



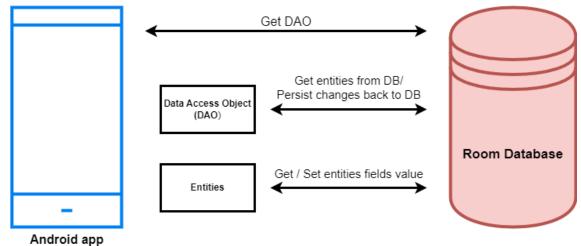


Wanderlust: A Personalized Travel Planning and
Tracking App
Project Based Experiential Learning Program

## 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:

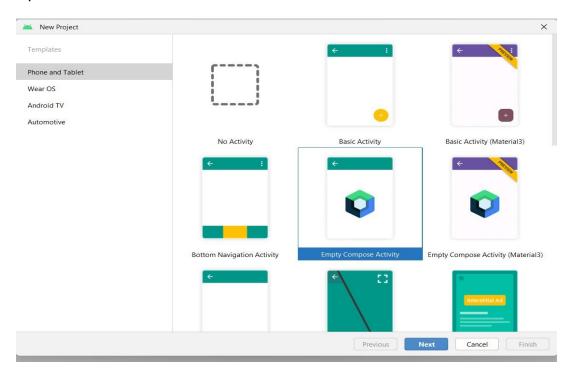
https://developer.android.com/studio/install

#### Task 2:

Creating a new project.

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

Step 2 : Click on Next button.

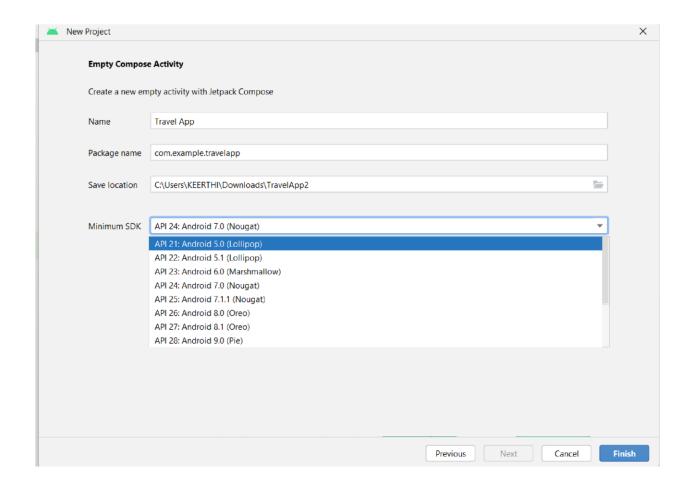


Step 3:

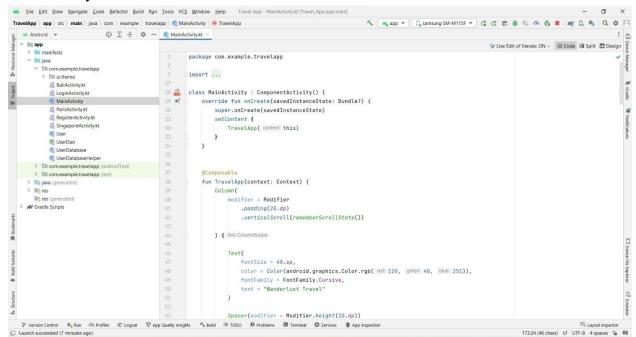
Give name to the new project.

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)

```
Android ▼ ⊕ ₹ ★ − ≈ build.gradle (:app) ×
      📭 арр
                                                                                         Gradle files have changed since last project sync. A project sync may be necessary for the IDE to work properly
build.gradle (Project: Podcast_Play 42 43 build.gradle (Module tapp)
                                                                                                                      packagingOptions {
               proguard-rules.pro (ProGuard Rul
                                                                                                                                                 excludes += '/META-INF/{AL2.0,LGPL2.1}'
               gradle.properties (Project Propert 45
               gradle-wrapper.properties (Gradle 46
             er settings.gradle (Project Settings) 48
                                                                                                               dependencies {
                                                                                                                            implementation 'androidx.core:core-ktx:1.7.0'
                                                                                                                           implementation 'androidx.lifecycle:lifecycle-runtime-ktx:2.3.1'
                                                                                                                           implementation 'androidx.activity:activity-compose:1.3.1'
                                                                                                                           implementation "androidx.compose.ui:ui:$compose_ui_version"
                                                                                                                           implementation "androidx.compose.ui:ui-tooling-preview:$compose_ui_version"
                                                                                                                            implementation 'androidx.compose.material:material:1.2.0'
                                                                                                                               No candidates found for method call
                                                                                                                                                                                                                                       st.ext:junit:1.1.5'
                                                                                          58
                                                                                                                                                                                            st.espresso:espresso-core:3.5.1'

st.espresso:espresso-core:3.5.1'

provided to the street of the st
                                                                                                                             Podcast_Player.app
                                                                                                                           debugImplementation "androidx.compose.ui:ui-tooling:$compose_ui_version"
                                                                                                                            debugImplementation "androidx.compose.ui:ui-test-manifest:$compose_ui_version"
```

#### 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'
```

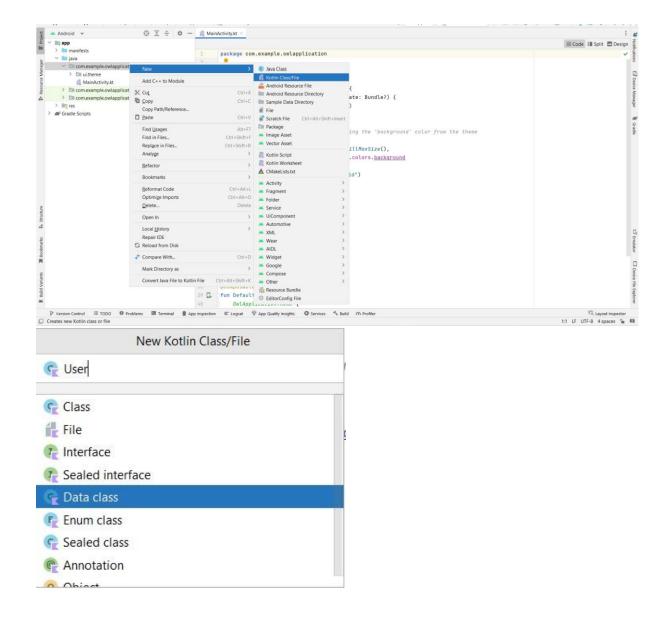


Step 3: Click on Sync now

#### Task 4:

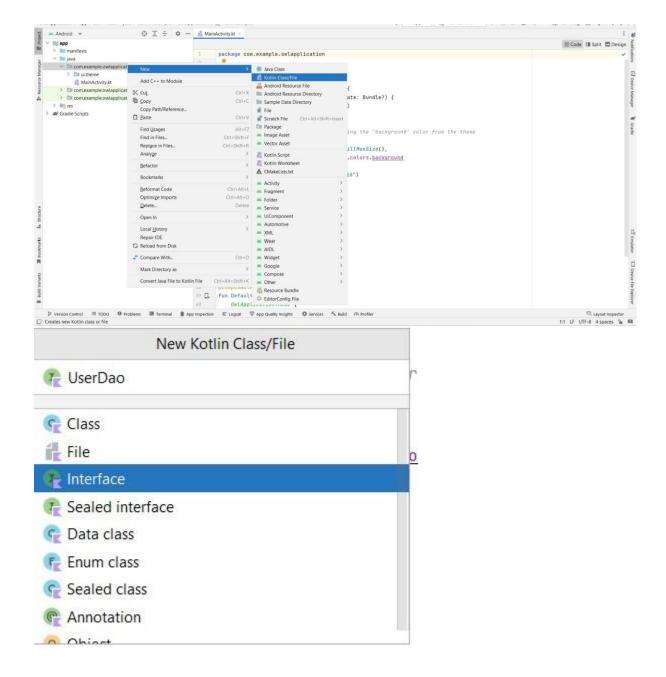
Creating the database classes.

Step 1: Create User data class



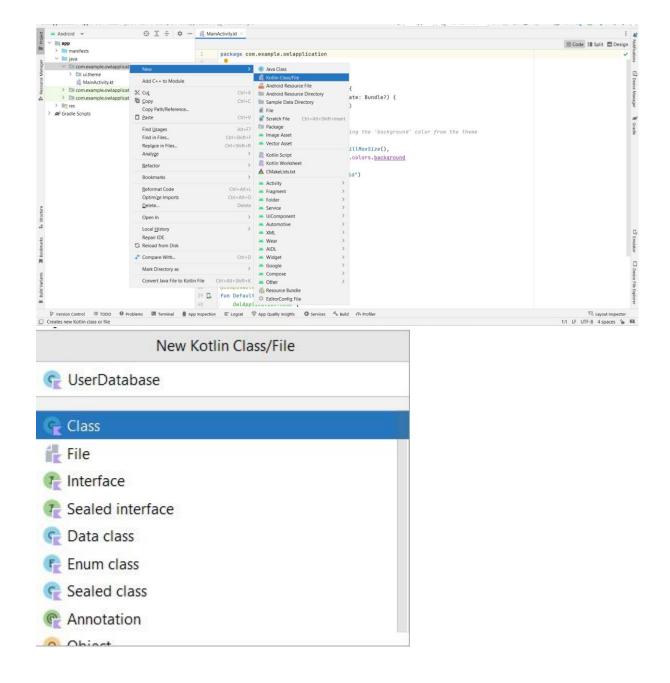
User data class code: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/User.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/User.kt</a>

Step 2: Create an UserDao interface



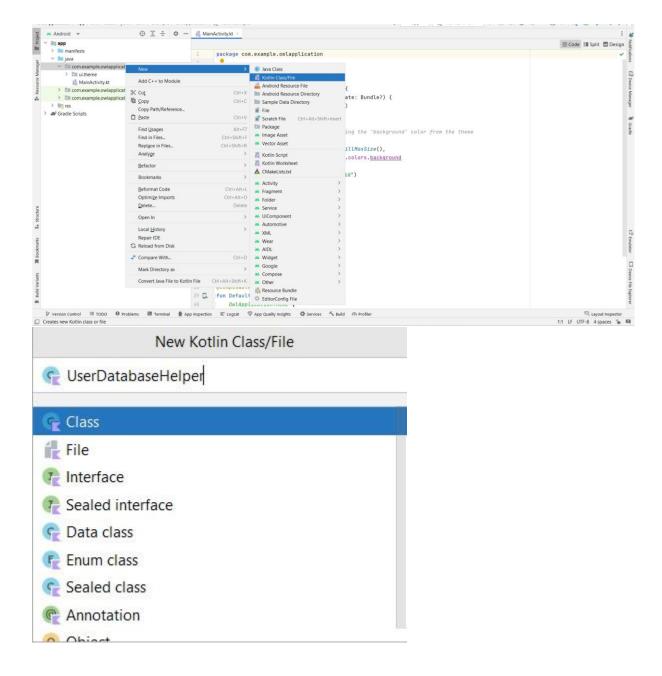
UserDao interface code: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDao.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDao.kt</a>

Step 3: Create an UserDatabase class



UserDatabase class code: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDatabase.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDatabase.kt</a>

Step 4 : Create an UserDatabaseHelper class

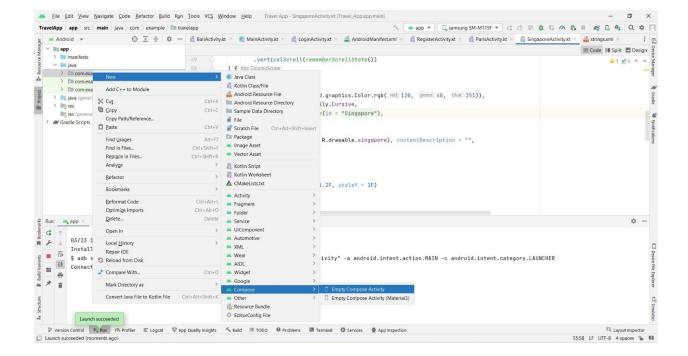


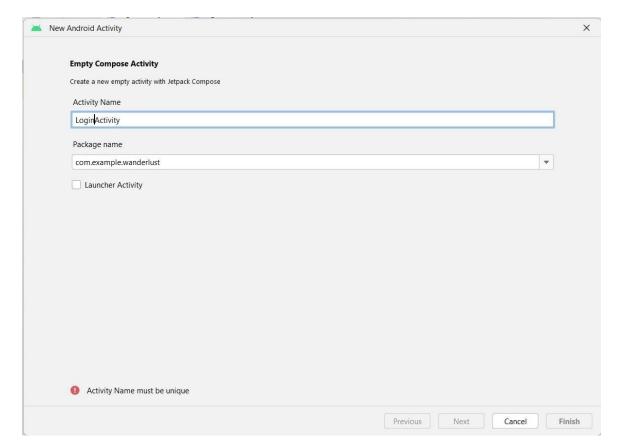
UserDatabaseHelper class code: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDatabaseHelper.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/UserDatabaseHelper.kt</a>

#### Task 5:

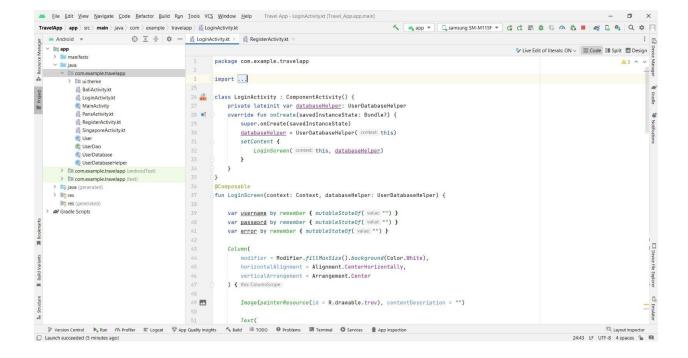
Building application UI and connecting to database.

Step 1: Creating LoginActivity.kt with database



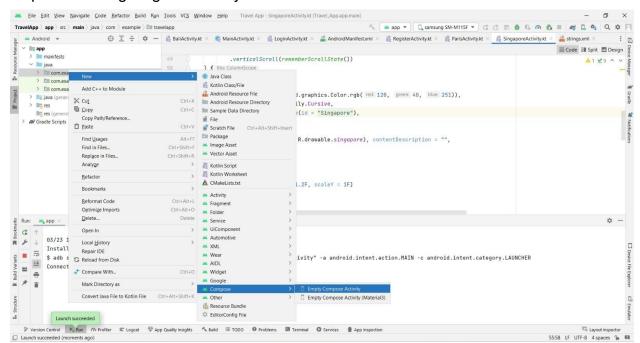


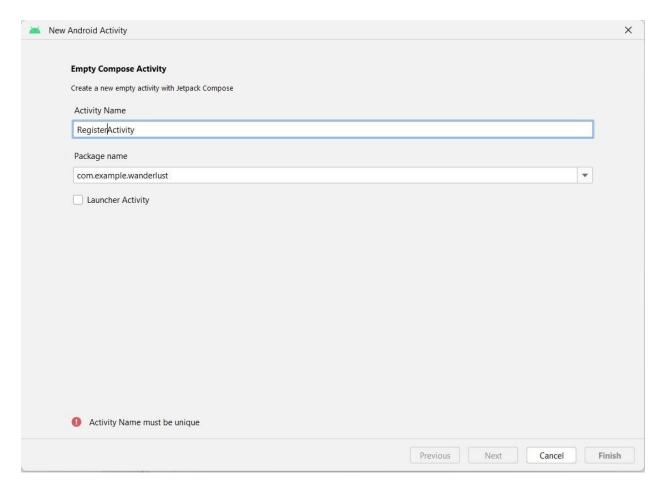
Database connection in LoginActivity.kt



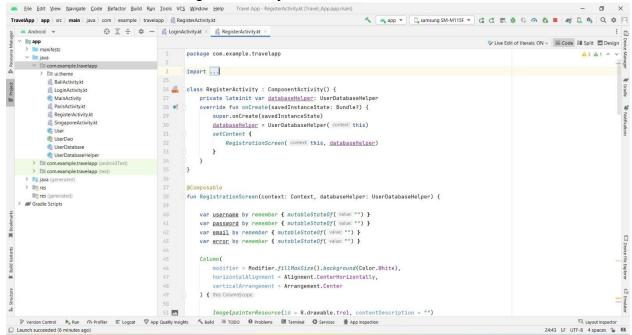
Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/LoginActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/LoginActivity.kt</a>

#### Step 2: Creating RegisterActivity.kt with database





Database connection in RegisterActivity.kt

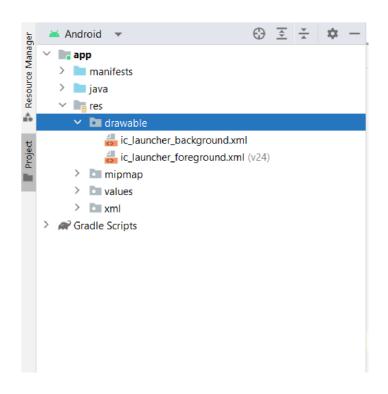


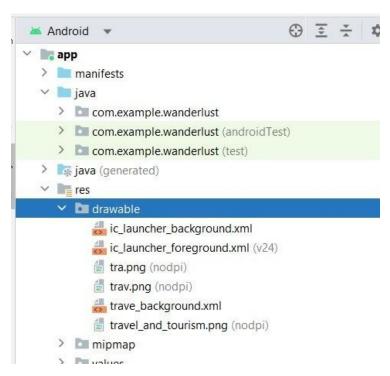
Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/RegisterActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/RegisterActivity.kt</a>

#### Step 3: Creating MainActivity.kt file

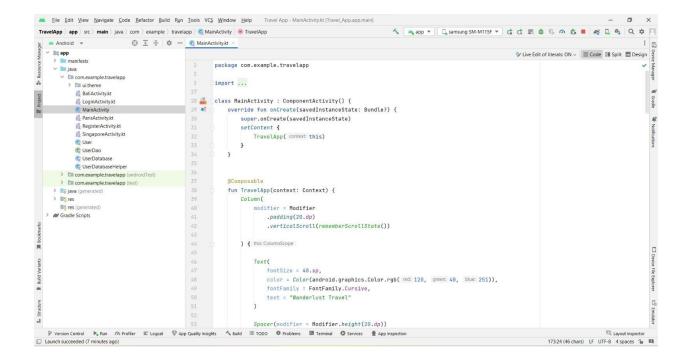
In MainActivity.kt file the main application is developed

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



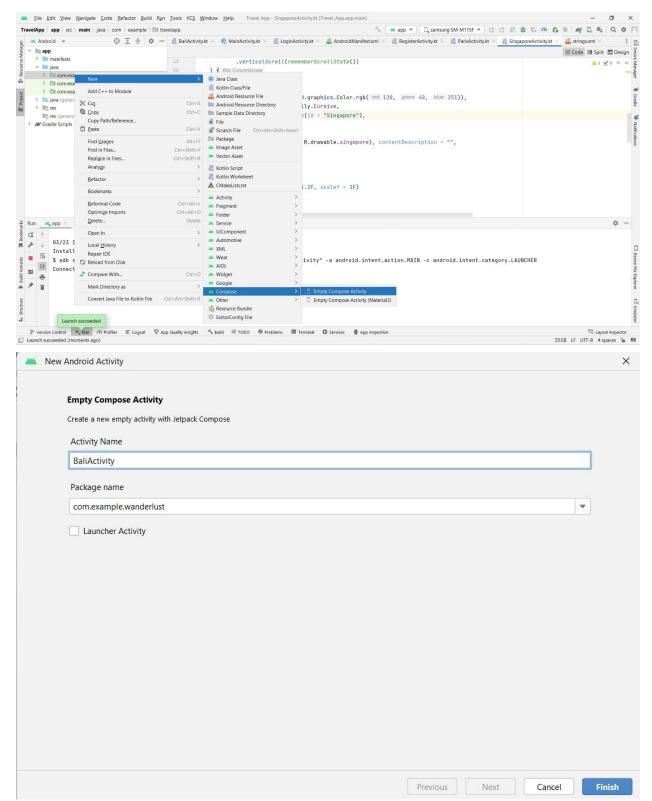


MainActivity.kt

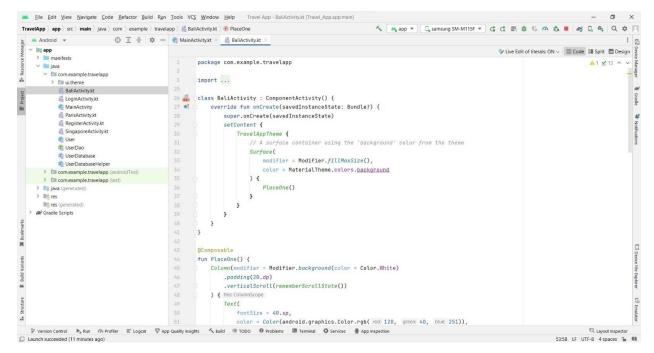


Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/MainActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/MainActivity.kt</a>

Step 4: Creating BaliActivity.kt file



BaliActivity.kt

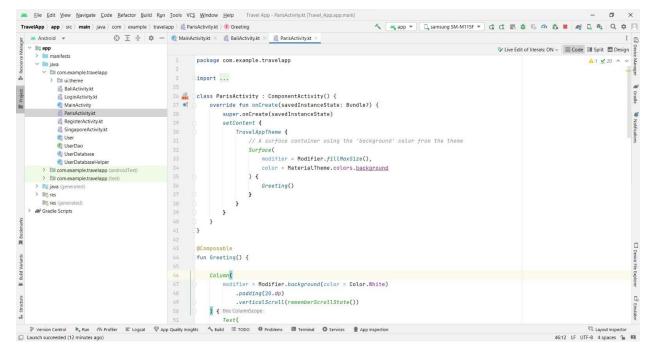


Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/BaliActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/BaliActivity.kt</a>

#### Step 5: Creating ParisActivity.kt file

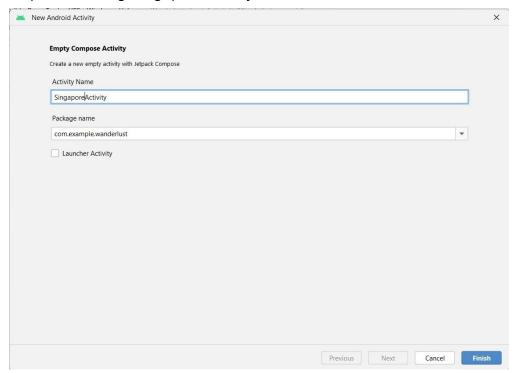
➤ Ne	lew Android Activity	×
	Empty Compose Activity	
	Create a new empty activity with Jetpack Compose	
	Activity Name	
	ParisActivity	
	Package name	
	com.example.wanderlust 🔻	
	Launcher Activity	
	Previous Next Cancel	Finish

ParisActivity.kt file



Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/ParisActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/ParisActivity.kt</a>

#### Step 6: Creating SingaporeActivity.kt file



SingaporeActivity.kt file

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help Travel App - SingaporeActivity.kt [Travel App.app.main]
                                                                                                へ (編app ▼) □ samsung SM-M115F ▼ は は 恵 藤 □ ぬ 森 ■ | № □ へ 中 □
Android 🔻 😌 🖫 🕏 — 🥷 MainActivity.kt × 🦺 BallActivity.kt × 🛍 ParisActivity.kt ×
                                                                                                                                    package com.example.travelapp
   ∨ iava
                                               Dimport ...
         # BaliActivity.kt
                                         26 - class SingaporeActivity : ComponentActivity() {
          ParisActivity.kt
                                                       super.onCreate(savedInstanceState)
                                                          TravelAppTheme {
                                                              // A surface container using the 'background' color from the theme
         D UserDao
                                                              Surface(
         UserDatabase
UserDatabaseHelper
                                                              modifier = Modifier.fillMaxSize(),
                                                                  color = MaterialTheme.colors.background
      > com.example.travelapp (androidTest)
                                                              ) {
                                                              }
                                                @Composable
                                                fun Greeting2() {
                                                       modifier = Modifier.background(color = Color.White)
                                                         .padding(20.dp)
                                                           .verticalScroll(rememberScrollState())
                                                   ) { this: ColumnScope
  🏴 Version Control 🕨 Run 🕜 Profiler 🖺 Logicat 🖤 App Quality Insights 🔨 Build 🗏 TODO 🕕 Problems 💹 Terminal 🔘 Services 👲 App Inspection
```

Complete code in below link: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/SingaporeActivity.kt">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/SingaporeActivity.kt</a>

#### Task 6:

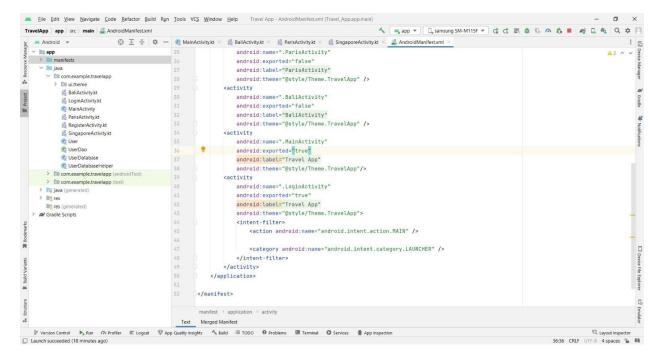
Modifying AndroidManifest.xml

```
Elle Edit View Navigate Code Befactor Build Run Iools VCS Window Help Travel App - AndroidManifestxml [Travel_App.app.main]
                                                        😌 🚊 🕏 🗘 🗘 — 🥷 MainActivity.kt × 🦺 BaliActivity.kt × 🎎 ParisActivity.kt × 🛍 SingaporeActivity.kt × 🕍 AndroidManifest.xml ×
                                                                                                                              <?xml version="1.0" encoding="utf-8"?>
                                                                                                                             <manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
                                                                                                                                          xmlns:tools="http://schemas.android.com/tools">
                     # BaliActivity.kt
                                                                                                                                                     android:allowBackup="true"
                                                                                                                                                     android:dataExtractionRules="@xml/data_extraction_rules"
                                                                                                                                                   android:fullBackupContent="@xml/backup_rules"
                      ParisActivity.kt
                     RegisterActivity.kt
                                                                                                                                                  android:icon="@mipmap/ic_launcher"
                                                                                                                                                  android:label="Travel App"
                      C User
                                                                                                                                                  android:supportsRtl="true"
                     android:theme="@style/Theme.TravelApp"
                                                                                                                                                     tools:targetApi="31">
                      UserDatabaseHelper
                                                                                                                                                     android:name=".RegisterActivity"
          > com.example.travelapp (androidTest)
                                                                                                                                                               android:exported="false"
   > ka java
        iii java (generated)
                                                                                                                                                                android:label="RegisterActivity"
                                                                                                                                                                 android:theme="@style/Theme.TravelApp" />
                                                                                                                                                     <activity
                                                                                                                                                            android:name=".SingaporeActivity"
                                                                                                                                                                 android:exported="false"
                                                                                                                                                                android:label="SingaporeActivity"
                                                                                                                                                     <activity
                                                                                                                                                               android:exported="false"
                                                                                                                                                                android:theme="@style/Theme.TravelApp" />
                                                                                                                   Text Merged Manifest

        P Version Control
        In the Control
```

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: <a href="https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/AndroidManifest.xml">https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App/blob/main/Project%20Files/AndroidManifest.xml</a>

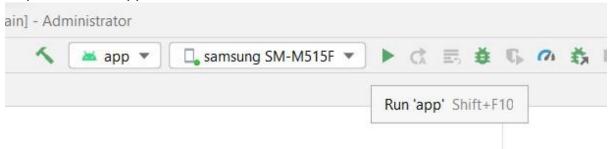
#### Task 7:

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:**

Final Output of the Application:

https://github.com/Poornima9n/Wanderlust-A-Personalized-Travel-Planning-and-Tracking-App

Login Page:



Username poornima

Email poori@123

Password

Register

Have an account? Log in



Login

Username poornima

Password •••••

Login

Register Forget password?



Login

Username Poornima

Password ....

Successfully log in

Login

Forget password? Register

## Wanderlust Travel



Bali Super saver pack with less than \$10000 7days/2persons



Paris
Super saver pack with less than \$10000
7days/2persons



Singapore

## Paris



Day 1: Arrival and Introduction Check into your accommodation and freshen up

Take a stroll around the neighborhood to get acquainted

Visit the Eiffel Tower, preferably in the evening when it is lit up

Have a relaxing dinner at a nearby restaurant

#### Day 2: Art and History

Visit the Louvre Museum to see some of the world's most famous art pieces
Stroll through the Tuileries Garden and the Place de la Concorde
Visit the Orsay Museum, which houses a large collection of impressionist art
Have dinner at a local French restaurant

#### Day 3: French Culture and Food Visit the Montmartre neighborhood to see the famous Basilique du Sacré-Cœur and Place du Tertre

Explore the historic neighborhood of Le

### 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.

## Singapore



#### Day 1:

Morning: Visit Gardens by the Bay and marvel at the Supertree Grove and the Flower Dome and Cloud Forest conservatories.

Afternoon: Explore the Marina Bay Sands complex, which includes a casino, luxury shopping mall, and observation deck with a stunning view of the city.

#### Day 2:

Morning: Explore the historic district of Chinatown, including the Buddha Tooth Relic Temple and Museum and the Sri Mariamman Temple.

Afternoon: Visit the nearby Clarke Quay for lunch and to explore its waterfront restaurants, bars, and shops.

#### Day 3:

Morning: Take a tour of the UNESCO-listed Botanic Gardens, one of the world's most famous and significant tropical gardens. Afternoon: Head over to the National

# PROJECT - T (TRAVEL APP) DESIGNED BY GIETIANS