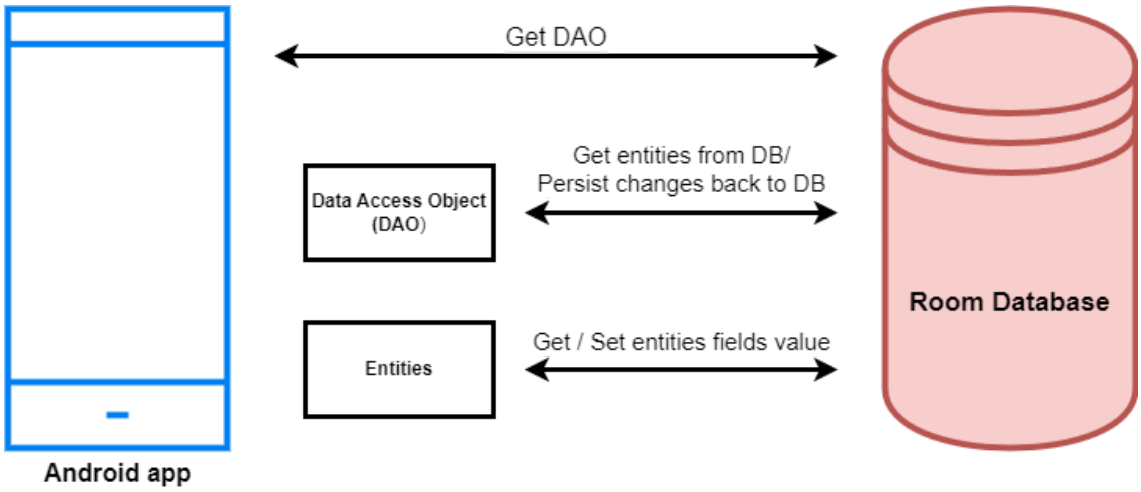
Wanderlust: A Personalized Travel Planning and Tracking App

Project Based Experiential Learning Program

Wanderlust: A Personalized Travel Planning and Tracking App

A project built using the Android Compose UI toolkit. It demonstrates how to create a simple travel app using the Compose libraries. It also features a personalized feed of recommended accommodations based on the locations.

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:

- Users register into the application.
- After registration , user logins into the application.
- User enters into the main page

Tasks:

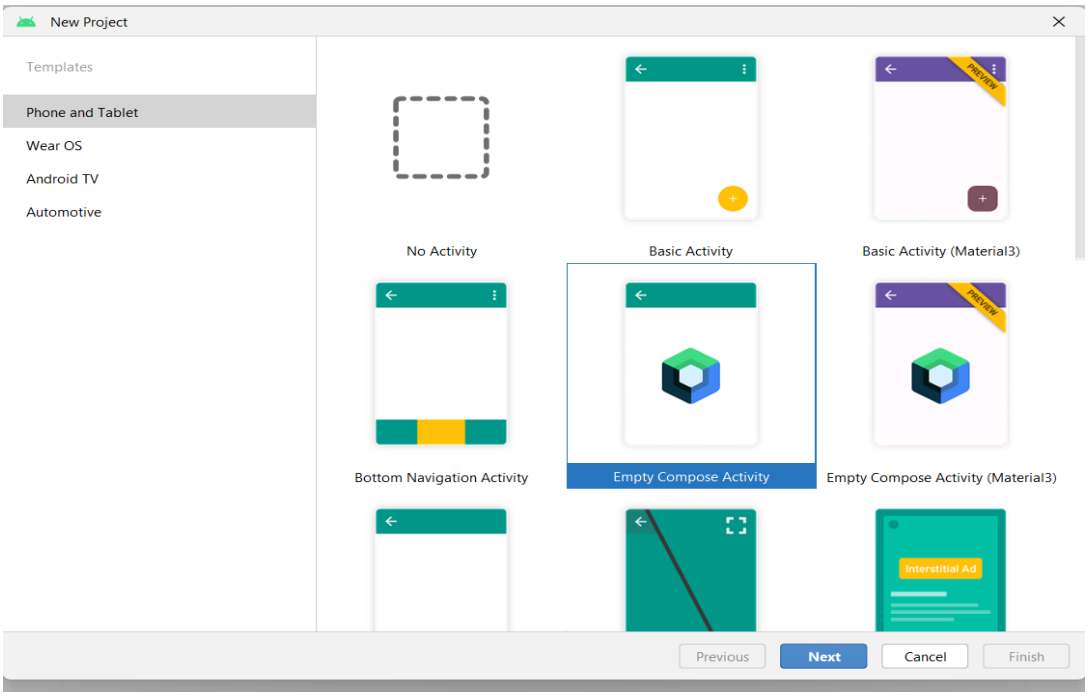
1.Required initial steps
2.Creating a new project.
3.Adding required dependencies.
4.Creating the database classes.
5.Building application UI and connecting to database.
6.Using AndroidManifest.xml
7.Running the application.

Task 1:

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

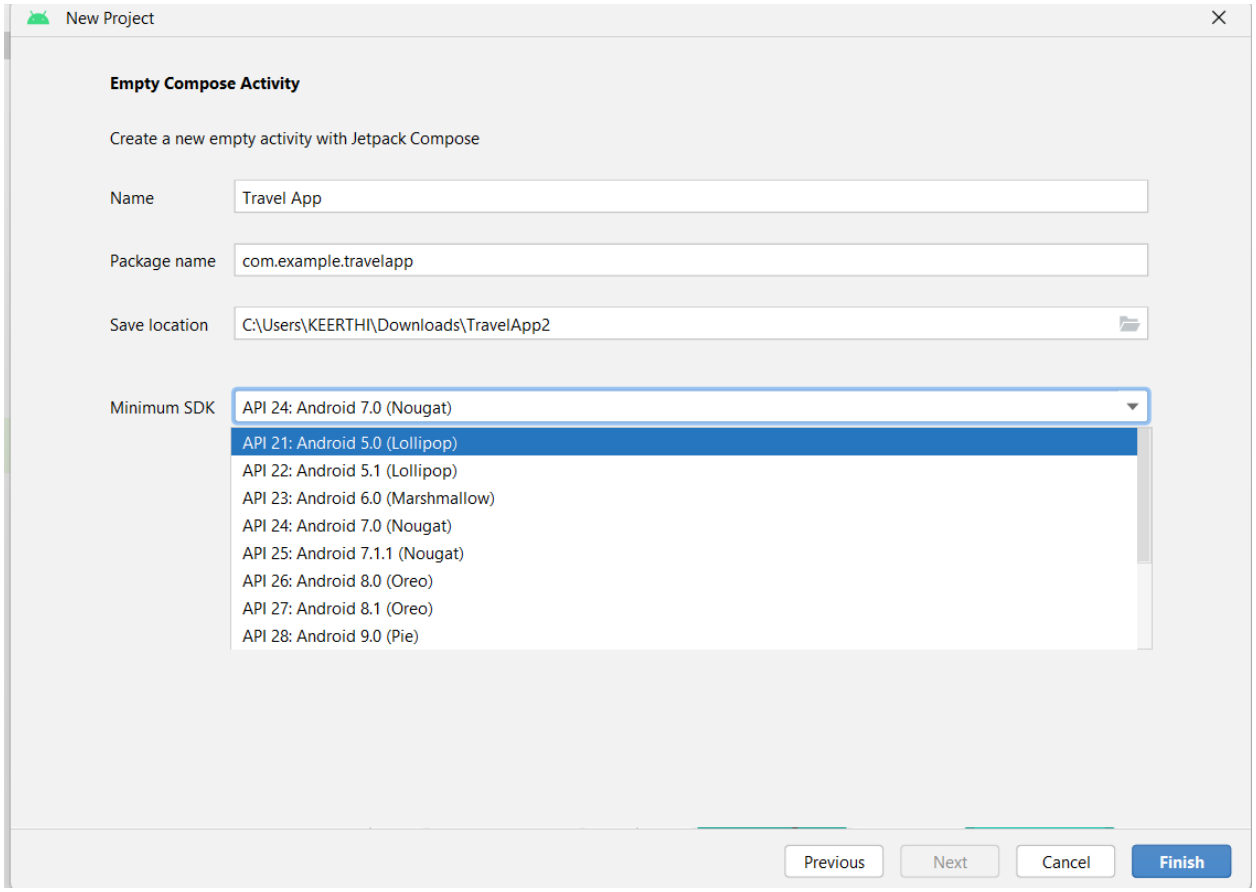
Task 2 :

Creating a new project.
Step 1 : Android studio > File > New > New Project > Empty Compose Activity
Step 2 : Click on **Next** button.

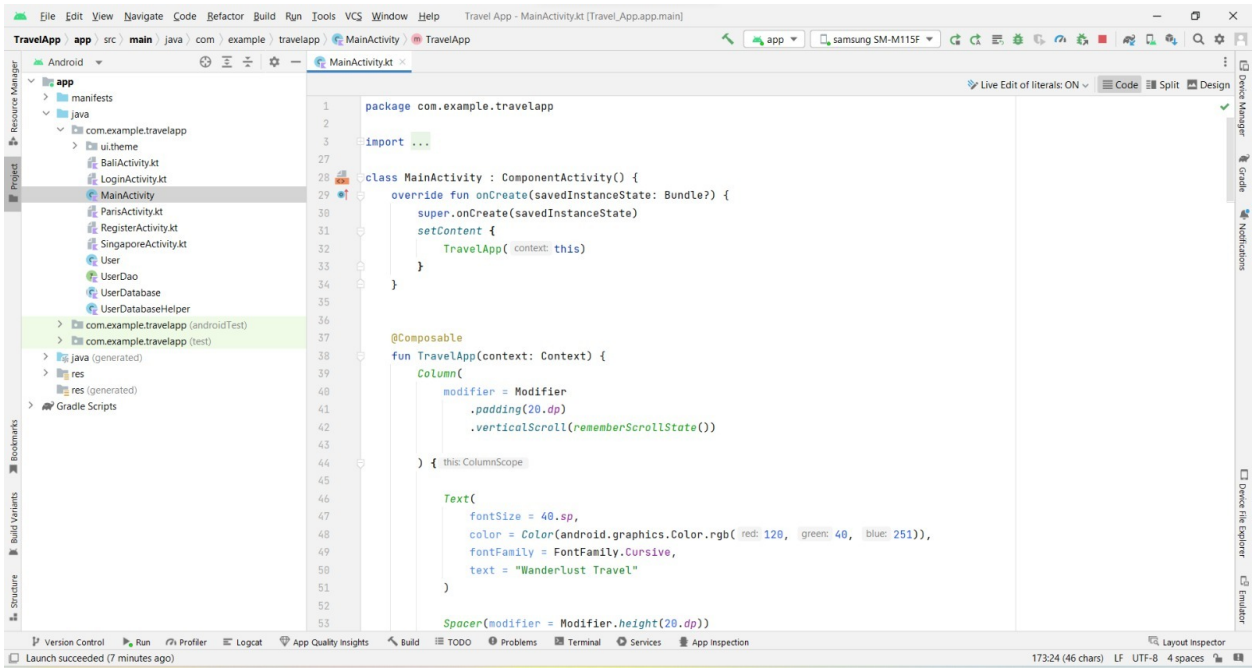


Step 3 :

Give name to the new project.
Step 4 : Give the Minimum SDK value
Step 5 : Click Finish



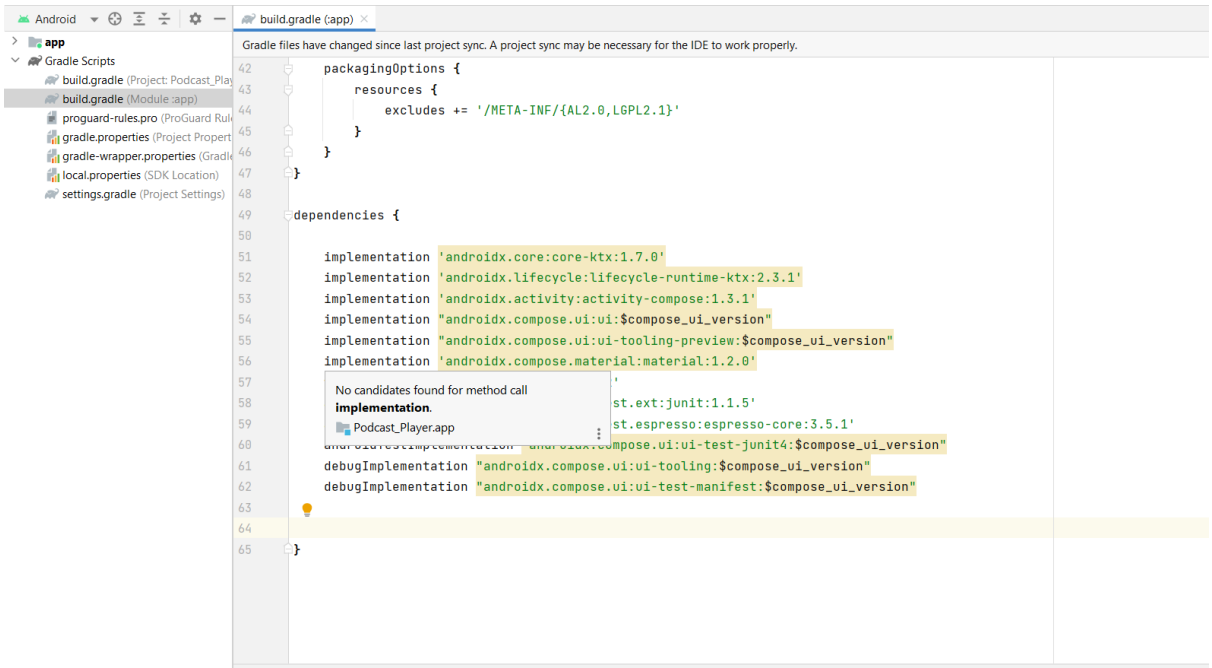
Main activity file



Task 3 :

Adding required dependencies.

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

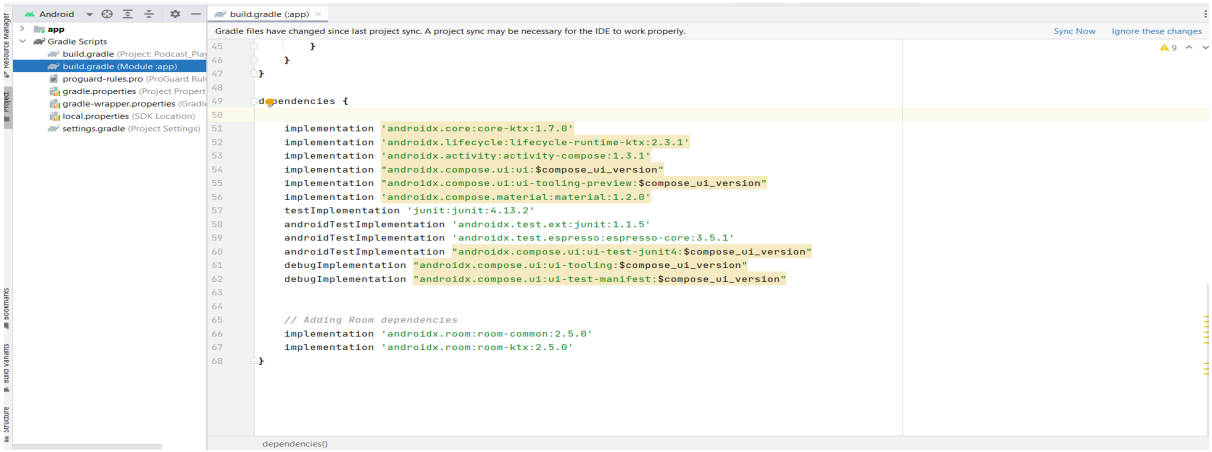


Step 2 : Adding room dependencies.

Add the below code in dependencies

```
// Adding Room dependencies
implementation 'androidx.room:room-common:2.5.0'
```

```
implementation 'androidx.room:room-ktx:2.5.0'
```

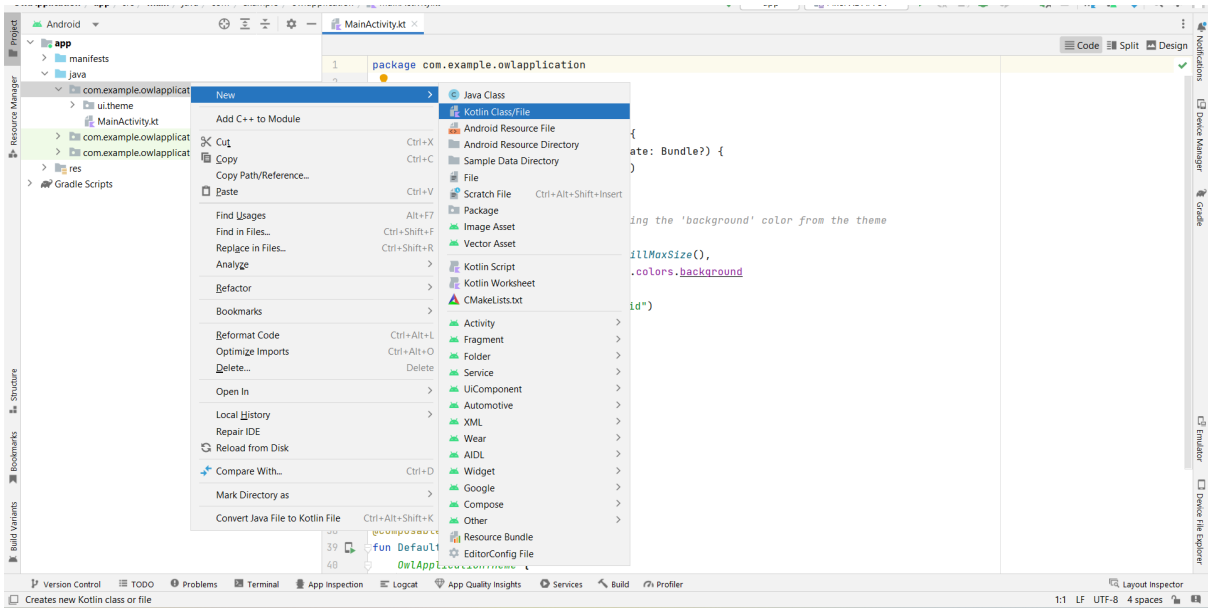


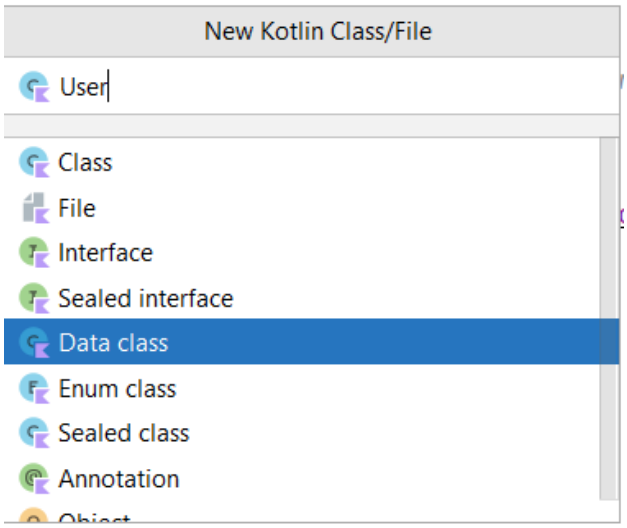
Step 3 : Click on Sync now

Task 4:

Creating the database classes.

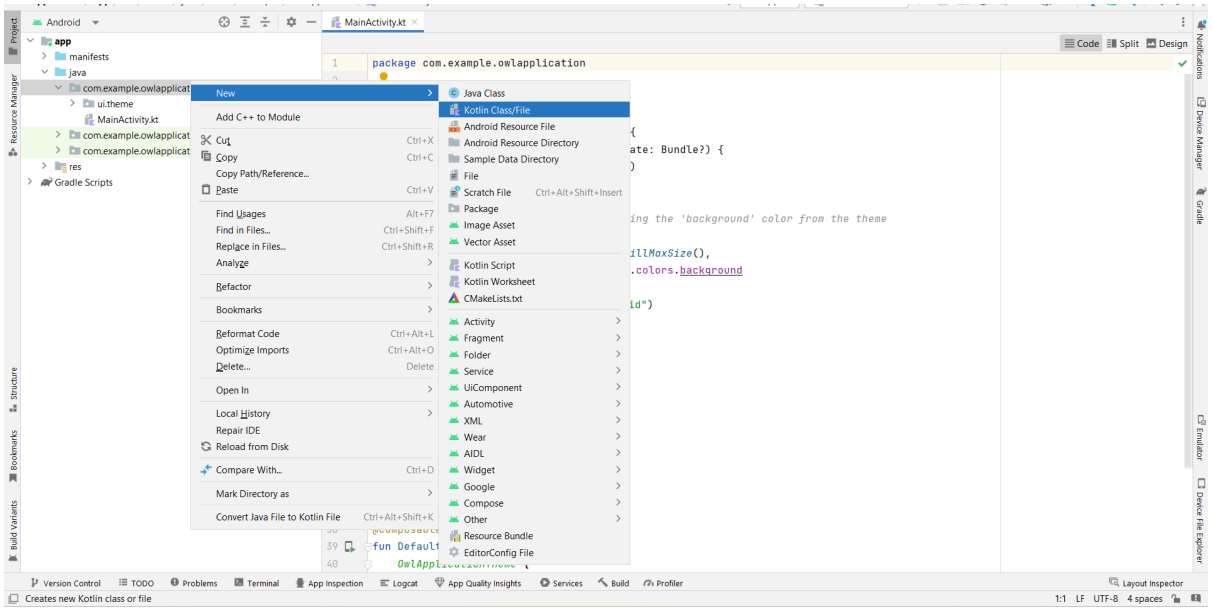
Step 1 : Create User data class

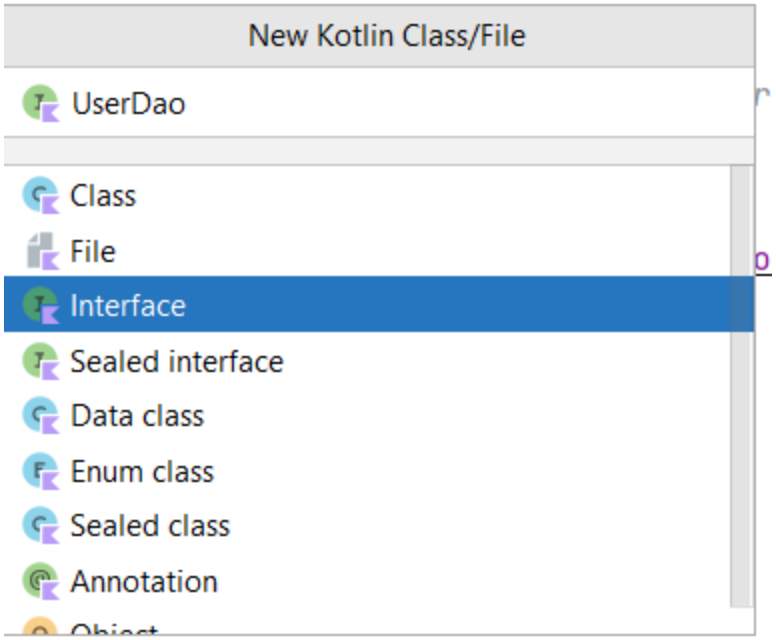




User data class code:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/User.kt

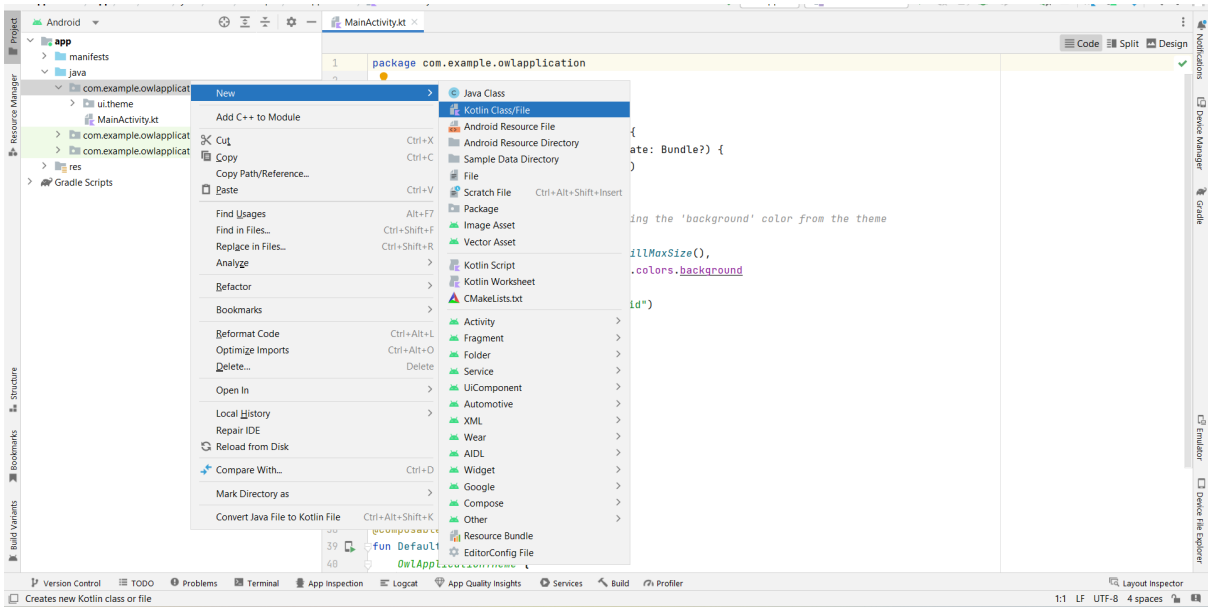
Step 2 : Create an UserDao interface

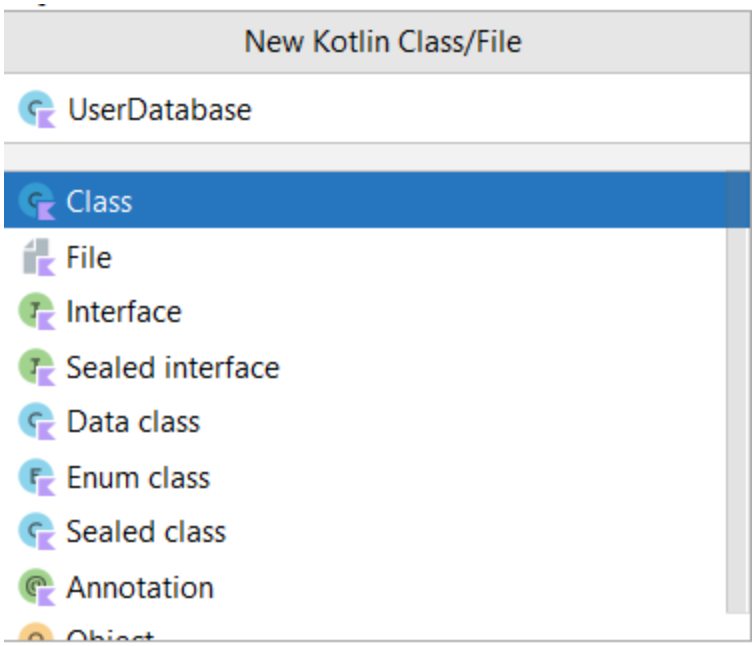




UserDao interface code :
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/UserDao.kt

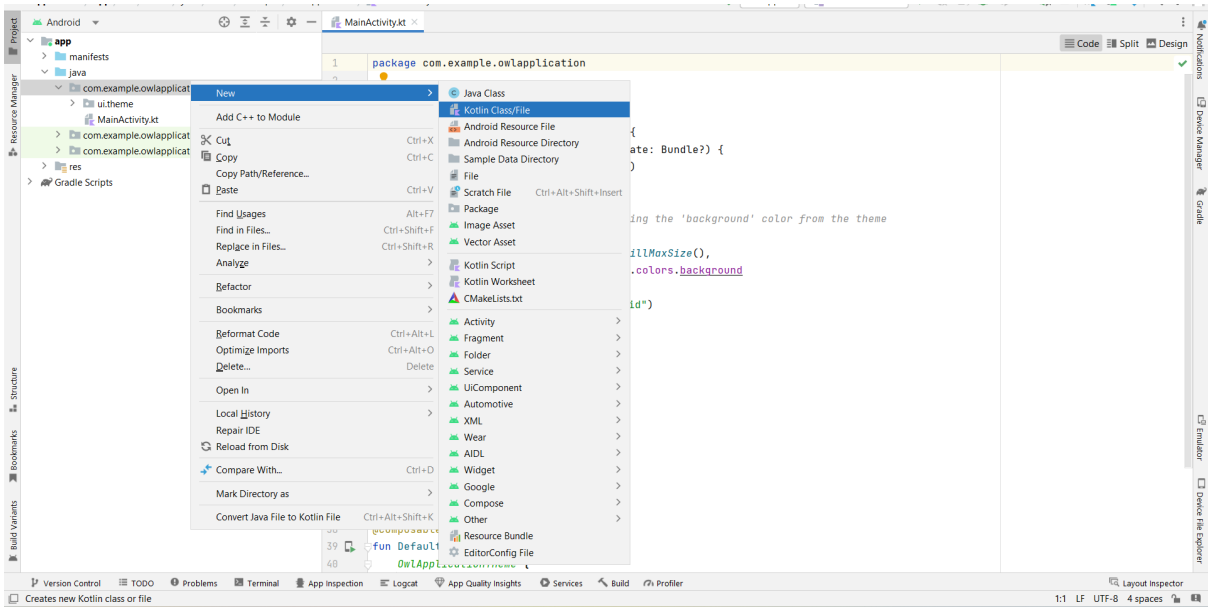
Step 3 : Create an UserDatabase class

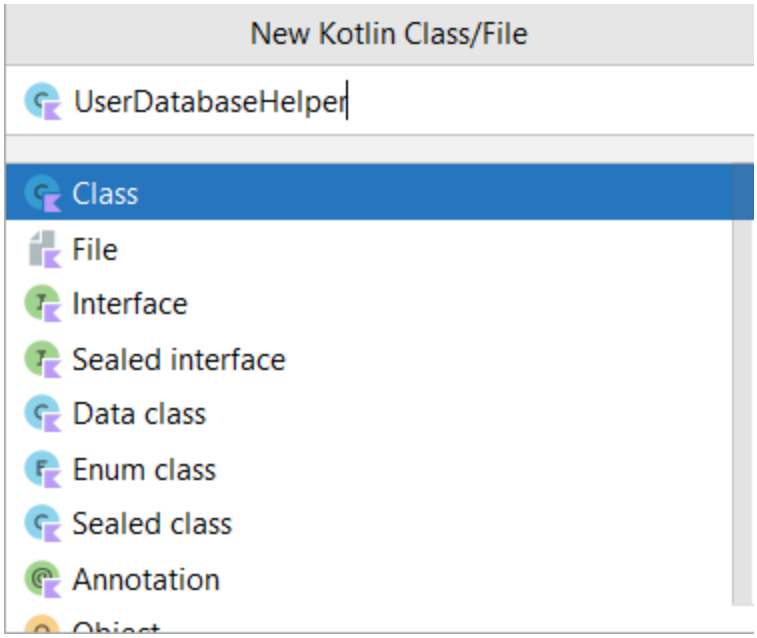




UserDatabase class code : https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/UserDatabase.kt

Step 4 : Create an UserDatabaseHelper class



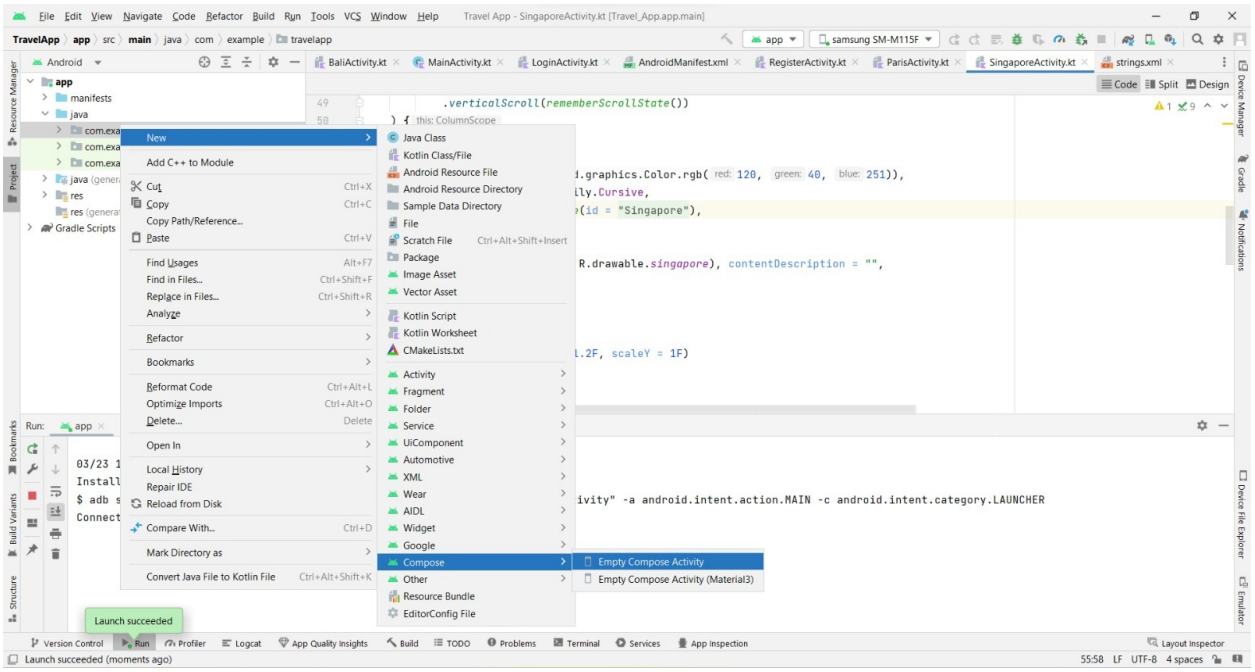


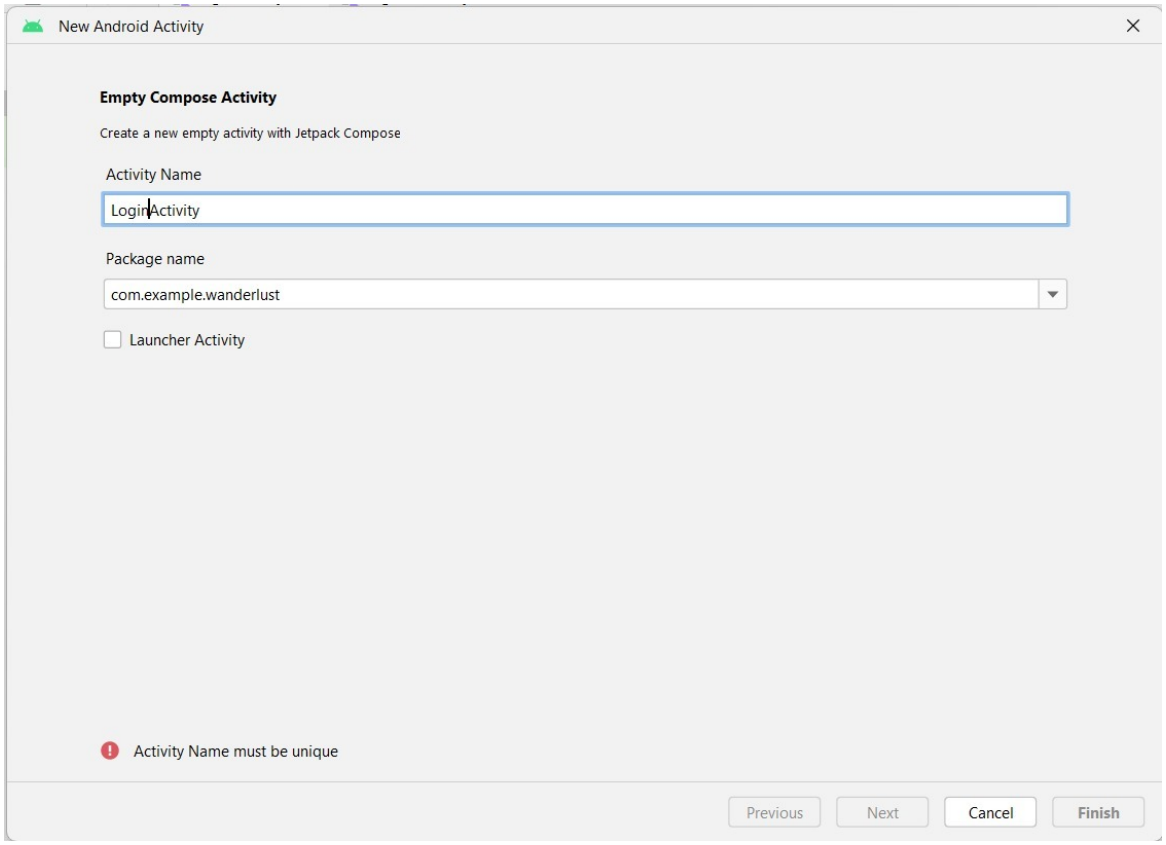
UserDatabaseHelper class code :
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/UserDatabaseHelper.kt

Task 5:

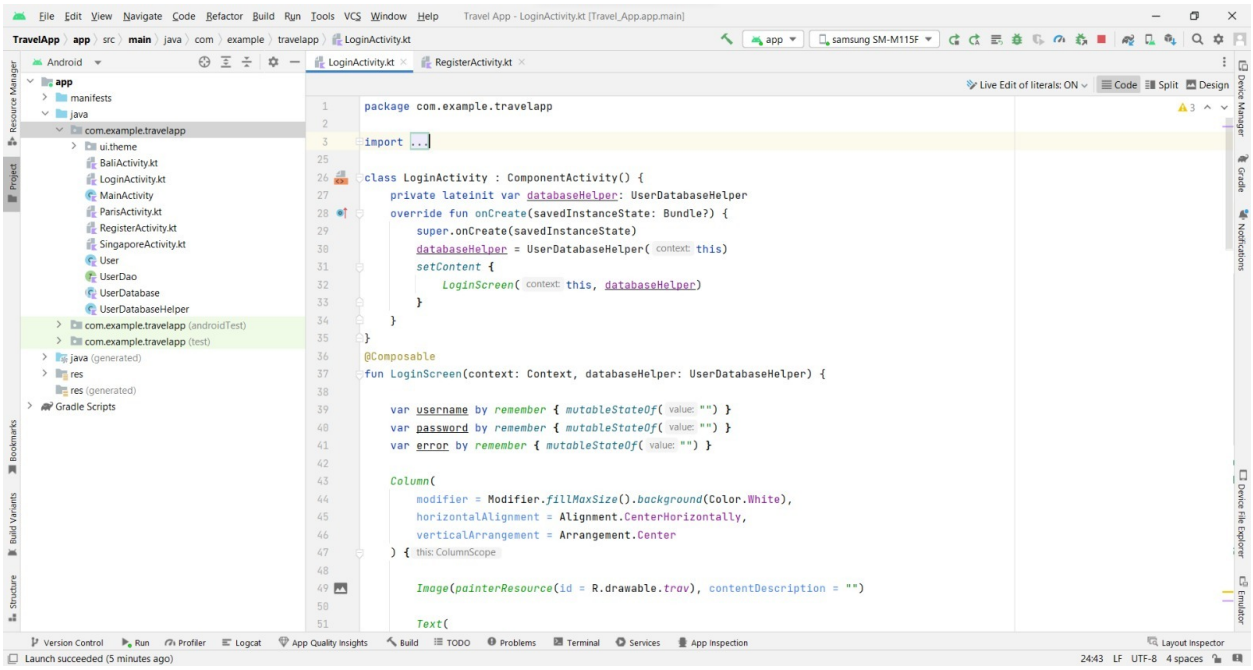
Building application UI and connecting to database.

Step 1: Creating LoginActivity.kt with database



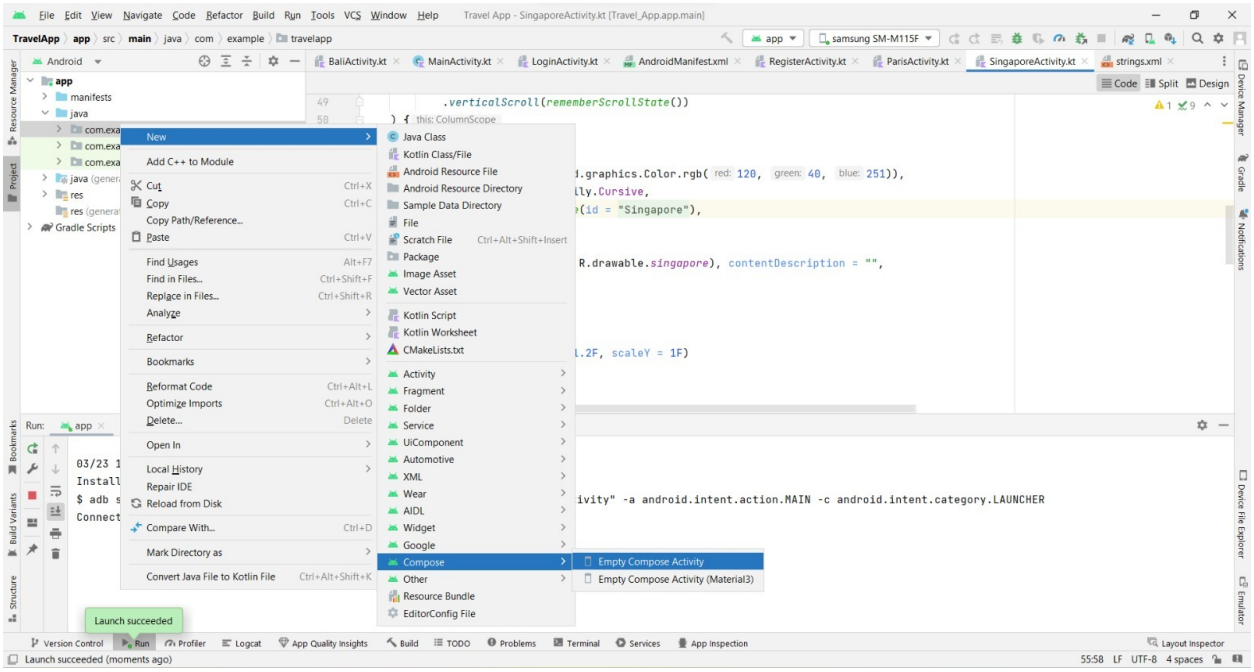


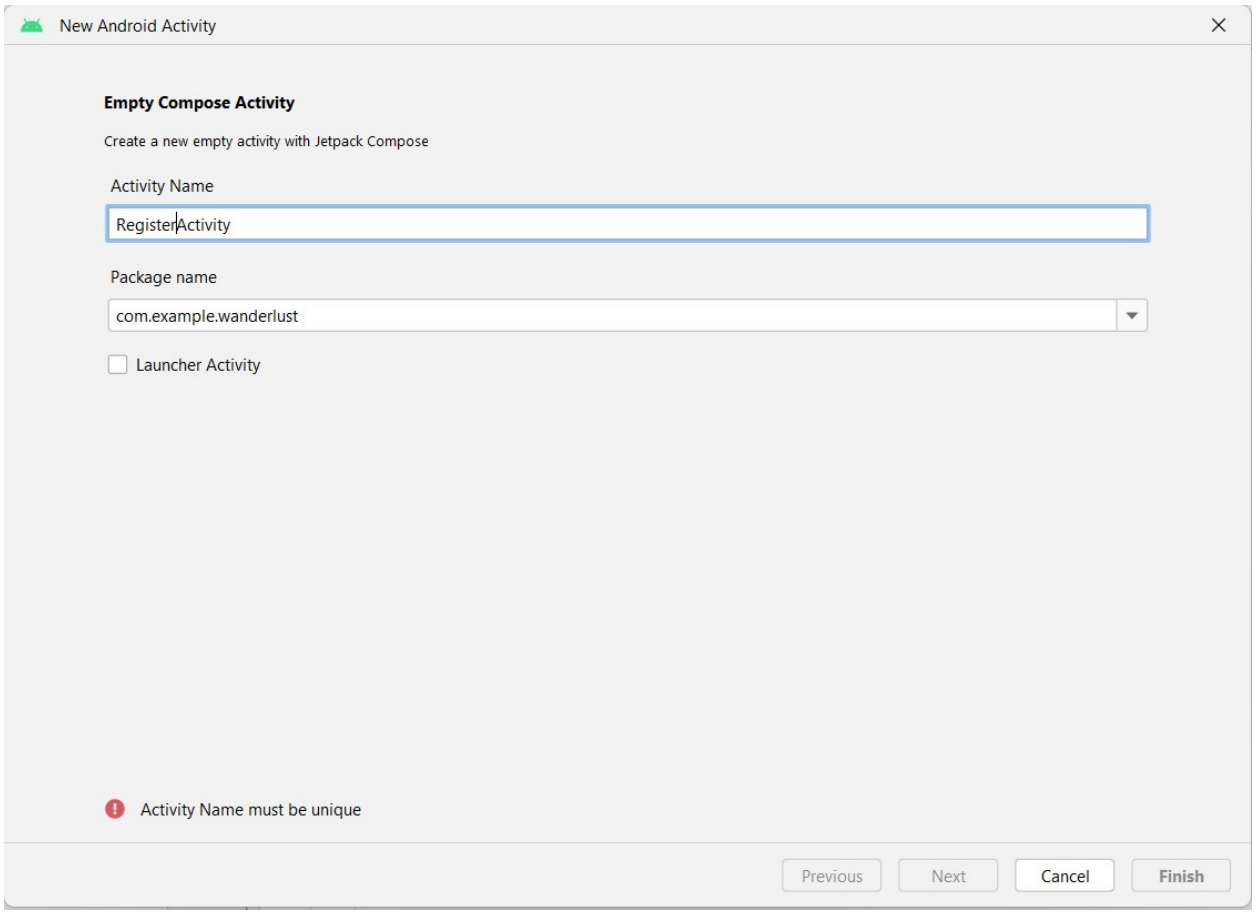
Database connection in LoginActivity.kt



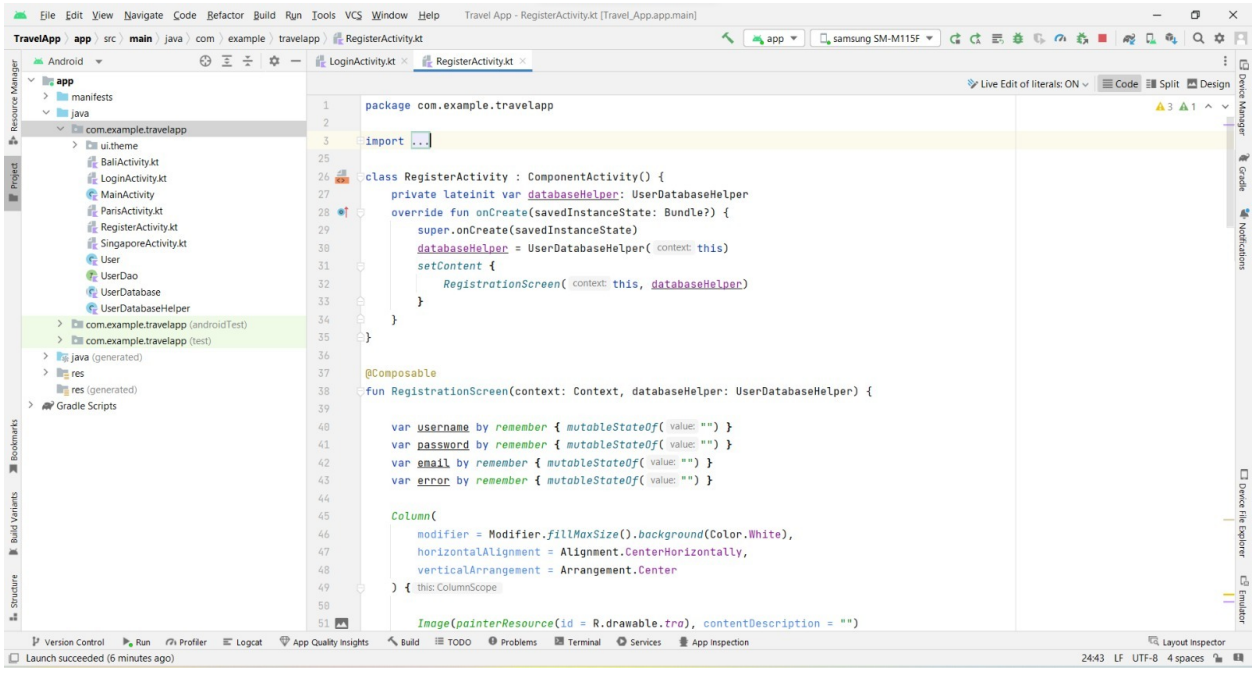
Complete code in below link:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/LoginActivity.kt

Step 2 : Creating RegisterActivity.kt with database





Database connection in RegisterActivity.kt



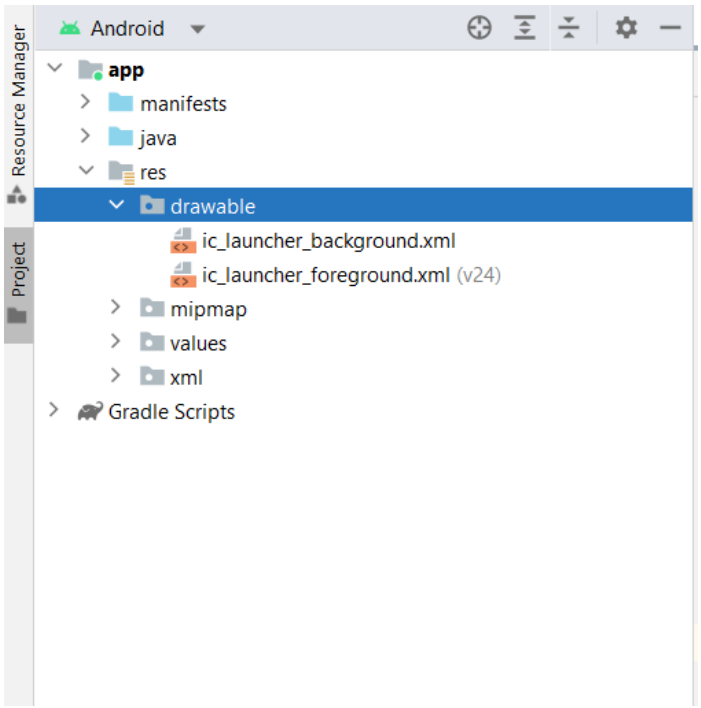
Complete code in below link:

https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/RegisterActivity.kt

Step 3 : Creating MainActivity.kt file

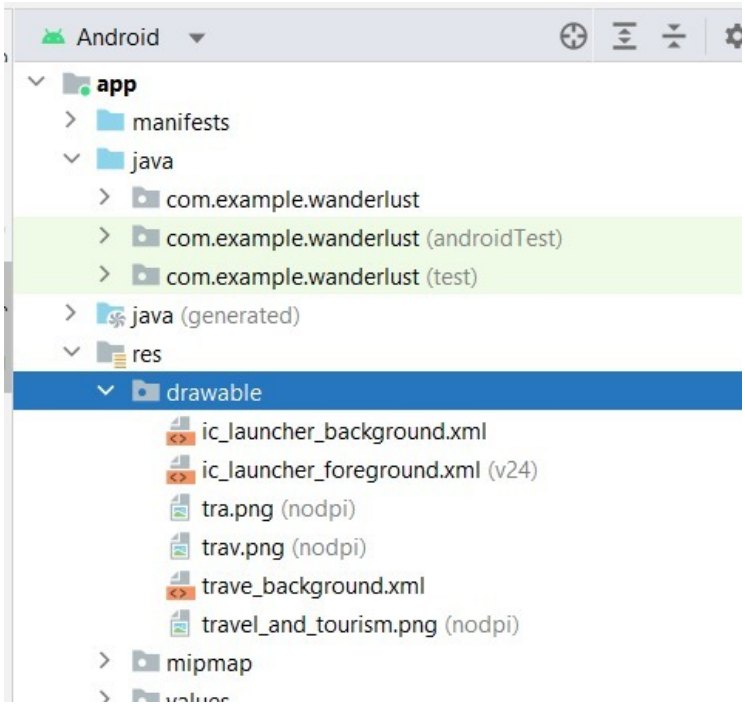
In MainActivity.kt file the main application is developed

- Before creating UI we need to add some images in drawables which are in res

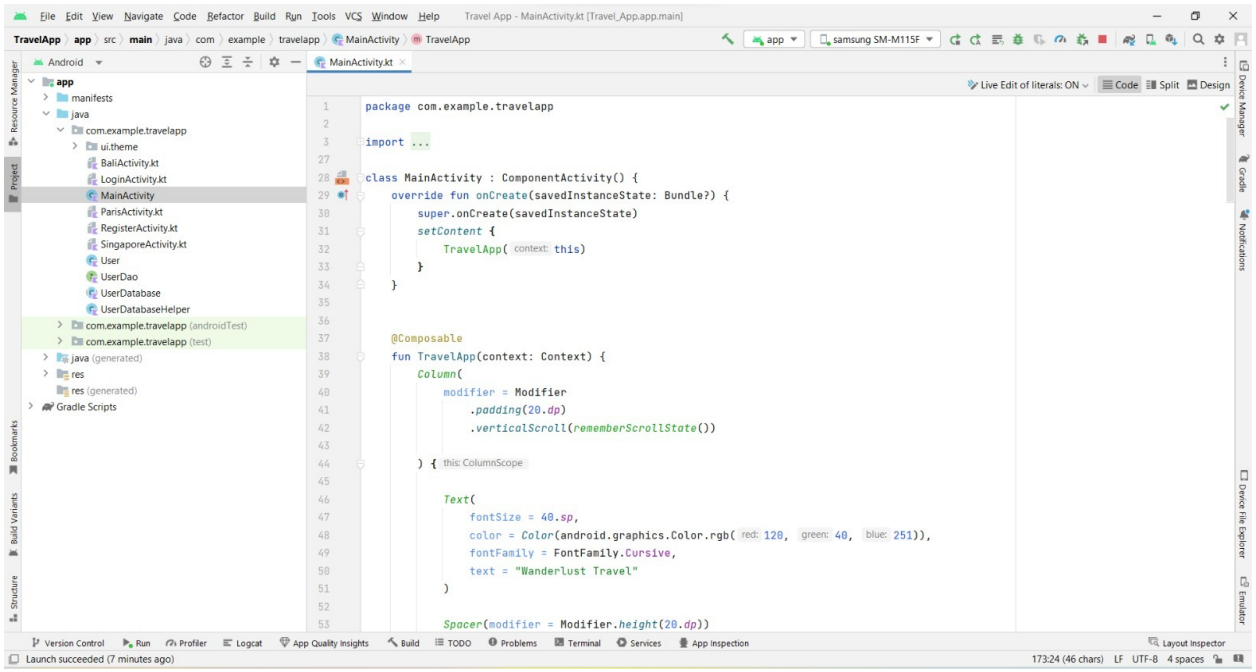


Download the required drawable from the code:
https://github.com/smartinternz02/Travel-Plan-App/tree/master/app/src/main/res/drawable-nodpi

https://github.com/smartinternz02/Travel-Plan-App/tree/master/app/src/main/res/drawable

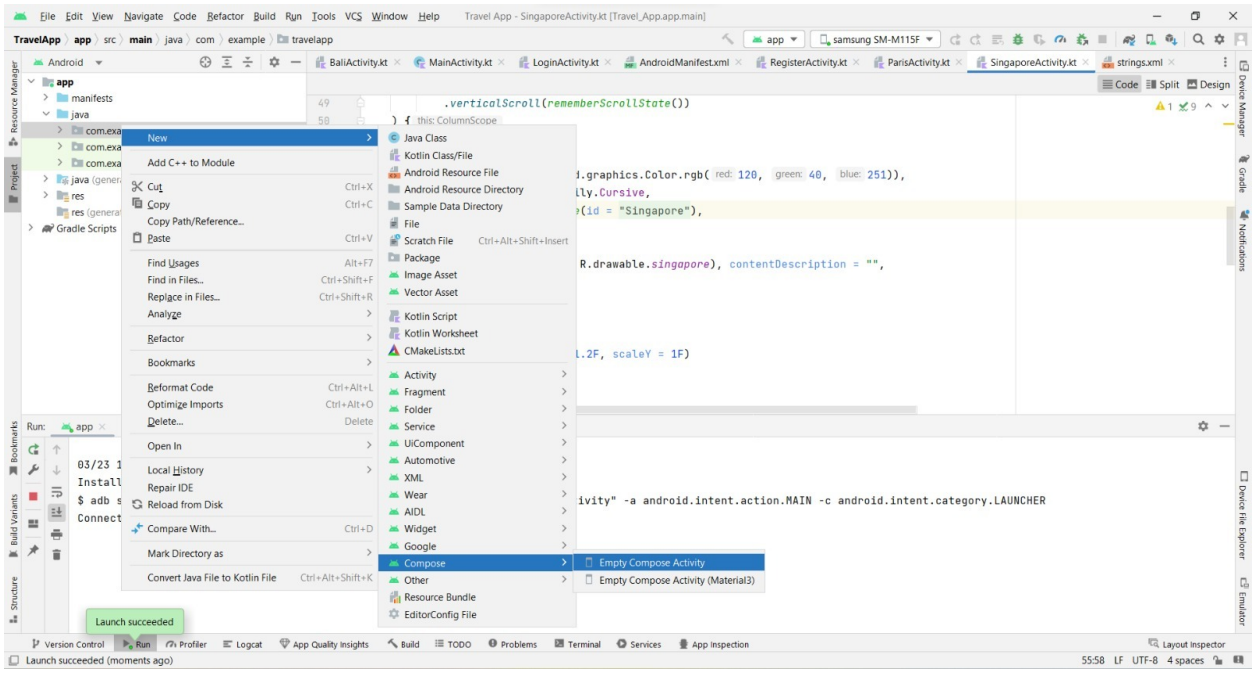


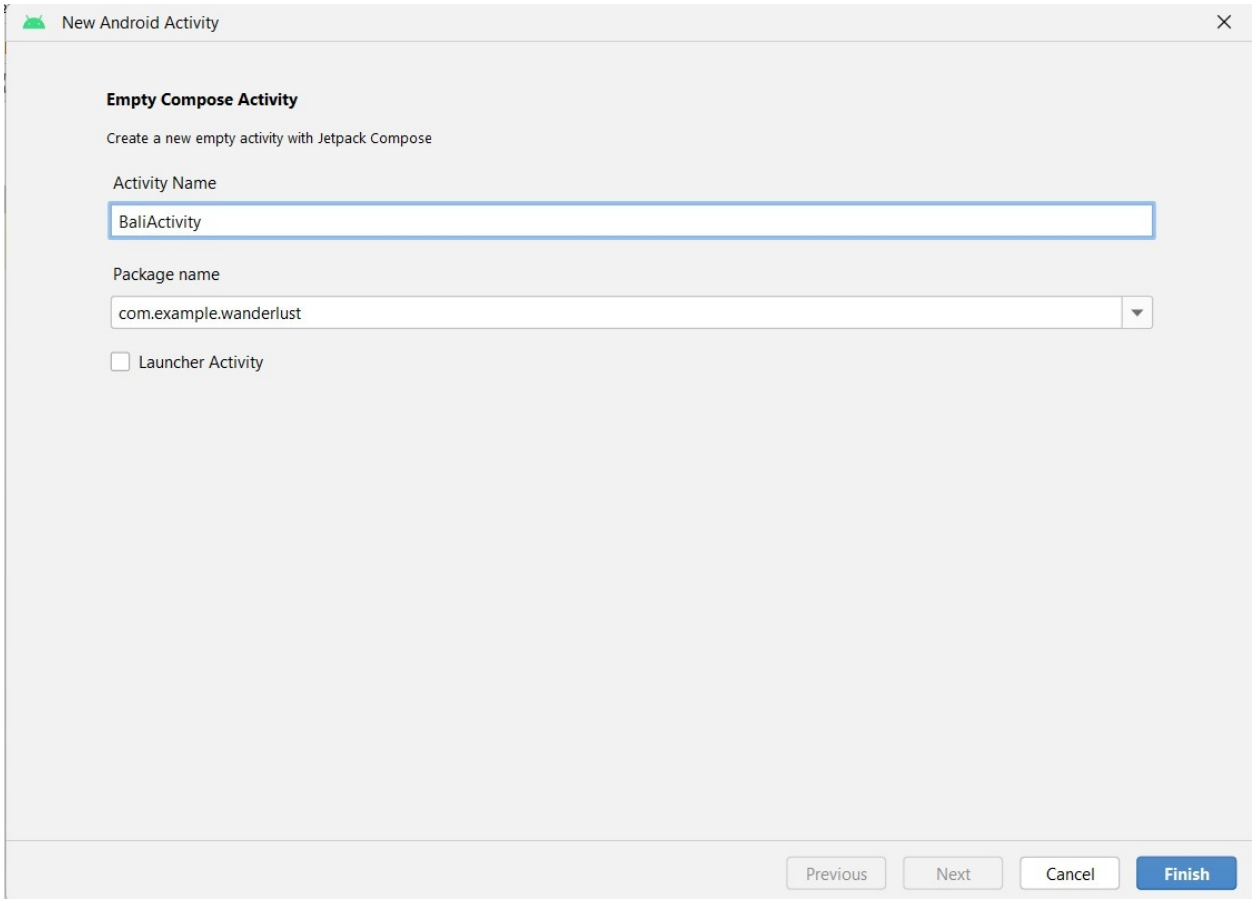
MainActivity.kt



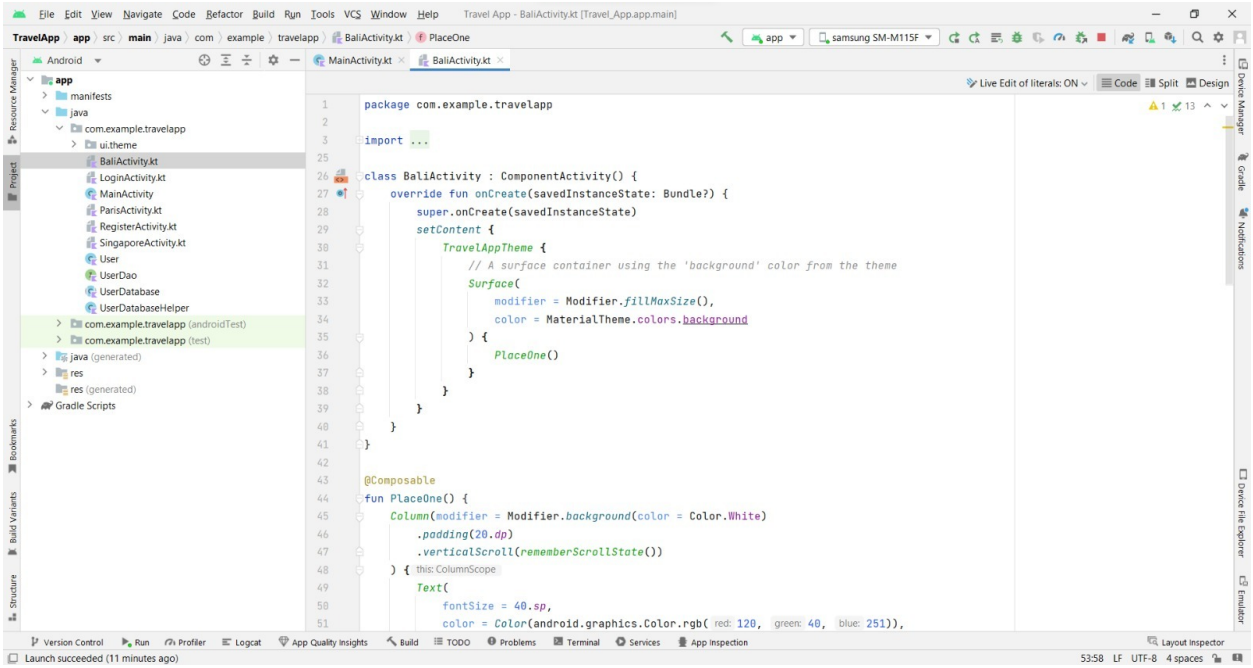
Complete code in below link:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/MainActivity.kt

Step 4 : Creating BaliActivity.kt file



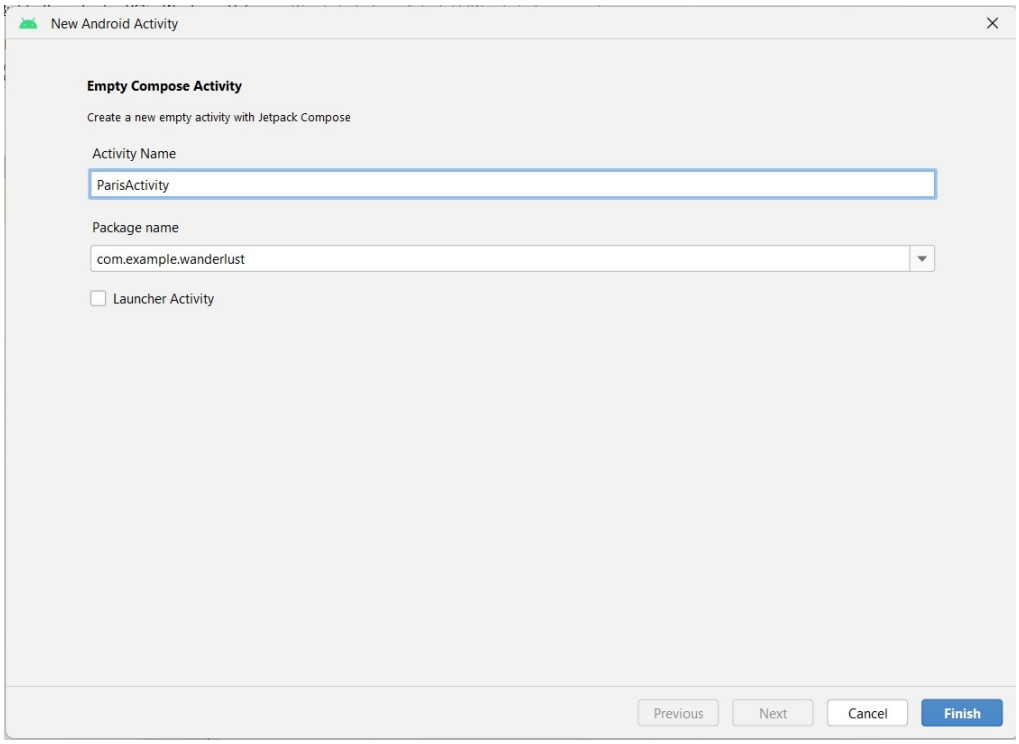


BaliActivity.kt

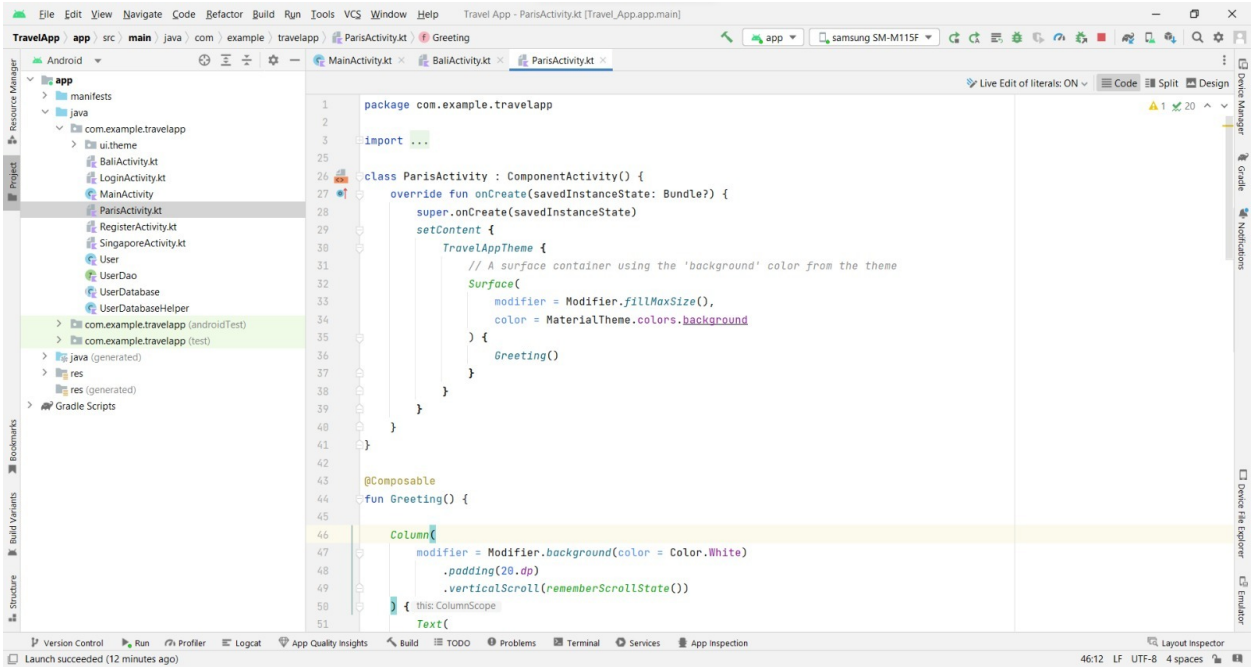


Complete code in below link:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/BaliActivity.kt

Step 5 : Creating ParisActivity.kt file



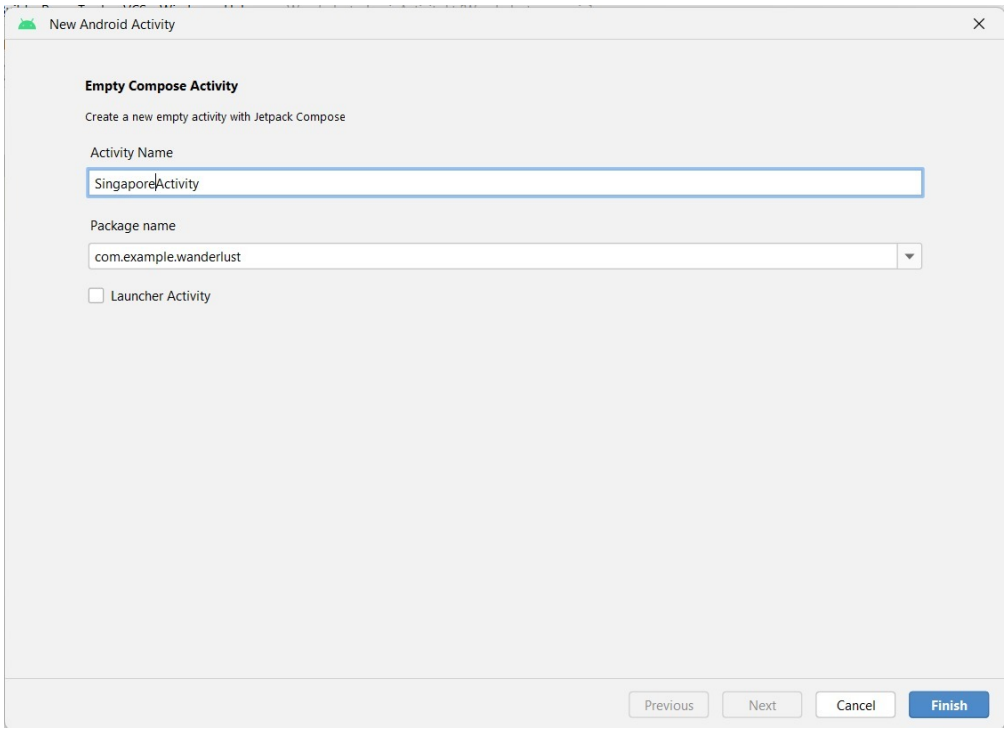
ParisActivity.kt file



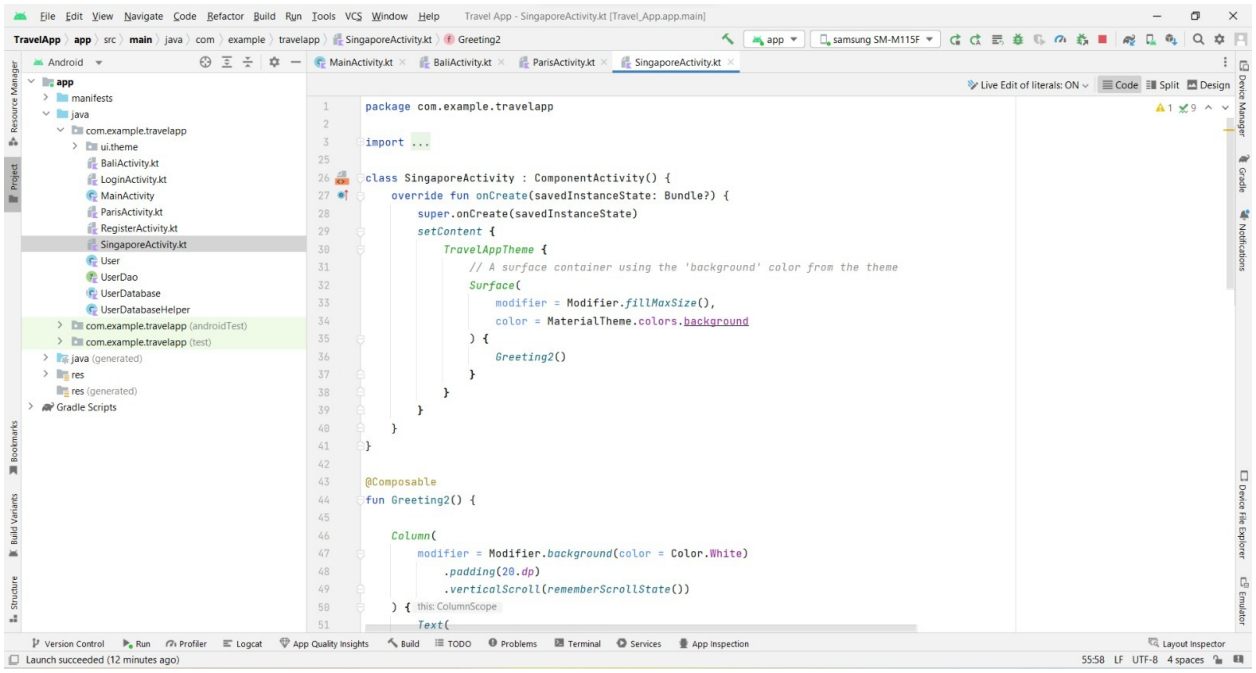
```
package com.example.travelapp

import ...

class ParisActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            TravelAppTheme {
                // A surface container using the 'background' color from the theme
                Surface(
                    modifier = Modifier.fillMaxSize(),
                    color = MaterialTheme.colors.background
                ) {
                    Greeting()
                }
            }
        }
    }
}

@Composable
fun Greeting() {

    Column(
        modifier = Modifier.background(color = Color.White)
            .padding(20.dp)
            .verticalScroll(rememberScrollState())
    ) { this: ColumnScope
        Text(
```

Complete code in below link:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/ParisActivity.kt

Step 6 : Creating SingaporeActivity.kt file



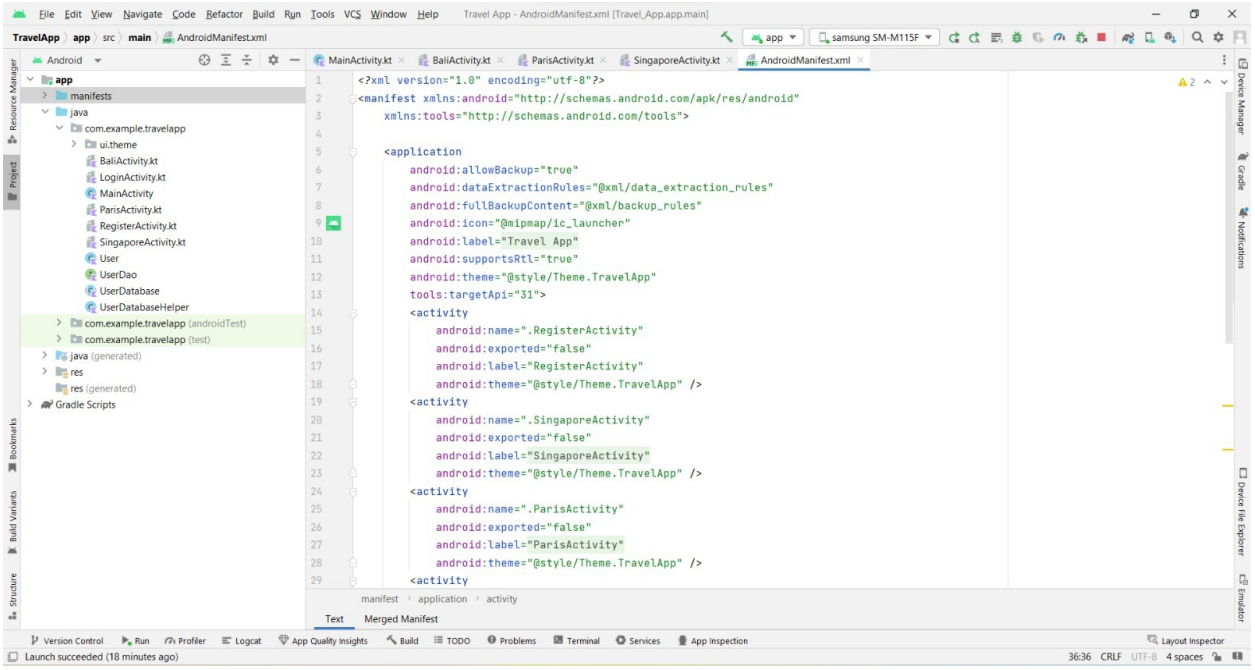
SingaporeActivity.kt file



Complete code in below link:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/SingaporeActivity.kt

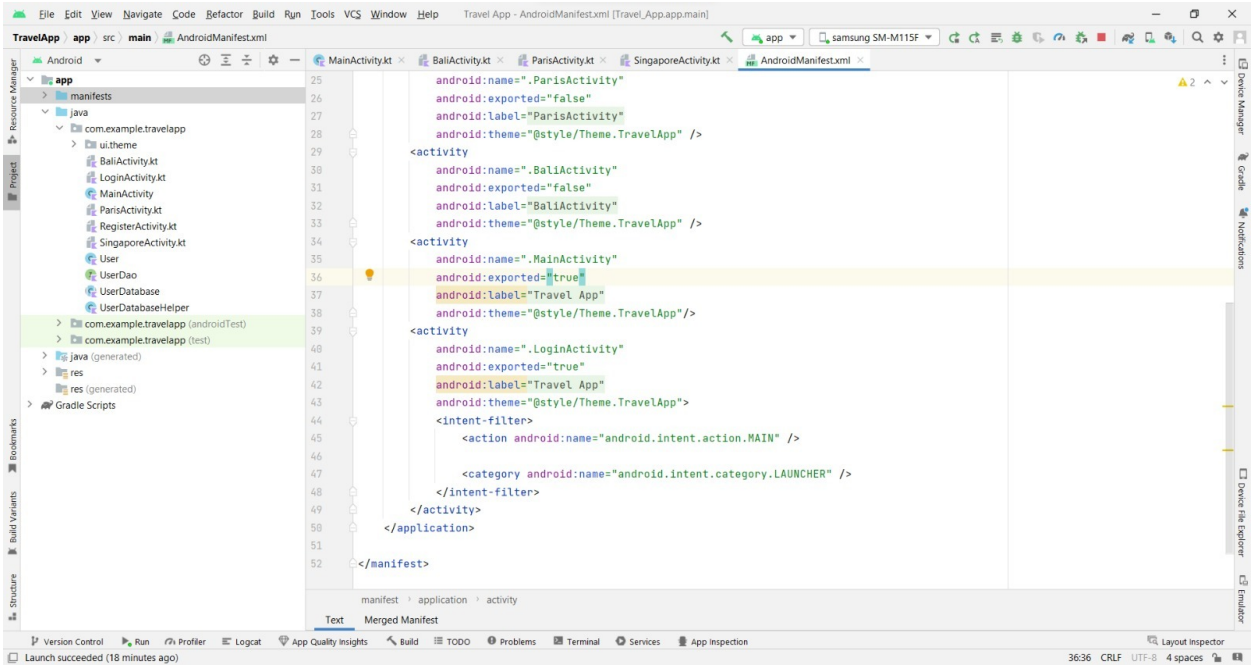
Task 6:

Modifying AndroidManifest.xml



When we run the app we will get the MainActivity.kt file as our first screen , but we want LoginActivity.kt , So we need to change in AndroidManifest.xml.

Changed AndroidManifest.xml



Complete AndroidManifest.xml code:
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/AndroidManifest.xml

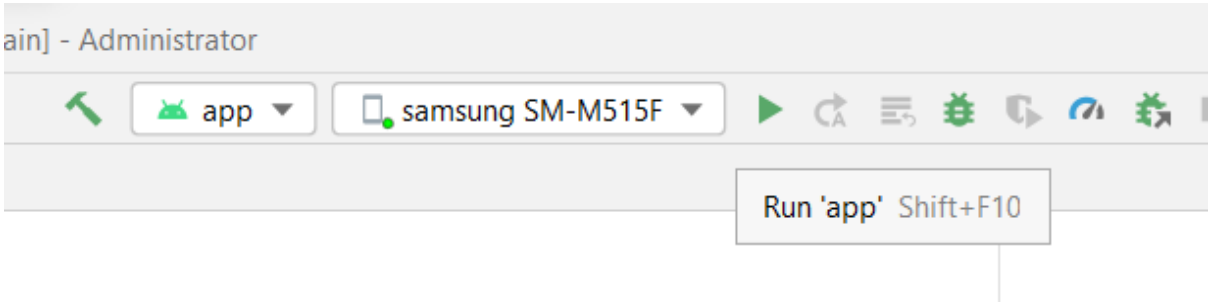
Task 7:

Running the application.

Step 1: Run apps on a hardware device

https://developer.android.com/studio/run/device

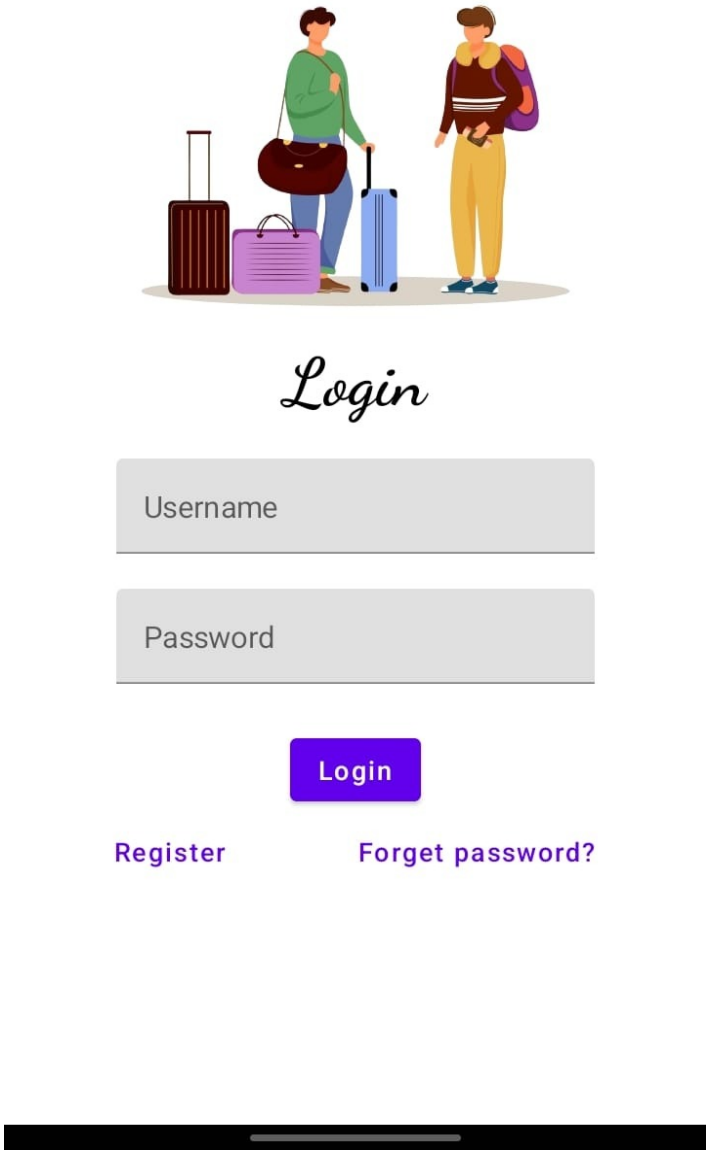
Step 2: Run the application in Mobile



Complete Project Link: https://github.com/smartinternz02/Travel-Plan-App

Final Output of the Application :

Login Page :



RegisterPage :

Register

Username

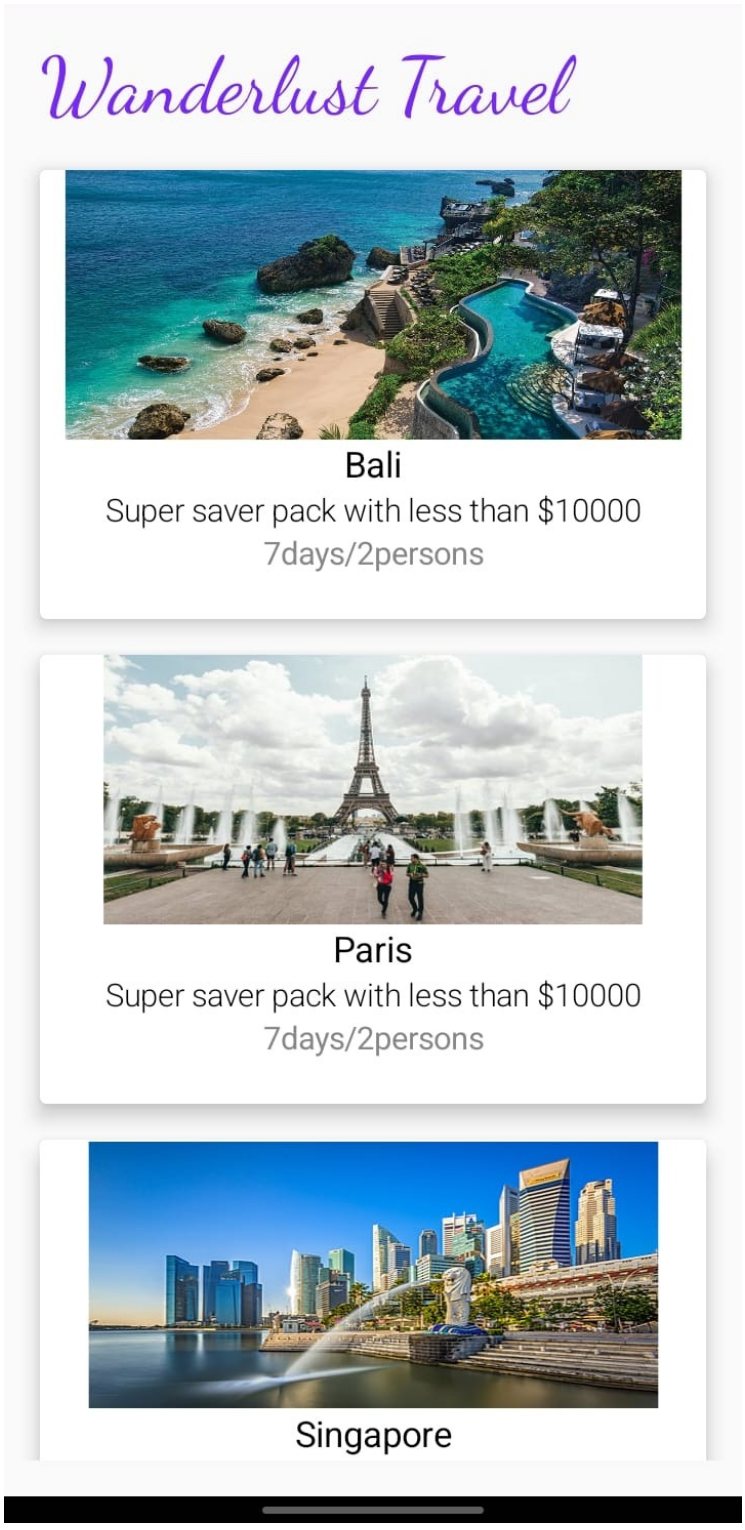
Email

Password

Register

Have an account? Log in

MainPage :


Wanderlust Travel
Bali
Super saver pack with less than $10000
7days/2persons
Paris
Super saver pack with less than $10000
7days/2persons
Singapore

Location Page:

Bali

Day 1: Arrival and Relaxation
Arrive in Bali and check into your hotel or accommodation.
Spend the day relaxing and getting acclimated to the island.
If you have time, explore the nearby area or head to the beach.

Day 2: Ubud Tour
Start your day early and head to Ubud, a cultural and artistic hub in Bali.
Visit the Monkey Forest and the Ubud Palace.
Take a tour of the Tegalalang Rice Terrace, a beautiful UNESCO World Heritage Site.
End your day with a traditional Balinese dance performance.

Day 3: Temple Hopping
Visit some of Bali's most famous temples, such as Tanah Lot and Uluwatu.
Take in the stunning views of the ocean and cliffs.
Enjoy a sunset dinner at one of the many restaurants near the temples.