

```
1 package com.example.curdoperation;
2
3 public class User {
4
5     int id;
6     String name;
7     String surname;
8     String password;
9     String department;
10
11     public User(int id,String name,String surname,
    String password,String department){
12         this.id = id;
13         this.name = name;
14         this.surname = surname;
15         this.password = password;
16         this.department = department;
17     }
18
19     public int getId(){
20         return id;
21     }
22
23     public String getDepartment() {
24         return department;
25     }
26
27     public String getName() {
28         return name;
29     }
30
31     public String getSurname() {
32         return surname;
33     }
34
35     public String getPassword() {
36         return password;
37     }
38 }
39
```

```
1 package com.example.curdoperation;
2
3 import android.app.AlertDialog;
4 import android.content.Context;
5 import android.content.DialogInterface;
6 import android.database.Cursor;
7 import android.database.sqlite.SQLiteDatabase;
8 import android.view.LayoutInflater;
9 import android.view.View;
10 import android.view.ViewGroup;
11 import android.widget.ArrayAdapter;
12 import android.widget.Button;
13 import android.widget.EditText;
14 import android.widget.Spinner;
15 import android.widget.TextView;
16 import android.widget.Toast;
17
18 import androidx.annotation.NonNull;
19 import androidx.annotation.Nullable;
20
21 import java.util.List;
22
23 public class UserAdapter extends ArrayAdapter<User> {
24
25     Context context;
26     int listLayoutRes;
27     List<User> userList;
28     SQLiteDatabase mDatabase;
29
30     public UserAdapter(Context ctn,int list,List<
31 User> user,SQLiteDatabase lite){
32
33         super(ctn,list,user);
34
35         this.context = ctn;
36         this.userlist = user;
37         this.listLayoutRes = list;
38         this.mDatabase = lite;
39     }
40
```

```

41
42     @NonNull
43     @Override
44     public View getView(int position, @Nullable View
convertView, @NonNull ViewGroup parent) {
45
46         LayoutInflater inflater = LayoutInflater.from
(context);
47         View view = inflater.inflate(listLayoutRes,
null);
48
49         User user = userList.get(position);
50
51         TextView txtname = view.findViewById(R.id.
textView4);
52         TextView txtsurname = view.findViewById(R.id
.textView5);
53         TextView txtpassword = view.findViewById(R.id
.textView6);
54         TextView txtdepartment = view.findViewById(R.
id.textView7);
55
56         txtname.setText(user.name);
57         txtdepartment.setText(user.department);
58         txtpassword.setText(user.password);
59         txtsurname.setText(user.surname);
60
61         Button btnedit = view.findViewById(R.id.edit
);
62         Button btndelete = view.findViewById(R.id.
delete);
63
64
65         btnedit.setOnClickListener(
66             new View.OnClickListener() {
67                 @Override
68                 public void onClick(View v) {
69                     updateuser(user);
70                 }
71             }
72         );

```

```

73
74
75         btndel.delete.setOnClickListener(
76             new View.OnClickListener() {
77                 @Override
78                 public void onClick(View v) {
79                     AlertDialog.Builder builder
80                     = new AlertDialog.Builder(context);
81                     builder.setTitle("Are you
82                     sure ?");
83                     builder.setPositiveButton("
84                     YES", new DialogInterface.OnClickListener() {
85                         @Override
86                         public void onClick(
87                             DialogInterface dialog, int which) {
88                             String sql = "DELETE
89                             FROM User WHERE id = ?";
90                             mDatabase.execSQL(
91                             sql,new Integer[]{user.getId()});
92                             reloadEmployeesFromDatabase();
93                         }
94                     });
95                     builder.setNegativeButton("
96                     Cancel", new DialogInterface.OnClickListener() {
97                         @Override
98                         public void onClick(
99                             DialogInterface dialogInterface, int i) {
100                             }
101                         });
102                     AlertDialog dialog = builder
103                     .create();
104                     dialog.show();
105                 }
106             }
107         );

```

```
104         return view;
105
106     }
107
108     private void updateUser(final User user){
109         final AlertDialog.Builder builder = new
            AlertDialog.Builder(context);
110
111         LayoutInflater inflater = LayoutInflater.from(
            context);
112         View view = inflater.inflate(R.layout.editlayour,
            null);
113         builder.setView(view);
114
115         final EditText name = view.findViewById(R.id.
            editTextName);
116         final EditText surname = view.findViewById(R
            .id.esurname);
117         final EditText password = view.findViewById(
            R.id.epassword);
118         final Spinner department = view.findViewById
            (R.id.spinnerDepartment);
119
120         final AlertDialog alertDialog = builder.
            create();
121         alertDialog.show();
122
123         view.findViewById(R.id.buttonUpdateEmployee
            ).setOnClickListener(
124             new View.OnClickListener() {
125                 @Override
126                 public void onClick(View v) {
127                     String namee = name.getText
            ().toString().trim();
128
129                     String esurname = surname.
            getText().toString().trim();
130
131                     String passworde = password.
            getText().toString().trim();
132
```

```

133             String departmente =
department.getSelectedItemAt().toString();
134
135             String sql = "UPDATE User \n
" +
136                 "SET NAME = ?, \n" +
137                 "SURNAME = ?, \n" +
138                 "PASSWORD = ?, \n" +
139                 "DEPARTMENT = ? \n"
+
140                 "WHERE id = ?;\n";
141
142             mDatabase.execSQL(sql, new
String[]{namee, esurname, passworde,departmente,
String.valueOf(user.getId())});
143             Toast.makeText(context, "
Employee Updated", Toast.LENGTH_SHORT).show();
144             reloadEmployeesFromDatabase
();
145         }
146     }
147 );
148
149 }
150
151     private void reloadEmployeesFromDatabase() {
152         Cursor cursorEmployees = mDatabase.rawQuery(
"SELECT * FROM User", null);
153         if (cursorEmployees.moveToFirst()) {
154             userlist.clear();
155             do {
156                 userlist.add(new User(
157                     cursorEmployees.getInt(0),
158                     cursorEmployees.getString(1
),
159                     cursorEmployees.getString(2
),
160                     cursorEmployees.getString(3
),
161                     cursorEmployees.getString(4)
162                 ));

```

```
163         } while (cursorEmployees.moveToNext());
164     }
165     cursorEmployees.close();
166     notifyDataSetChanged();
167 }
168 }
169
```

```
1 package com.example.curdoperation;
2
3 import android.database.Cursor;
4 import android.database.sqlite.SQLiteDatabase;
5 import android.os.Bundle;
6 import android.widget.ListView;
7
8 import androidx.activity.EdgeToEdge;
9 import androidx.appcompat.app.AppCompatActivity;
10 import androidx.core.graphics.Insets;
11 import androidx.core.view.ViewCompat;
12 import androidx.core.view.WindowInsetsCompat;
13
14 import java.util.ArrayList;
15 import java.util.List;
16
17 public class Editactivity extends AppCompatActivity {
18     List<User> employeeList;
19     SQLiteDatabase mDatabase;
20     ListView listViewEmployees;
21     UserAdapter adapter;
22
23     @Override
24     protected void onCreate(Bundle savedInstanceState
25 ) {
26         super.onCreate(savedInstanceState);
27         setContentView(R.layout.activity_editactivity
28 );
29
30         // Initialize list and database
31         employeeList = new ArrayList<>();
32         mDatabase = openOrCreateDatabase(MainActivity
33 .Database_NAME, MODE_PRIVATE, null);
34
35         // Initialize ListView
36         listViewEmployees = findViewById(R.id.
37 listViewEmployees);
38
39         // Load employees from database
40         showEmployeesFromDatabase();
41     }
42 }
```



```
38
39     private void showEmployeesFromDatabase() {
40         Cursor cursorEmployees = mDatabase.rawQuery("
41         SELECT * FROM User", null);
42
43         // Check if the cursor has data
44         if (cursorEmployees.moveToFirst()) {
45             employeeList.clear();
46             do {
47                 // Add each record to the employee
48                 list
49                 employeeList.add(new User(
50                     cursorEmployees.getInt(0),
51                     cursorEmployees.getString(1),
52                     cursorEmployees.getString(2),
53                     cursorEmployees.getString(3),
54                     cursorEmployees.getString(4)
55                 ));
56             } while (cursorEmployees.moveToNext());
57         }
58
59         // Close the cursor
60         cursorEmployees.close();
61
62         // Create and set the adapter
63         adapter = new UserAdapter(this, R.layout.
64             list_layout_design, employeeList, mDatabase);
65         listViewEmployees.setAdapter(adapter);
66     }
67 }
```

```
1 package com.example.curdoperation;
2
3 import android.content.Intent;
4 import android.database.sqlite.SQLiteDatabase;
5 import android.os.Bundle;
6 import android.view.View;
7 import android.widget.Button;
8 import android.widget.EditText;
9 import android.widget.Spinner;
10 import android.widget.TextView;
11 import android.widget.Toast;
12
13 import androidx.activity.EdgeToEdge;
14 import androidx.appcompat.app.AppCompatActivity;
15 import androidx.core.graphics.Insets;
16 import androidx.core.view.ViewCompat;
17 import androidx.core.view.WindowInsetsCompat;
18
19 public class MainActivity extends AppCompatActivity {
20
21     public static final String Database_NAME = "
    User";
22     EditText name,surname,password;
23     Spinner department;
24     Button btnsave,btnnext;
25
26     SQLiteDatabase sqLiteDatabase;
27
28     @Override
29     protected void onCreate(Bundle savedInstanceState
    ) {
30         super.onCreate(savedInstanceState);
31         setContentView(R.layout.activity_main);
32
33         name = findViewById(R.id.editName);
34         surname = findViewById(R.id.editsurnamee);
35         password = findViewById(R.id.
    editTextTextPassword);
36         department = findViewById(R.id.spinner);
37         btnsave = findViewById(R.id.btnadd);
38         btnnext = findViewById(R.id.btnnext);
```

```

39
40         sqLiteDatabase = openOrCreateDatabase(
Database_NAME,MODE_PRIVATE,null);
41
42         createDatabase();
43
44         btnnext.setOnClickListener(
45             new View.OnClickListener() {
46                 @Override
47                 public void onClick(View v) {
48                     startActivity(new Intent(
MainActivity.this, Editactivity.class));
49                     Toast.makeText(
getApplicationContext(),"this",Toast.LENGTH_LONG).
show();
50             }
51         }
52     );
53
54
55
56     btnsave.setOnClickListener(
57         new View.OnClickListener() {
58             @Override
59             public void onClick(View v) {
60                 adduser();
61             }
62         }
63     );
64
65
66 }
67
68 private void createDatabase(){
69
70     sqLiteDatabase.execSQL("CREATE TABLE IF NOT
EXISTS User (" +
71         "id INTEGER PRIMARY KEY AUTOINCREMENT
, " +
72         "NAME VARCHAR(200) NOT NULL, " +
73         "SURNAME VARCHAR(200) NOT NULL, " +

```

```
74             "PASSWORD VARCHAR(200) NOT NULL, " +
75             "DEPARTMENT VARCHAR(200) NOT NULL" +
76             ");");
77
78
79     }
80     private void adduser() {
81
82         String addname = name.getText().toString().
trim();
83         String addsurname = surname.getText().
toString().trim();
84         String adddepartment = department.
getSelectedItem().toString();
85         String passwordadd = password.getText().
toString().trim();
86
87
88         String adduser = "INSERT INTO User (NAME,
SURNAME,PASSWORD,DEPARTMENT) VALUES (? ,? ,? ,?)";
89
90         sqLiteDatabase.execSQL(adduser,new String[]{
91             addname,addsurname,passwordadd,
adddepartment
92         });
93
94         Toast.makeText(getApplicationContext(),"The
user added successfully",Toast.LENGTH_LONG).show();
95     }
96
97 }
98
```