

Project Development Phase  
Project Manual  
Online Food Delivery App

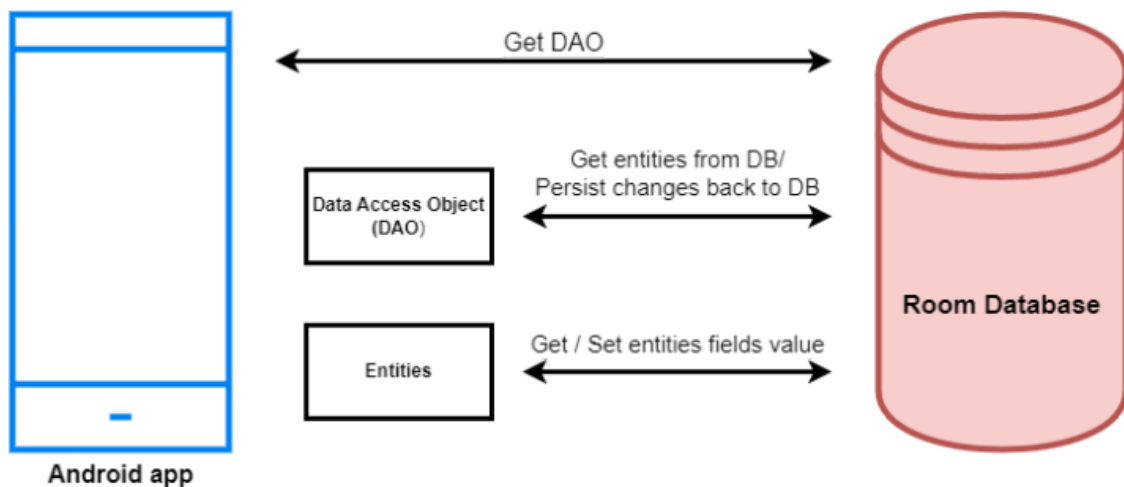
|               |             |
|---------------|-------------|
| Date          | 19/10/23    |
| Team ID       | 591057      |
| Project Name  | Snack Squad |
| Maximum Marks | 4 Marks     |

## Introduction

### Snack Squad: A Customizable Snack Ordering and Delivery App

A project that demonstrates the use of Android Jetpack Compose to build a UI for a snack squad app. Snack Squad is a sample project built using the Android Compose UI toolkit. It demonstrates how to create a simple e-commerce app for snacks using the Compose libraries. The user can see a list of snacks, and by tapping on a snack, and by tapping on the "Add to Cart" button, the snack will be added to the cart. The user can also see the list of items in the cart and can proceed to checkout to make the purchase.

## Architecture



## Learning Outcomes :

By end of this project:

- You'll be able to work on Android studio and build an app.
- You'll be able to integrate the database accordingly.

Project Workflow:

- User can view the Restaurants
- User can view the items inside of the Restaurants
- User can add the items into the cart
- User can give his details
- User can give his payment details
- Then user can place the order successfully

Tasks:

- 1.Required initial steps
- 2.Creating a new project.
- 3.Adding required dependencies.
- 4.Creating the database classes.
- 5.Building application UI and connecting to database.
- 6.Using AndroidManifest.xml
- 7.Running the application.

Task 1:

Required initial steps : <https://developer.android.com/studio/install>

Task 2 :

Creating a new project.

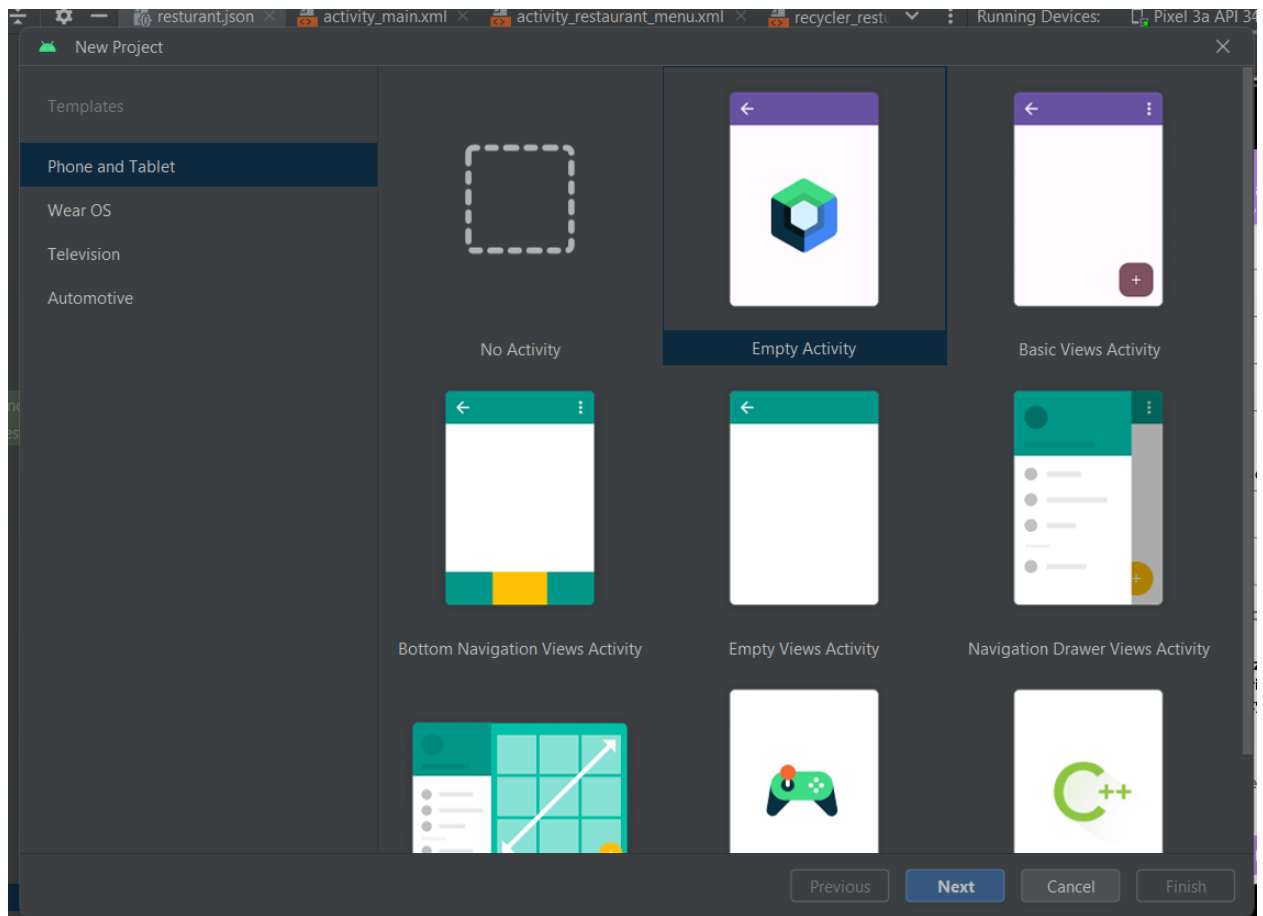
Step 1 : Android studio > File > New > New Project > Empty Compose Activity

Step 2 : Click on Next button.

Step 3 : Give name to the new project.

Step 4 : Give the Minimum SDK value

Step 5 : Click Finish



Main activity file

```
1 package com.example.onlinefooddeliveryapp
2
3 import ...
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20 class MainActivity : AppCompatActivity(), RestaurantListAdapter.RestaurantListClickListener {
21     override fun onCreate(savedInstanceState: Bundle?) {
22         super.onCreate(savedInstanceState)
23         setContentView(R.layout.activity_main)
24
25         val actionBar: ActionBar? = supportActionBar
26         actionBar?.setTitle("Restaurant List")
27
28         val restaurantModel : List<RestaurentModel?>? = getRestaurantData()
29         initRecyclerView(restaurantModel)
30     }
31
32     private fun initRecyclerView(restaurantList: List<RestaurentModel?>?) {
33         val recyclerViewRestaurant : RecyclerView? = findViewById<RecyclerView>(R.id.recyclerViewRestaurant)
34         recyclerViewRestaurant?.layoutManager = LinearLayoutManager(context, this)
35         val adapter = RestaurantListAdapter(restaurantList, clickListener: this)
36         recyclerViewRestaurant?.adapter = adapter
37     }
38
39     private fun getRestaurantData(): List<RestaurentModel?>? {
40         val inputStream: InputStream = resources.openRawResource(R.raw.restaurant)
41         val writer: Writer = StringWriter()
42         val buffer = CharArray(size: 1024)
43         try {
44             val reader: Reader = BufferedReader(InputStreamReader(inputStream, charsetName: "UTF-8"))
45             var n : Int
46             while (reader.read(buffer).also { n = it } != -1) {
```

Task 3 :

Adding required dependencies.

Step 1 : Gradle scripts > build.gradle(Module :app)

Step 2 : Click on Sync now

```

32     }
33 }
34
35 dependencies {
36
37     implementation 'androidx.core:core-ktx:1.7.0'
38     implementation 'androidx.appcompat:appcompat:1.6.1'
39     implementation 'com.google.android.material:material:1.8.0'
40     implementation 'androidx.constraintlayout:constraintlayout:2.1.4'
41     testImplementation 'junit:junit:4.13.2'
42     androidTestImplementation 'androidx.test.ext:junit:1.1.5'
43     androidTestImplementation 'androidx.test.espresso:espresso-core:3.5.1'
44
45     implementation "com.github.bumptech.glide:glide:4.12.0"
46     implementation "com.google.code.gson:gson:2.9.0"
47 }

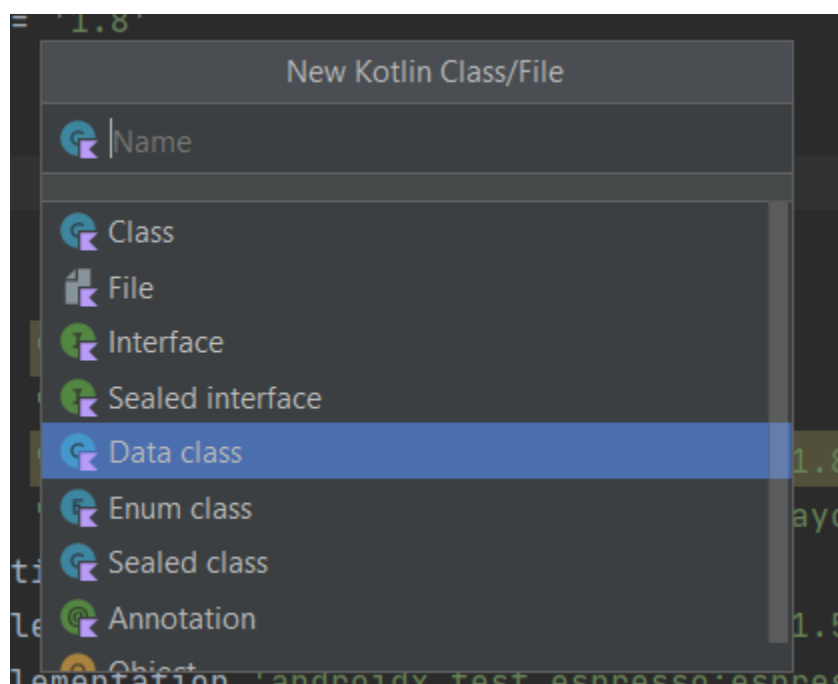
```

#### Task 4:

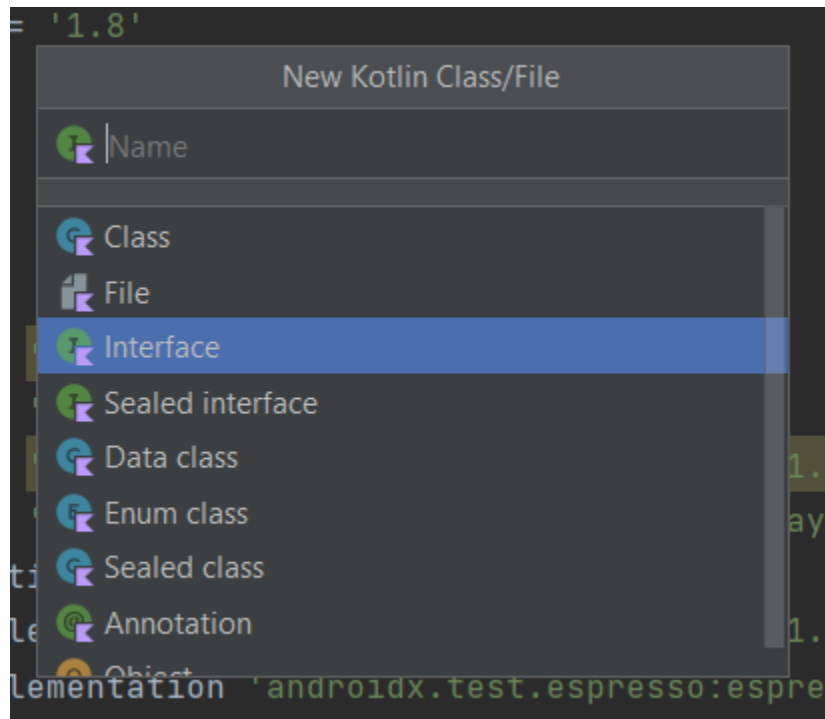
Creating the database classes. In this project we will be having two databases, one is for user registration and login, and other is for tracking the orders of the user, which is used for admin page .

#### Database 1

Step 1 : Create User data class



Step 2 : Create an UserDao interface



Step 3 : Create an UserDatabase class

Step 4 : Create an UserDatabaseHelper class

Database 2

Step 1 : Create Order data class

Step 2 : Create OrderDao interface

Step 3 : Create OrderDatabase class

Step 4 : Create OrderDatabaseHelper class

Task 5: Building application UI and connecting to database.

Step 1: Creating LoginActivity.kt with database

Database connection in LoginActivity.kt

```
enu.xml × recycler_restuarant_list_row.xml × menu_list_row.xml × place_your_order_list_row.xml × MainActivity.kt × build.gradle (.app)

package com.example.onlinefooddeliveryapp

import ...

class SplashActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_splash)

        val actionBar = supportActionBar
        actionBar!!.hide()

        Handler().postDelayed({
            startActivity(Intent(this@SplashActivity, MainActivity::class.java))
            finish()
        }, 2000)
    }
}
```

Link to source [code](#)

Snackapp is the final project

Step 2 : Creating MainActivity.kt with database MainActivity is converted into RegisterActivity.kt as follows below:

Database connection in ResturantActivity.kt

Creating Placeyourorderactivity.kt

Create successorderactivity.kt

```
package com.example.onlinefooddeliveryapp

import ...

class RestaurantMenuActivity : AppCompatActivity(), MenuListAdapter.MenuListClickListener {

    private var itemsInTheCartList: MutableList<Menus?> = null
    private var totalItemInCartCount = 0
    private var menuList: List<Menus?> = null
    private var menuListAdapter: MenuListAdapter? = null

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_restaurant_menu)

        val restaurantModel : RestaurantModel? = intent?.getParcelableExtra<RestaurantModel>( name: "RestaurantModel")

        val actionBar: ActionBar? = supportActionBar
        actionBar?.setTitle(restaurantModel?.name)
        actionBar?.setSubtitle(restaurantModel?.address)
        actionBar?.setDisplayHomeAsUpEnabled(true)

        menuList = restaurantModel?.menus

        initRecyclerView(menuList)
        checkoutButton.setOnClickListener { it View!
            if(itemsInTheCartList != null && itemsInTheCartList!!.size <= 0) {
                Toast.makeText( context: this@RestaurantMenuActivity, text: "Please add some items in cart", Toast.LENGTH_LONG).show
            }
            else {
                restaurantModel?.menus = itemsInTheCartList
            }
        }
    }
}
```

## Modify androidmanifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.onlinefooddeliveryapp">

    <uses-permission android:name="android.permission.INTERNET" />

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.OnlineFoodDeliveryApp"
        tools:targetApi="31">
        <activity
            android:name=".SuccessOrderActivity"
            android:exported="false" />
        <activity
            android:name=".SuccessOrderActivity"
            android:exported="false" />
        <activity
            android:name=".PlaceYourOrderActivity"
            android:exported="false" />
        <activity
            android:name=".RestaurantMenuActivity"
            android:exported="false" />
    </application>
</manifest>
```

## Task 7:



## Running the application.

## Step 1: Run apps on a hardware device

