**Assignment 5: Using SQLite**

Java File (ContactList\_MainActivity):

**package** com.example.smd\_assignments.Assignment\_5;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.annotation.SuppressLint;  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.AdapterView;  
**import** android.widget.ListView;  
**import** android.widget.SimpleAdapter;  
  
**import** com.example.smd\_assignments.R;  
  
**import** java.util.ArrayList;  
**import** java.util.HashMap;  
  
**public class** ContactList\_MainActivity **extends** AppCompatActivity {  
  
 DbQueries **dbQueries**;  
 ListView **listView**;  
 @SuppressLint(**"MissingInflatedId"**)  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_contact\_list\_main***);  
 **dbQueries** = **new** DbQueries(getApplicationContext());  
 **listView** = findViewById(R.id.***lstmaincontactlist***);  
 }  
  
 @Override  
 **protected void** onStart() {  
 **super**.onStart();  
 ArrayList<HashMap<String,String>> contactList = **dbQueries**.getAllContacts();  
 SimpleAdapter adapter = **new** SimpleAdapter(**this**,contactList,R.layout.***sqlnewlayout\_contactlist***, **new** String[]{**"firstName"**,**"secondName"**,**"phoneNumber"**},  
 **new int**[]{R.id.***txtfirstname***,R.id.***txtsecondname***,R.id.***txtphonenumber***});  
 **listView**.setAdapter(adapter);  
 **listView**.setOnItemClickListener(**new** AdapterView.OnItemClickListener() {  
 @Override  
 **public void** onItemClick(AdapterView<?> adapterView, View view, **int** position, **long** l) {  
 Intent intent = **new** Intent(ContactList\_MainActivity.**this**,Update\_Delete\_ContactList.**class**);  
 intent.putExtra(**"id"**,String.*valueOf*(position+1));  
 startActivity(intent);  
 }  
 });  
 }  
  
 **public void** AddContact(View view) {  
 Intent intent = **new** Intent(**this**, NewContactEntery.**class**);  
 startActivity(intent);  
 }  
}

Xml File:

*<?***xml version="1.0" encoding="utf-8"***?>*<**TableLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/image3"  
 tools:context=".Assignment\_5.ContactList\_MainActivity"**>  
  
 <**TableRow  
 android:id="@+id/tableRow1"  
 android:layout\_width="-130dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginTop="20dp"**>  
  
 <**TextView  
 android:id="@+id/textView1"  
 android:layout\_width="54dp"  
 android:layout\_height="match\_parent"  
 android:text="contacts"  
 android:textColor="@color/white"  
 android:textSize="24sp"** />  
  
 <**Button  
 android:id="@+id/btnAddContact"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="49dp"  
 android:layout\_marginRight="-90dp"  
 android:layout\_gravity="end"  
 android:background="#9C3A0B"  
 android:onClick="AddContact"  
 android:padding="12dp"  
 android:text="add\_contact"  
 android:textColor="@color/white"  
 android:textSize="20dp"** />  
 </**TableRow**>  
 <**TableRow  
 android:id="@+id/tableRow2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"** >  
  
 <**ListView  
 android:layout\_marginTop="130dp"  
 android:layout\_marginLeft="10dp"  
 android:id="@+id/lstmaincontactlist"  
 android:layout\_width="match\_parent"  
 android:layout\_height="684dp"  
 android:layout\_weight="1"** />  
 </**TableRow**>  
  
</**TableLayout**>

Layout File (Sqlnewlayout\_ContactList):

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
  
 <**TextView  
 android:id="@+id/txtfirstname"  
 android:layout\_width="99dp"  
 android:layout\_height="42dp"  
 android:layout\_weight="1"  
 android:text="@string/textview"  
 android:textSize="15dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 tools:ignore="TextSizeCheck"** />  
  
 <**TextView  
 android:id="@+id/txtsecondname"  
 android:layout\_width="99dp"  
 android:layout\_height="40dp"  
 android:layout\_weight="1"  
 android:text="second\_name"  
 android:textSize="15dp"  
 tools:ignore="TextSizeCheck"** />  
  
 <**TextView  
 android:id="@+id/txtphonenumber"  
 android:layout\_width="99dp"  
 android:layout\_height="40dp"  
 android:layout\_weight="1"  
 android:text="phone\_number1"  
 android:textSize="15dp"  
 tools:ignore="TextSizeCheck"** />  
  
</**LinearLayout**>

Java Class (DbQueries):

**package** com.example.smd\_assignments.Assignment\_5;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
**import** android.util.Log;  
  
**import** androidx.annotation.Nullable;  
  
**import** java.util.ArrayList;  
**import** java.util.HashMap;  
  
**public class** DbQueries **extends** SQLiteOpenHelper {  
 **public** DbQueries(@Nullable Context context) {  
 **super**(context, **"ContactsDB"**, **null**, 1);  
 Log.*d*(**"TAG"**,**"Database Created"**);  
 }  
  
 @Override  
 **public void** onCreate(SQLiteDatabase db) {  
 String Query = **"CREATE TABLE CONTACTS("**+  
 **"\_id INTEGER PRIMARY KEY AUTOINCREMENT,"**+  
 **"firstName TEXT,"**+  
 **"secondName TEXT,"**+  
 **"phoneNumber TEXT,"**+  
 **"emailAddress TEXT,"**+  
 **"homeAddress TEXT)"**;  
 db.execSQL(Query);  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase db, **int** i, **int** i1) {  
  
 }  
  
 **public void** AddContact(HashMap<String, String> contact) {  
 SQLiteDatabase db = getWritableDatabase();  
 ContentValues contentValues = **new** ContentValues();  
 contentValues.put(**"\_id"**,contact.get(**"\_id"**));  
 contentValues.put(**"firstName"**,contact.get(**"firstName"**));  
 contentValues.put(**"secondName"**,contact.get(**"secondName"**));  
 contentValues.put(**"phoneNumber"**,contact.get(**"phoneNumber"**));  
 contentValues.put(**"emailAddress"**,contact.get(**"emailAddress"**));  
 contentValues.put(**"homeAddress"**,contact.get(**"homeAddress"**));  
 db.insert(**"CONTACTS"**,**null**,contentValues);  
 }  
  
 **public** ArrayList<HashMap<String, String>> getAllContacts() {  
 SQLiteDatabase db = getReadableDatabase();  
 ArrayList<HashMap<String,String>> contactList = **new** ArrayList<HashMap<String, String>>();  
 String Query = **"SELECT \* FROM CONTACTS"**;  
 Cursor cursor = db.rawQuery(Query,**null**);  
 **if**(cursor.moveToNext()){  
 **do**{  
 HashMap<String,String> hashMap = **new** HashMap<String, String>();  
 hashMap.put(**"\_id"**,cursor.getString(0));  
 hashMap.put(**"firstName"**, cursor.getString(1));  
 hashMap.put(**"secondName"**, cursor.getString(2));  
 hashMap.put(**"phoneNumber"**, cursor.getString(3));  
 hashMap.put(**"emailAddress"**, cursor.getString(4));  
 hashMap.put(**"homeAddress"**, cursor.getString(5));  
 contactList.add(hashMap);  
 }**while**(cursor.moveToNext());  
 }  
 **return** contactList;  
 }  
  
 **public** HashMap<String, String> getSingleContact(String id) {  
 SQLiteDatabase db = getReadableDatabase();  
 HashMap<String,String> hashMap = **new** HashMap<String, String>();  
 String Query = **"SELECT \* FROM CONTACTS WHERE \_ID="**+id;  
 Cursor cursor = db.rawQuery(Query,**null**);  
 **if**(cursor.moveToFirst()){  
 **do**{  
 hashMap.put(**"\_id"**,cursor.getString(0));  
 hashMap.put(**"firstName"**, cursor.getString(1));  
 hashMap.put(**"secondName"**, cursor.getString(2));  
 hashMap.put(**"phoneNumber"**, cursor.getString(3));  
 hashMap.put(**"emailAddress"**, cursor.getString(4));  
 hashMap.put(**"homeAddress"**, cursor.getString(5));  
 }**while**(cursor.moveToNext());  
 }  
 **return** hashMap;  
 }  
  
 **public void** updateContact(HashMap<String, String> updateContact,String id) {  
 SQLiteDatabase db = getWritableDatabase();  
 String firstName = updateContact.get(**"firstName"**);  
 String secondName = updateContact.get(**"secondName"**);  
 String phoneNumber = updateContact.get(**"phoneNumber"**);  
 String emailAddress = updateContact.get(**"emailAddress"**);  
 String homeAddress = updateContact.get(**"homeAddress"**);  
 String Query= **"UPDATE CONTACTS SET firsName='"**+firstName+**"' ,secondName='"**+secondName+**"' ,phoneNumber='"**+phoneNumber+**"' "** +  
 **",emailAddress='"**+emailAddress+**"' ,homeAddress='"**+homeAddress+**"' WHERE \_id="**+id;  
 db.execSQL(Query);  
 }  
  
 **public void** deleteContact(HashMap<String, String> updateContact, String id) {  
 SQLiteDatabase db = getWritableDatabase();  
 ContentValues contentValues = **new** ContentValues();  
 contentValues.put(**"\_id"**,updateContact.get(**"\_id"**));  
 db.delete(**"CONTACTS"**,**"\_id="**+id,**null**);  
 }  
}

Java File (NewContactEntery):

**package** com.example.smd\_assignments.Assignment\_5;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.annotation.SuppressLint;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.EditText;  
  
**import** com.example.smd\_assignments.R;  
  
**import** java.util.HashMap;  
  
**public class** NewContactEntery **extends** AppCompatActivity {  
  
 EditText **firstName**,**secondName**,**phoneNumber**,**emailAddress**,**homeAddress**;  
 DbQueries **dbQueries**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_new\_contact\_entery***);  
 **firstName** = findViewById(R.id.***editfirstname***);  
 **secondName** = findViewById(R.id.***editsecondname***);  
 **phoneNumber** = findViewById(R.id.***editphonenumber***);  
 **emailAddress** = findViewById(R.id.***editemailaddress***);  
 **homeAddress** = findViewById(R.id.***edithomeaddress***);  
 **dbQueries** = **new** DbQueries(getApplicationContext());  
 }  
  
 **public void** SaveContact(View view) {  
 HashMap<String,String> contact = **new** HashMap<String,String>();  
 contact.put(**"firstName"**,**firstName**.getText().toString());  
 contact.put(**"secondName"**,**secondName**.getText().toString());  
 contact.put(**"phoneNumber"**,**phoneNumber**.getText().toString());  
 contact.put(**"emailAddress"**,**emailAddress**.getText().toString());  
 contact.put(**"homeAddress"**,**homeAddress**.getText().toString());  
 **dbQueries**.AddContact(contact);  
 Log.*d*(**"TAG"**,**"Contact added successfully"**);  
 }  
}

Xml File:

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/image2"  
 tools:context=".Assignment\_5.NewContactEntery"**>  
  
 <**TextView  
 android:id="@+id/textView6"  
 android:layout\_width="395dp"  
 android:layout\_height="105dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="10dp"  
 android:layout\_marginTop="25dp"  
 android:layout\_marginEnd="6dp"  
 android:layout\_marginBottom="600dp"  
 android:padding="20dp"  
 android:text="Add New Contact"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="35dp"** />  
  
 <**EditText  
 android:id="@+id/editfirstname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="58dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="51dp"  
 android:layout\_marginTop="239dp"  
 android:layout\_marginEnd="72dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="firstname"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/editsecondname"  
 android:layout\_width="285dp"  
 android:layout\_height="62dp"  
 android:layout\_below="@+id/editfirstname"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="19dp"  
 android:layout\_marginEnd="76dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="secondname"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/editphonenumber"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="59dp"  
 android:layout\_below="@+id/editsecondname"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="47dp"  
 android:layout\_marginTop="19dp"  
 android:layout\_marginEnd="78dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="phone\_number"  
 android:inputType="number|textPersonName"  
 android:minHeight="48dp"  
 android:textSize="20dp"  
 tools:ignore="VisualLintTextFieldSize"** />  
  
 <**EditText  
 android:id="@+id/editemailaddress"  
 android:layout\_width="291dp"  
 android:layout\_height="63dp"  
 android:layout\_below="@+id/editphonenumber"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="50dp"  
 android:layout\_marginTop="15dp"  
 android:layout\_marginEnd="70dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="email"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/edithomeaddress"  
 android:layout\_width="289dp"  
 android:layout\_height="61dp"  
 android:layout\_below="@+id/editemailaddress"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="51dp"  
 android:layout\_marginTop="12dp"  
 android:layout\_marginEnd="70dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="home\_address"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**Button  
 android:id="@+id/btnsave"  
 android:layout\_width="254dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="72dp"  
 android:layout\_marginTop="60dp"  
 android:layout\_marginEnd="85dp"  
 android:layout\_marginBottom="17dp"  
 android:background="#000784E4"  
 android:onClick="SaveContact"  
 android:padding="30dp"  
 android:text="buttonsavetosql"  
 android:textAlignment="center"  
 android:textColor="#FFFFFF"  
 android:textSize="18dp"** />  
  
</**RelativeLayout**>

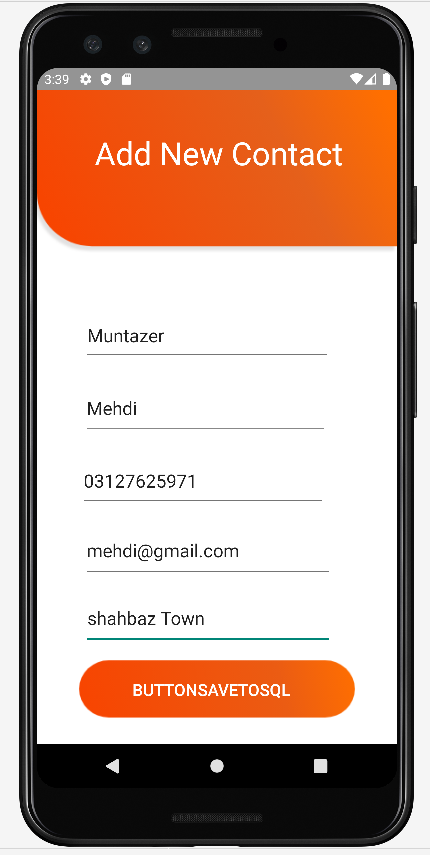
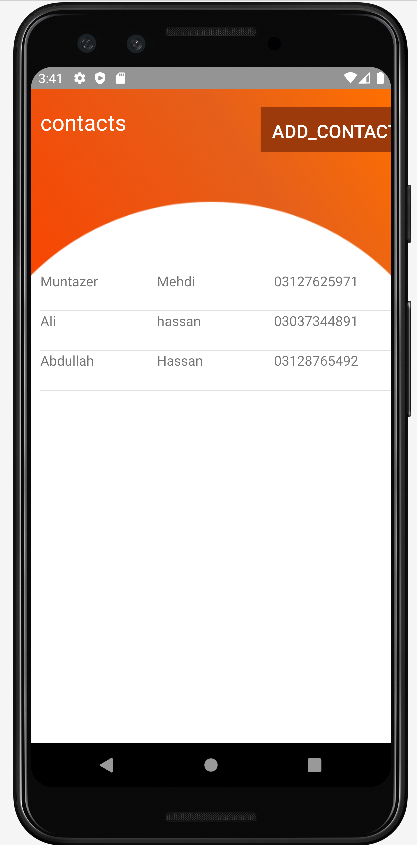
Java File (Update/Delete\_ContactList):

**package** com.example.smd\_assignments.Assignment\_5;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.EditText;  
  
**import** com.example.smd\_assignments.R;  
  
**import** java.util.HashMap;  
  
**public class** Update\_Delete\_ContactList **extends** AppCompatActivity {  
  
 EditText **firstName**,**secondName**,**phoneNumber**,**emailAddress**,**homeAddress**;  
 DbQueries **dbQueries**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_update\_delete\_contact\_list***);  
 **dbQueries** = **new** DbQueries(getApplicationContext());  
 *//Binding...* **firstName** = findViewById(R.id.***editfirstname***);  
 **secondName** = findViewById(R.id.***editsecondname***);  
 **phoneNumber** = findViewById(R.id.***editphonenumber***);  
 **emailAddress** = findViewById(R.id.***editemailaddress***);  
 **homeAddress** = findViewById(R.id.***edithomeaddress***);  
 Intent intent = getIntent();  
 String id = intent.getExtras().getString(**"id"**);  
 HashMap<String,String> singleContact = **dbQueries**.getSingleContact(id);  
 Log.*d*(**"TAG"**,**"The next work will be done by me"**);  
  
 **firstName**.setText(singleContact.get(**"firstName"**));  
 **secondName**.setText(singleContact.get(**"secondName"**));  
 **phoneNumber**.setText(singleContact.get(**"phoneNumber"**));  
 **emailAddress**.setText(singleContact.get(**"emailAddress"**));  
 **homeAddress**.setText(singleContact.get(**"homeAddress"**));  
 **dbQueries** = **new** DbQueries(getApplicationContext());  
 }  
  
  
 **public void** UpdateRecord(View view) {  
 Intent intent = getIntent();  
 String id = intent.getExtras().getString(**"id"**);  
 HashMap<String,String> updateContact = **new** HashMap<String, String>();  
 updateContact.put(**"firstName"**,**firstName**.getText().toString());  
 updateContact.put(**"secondName"**,**secondName**.getText().toString());  
 updateContact.put(**"phoneNumber"**,**phoneNumber**.getText().toString());  
 updateContact.put(**"emailAddress"**,**emailAddress**.getText().toString());  
 updateContact.put(**"homeAddress"**,**homeAddress**.getText().toString());  
 **dbQueries**.updateContact(updateContact,id);  
 Log.*d*(**"TAG"**,**"Data Updated Successfully"**);  
 intent = **new** Intent(**this**,ContactList\_MainActivity.**class**);  
 startActivity(intent);  
 }  
  
 **public void** DeleteRecord(View view) {  
 Intent intent = getIntent();  
 String id = intent.getExtras().getString(**"id"**);  
 HashMap<String,String> updateContact = **new** HashMap<String, String>();  
 **dbQueries**.deleteContact(updateContact, id);  
 intent = **new** Intent(**this**,ContactList\_MainActivity.**class**);  
 startActivity(intent);  
 }  
}

Xml File:

*<?***xml version="1.0" encoding="utf-8"***?>*<**RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="@drawable/image2"  
 tools:context=".Assignment\_5.Update\_Delete\_ContactList"**>  
  
 <**TextView  
 android:id="@+id/textView7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="130dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="10dp"  
 android:layout\_marginTop="6dp"  
 android:layout\_marginEnd="6dp"  
 android:layout\_marginBottom="595dp"  
 android:padding="20dp"  
 android:text="Update / Delete contact"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="35dp"** />  
  
 <**EditText  
 android:id="@+id/editfirstname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="58dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="52dp"  
 android:layout\_marginTop="218dp"  
 android:layout\_marginEnd="71dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="firstname"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/editsecondname"  
 android:layout\_width="285dp"  
 android:layout\_height="62dp"  
 android:layout\_below="@+id/editfirstname"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="60dp"  
 android:layout\_marginTop="19dp"  
 android:layout\_marginEnd="66dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="secondname"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/editphonenumber"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="59dp"  
 android:layout\_below="@+id/editsecondname"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="59dp"  
 android:layout\_marginTop="20dp"  
 android:layout\_marginEnd="67dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="phone\_number"  
 android:inputType="number|textPersonName"  
 android:minHeight="48dp"  
 android:textSize="20dp"  
 tools:ignore="VisualLintTextFieldSize"** />  
  
 <**EditText  
 android:id="@+id/editemailaddress"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="55dp"  
 android:layout\_below="@+id/editphonenumber"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="59dp"  
 android:layout\_marginTop="24dp"  
 android:layout\_marginEnd="72dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="email"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**EditText  
 android:id="@+id/edithomeaddress"  
 android:layout\_width="289dp"  
 android:layout\_height="61dp"  
 android:layout\_below="@+id/editemailaddress"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentEnd="true"  
 android:layout\_marginStart="54dp"  
 android:layout\_marginTop="17dp"  
 android:layout\_marginEnd="66dp"  
 android:autofillHints=""  
 android:ems="10"  
 android:hint="home\_address"  
 android:inputType="textPersonName"  
 android:textSize="20dp"** />  
  
 <**Button  
 android:id="@+id/btnupdate"  
 android:layout\_width="157dp"  
 android:layout\_height="73dp"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="23dp"  
 android:layout\_marginBottom="24dp"  
 android:background="#ED550D"  
 android:onClick="UpdateRecord"  
 android:padding="10dp"  
 android:text="Update"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="20dp"** />  
  
 <**Button  
 android:id="@+id/btndelete"  
 android:layout\_width="165dp"  
 android:layout\_height="74dp"  
 android:layout\_alignParentEnd="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="31dp"  
 android:layout\_marginEnd="21dp"  
 android:layout\_marginBottom="23dp"  
 android:layout\_toEndOf="@+id/btnupdate"  
 android:background="#EC550D"  
 android:onClick="DeleteRecord"  
 android:padding="10dp"  
 android:text="Delete"  
 android:textAlignment="center"  
 android:textColor="@color/white"  
 android:textSize="20dp"** />  
  
</**RelativeLayout**>

**Output:**



Graphical user interface, application

Description automatically generated A screen shot of a cell phone

Description automatically generated with low confidence