sk TATA"
         android:textSize="12sp"
         android:textStyle="bold" />
    </LinearLayout>
  </LinearLayout>
</LinearLayout>
<LinearLayout
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:layout_marginTop="10dp"
```

```
android:background="@drawable/circularbordersolid"
android:orientation="horizontal"
android:padding="20dp">
<LinearLayout
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_weight="2"
  android:gravity="center_vertical">
  <androidx.cardview.widget.CardView
    android:layout_width="70dp"
    android:layout_height="70dp"
    app:cardCornerRadius="6dp"
    app:cardElevation="0dp">
    <ImageView
      android:layout_width="70dp"
      android:layout_height="70dp"
      android:scaleType="centerCrop"
      android:src="@drawable/person3"/>
  </androidx.cardview.widget.CardView>
  <LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```
android:orientation="vertical">
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:maxLines="3"
                  android:text="@string/samplereview"
                  android:textSize="14sp" />
                <TextView
                  android:layout_width="wrap_content"
                  android:layout_height="wrap_content"
                  android:layout_marginTop="3dp"
                  android:text="Shikha Tiwari"
                  android:textSize="12sp"
                  android:textStyle="bold" />
             </LinearLayout>
           </LinearLayout>
         </LinearLayout>
      </LinearLayout>
    </LinearLayout>
  </ScrollView>
</RelativeLayout>
```

android:layout_marginLeft="10dp"

```
Profile.java:
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.LinearLayout;
import android.widget.TextView;
public class ProfileActivity extends AppCompatActivity {
  LinearLayout personalinfo, experience, review;
  TextView personalinfobtn, experiencebtn, reviewbtn;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView (R.layout.profile\_main);
    personalinfo = findViewById(R.id.personalinfo);
    experience = findViewById(R.id.experience);
    review = findViewById(R.id.review);
    personal in fobtn = find View By Id (R.id.personal in fobtn); \\
    experiencebtn = findViewById(R.id.experiencebtn);
    reviewbtn = findViewById(R.id.reviewbtn);
    /*making personal info visible*/
    personalinfo.setVisibility(View.VISIBLE);
```

```
experience.setVisibility(View.GONE);
review.setVisibility(View.GONE);
personalinfobtn.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View v) {
    personalinfo.setVisibility(View.VISIBLE);
    experience.setVisibility(View.GONE);
    review.setVisibility(View.GONE);
    personal in fobtn. set Text Color (get Resources (). get Color (R. color. blue));\\
    experiencebtn.setTextColor(getResources().getColor(R.color.grey));
    reviewbtn.setTextColor(getResources().getColor(R.color.grey));
  }
});
experiencebtn.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View v) {
    personalinfo.setVisibility(View.GONE);
    experience.setVisibility(View.VISIBLE);
    review.setVisibility(View.GONE);
    personalinfobtn.setTextColor(getResources().getColor(R.color.grey));
    experiencebtn.setTextColor(getResources().getColor(R.color.blue));
```

```
reviewbtn.setTextColor(getResources().getColor(R.color.grey));
       }
     });
    reviewbtn.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         personalinfo.setVisibility(View.GONE);
         experience.setVisibility(View.GONE);
         review.setVisibility(View.VISIBLE);
         personalinfobtn.setTextColor(getResources().getColor(R.color.grey));
         experiencebtn.setTextColor(getResources().getColor(R.color.grey));
         review btn.set Text Color (get Resources (). get Color (R. color. blue)); \\
       }
     });
CustomerAdapter.java:
import android.content.Context;
import android.graphics.Color;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
```

}

```
import android.widget.TextView;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import java.util.List;
public class CustomeAdapter_history extends
RecyclerView.Adapter<ViewHolder> {
  history_list HistoryList;
  List<Model> modelList;
  Context context;
  TextView mTransc_status;
  public CustomeAdapter_history(history_list historyList, List<Model>
modelList) {
    this.HistoryList = historyList;
    this.modelList = modelList;
  }
  @NonNull
  @Override
  public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
```

```
View itemView =
LayoutInflater.from(parent.getContext()).inflate(R.layout.transfer_history_list,
parent, false);
    mTransc_status = itemView.findViewById(R.id.transaction_status);
    ViewHolder viewHolder = new ViewHolder(itemView);
    viewHolder.setOnClickListener(new ViewHolder.ClickListener() {
       @Override
       public void onItemClick(View view, int position) {
       }
     });
    return viewHolder;
  }
  @Override
  public void onBindViewHolder(@NonNull ViewHolder holder, int position)
    holder.mName1.setText(modelList.get(position).getName1());
    holder.mName2.setText(modelList.get(position).getName2());
    holder.mBalance.setText(modelList.get(position).getBalance());
    holder.mDate.setText(modelList.get(position).getDate());
holder.mTransc_status.setText(modelList.get(position).getTransaction_status())
    if(modelList.get(position).getTransaction_status().equals("Failed")){
```

```
holder.mTransc_status.setTextColor(Color.parseColor("#f40404"));
     }else{
       holder.mTransc\_status.setTextColor(Color.parseColor("\#4BB543"));
  }
  @Override
  public int getItemCount() {
    return modelList.size();
  }
}
CustomerAdapter_sendertour.java
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
import java.util.ArrayList;
import java.util.List;
public class CustomeAdapter_sendtouser extends
RecyclerView.Adapter<ViewHolder> {
```

```
sendtouser SendtoUser;
  List<Model> modelList;
  Context context;
  public CustomeAdapter_sendtouser(sendtouser sentoUser, List<Model>
modelList) {
    this.SendtoUser = sentoUser;
    this.modelList = modelList;
  }
  @NonNull
  @Override
  public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
    View itemView =
LayoutInflater.from(parent.getContext()).inflate(R.layout.userslist, parent,
false);
    ViewHolder viewHolder = new ViewHolder(itemView);
    viewHolder.setOnClickListener(new ViewHolder.ClickListener() {
       @Override
       public void onItemClick(View view, int position) {
         SendtoUser.selectuser(position);
       }
    });
    return viewHolder;
  }
```

```
@Override
  public void onBindViewHolder(@NonNull ViewHolder holder, int position)
    holder.mName.setText(modelList.get(position).getName());
    holder.mPhonenumber.setText(modelList.get(position).getPhoneno());
    holder.mBalance.setText(modelList.get(position).getBalance());
  }
  @Override
  public int getItemCount() {
    return modelList.size();
  }
  public void setFilter(ArrayList<Model> newList){
    modelList = new ArrayList<>();
    modelList.addAll(newList);
    notifyDataSetChanged();
  }
CustomerAdapter_userlist.java:
import android.content.Context;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import androidx.annotation.NonNull;
```

```
import androidx.recyclerview.widget.RecyclerView;
import java.util.List;
public class CustomeAdapter_userlist extends
RecyclerView.Adapter<ViewHolder> {
  user_list UserList;
  List<Model> modelList;
  Context context:
  public CustomeAdapter_userlist(user_list userList, List<Model> modelList)
{
    this.UserList = userList;
    this.modelList = modelList;
  }
  @NonNull
  @Override
  public ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int
viewType) {
    View itemView =
LayoutInflater.from(parent.getContext()).inflate(R.layout.userslist, parent,
false);
    ViewHolder viewHolder = new ViewHolder(itemView);
    viewHolder.setOnClickListener(new ViewHolder.ClickListener() {
       @Override
```

```
public void onItemClick(View view, int position) {
         UserList.nextActivity(position);
       }
     });
    return viewHolder;
  }
  @Override
  public void onBindViewHolder(@NonNull ViewHolder holder, int position)
    holder.mName.setText(modelList.get(position).getName());
    holder.mPhonenumber.setText(modelList.get(position).getPhoneno());
    holder.mBalance.setText(modelList.get(position).getBalance());
  }
  @Override
  public int getItemCount() {
    return modelList.size();
Transaction.java:
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
```

```
import android.widget.Button;
public class MainActivity extends AppCompatActivity {
  Button view_users;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    view_users = findViewById(R.id.view_users);
    view_users.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         startActivity(new Intent(MainActivity.this, user_list.class));
         finish();
       }
     });
}
DataHelper.java:
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
```

```
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
import androidx.annotation.Nullable;
public class DatabaseHelper extends SQLiteOpenHelper {
  private String TABLE_NAME = "user_table";
  private String TABLE_NAME1 = "transfers_table";
  public DatabaseHelper(@Nullable Context context) {
    super(context, "User.db", null, 1);
  }
  @Override
  public void onCreate(SQLiteDatabase db) {
    db.execSQL("create table " + TABLE_NAME +" (PHONENUMBER
INTEGER PRIMARY KEY .NAME TEXT, BALANCE DECIMAL, EMAIL
VARCHAR, ACCOUNT_NO VARCHAR, IFSC_CODE VARCHAR)");
    db.execSQL("create table " + TABLE_NAME1 +" (TRANSACTIONID
INTEGER PRIMARY KEY AUTOINCREMENT, DATE TEXT, FROMNAME
TEXT, TONAME TEXT, AMOUNT DECIMAL, STATUS TEXT)");
    db.execSQL("insert into user_table
values(1234567890,'Joey',9472.00,'jory.02@gmail.com','XXXXXXXXXXXXXX1
234','ABC09876543')");
    db.execSQL("insert into user table
XXX2341', 'BCA98765432')");
    db.execSQL("insert into user_table values(3456789012,'Monica
Gellar',1359.56,'mongellar.04@gmail.com','XXXXXXXXXXXXXX3412','CAB87
654321')");
```

```
db.execSQL("insert into user_table values(4567890123, 'Rachel
Green',1500.01, 'greenrach.05@gmail.com', 'XXXXXXXXXXXXXXX4123', 'ABC76
543210')");
   db.execSQL("insert into user_table
XX2345', 'BCA65432109')");
   db.execSQL("insert into user_table
values(6789012345, 'Guna', 945.16, 'guna.07@gmail.com', 'XXXXXXXXXXXXXXXX
452','CAB54321098')");
   db.execSQL("insert into user table
X4523', 'ABC43210987')");
   db.execSQL("insert into user_table
X5234', 'BCA32109876')");
   db.execSQL("insert into user_table
3456', 'CAB21098765')");
   db.execSQL("insert into user_table
X4563', 'ABC10987654')");
 }
 @Override
 public void on Upgrade (SQLiteDatabase db, int oldVersion, int newVersion)
{
   db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME);
   db.execSQL("DROP TABLE IF EXISTS "+TABLE_NAME1);
   onCreate(db);
 public Cursor readalldata(){
```

```
SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery("select * from user_table", null);
    return cursor;
  }
  public Cursor readparticulardata(String phonenumber){
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery("select * from user_table where
phonenumber = " +phonenumber, null);
    return cursor;
  }
  public Cursor readselectuserdata(String phonenumber) {
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery("select * from user_table except select *
from user table where phonenumber = " +phonenumber, null);
    return cursor;
  }
  public void updateAmount(String phonenumber, String amount){
    SQLiteDatabase db = this.getWritableDatabase();
    db.execSQL("update user table set balance = " + amount + " where
phonenumber = " +phonenumber);
  }
  public Cursor readtransferdata(){
    SQLiteDatabase db = this.getWritableDatabase();
    Cursor cursor = db.rawQuery("select * from transfers_table", null);
```

```
return cursor;
  }
  public boolean insertTransferData(String date,String from_name, String
to_name, String amount, String status){
    SQLiteDatabase db = this.getWritableDatabase();
    ContentValues contentValues = new ContentValues();
    contentValues.put("DATE", date);
    contentValues.put("FROMNAME", from_name);
    contentValues.put("TONAME", to_name);
    contentValues.put("AMOUNT", amount);
    contentValues.put("STATUS", status);
    Long result = db.insert(TABLE_NAME1, null, contentValues);
    if(result == -1)
       return false;
     }else{
       return true;
History_list.java:
import android.content.Intent;
import android.database.Cursor;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
```

```
import\ and roid. widget. Text View;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import java.text.NumberFormat;
import java.util.ArrayList;
import java.util.List;
public class history_list extends AppCompatActivity {
  List<Model> modelList_historylist = new ArrayList<>();
  RecyclerView mRecyclerView;
  RecyclerView.LayoutManager layoutManager;
  CustomeAdapter_history adapter;
  TextView history_empty;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_transfer_history);
    mRecyclerView = findViewById(R.id.recyclerview);
    mRecyclerView.setHasFixedSize(true);
    layoutManager = new LinearLayoutManager(this);
```

```
mRecyclerView.setLayoutManager(layoutManager);
    history_empty = findViewById(R.id.empty_text);
    showData();
  }
  private void showData() {
    modelList_historylist.clear();
    Cursor cursor = new DatabaseHelper(this).readtransferdata();
    while (cursor.moveToNext()) {
       String balancefromdb = cursor.getString(4);
       Double balance = Double.parseDouble(balancefromdb);
       NumberFormat nf = NumberFormat.getNumberInstance();
       nf.setGroupingUsed(true);
       nf.setMaximumFractionDigits(2);
       nf.setMinimumFractionDigits(2);
       String price = nf.format(balance);
       Model model = new Model(cursor.getString(2), cursor.getString(3),
price, cursor.getString(1), cursor.getString(5));
       modelList_historylist.add(model);
     }
    adapter = new CustomeAdapter_history(history_list.this,
modelList_historylist);
```

```
mRecyclerView.setAdapter(adapter);
    if(modelList_historylist.size() == 0){
       history_empty.setVisibility(View.VISIBLE);
     }
  }
}
Model.java:
public class Model {
  String phoneno, name, balance, name1, name2, date, transaction_status;
  public Model() {
  public Model(String phoneno, String name, String balance) {
    this.phoneno = phoneno;
    this.name = name;
    this.balance = balance;
  }
  public Model(String name1, String name2, String balance, String date, String
transaction_status) {
    this.name1 = name1;
    this.name2 = name2;
    this.balance = balance;
```

```
this.date = date;
  this.transaction_status = transaction_status;
}
public String getPhoneno() {
  return phoneno;
}
public void setPhoneno(String phoneno) {
  this.phoneno = phoneno;
}
public String getName() {
  return name;
}
public void setName(String name) {
  this.name = name;
}
public String getBalance() {
  return balance;
}
public void setBalance(String balance) {
  this.balance = balance;
}
```

```
public String getName1() {
  return name1;
}
public void setName1(String name1) {
  this.name1 = name1;
}
public String getName2() {
  return name2;
}
public void setName2(String name2) {
  this.name2 = name2;
}
public String getDate() {
  return date;
}
public void setDate(String date) {
  this.date = date;
}
public String getTransaction_status() {
  return transaction_status;
```

```
}
  public void setTransaction_status(String transaction_status) {
    this.transaction_status = transaction_status;
  }
}
SenderTour.java:
import android.content.DialogInterface;
import android.content.Intent;
import android.database.Cursor;
import android.os.Bundle;
import android.util.Log;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.SearchView;
import android.widget.Toast;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.view.MenuItemCompat;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;
import java.text.NumberFormat;
import java.text.SimpleDateFormat;
```

```
import java.util.ArrayList;
import java.util.Calendar;
import java.util.List;
public class sendtouser extends AppCompatActivity {
  List<Model> modelList_sendtouser = new ArrayList<>();
  RecyclerView mRecyclerView;
  RecyclerView.LayoutManager layoutManager;
  CustomeAdapter_sendtouser adapter;
  String phonenumber, name, currentamount, transferamount,
remainingamount;
  String selectuser_phonenumber, selectuser_name, selectuser_balance, date;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_sendtouser);
    mRecyclerView = findViewById(R.id.recyclerview);
    mRecyclerView.setHasFixedSize(true);
    layoutManager = new LinearLayoutManager(this);
    mRecyclerView.setLayoutManager(layoutManager);
    Calendar calendar = Calendar.getInstance();
    SimpleDateFormat simpleDateFormat = new SimpleDateFormat("dd-
MMM-yyyy, hh:mm a");
```

```
date = simpleDateFormat.format(calendar.getTime());
    Bundle bundle = getIntent().getExtras();
    if(bundle != null){
       phonenumber = bundle.getString("phonenumber");
       name = bundle.getString("name");
       currentamount = bundle.getString("currentamount");
       transferamount = bundle.getString("transferamount");
       showData(phonenumber);
    }
  }
  private void showData(String phonenumber) {
    modelList_sendtouser.clear();
    Log.d("DEMO",phonenumber);
    Cursor cursor = new
DatabaseHelper(this).readselectuserdata(phonenumber);
    while(cursor.moveToNext()){
       String balancefromdb = cursor.getString(2);
       Double balance = Double.parseDouble(balancefromdb);
       NumberFormat nf = NumberFormat.getNumberInstance();
       nf.setGroupingUsed(true);
       nf.setMaximumFractionDigits(2);
       nf.setMinimumFractionDigits(2);
       String price = nf.format(balance);
```

```
Model model = new Model(cursor.getString(0), cursor.getString(1),
price);
       modelList_sendtouser.add(model);
    }
    adapter = new CustomeAdapter_sendtouser(sendtouser.this,
modelList sendtouser);
    mRecyclerView.setAdapter(adapter);
  }
  public void selectuser(int position) {
    selectuser_phonenumber =
modelList_sendtouser.get(position).getPhoneno();
    Cursor cursor = new
DatabaseHelper(this).readparticulardata(selectuser_phonenumber);
    while(cursor.moveToNext()) {
       selectuser_name = cursor.getString(1);
       selectuser_balance = cursor.getString(2);
       Double Dselectuser_balance = Double.parseDouble(selectuser_balance);
       Double Dselectuser transferamount =
Double.parseDouble(transferamount);
       Double Dselectuser remainingamount = Dselectuser balance +
Dselectuser transferamount;
       new DatabaseHelper(this).insertTransferData(date, name,
selectuser_name, transferamount, "Success");
       new DatabaseHelper(this).updateAmount(selectuser_phonenumber,
Dselectuser_remainingamount.toString());
       calculateAmount();
```

```
Toast.makeText(this, "Transaction Successful!",
Toast.LENGTH_LONG).show();
       startActivity(new Intent(sendtouser.this, user_list.class));
       finish();
  }
  private void calculateAmount() {
    Double Dcurrentamount = Double.parseDouble(currentamount);
    Double Dtransferamount = Double.parseDouble(transferamount);
    Double Dremainingamount = Dcurrentamount - Dtransferamount;
    remainingamount = Dremainingamount.toString();
    new DatabaseHelper(this).updateAmount(phonenumber,
remainingamount);
  }
  @Override
  public void onBackPressed() {
    AlertDialog.Builder_builder_exitbutton = new
AlertDialog.Builder(sendtouser.this);
    builder_exitbutton.setTitle("Do you want to cancel the
transaction?").setCancelable(false)
         .setPositiveButton("yes", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {
              new DatabaseHelper(sendtouser.this).insertTransferData(date,
name, "Not selected", transferamount, "Failed");
              Toast.makeText(sendtouser.this, "Transaction Cancelled!",
Toast.LENGTH LONG).show();
```

```
startActivity(new Intent(sendtouser.this, user_list.class));
              finish();
            }
         }).setNegativeButton("No", null);
    AlertDialog alertexit = builder_exitbutton.create();
    alertexit.show();
  }
  @Override
  public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.menu, menu);
    MenuItem search = menu.findItem(R.id.action_search);
    android.widget.SearchView searchView = (android.widget.SearchView)
MenuItemCompat.getActionView(search);
    searchView.setOnQueryTextListener(new
SearchView.OnQueryTextListener() {
       @Override
       public boolean onQueryTextSubmit(String query) {
         return false;
       }
       @Override
       public boolean onQueryTextChange(String newText) {
         newText = newText.toLowerCase();
         ArrayList<Model> newList = new ArrayList<>();
         for(Model model : modelList_sendtouser){
           String name = model.getName().toLowerCase();
           if(name.contains(newText)){
```

```
newList.add(model);
         adapter.setFilter(newList);
         return true;
    });
    return super.onCreateOptionsMenu(menu);
  }
}
User_data.java:
import android.app.ProgressDialog;
import android.content.DialogInterface;
import android.content.Intent;
import android.database.Cursor;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.TextView;
import android.widget.Toast;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
```

```
import java.text.NumberFormat;
import java.text.SimpleDateFormat;
import java.util.Calendar;
public class user_data extends AppCompatActivity {
  ProgressDialog progressDialog;
  String phonenumber;
  Double newbalance;
  TextView name, phoneNumber, email, account_no, ifsc_code, balance;
  Button transfer_button;
  AlertDialog dialog;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_userdata);
    name = findViewById(R.id.username);
    phoneNumber = findViewById(R.id.userphonenumber);
    email = findViewById(R.id.email);
    account_no = findViewById(R.id.account_no);
    ifsc_code = findViewById(R.id.ifsc_code);
    balance = findViewById(R.id.balance);
    transfer_button = findViewById(R.id.transfer_button);
```

```
progressDialog = new ProgressDialog(user_data.this);
    progressDialog.setTitle("Loading data...");
    progressDialog.show();
    Bundle bundle = getIntent().getExtras();
    if(bundle != null){
       phonenumber = bundle.getString("phonenumber");
       showData(phonenumber);
     }
    transfer_button.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View v) {
         enterAmount();
       }
    });
  }
  private void showData(String phonenumber) {
    Cursor cursor = new
DatabaseHelper(this).readparticulardata(phonenumber);
    while(cursor.moveToNext()) {
       String balancefromdb = cursor.getString(2);
       newbalance = Double.parseDouble(balancefromdb);
       NumberFormat nf = NumberFormat.getNumberInstance();
       nf.setGroupingUsed(true);
       nf.setMaximumFractionDigits(2);
```

```
nf.setMinimumFractionDigits(2);
       String price = nf.format(newbalance);
       progressDialog.dismiss();
       phoneNumber.setText(cursor.getString(0));
       name.setText(cursor.getString(1));
       email.setText(cursor.getString(3));
       balance.setText(price);
       account_no.setText(cursor.getString(4));
       ifsc_code.setText(cursor.getString(5));
  }
  private void enterAmount() {
    final AlertDialog.Builder mBuilder = new
AlertDialog.Builder(user_data.this);
    View mView =
getLayoutInflater().inflate(R.layout.activity_transfer_money, null);
    mBuilder.setTitle("Enter amount").setView(mView).setCancelable(false);
    final EditText mAmount = (EditText)
mView.findViewById(R.id.enter_money);
    mBuilder.setPositiveButton("SEND", new
DialogInterface.OnClickListener() {
       @Override
       public void onClick(DialogInterface dialogInterface, int i) {
```

```
}
     }).setNegativeButton("CANCEL", new DialogInterface.OnClickListener()
{
       @Override
       public void onClick(DialogInterface dialog, int which) {
         dialog.dismiss();
         transactionCancel();
       }
     });
    dialog = mBuilder.create();
    dialog.show();
dialog.getButton(AlertDialog.BUTTON_POSITIVE).setOnClickListener(new
View.OnClickListener() {
       @Override
       public void onClick(View view) {
         if(mAmount.getText().toString().isEmpty()){
           mAmount.setError("Amount can't be empty");
         }else if(Double.parseDouble(mAmount.getText().toString()) >
newbalance){
           mAmount.setError("Your account don't have enough balance");
         }else{
           Intent intent = new Intent(user_data.this, sendtouser.class);
           intent.putExtra("phonenumber",
phoneNumber.getText().toString());
           intent.putExtra("name", name.getText().toString());
           intent.putExtra("currentamount", newbalance.toString());
           intent.putExtra("transferamount", mAmount.getText().toString());
```

```
startActivity(intent);
            finish();
     });
  }
  private void transactionCancel() {
    AlertDialog.Builder builder_exitbutton = new
AlertDialog.Builder(user_data.this);
    builder_exitbutton.setTitle("Do you want to cancel the
transaction?").setCancelable(false)
         .setPositiveButton("yes", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialogInterface, int i) {
              Calendar calendar = Calendar.getInstance();
              SimpleDateFormat simpleDateFormat = new
SimpleDateFormat("dd-MMM-yyyy, hh:mm a");
              String date = simpleDateFormat.format(calendar.getTime());
              new DatabaseHelper(user_data.this).insertTransferData(date,
name.getText().toString(), "Not selected", "0", "Failed");
              Toast.makeText(user_data.this, "Transaction Cancelled!",
Toast.LENGTH_LONG).show();
            }
          }).setNegativeButton("No", new DialogInterface.OnClickListener() {
       @Override
       public void onClick(DialogInterface dialog, int which) {
```

```
dialog.dismiss();
         enterAmount();
       }
     });
    AlertDialog alertexit = builder_exitbutton.create();
    alertexit.show();
  }
}
User_list.java:
import android.app.ProgressDialog;
import android.content.Intent;
import android.content.SharedPreferences;
import android.database.Cursor;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.ProgressBar;
import android.widget.SearchView;
import android.widget.Toast;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.view.MenuItemCompat;
import androidx.recyclerview.widget.LinearLayoutManager;
```

```
import androidx.recyclerview.widget.RecyclerView;
import java.text.NumberFormat;
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Calendar;
import java.util.Date;
import java.util.List;
public class user_list extends AppCompatActivity {
  List<Model> modelList_showlist = new ArrayList<>();
  RecyclerView mRecyclerView;
  RecyclerView.LayoutManager layoutManager;
  CustomeAdapter_userlist adapter;
  String phonenumber;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_show_allusers);
    mRecyclerView = findViewById(R.id.recyclerview);
    mRecyclerView.setHasFixedSize(true);
    layoutManager = new LinearLayoutManager(this);
    mRecyclerView.setLayoutManager(layoutManager);
```

```
showData();
  }
  private void showData() {
    modelList_showlist.clear();
    Cursor cursor = new DatabaseHelper(this).readalldata();
    while(cursor.moveToNext()){
       String balancefromdb = cursor.getString(2);
       Double balance = Double.parseDouble(balancefromdb);
       NumberFormat nf = NumberFormat.getNumberInstance();
       nf.setGroupingUsed(true);
       nf.setMaximumFractionDigits(2);
       nf.setMinimumFractionDigits(2);
       String price = nf.format(balance);
       Model model = new Model(cursor.getString(0), cursor.getString(1),
price);
       modelList_showlist.add(model);
     }
    adapter = new CustomeAdapter_userlist(user_list.this,
modelList_showlist);
    mRecyclerView.setAdapter(adapter);
  }
```

```
public void nextActivity(int position) {
    phonenumber = modelList_showlist.get(position).getPhoneno();
    Intent intent = new Intent(user_list.this, user_data.class);
    intent.putExtra("phonenumber",phonenumber);
    startActivity(intent);
  }
  @Override
  public boolean onCreateOptionsMenu(Menu menu) {
    getMenuInflater().inflate(R.menu.menu_history, menu);
    return super.onCreateOptionsMenu(menu);
  }
  @Override
  public boolean onOptionsItemSelected(@NonNull MenuItem item) {
    if(item.getItemId()==R.id.action_history){
       startActivity(new Intent(user_list.this, history_list.class));
    return super.onOptionsItemSelected(item);
  }
Viewholder.java:
import android.view.View;
import android.widget.ImageView;
import android.widget.TextView;
```

}

```
import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;
public class ViewHolder extends RecyclerView.ViewHolder {
  TextView mName, mPhonenumber, mBalance, mRupee, mRupeeslash,
mName1, mName2, mDate, mTransc status;
  ImageView mPhone, mArrow;
  View mView:
  public ViewHolder(@NonNull View itemView) {
    super(itemView);
    mView = itemView;
    mName = itemView.findViewById(R.id.username);
    mPhonenumber = itemView.findViewById(R.id.userphonenumber);
    mBalance = itemView.findViewById(R.id.balance);
    mRupee = itemView.findViewById(R.id.rupee);
    mRupeeslash = itemView.findViewById(R.id.rupeeslash);
    mPhone = itemView.findViewById(R.id.phone);
    mName1 = itemView.findViewById(R.id.name1);
    mName2 = itemView.findViewById(R.id.name2);
    mDate = itemView.findViewById(R.id.date);
    mArrow = itemView.findViewById(R.id.arrow);
    mTransc_status = itemView.findViewById(R.id.transaction_status);
    itemView.setOnClickListener(new View.OnClickListener() {
      @Override
```

```
public void onClick(View view) {
        mClickListener.onItemClick(view, getAdapterPosition());
    });
  private ViewHolder.ClickListener mClickListener;
  public interface ClickListener{
    void onItemClick(View view, int position);
  }
  public void setOnClickListener(ViewHolder.ClickListener clickListener){
    mClickListener = clickListener;
  }
}
Activity_main.xml:
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  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:gravity="center"
  android:orientation="vertical"
  tools:context=".MainActivity">
```

```
<TextView
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  android:gravity="center"
  android:layout_marginBottom="10dp"
  android:textSize="40dp"
  android:fontFamily="sans-serif-black"
  android:textColor="#a83232"
  android:text="Banking System"/>
<ImageView
  android:layout_width="wrap_content"
  android:layout_height="448dp"
  android:src="@drawable/transfer_money" />
<Button
  android:id="@+id/view_users"
  android:layout_width="wrap_content"
  android:layout_height="40dp"
  android:background="@drawable/rounded_button"
  android:paddingHorizontal="15dp"
  android:paddingVertical="5dp"
  android:text="View Users"
  android:textAllCaps="false"
  android:textColor="#fff"
  android:textSize="15dp"
```

```
android:textStyle="bold"></Button>
</LinearLayout>
Activity_voice.xml:
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
  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:padding="20dp"
  tools:context=".MainActivity">
  <!--TextView: in witch text will be displayed after conversion from speech--
  <TextView
    android:id="@+id/textTv"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="press mic button to input voice..."
    android:textSize="20sp"
    android:textColor="#000"/>
  <!--ImageButton: By clicking this SpeechToText dialog will be shown-->
  <ImageButton
    android:id="@+id/voiceBtn"
    android:layout_width="150dp"
    android:layout_height="150dp"
    android:background="@null"
    android:src="@drawable/ic_mic"
    android:scaleType="fitCenter"
    android:layout_centerHorizontal="true"
    android:layout_centerVertical="true" />
</RelativeLayout>
```

```
Voice.java:
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.speech.RecognizerIntent;
import android.view.View;
import android.widget.ImageButton;
import android.widget.TextView;
import android.widget.Toast;
import java.util.ArrayList;
import java.util.Locale;
public class MainActivity extends AppCompatActivity {
private static final int REQUEST_CODE_SPEECH_INPUT=1000;
  //views from activity
  TextView mTextTv;
  ImageButton mVoiceBtn;
  private boolean value;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_main);
    mTextTv=findViewById(R.id.textTv);
    mVoiceBtn=findViewById(R.id.voiceBtn);
    //button click to show speech to text dialog
    mVoiceBtn.setOnClickListener(new View.OnClickListener() {
       @Override
         public void onClick(view v) {
         speak();
       }
    });
  }
  private void speak() {
    //intent to show speech to text dialog
    Intent intent = new
Intent(RecognizerIntent.ACTION_RECOGNIZE_SPEECH);
    Intent.putExtra (RecognizerIntent.EXTRA_LANGUAGE_MODEL,
         RecognizerIntent.LANGUAGE_MODEL_FREE_FORM);
    intent.putExtra(RecognizerIntent.EXTRA_LANGUAGE,
Locale.getDefault());
    intent.putExtra(RecognizerIntent.EXTRA_PROMPT, value:"Hi speak
something");
//start intent
    try {
```

```
//in there was no error
       //show dialog
       startActivityForResult(intent, REQUEST_CODE_SPEECH_INPUT);
     } catch (Exception e) {
       //if there was some error
      //get message of error and show
      Toast.makeText(context:this, text:"" + e.getMessage(),
Toast.LENGTH_SHORT).show();
    }
    //show dialog
    startActivityForResult(intent, REQUEST_CODE_SPEECH_INPUT);
  }
  //receive voice input and handle it
  @Override
  protected void onActivityResult(int requestCode, int resultCode, @NonNull
Intent data) {
    super.onActivityResult(requestCode,resultCode,data);
    switch (requestCode){
       case REQUEST_CODE_SPEECH_INPUT:{
         if (resultCode == RESULT_OK && null!=data){
           //get text array from voice intent
           ArrayList<String>
result=data.getStringArrayListExtra(RecognizerIntent.EXTRA_RESULTS);
```

```
//set to text view
           mTextTv.setText(result.get(0));
         break;
}
IC MIC.XML:(NO CHANGES IN THIS IT'S A DEFAULT CODE)
<vector android:height="24dp" android:tint="#000000"</pre>
  android:viewportHeight="24" android:viewportWidth="24"
  android:width="24dp"
xmlns:android="http://schemas.android.com/apk/res/android">
  <path android:fillColor="@android:color/white"</pre>
android:pathData="M12,14c1.66,0 2.99,-1.34 2.99,-3L15,5c0,-1.66 -1.34,-3 -3,-
3$9,3.34 9,5v6c0,1.66 1.34,3 3,3zM17.3,11c0,3 -2.54,5.1 -5.3,5.1$6.7,14
6.7,11L5,11c0,3.41 2.72,6.23 6,6.72L11,21h2v-3.28c3.28,-0.48 6,-3.3 6,-6.72h-
1.7z''/>
</re>
```

```
Logout.java:
import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import\ com.google.firebase.auth.FirebaseAuth;
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    Button logout=findViewById(R.id.logoutBtn);
    logout.setOnClickListener(new View.OnClickListener() {
       @Override
       public void onClick(View view) {
         FirebaseAuth.getInstance().signOut();
         startActivity(new Intent(getApplicationContext(),Login.class));
         finish();
       }
     });
```

