



Wanderlust: A Personalized Travel Planning and Tracking App

Project Experiential Learning Python

Done by:

- P. Sandhya Sri
- S. Kishore
- Y. Nethaneyalu
- P. Ajay kumar

Handbook

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.

Get DAO Get entities from DB/ Persist changes back to DB Room Database Entities Get / Set entities fields value

Learning Outcomes:

By end of this project:

Android app

- 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:

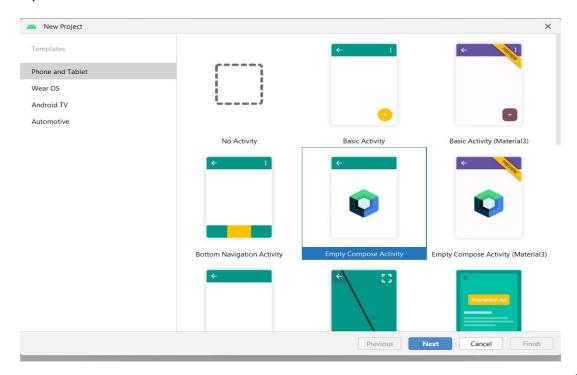
https://developer.android.com/studio/install

Task 2:

Creating a new project.

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

Step 2 : Click on Next button.

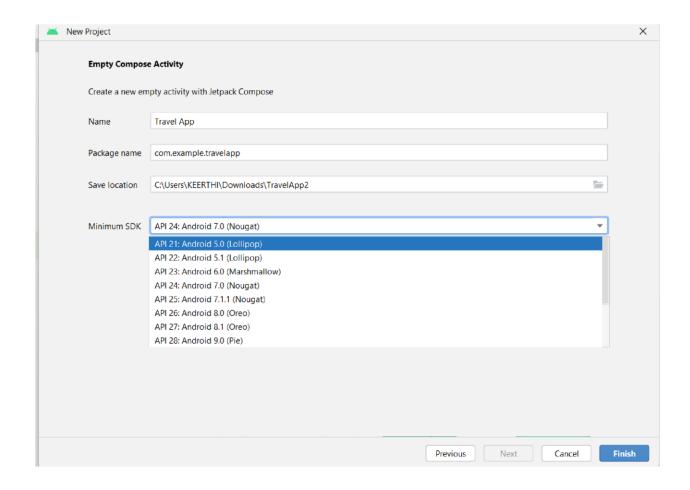


Step 3:

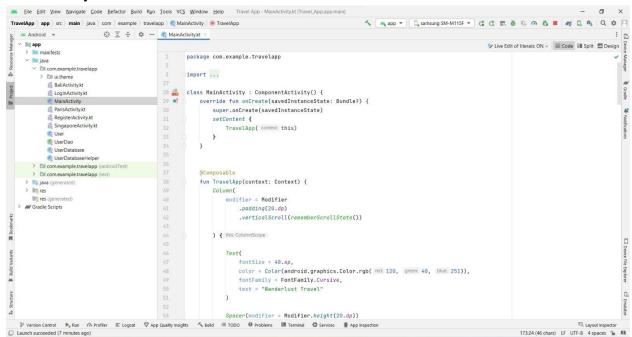
Give name to the new project.

Step 4: Give the Minimum SDK value

Step 5 : Click Finish



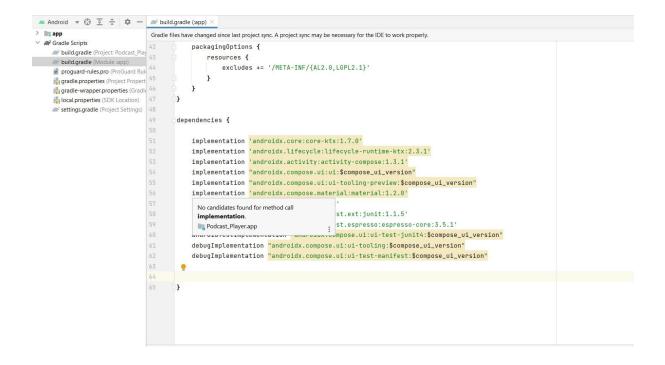
Main activity file



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'
```

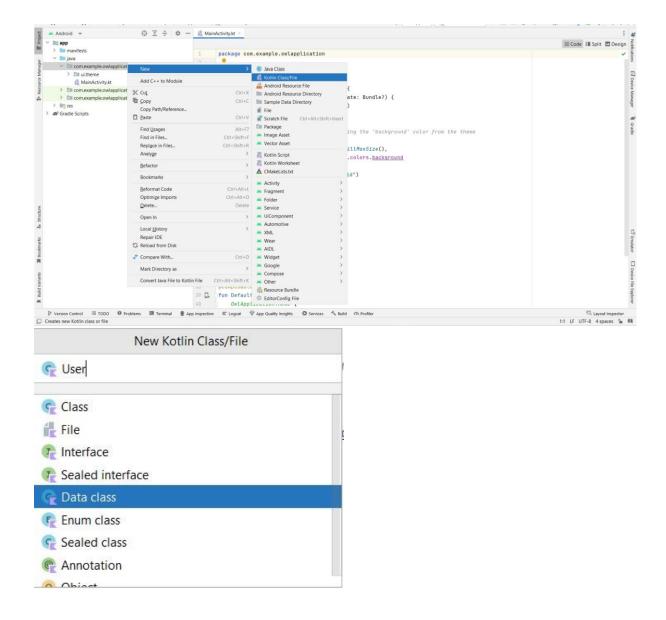


Step 3 : Click on Sync now

Task 4:

Creating the database classes.

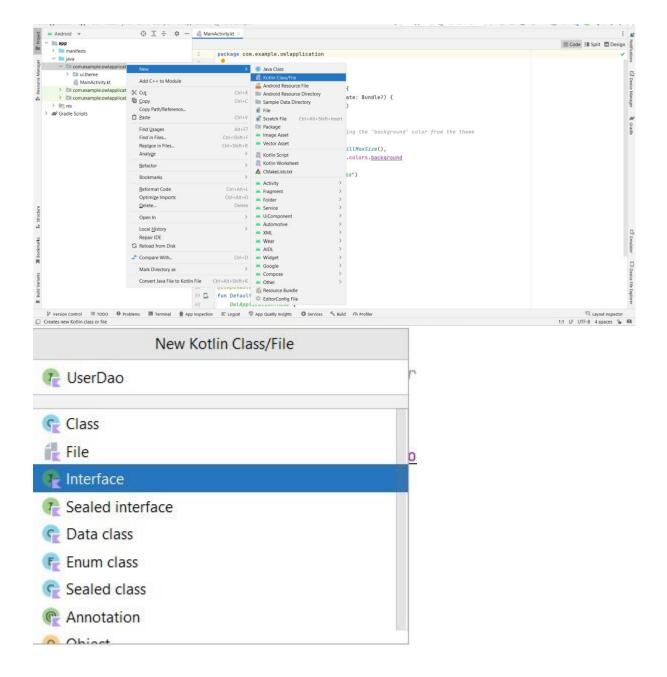
Step 1: Create User data class



User data class code:

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

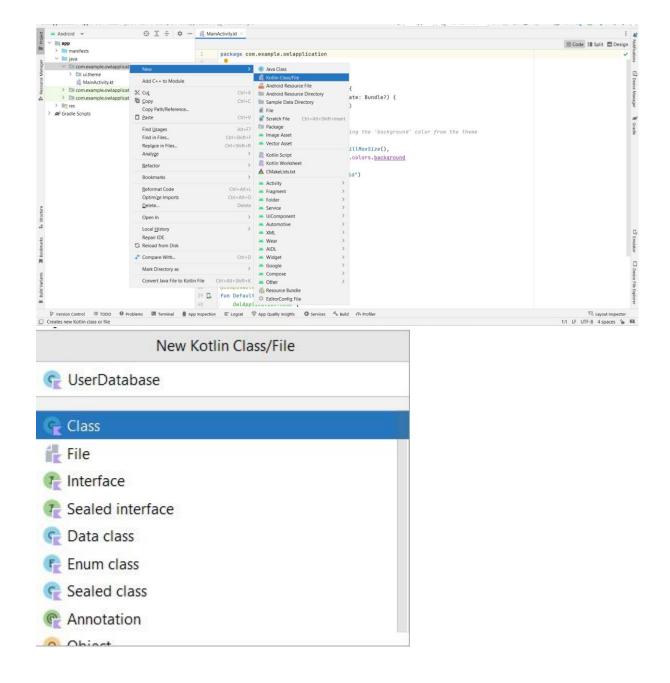
Step 2 : Create an UserDao interface



UserDao interface code :

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

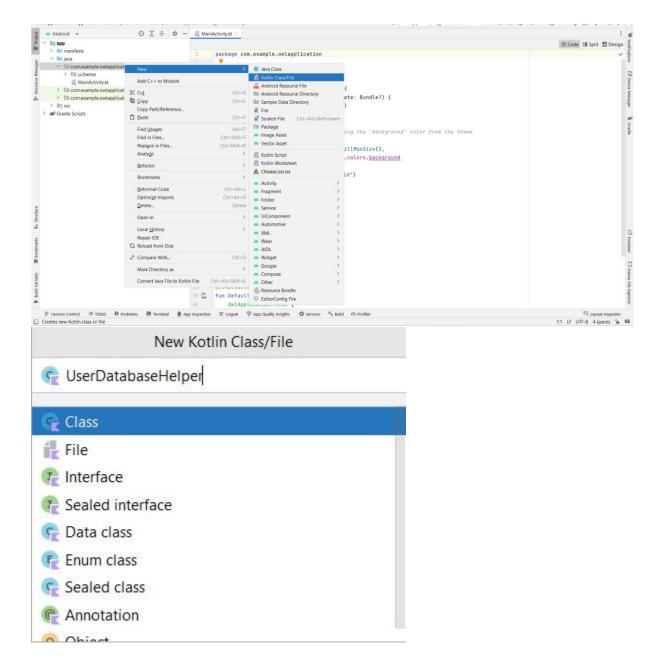
Step 3: Create an UserDatabase class



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



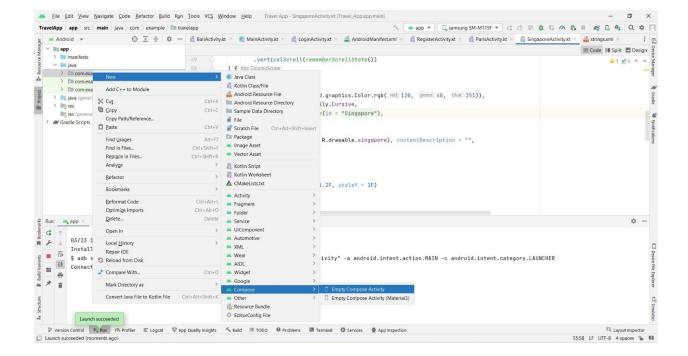
UserDatabaseHelper class code:

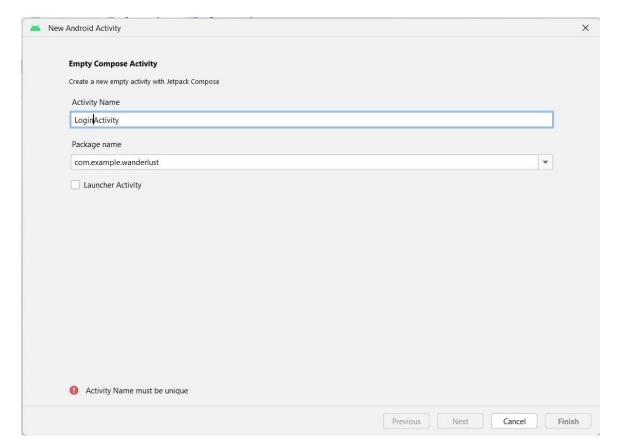
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/UserDatabaseHelper.kt

Task 5:

Building application UI and connecting to database.

Step 1: Creating LoginActivity.kt with database





Database connection in LoginActivity.kt

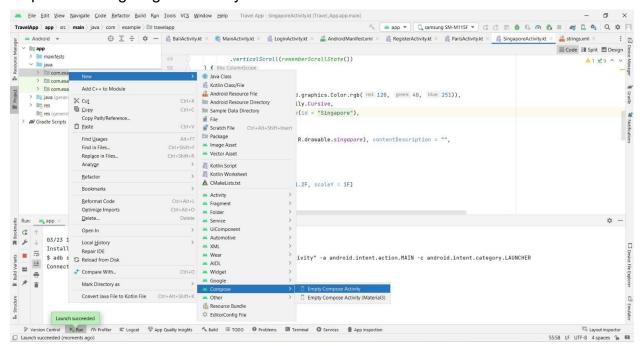
```
Eile Edit View Navigate Code Befactor Build Run Iools VCS Window Help Travel App - LoginActivity.kt [Travel_App.app.main]
                                                                                                                                                                                                                                                                                       へ 【 ዿ app ▼ 】 □, samsung SM-M115F ▼ 】 は は 思 華 ⑤ の 義 ■ № □ 負 Q 章 □
\textbf{TravelApp} \; \rangle \; \textbf{app} \; \rangle \; \text{src} \; \rangle \; \; \textbf{main} \; \rangle \; \text{java} \; \rangle \; \; \text{com} \; \rangle \; \text{example} \; \rangle \; \; \text{travelapp} \; \rangle \; \underset{\mathbb{R}}{\text{\#}} \; \text{LoginActivity.kt}
                                                      package com.example.travelapp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A3 ^ V
                                                                                                                                        import ...
                             BaliActivity.kt
                                                                                                                       26 dass LoginActivity : ComponentActivity() {
                                                                                                                                                    private lateinit var <u>databaseHelper</u>: UserDatabaseHelper
                             ParisActivity.kt
                                                                                                                                                    override fun onCreate(savedInstanceState: Bundle?) {
                                                                                                                                                              super.onCreate(savedInstanceState)
                             RegisterActivity.kt
                                                                                                                                                             databaseHelper = UserDatabaseHelper( context this)

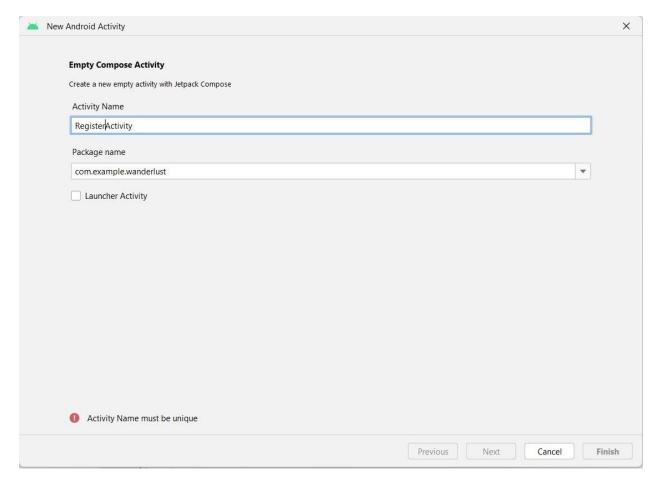
    UserDao
    UserDao

                                                                                                                                                                      LoginScreen( context this, databaseHelper)
                             © UserDatabase
© UserDatabaseHelper
                  > com.example.travelapp (androidTest)
                  > 🛅 com.example.travelapp (test)
                  🔯 java (generated)
                                                                                                                                          fun LoginScreen(context: Context, databaseHelper: UserDatabaseHelper) {
           var username by remember { mutableStateOf( value: "") }
                                                                                                                                                    var password by remember { mutableStateOf( value: "") }
                                                                                                                                                    var error by remember { mutableStateOf( value: "") }
                                                                                                                                                             modifier = Modifier.fillMaxSize().background(Color.White),
                                                                                                                                                            horizontalAlignment = Alignment.CenterHorizontally,
verticalArrangement = Arrangement.Center
                                                                                                                         49 🔼
                                                                                                                                                             Image(painterResource(id = R.drawable.trav), contentDescription = "")
```

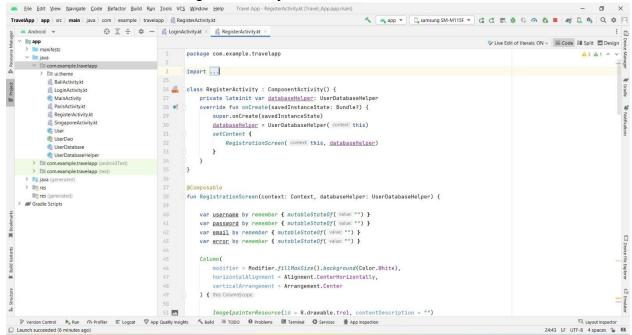
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/LoginActivity.kt

Step 2: Creating RegisterActivity.kt with database





Database connection in RegisterActivity.kt

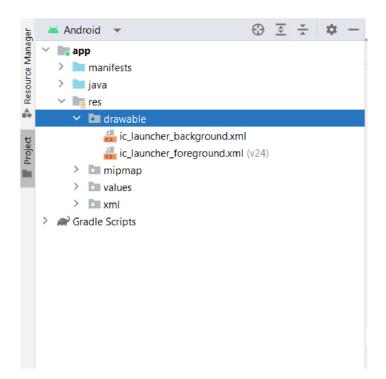


Complete code in below link: https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/RegisterActivity.kt

Step 3: Creating MainActivity.kt file

In MainActivity.kt file the main application is developed

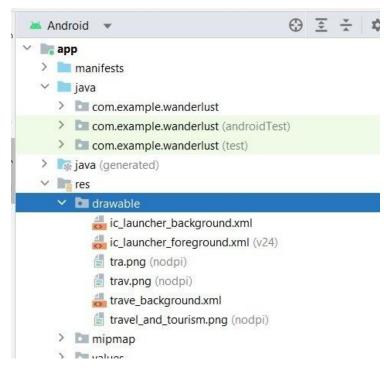
Before creating UI we need to add some images in drawables which are in res



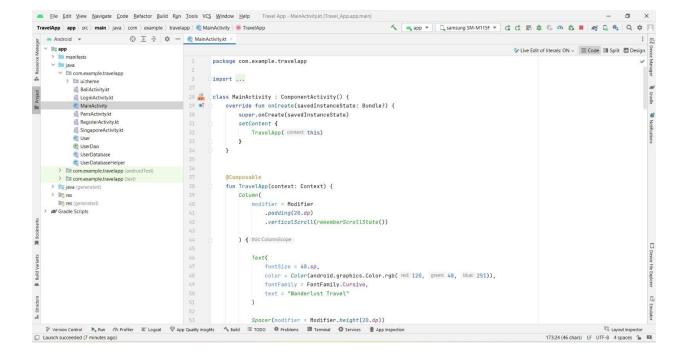
Download the required drawable from the code:

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

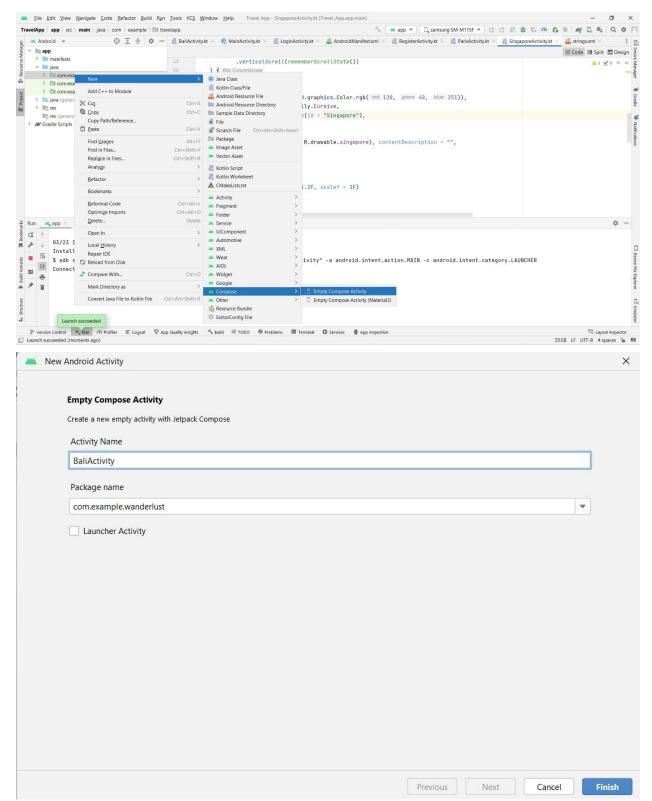


MainActivity.kt

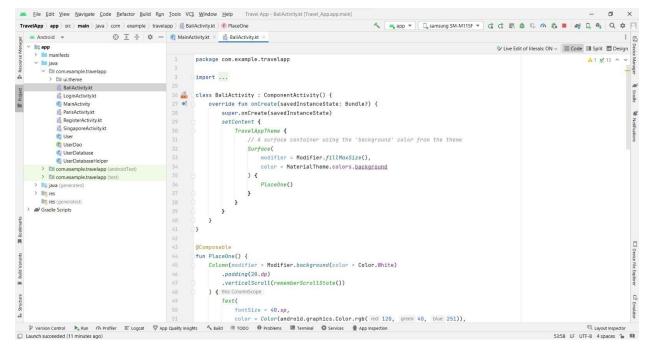


https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/MainActivity.kt

Step 4: Creating BaliActivity.kt file

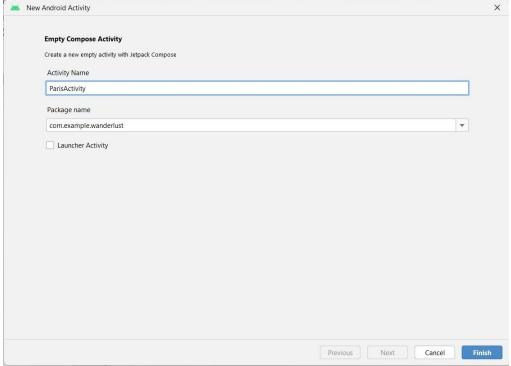


BaliActivity.kt

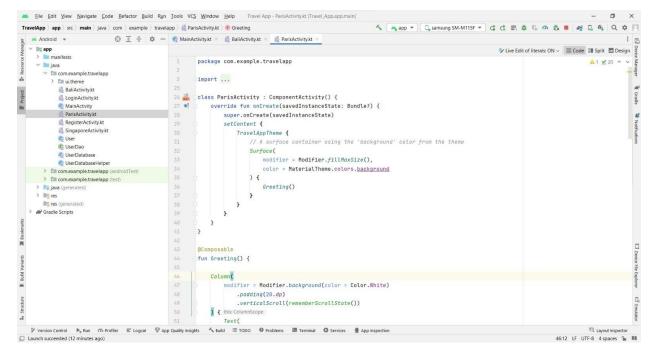


https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/BaliActivity.kt

Step 5: Creating ParisActivity.kt file

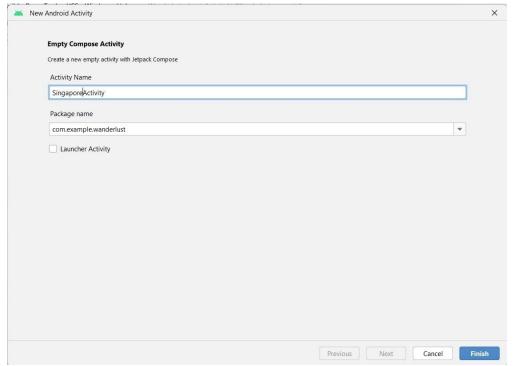


ParisActivity.kt file

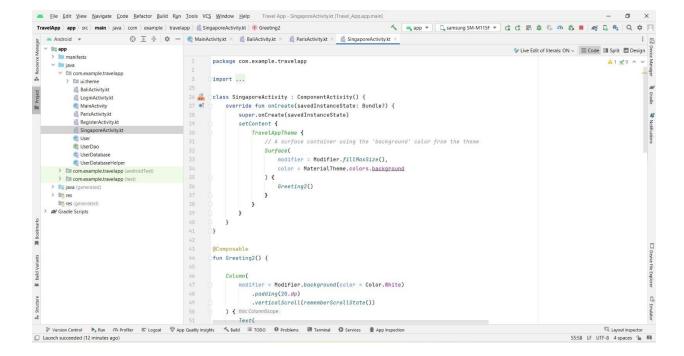


https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/ParisActivity.kt

Step 6: Creating SingaporeActivity.kt file

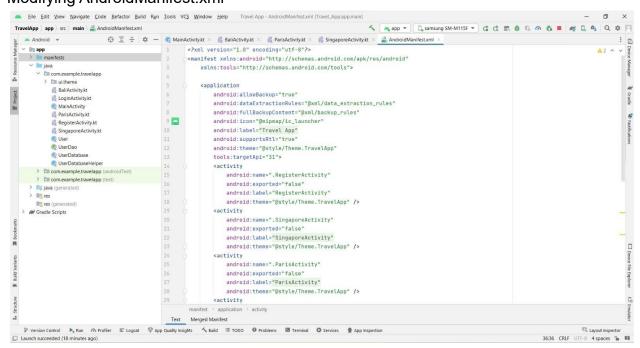


SingaporeActivity.kt file



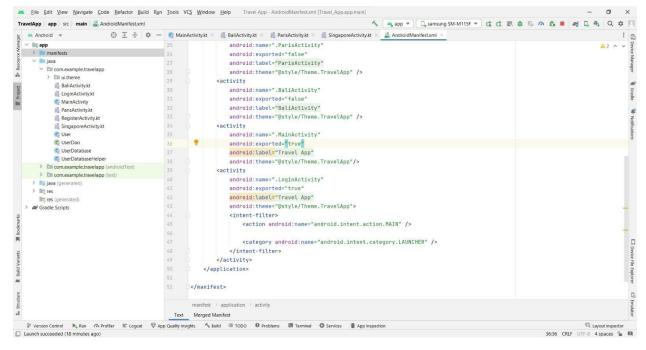
https://github.com/smartinternz02/Travel-Plan-App/blob/master/app/src/main/java/com/example/travelapp/SingaporeActivity.kt

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

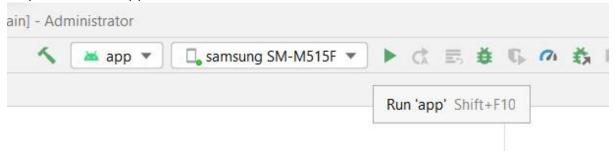
Task 7:

Running the application.

Step 1: Run apps on a hardware device

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

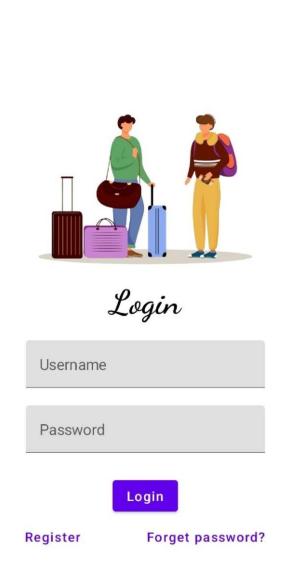
Step 2: Run the application in Mobile



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

Final Output of the Application:

Login Page :



RegisterPage :



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



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.