

PRACTICAL 14

Aim: Create an Android application for a sales man, Application having two buttons called “Take Order” and “View Order”. On click of “Take Order” button a new activity shall be open, which accept customer phone number, item name, and quantity from user. Activity having a button also called “Save”. On click of “Save” button entered data shall be save to SQLite database. On click of “View Order” button a new activity should start which displays list of ordered item to ListView.

Code:

JAVA FILE: (MainActivity.java)

```
package com.example.practical14;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import androidx.appcompat.app.AppCompatActivity;
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        findViewById(R.id.button_take_order).setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startActivity(new Intent(MainActivity.this, TakeOrderActivity.class));
            }
        });
        findViewById(R.id.button_view_order).setOnClickListener(new
View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startActivity(new Intent(MainActivity.this, ViewOrderActivity.class));
            }
        });
    }
}
```

JAVA FILE: (TakeOrderActivity.java)

```
package com.example.practical14;
import android.content.ContentValues;
```

```
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
public class TakeOrderActivity extends AppCompatActivity {
    private EditText editTextPhone, editTextItemName, editTextQuantity;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_take_order);
        editTextPhone = findViewById(R.id.editText_phone);
        editTextItemName = findViewById(R.id.editText_item_name);
        editTextQuantity = findViewById(R.id.editText_quantity);
        Button buttonSave = findViewById(R.id.button_save);
        buttonSave.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                saveOrder();
            }
        });
    }
    private void saveOrder() {
        String phone = editTextPhone.getText().toString();
        String itemName = editTextItemName.getText().toString();
        int quantity = Integer.parseInt(editTextQuantity.getText().toString());
        // Initialize your SQLiteOpenHelper (e.g., OrderDatabaseHelper) and get a writable
        database.
        OrderDatabaseHelper dbHelper = new OrderDatabaseHelper(this);
        SQLiteDatabase db = dbHelper.getWritableDatabase();
        ContentValues values = new ContentValues();
        values.put(OrderContract.OrderEntry.COLUMN_PHONE, phone);
        values.put(OrderContract.OrderEntry.COLUMN_ITEM_NAME, itemName);
        values.put(OrderContract.OrderEntry.COLUMN_QUANTITY, quantity);
        db.insert(OrderContract.OrderEntry.TABLE_NAME, null, values);
        db.close();
        Toast.makeText(this, "Order saved!", Toast.LENGTH_SHORT).show();
    }
}
```

JAVA FILE: (ViewOrderActivity.java)

```
package com.example.practical14;
```

```
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.widget.AdapterView;
import android.widget.ListView;
import androidx.appcompat.app.AppCompatActivity;
import java.util.ArrayList;

public class ViewOrderActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_view_order);
        ArrayList<String> orderList = getOrders();
        ArrayAdapter<String> adapter = new ArrayAdapter<>(this,
        android.R.layout.simple_list_item_1, orderList);
        ListView listView = findViewById(R.id.listView_orders);
        listView.setAdapter(adapter);
    }
    private ArrayList<String> getOrders() {
        ArrayList<String> orderList = new ArrayList<>();
        OrderDatabaseHelper dbHelper = new OrderDatabaseHelper(this);
        SQLiteDatabase db = dbHelper.getReadableDatabase();
        String[] projection = {
            OrderContract.OrderEntry.COLUMN_PHONE,
            OrderContract.OrderEntry.COLUMN_ITEM_NAME,
            OrderContract.OrderEntry.COLUMN_QUANTITY
        };
        Cursor cursor = db.query(
            OrderContract.OrderEntry.TABLE_NAME,
            projection,
            null,
            null,
            null,
            null,
            null
        );
        while (cursor.moveToNext()) {
            String phone =
            cursor.getString(cursor.getColumnIndexOrThrow(OrderContract.OrderEntry.COLUMN_PHONE));
            String itemName =
            cursor.getString(cursor.getColumnIndexOrThrow(OrderContract.OrderEntry.COLUMN_ITEM_NAME));
```

```
        int quantity =
cursor.getInt(cursor.getColumnIndexOrThrow(OrderContract.OrderEntry.COLUMN_QUAN
TITY));
        String order = "Phone: " + phone + ", Item: " + itemName + ", Quantity: " + quantity;
        orderList.add(order);
    }
    cursor.close();
    db.close();
    return orderList;
}
}
```

JAVA FILE: (OrderDatabaseHelper.java)

```
package com.example.practical14;
import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
public class OrderDatabaseHelper extends SQLiteOpenHelper {
    private static final String DATABASE_NAME = "order.db";
    private static final int DATABASE_VERSION = 1;
    private static final String SQL_CREATE_ENTRIES =
"CREATE TABLE " + OrderContract.OrderEntry.TABLE_NAME + " (" +
        OrderContract.OrderEntry._ID + " INTEGER PRIMARY KEY," +
        OrderContract.OrderEntry.COLUMN_PHONE + " TEXT," +
        OrderContract.OrderEntry.COLUMN_ITEM_NAME + " TEXT," +
        OrderContract.OrderEntry.COLUMN_QUANTITY + " INTEGER)";
    private static final String SQL_DELETE_ENTRIES =
"DROP TABLE IF EXISTS " + OrderContract.OrderEntry.TABLE_NAME;
    public OrderDatabaseHelper(Context context) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
    }
    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL(SQL_CREATE_ENTRIES);
    }
    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        db.execSQL(SQL_DELETE_ENTRIES);
        onCreate(db);
    }
}
```

JAVA FILE: (OrderContact.java)

```
package com.example.practical14;
```

```
import android.provider.BaseColumns;
public final class OrderContract {
    private OrderContract() {}
    public static class OrderEntry implements BaseColumns {
        public static final String TABLE_NAME = "orders";
        public static final String COLUMN_PHONE = "phone";
        public static final String COLUMN_ITEM_NAME = "item_name";
        public static final String COLUMN_QUANTITY = "quantity";
    }
}
```

XML FILE: (activity_main.xml)

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:padding="16dp"
    tools:context=".MainActivity">
    <Button
        android:id="@+id/button_take_order"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Take Order" />
    <Button
        android:id="@+id/button_view_order"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="View Order" />
</LinearLayout>
```

XML FILE: (activity_take_order.xml)

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:orientation="vertical"
    android:padding="16dp"
    tools:context=".TakeOrderActivity">
    <EditText
```

```
        android:id="@+id/editText_phone"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Customer Phone Number" />
        <EditText
        android:id="@+id/editText_item_name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Item Name" />
        <EditText
        android:id="@+id/editText_quantity"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:inputType="number"
        android:hint="Quantity" />
        <Button
        android:id="@+id/button_save"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Save" />
    </LinearLayout>
```

XML FILE: (activity_view_order.xml)

```
<?xml version="1.0" encoding="utf-8"?>
<ListView xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/listView_orders"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".ViewOrderActivity" />
```

Output:

