WANDERLUST: A PERSONALIZED TRACKING PLANNING AND TRACKING APP

PROJECT PRESENTED BY:

TEAM ID: NM2023TMID15008

TEAM SIZE: 4

TEAM LEADER: KAVINITHA R

TEAM MEMBER:

- JEEVA V
- KALAIVANI V
- KOGILA S

1 INTRODUCTION

1.1 OVERVIEW

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.

1.2 PURPOSE

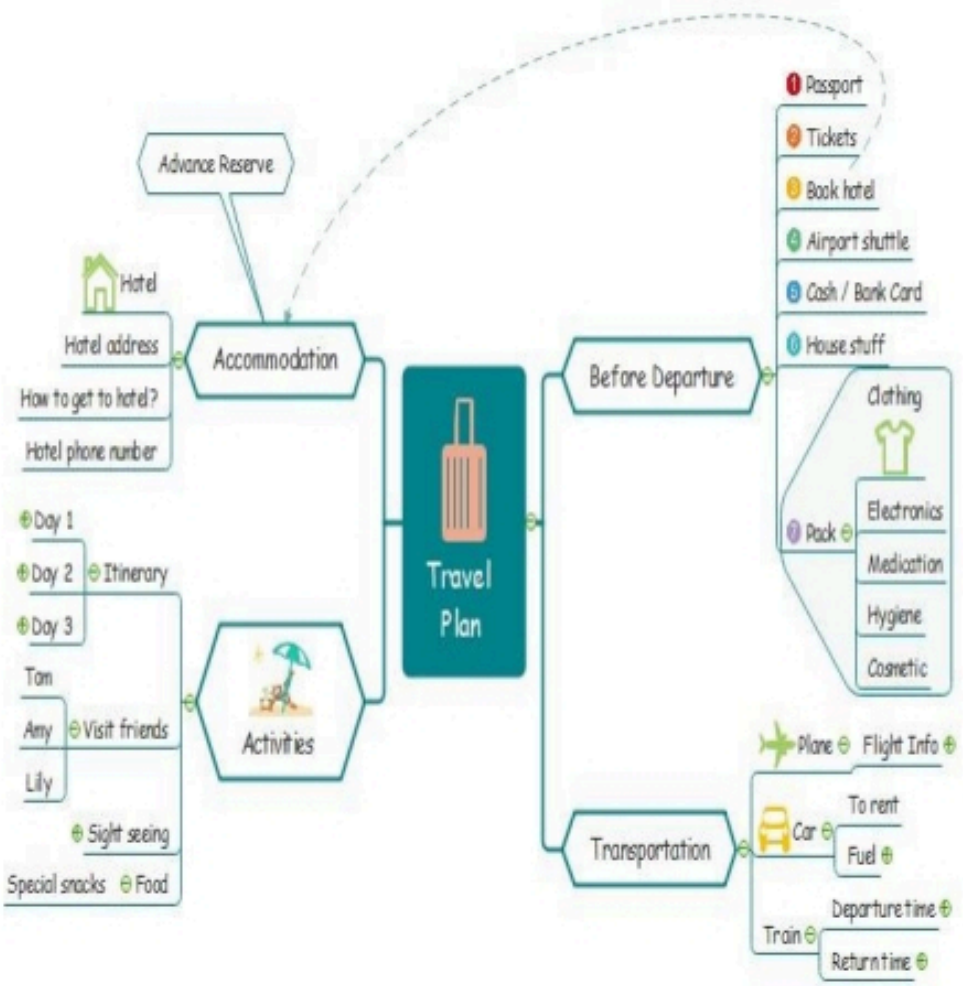
- ***Ease your travel worries, and relax and enjoy every moment***

of your trip – without worrying about a thing.

➢ ***This is the perfect tool for*** *anyone who wants to have a worry-free vacation*.

2.PROBLEM DEFINITION & DESIGN THINKING

.1 **EMAPATHY MAP**

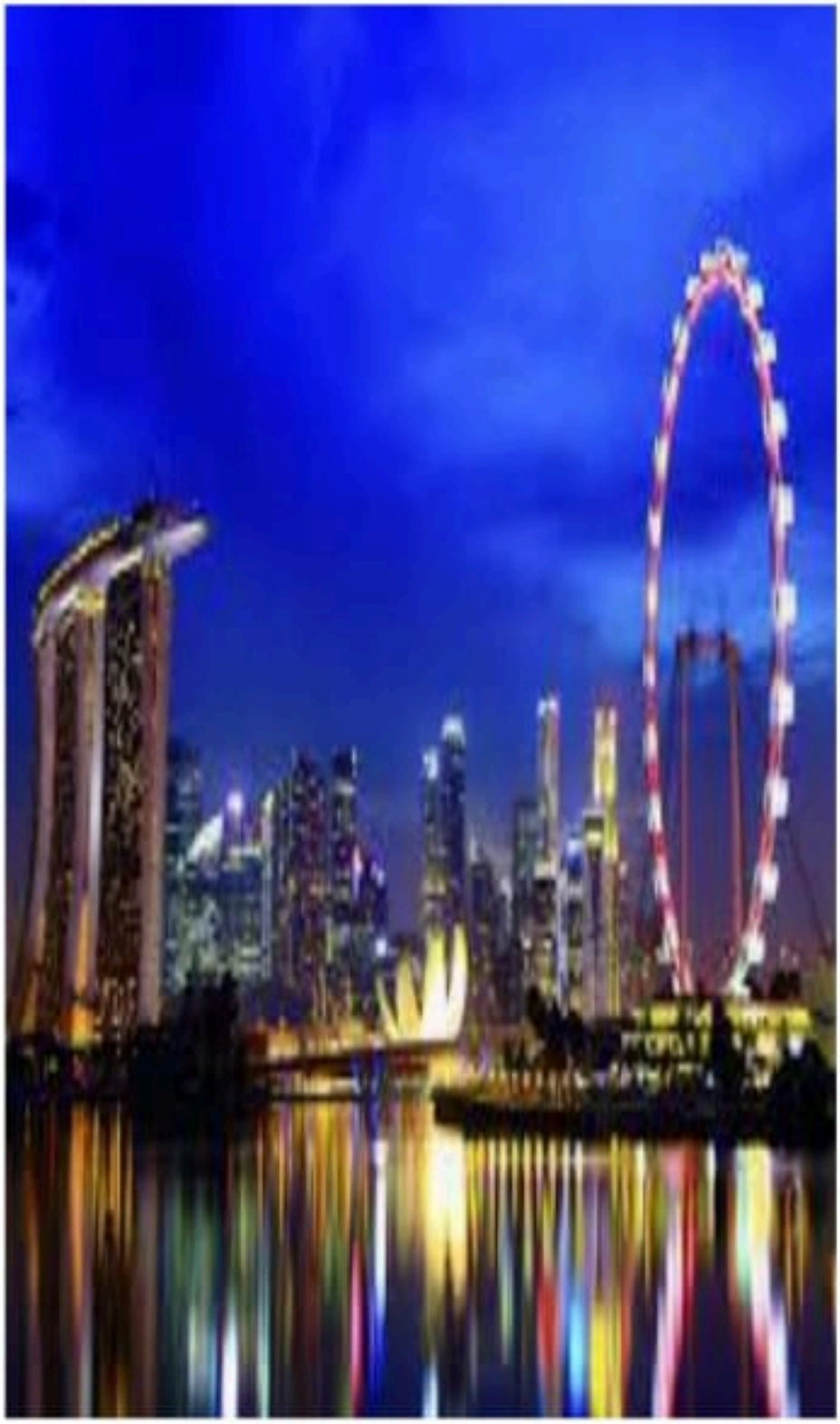


2.2 IDEATION & BRAINSTORMNG MAP


TRAVEL HACKS
01
ACCOMMODATION
Sign up for a loyalty program to get discounts on accommodation. Book in advance.
02
SIGHTSEEING
Sign up for a free walking tour and pay only if you like the tour. The amount of tips is up to you.
03
FOOD
Talk to locals about their favorite spots to eat - they are normally cheaper and have tastier food.
04
SOUVENIRS
Visit only crafting stores or flea markets if you hunt for cheap but authentic stuff to take home.

5 / 9

3 RESULT



Singapore

4 ADVANTAGES & DISADVANTAGES

ADVANTAGES

- ***Breaking from this routine helps you reset and relax.***
- ***This can improve your problemsolving skills and make you a creative thinker***
- ***Getting out of your comfort zone and experiencing***
- ***new things means you have to adapt and be resourceful***

DISADVANTAGES

- ***Environmental disadvantages of travelling***
- ***Long flight and road trips contribute to air pollution caused by transportation***
- ***Tourism contributes also to plastic***
- ***Pollution most of the plastics used in tourism is meant to be used only once and then be thrown away.***

5 APPLICATIONS

A travel planning app is an application for "booking travel reservation, tracking loyalty points, and browsing travel packages". A travel planning software packages can be used by travel agencies, travel suppliers, and consumers

6 CONCLUSION

Having done this project for a hackathon,

time was naturally very tight and as a team we had very little time to brainstorm and truly iron out our idea before we need to begin research

Compromised-having a strong foundation and understanding of the problem space is critical to delivering a problem solving and user centric solution.

7 FUTURE SCOPE

VIRTUAL REALITY: The app could incorporate virtual reality, allowing users to see a 3D view of their travel destination before they arrive, making it easier for them to plan their itinerary.

8 APPENDIX

Wanderlust: A Personalized Travel Planning and Tracking App

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">

    <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:supportsRtl="true"
        android:theme="@style/Theme.TravelApp"
        tools:targetApi="31">
        <activity
            android:name=".RegisterActivity"
            android:exported="false"
            android:label="RegisterActivity"
            android:theme="@style/Theme.TravelApp" />
        <activity
            android:name=".SingaporeActivity"
            android:exported="false"
            android:label="@string/title_activity_singapore"
            android:theme="@style/Theme.TravelApp" />
        <activity
            android:name=".ParisActivity"
            android:exported="false"
            android:label="@string/title_activity_paris"
            android:theme="@style/Theme.TravelApp" />
        <activity
            android:name=".BaliActivity"
            android:exported="false"
            android:label="@string/title_activity_bali"
            android:theme="@style/Theme.TravelApp" />
        <activity
            android:name=".MainActivity"
            android:exported="true"
            android:label="@string/app_name"
            android:theme="@style/Theme.TravelApp"/>
        <activity
            android:name=".LoginActivity"
            android:exported="true"
            android:label="@string/app_name"
            android:theme="@style/Theme.TravelApp">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER"
/>
            </intent-filter>
        </activity>
```

```
    </application>

</manifest>
```

Color.kt

```
package com.example.travelapp.ui.theme

import androidx.compose.ui.graphics.Color

val Purple200 = Color(0xFFBB86FC)
val Purple500 = Color(0xFF6200EE)
val Purple700 = Color(0xFF3700B3)
val Teal200 = Color(0xFF03DAC5)
```

Shape.kt

```
package com.example.travelapp.ui.theme

import androidx.compose.foundation.shape.RoundedCornerShape
import androidx.compose.material.Shapes
import androidx.compose.ui.unit.dp

val Shapes = Shapes(
    small = RoundedCornerShape(4.dp),
    medium = RoundedCornerShape(4.dp),
    large = RoundedCornerShape(0.dp)
)
```

Theme.kt

```
package com.example.travelapp.ui.theme

import androidx.compose.foundation.isSystemInDarkTheme
import androidx.compose.material.MaterialTheme
import androidx.compose.material.darkColors
import androidx.compose.material.lightColors
import androidx.compose.runtime.Composable

private val DarkColorPalette = darkColors(
    primary = Purple200,
    primaryVariant = Purple700,
    secondary = Teal200
)

private val LightColorPalette = lightColors(
    primary = Purple500,
    primaryVariant = Purple700,
    secondary = Teal200

    /* Other default colors to override
    background = Color.White,
    surface = Color.White,
```

```
    onPrimary = Color.White,
    onSecondary = Color.Black,
    onBackground = Color.Black,
    onSurface = Color.Black,
    */
)

@Composable
fun TravelAppTheme(darkTheme: Boolean = isSystemInDarkTheme(), content:
@Composable () -> Unit) {
    val colors = if (darkTheme) {
        DarkColorPalette
    } else {
        LightColorPalette
    }

    MaterialTheme(
        colors = colors,
        typography = Typography,
        shapes = Shapes,
        content = content
    )
}
```

Type.kt

```
package com.example.travelapp.ui.theme

import androidx.compose.material.Typography
import androidx.compose.ui.text.TextStyle
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.unit.sp

// Set of Material typography styles to start with
val Typography = Typography(
    body1 = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.Normal,
        fontSize = 16.sp
    )
    /* Other default text styles to override
    button = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.W500,
        fontSize = 14.sp
    ),
    caption = TextStyle(
        fontFamily = FontFamily.Default,
        fontWeight = FontWeight.Normal,
        fontSize = 12.sp
    )
    */
)
```

BailActivity.kt

```
package com.example.travelapp

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.MaterialTheme
import androidx.compose.material.Surface
import androidx.compose.material.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.scale
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.travelapp.ui.theme.TravelAppTheme

class BaliActivity : 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
                ) {
                    PlaceOne()
                }
            }
        }
    }
}

@Composable
fun PlaceOne() {
    Column(modifier = Modifier.background(color = Color.White)
        .padding(20.dp)
        .verticalScroll(rememberScrollState())
    ) {
        Text(
            fontSize = 40.sp,
            color = Color(android.graphics.Color.rgb(120, 40, 251)),
            fontFamily = FontFamily.Cursive,
            text = stringResource(id = R.string.place_1),
        )
        Image(
            painterResource(id = R.drawable.bali), contentDescription = "",
            modifier = Modifier
                .padding(16.dp)
                .fillMaxWidth()
                .height(200.dp)
```

```
                .scale(scaleX = 1.2F, scaleY = 1F)
        )
        Text(
            color=Color.Black,
            text = "Day 1: Arrival and Relaxation\n" +

                    "Arrive in Bali and check into your hotel or
accommodation.\n" +
                    "Spend the day relaxing and getting acclimated to the
island.\n" +
                    "If you have time, explore the nearby area or head to
the beach.\n" +
                    "\n" +

                    "Day 2: Ubud Tour\n" +

                    "Start your day early and head to Ubud, a cultural and
artistic hub in Bali.\n" +
                    "Visit the Monkey Forest and the Ubud Palace.\n" +
                    "Take a tour of the Tegalalang Rice Terrace, a
beautiful UNESCO World Heritage Site.\n" +
                    "End your day with a traditional Balinese dance
performance.\n" +
                    "\n" +
                    "Day 3: Temple Hopping\n" +

                    "Visit some of Bali's most famous temples, such as
Tanah Lot and Uluwatu.\n" +
                    "Take in the stunning views of the ocean and cliffs.\n"
+
                    "Enjoy a sunset dinner at one of the many restaurants
near the temples.\n" +
                    "\n" +
                    "Day 4: Waterfalls and Beaches\n" +

                    "Take a day trip to Bali's beautiful waterfalls, such
as Tegenungan or Gitgit.\n" +
                    "Spend the afternoon at one of Bali's world-renowned
beaches, like Seminyak or Nusa Dua.\n" +
                    "\n" +
                    "Day 5: Island Hopping\n" +

                    "Take a day trip to one of Bali's neighboring islands,
such as Nusa Lembongan or Gili Islands.\n" +
                    "Snorkel or scuba dive in the clear waters and relax on
the beach.\n" +
                    "\n" +
                    "Day 6: Cultural Activities\n" +
                    "Visit a traditional Balinese village and learn about
the island.\n" +
            "\n" +
                    "Day 7: Departure\n" +
                    "Explore the surrounding area and take in the stunning
sunset views.\n" +
                    "Have dinner at a local restaurant before returning to
your accommodation."
        )


    }
}
```

LoginActivity.kt

```
package com.example.travelapp

import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.PasswordVisualTransformation
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.core.content.ContextCompat

class LoginActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        databaseHelper = UserDatabaseHelper(this)
        setContent {
            LoginScreen(this, databaseHelper)
        }
    }
}
@Composable
fun LoginScreen(context: Context, databaseHelper: UserDatabaseHelper) {

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }

    Column(
        modifier = Modifier.fillMaxSize().background(Color.White),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Image(painterResource(id = R.drawable.trav), contentDescription =
"")

        Text(
            fontSize = 36.sp,
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            text = "Login"
        )
        Spacer(modifier = Modifier.height(10.dp))
```

```
TextField(
    value = username,
    onValueChange = { username = it },
    label = { Text("Username") },
    modifier = Modifier.padding(10.dp)
        .width(280.dp)
)

TextField(
    value = password,
    onValueChange = { password = it },
    label = { Text("Password") },
    visualTransformation = PasswordVisualTransformation(),
    modifier = Modifier.padding(10.dp)
        .width(280.dp)
)

if (error.isNotEmpty()) {
    Text(
        text = error,
        color = MaterialTheme.colors.error,
        modifier = Modifier.padding(vertical = 16.dp)
    )
}

Button(
    onClick = {
        if (username.isNotEmpty() && password.isNotEmpty()) {
            val user = databaseHelper.getUserByUsername(username)
            if (user != null && user.password == password) {
                error = "Successfully log in"
                context.startActivity(
                    Intent(
                        context,
                        MainActivity::class.java
                    )
                )
                //onLoginSuccess()
            }
            else {
                error =  "Invalid username or password"
            }

        } else {
            error = "Please fill all fields"
        }
    },
    modifier = Modifier.padding(top = 16.dp)
) {
    Text(text = "Login")
}
Row {
    TextButton(onClick = {context.startActivity(
        Intent(
            context,
            RegisterActivity::class.java
        )
    )}
    )
    { Text(text = "Register") }
    TextButton(onClick = {
```

```
            })

            {
                Spacer(modifier = Modifier.width(60.dp))
                Text(text = "Forget password?")
            }
        }
    }
}
private fun startMainPage(context: Context) {
    val intent = Intent(context, MainActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

MainActivity.kt

```
android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.clickable
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.Card
import androidx.compose.material.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.scale
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.style.TextAlign
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp

class MainActivity : ComponentActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContent {
            TravelApp(this)
        }
    }


    @Composable
    fun TravelApp(context: Context) {
        Column(
            modifier = Modifier
                .padding(20.dp)
                .verticalScroll(rememberScrollState())

        ) {
```

```
            Text(
                fontSize = 40.sp,
                color = Color(android.graphics.Color.rgb(120, 40, 251)),
                fontFamily = FontFamily.Cursive,
                text = "Wanderlust Travel"
            )

            Spacer(modifier = Modifier.height(20.dp))

            // 01
            Card(
                modifier = Modifier
                    .fillMaxWidth()
                    .height(250.dp)
                    .clickable {
                    context.startActivity(
                        Intent(context, BaliActivity::class.java)

                    )
                    },
                elevation = 8.dp
            )
            {
                Column(
                    horizontalAlignment = Alignment.CenterHorizontally
                ) {
                    Image(
                        painterResource(id = R.drawable.bali),
contentDescription = "",
                        modifier = Modifier
                            .height(150.dp)
                            .scale(scaleX = 1.2F, scaleY = 1F)
                    )

                    Text(
                        text = stringResource(id = R.string.place_1),
                        fontSize = 18.sp
                    )


                    Text(
                        text = stringResource(id = R.string.description),
                        fontWeight = FontWeight.Light,
                        fontSize = 16.sp,
                        textAlign = TextAlign.Center,
                    )

                    Text(
                        text = stringResource(id = R.string.plan), color =
Color.Gray,
                        fontSize = 16.sp
                    )
                }
            }

            Spacer(modifier = Modifier.height(20.dp))


            //02
            Card(
                modifier = Modifier
```

```
                    .fillMaxWidth()
                    .height(250.dp)
                    .clickable {
                    context.startActivity(
                        Intent(context, ParisActivity::class.java)

                    )
                    },
                elevation = 8.dp
            )
            {
                Column(
                    horizontalAlignment = Alignment.CenterHorizontally
                ) {
                    Image(
                        painterResource(id = R.drawable.paris),
contentDescription = "",
                        modifier = Modifier
                            .height(150.dp)
                            .scale(scaleX = 1.2F, scaleY = 1F)
                    )

                    Text(
                        text = stringResource(id = R.string.place_2),
                        fontSize = 18.sp
                    )


                    Text(
                        text = stringResource(id = R.string.description),
                        fontWeight = FontWeight.Light,
                        fontSize = 16.sp,
                        textAlign = TextAlign.Center,
                    )

                    Text(
                        text = stringResource(id = R.string.plan), color =
Color.Gray,
                        fontSize = 16.sp
                    )
                }
            }

            Spacer(modifier = Modifier.height(20.dp))

            //03
            Card(
                modifier = Modifier
                    .fillMaxWidth()
                    .height(250.dp)
                    .clickable {
                    context.startActivity(
                        Intent(context, SingaporeActivity::class.java)

                    )
                    },
                elevation = 8.dp
            )
            {
                Column(
                    horizontalAlignment = Alignment.CenterHorizontally
```

```
                ) {
                    Image(
                        painterResource(id = R.drawable.singapore),
contentDescription = "",
                        modifier = Modifier
                            .height(150.dp)
                            .scale(scaleX = 1.2F, scaleY = 1F)
                    )

                    Text(
                        text = stringResource(id = R.string.place_3),
                        fontSize = 18.sp
                    )


                    Text(
                        text = stringResource(id = R.string.description),
                        fontWeight = FontWeight.Light,
                        fontSize = 16.sp,
                        textAlign = TextAlign.Center,
                    )

                    Text(
                        text = stringResource(id = R.string.plan), color =
Color.Gray,
                        fontSize = 16.sp
                    )
                }
            }

            Spacer(modifier = Modifier.height(20.dp))
        }
    }
}
```

ParisActivity.kt

```
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.MaterialTheme
import androidx.compose.material.Surface
import androidx.compose.material.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.scale
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
```

```
import androidx.compose.ui.unit.sp
import com.example.travelapp.ui.theme.TravelAppTheme

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())
    ) {
        Text(
            fontSize = 40.sp,
            color = Color(android.graphics.Color.rgb(120, 40, 251)),
            fontFamily = FontFamily.Cursive,
            text = stringResource(id = R.string.place_2),
        )
        Image(
            painterResource(id = R.drawable.paris), contentDescription =
"",
            modifier = Modifier
                .padding(16.dp)
                .fillMaxWidth()
                .height(200.dp)
                .scale(scaleX = 1.2F, scaleY = 1F)
        )
        Text(
            color=Color.Black,
            text = "Day 1: Arrival and Introduction\n" +

                    "Check into your accommodation and freshen up\n" +
                    "Take a stroll around the neighborhood to get
acquainted\n" +
                    "Visit the Eiffel Tower, preferably in the evening when
it is lit up\n" +
                    "Have a relaxing dinner at a nearby restaurant\n" +

                    "\n" +
                    "Day 2: Art and History\n" +

                    "Visit the Louvre Museum to see some of the world's
most famous art pieces\n" +
                    "Stroll through the Tuileries Garden and the Place de
```

```
la Concorde\n" +
                    "Visit the Orsay Museum, which houses a large
collection of impressionist art\n" +
                    "Have dinner at a local French restaurant\n" +

                    "\n" +
                    "Day 3: French Culture and Food\n" +

                    "Visit the Montmartre neighborhood to see the famous
Basilique du Sacré-Cœur and Place du Tertre\n" +
                    "Explore the historic neighborhood of Le Marais\n" +
                    "Try some delicious French pastries at a local
bakery\n" +
                    "Have dinner at a brasserie to taste some classic
French cuisine\n" +

                    "\n" +

                    "Day 4: Architecture and Gardens\n" +

                    "Visit the Palace of Versailles, a UNESCO World
Heritage site, and explore its beautiful gardens\n" +
                    "Walk along the Champs-Elysées and stop at the Arc de
Triomphe\n" +
                    "Visit the Sainte-Chapelle, a beautiful Gothic chapel
with stunning stained-glass windows\n" +
                    "Have dinner at a local restaurant in the 7th
arrondissement\n" +

                    "\n" +
                    "Day 5: Shopping and Sightseeing\n" +

                    "Visit the Notre-Dame Cathedral and climb up to the top
for a stunning view of the city\n" +
                    "Explore the Latin Quarter and visit the Panthéon\n" +
                    "Go shopping at the famous Galeries Lafayette or
Printemps department stores\n" +
                    "Have dinner at a local bistro\n" +
                    "\n" +
                    "Day 6: Parisian Parks and Museums\n" +

                    "Visit the Musée Rodin and explore its beautiful
gardens\n" +
                    "Stroll through the Luxembourg Gardens and visit the
Luxembourg Palace\n" +
                    "Visit the Centre Pompidou, a modern art museum in the
Marais neighborhood\n" +
                    "Have dinner at a local restaurant in the Latin
Quarter\n" +
                    "\n" +
                    "Day 7: River Cruise and Farewell\n" +

                    "Take a boat cruise along the Seine River to see the
city from a different perspective\n" +
                    "Visit the Musée de l'Orangerie, which houses Monet's
famous water lilies paintings\n" +
                    "Have a farewell dinner at a Michelin-starred
restaurant"
        )
    }
}
```

RegisterActivity.kt

```
package com.example.travelapp

import android.content.Context
import android.content.Intent
import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.material.*
import androidx.compose.runtime.*
import androidx.compose.ui.Alignment
import androidx.compose.ui.Modifier
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.layout.ContentScale
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.text.font.FontWeight
import androidx.compose.ui.text.input.PasswordVisualTransformation
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import androidx.core.content.ContextCompat

class RegisterActivity : ComponentActivity() {
    private lateinit var databaseHelper: UserDatabaseHelper
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        databaseHelper = UserDatabaseHelper(this)
        setContent {
            RegistrationScreen(this, databaseHelper)
        }
    }
}

@Composable
fun RegistrationScreen(context: Context, databaseHelper:
UserDatabaseHelper) {

    var username by remember { mutableStateOf("") }
    var password by remember { mutableStateOf("") }
    var email by remember { mutableStateOf("") }
    var error by remember { mutableStateOf("") }

    Column(
        modifier = Modifier.fillMaxSize().background(Color.White),
        horizontalAlignment = Alignment.CenterHorizontally,
        verticalArrangement = Arrangement.Center
    ) {

        Image(painterResource(id = R.drawable.tra), contentDescription =
"")

        Text(
            fontSize = 36.sp,
```

```
            fontWeight = FontWeight.ExtraBold,
            fontFamily = FontFamily.Cursive,
            text = "Register"
        )

        Spacer(modifier = Modifier.height(10.dp))
        TextField(
            value = username,
            onValueChange = { username = it },
            label = { Text("Username") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)

        )

        TextField(
            value = email,
            onValueChange = { email = it },
            label = { Text("Email") },
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)
        )

        TextField(
            value = password,
            onValueChange = { password = it },
            label = { Text("Password") },
            visualTransformation = PasswordVisualTransformation(),
            modifier = Modifier
                .padding(10.dp)
                .width(280.dp)
        )


        if (error.isNotEmpty()) {
            Text(
                text = error,
                color = MaterialTheme.colors.error,
                modifier = Modifier.padding(vertical = 16.dp)
            )
        }

        Button(
            onClick = {
                if (username.isNotEmpty() && password.isNotEmpty() &&
email.isNotEmpty()) {
                    val user = User(
                        id = null,
                        firstName = username,
                        lastName = null,
                        email = email,
                        password = password
                    )
                    databaseHelper.insertUser(user)
                    error = "User registered successfully"
                    // Start LoginActivity using the current context
                    context.startActivity(
                        Intent(
                            context,
```

```
                            LoginActivity::class.java
                        )
                    )

                } else {
                    error = "Please fill all fields"
                }
            },
            modifier = Modifier.padding(top = 16.dp)
        ) {
            Text(text = "Register")
        }
        Spacer(modifier = Modifier.width(10.dp))
        Spacer(modifier = Modifier.height(10.dp))

        Row() {
            Text(
                modifier = Modifier.padding(top = 14.dp), text = "Have an
account?"
            )
            TextButton(onClick = {
                context.startActivity(
                    Intent(
                        context,
                        LoginActivity::class.java
                    )
                )
            })

            {
                Spacer(modifier = Modifier.width(10.dp))
                Text(text = "Log in")
            }
        }
    }
}
private fun startLoginActivity(context: Context) {
    val intent = Intent(context, LoginActivity::class.java)
    ContextCompat.startActivity(context, intent, null)
}
```

SingaporeActivity.kt

```
package com.example.travelapp

import android.os.Bundle
import androidx.activity.ComponentActivity
import androidx.activity.compose.setContent
import androidx.compose.foundation.Image
import androidx.compose.foundation.background
import androidx.compose.foundation.layout.*
import androidx.compose.foundation.rememberScrollState
import androidx.compose.foundation.verticalScroll
import androidx.compose.material.MaterialTheme
import androidx.compose.material.Surface
import androidx.compose.material.Text
import androidx.compose.runtime.Composable
import androidx.compose.ui.Modifier
import androidx.compose.ui.draw.scale
import androidx.compose.ui.graphics.Color
import androidx.compose.ui.res.painterResource
import androidx.compose.ui.res.stringResource
```

```
import androidx.compose.ui.text.font.FontFamily
import androidx.compose.ui.tooling.preview.Preview
import androidx.compose.ui.unit.dp
import androidx.compose.ui.unit.sp
import com.example.travelapp.ui.theme.TravelAppTheme

class SingaporeActivity : 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
                ) {
                    Greeting2()
                }
            }
        }
    }
}

@Composable
fun Greeting2() {

    Column(
        modifier = Modifier.background(color = Color.White)
            .padding(20.dp)
            .verticalScroll(rememberScrollState())
    ) {
        Text(
            fontSize = 40.sp,
            color = Color(android.graphics.Color.rgb(120, 40, 251)),
            fontFamily = FontFamily.Cursive,
            text = stringResource(id = R.string.place_3),
        )
        Image(
            painterResource(id = R.drawable.singapore), contentDescription
= "",
            modifier = Modifier
                .padding(16.dp)
                .fillMaxWidth()
                .height(200.dp)
                .scale(scaleX = 1.2F, scaleY = 1F)
        )
        Text(
            color = Color.Black,
            text = "Day 1:\n" +

                    "Morning: Visit Gardens by the Bay and marvel at the
Supertree Grove and the Flower Dome and Cloud Forest conservatories.\n" +
                    "Afternoon: Explore the Marina Bay Sands complex, which
includes a casino, luxury shopping mall, and observation deck with a
stunning view of the city.\n" +
                    "\n" +
                    "Day 2:\n" +

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

```
Temple.\n" +
                    "Afternoon: Visit the nearby Clarke Quay for lunch and
to explore its waterfront restaurants, bars, and shops.\n" +
                    "\n" +
                    "Day 3:\n" +

                    "Morning: Take a tour of the UNESCO-listed Botanic
Gardens, one of the world's most famous and significant tropical
gardens.\n" +
                    "Afternoon: Head over to the National Museum of
Singapore, which houses a vast collection of historical and cultural
artifacts.\n" +

                    "\n" +
                    "Day 4:\n" +

                    "Morning: Visit the Singapore Zoo and admire the
wildlife, including orangutans, tigers, and elephants.\n" +
                    "Afternoon: Head over to Sentosa Island and relax at
one of its many beaches or try some of the many attractions such as
Universal Studios Singapore or Adventure Cove Waterpark.\n" +
                    "\n" +
                    "Day 5:\n" +

                    "Morning: Go on a nature walk at MacRitchie Reservoir,
which offers hiking trails and stunning views of the city skyline.\n" +
                    "Afternoon: Visit Little India, a vibrant and colorful
neighborhood, and explore the shops, temples, and food stalls.\n" +
                    "\n" +
                    "Day 6:\n" +

                    "Morning: Explore the trendy neighborhood of Tiong
Bahru, known for its hip cafes and boutiques, as well as its Art Deco
architecture.\n" +
                    "Afternoon: Visit the National Gallery Singapore, which
houses the largest public collection of modern art in Singapore and
Southeast Asia.\n" +
                    "\n" +
                    "Day 7:\n" +

                    "Morning: Take a day trip to the nearby island of Pulau
Ubin, where you can rent a "
        )
    }
}
```

User.kt

```
package com.example.travelapp

import androidx.room.ColumnInfo
import androidx.room.Entity
import androidx.room.PrimaryKey

@Entity(tableName = "user_table")
data class User(
    @PrimaryKey(autoGenerate = true) val id: Int?,
    @ColumnInfo(name = "first_name") val firstName: String?,
```

```
    @ColumnInfo(name = "last_name") val lastName: String?,
    @ColumnInfo(name = "email") val email: String?,
    @ColumnInfo(name = "password") val password: String?,

    )
```

UserDao.kt

```
package com.example.travelapp

import androidx.room.*

@Dao
interface UserDao {

    @Query("SELECT * FROM user_table WHERE email = :email")
    suspend fun getUserByEmail(email: String): User?

    @Insert(onConflict = OnConflictStrategy.REPLACE)
    suspend fun insertUser(user: User)

    @Update
    suspend fun updateUser(user: User)

    @Delete
    suspend fun deleteUser(user: User)
}
```

UserDatabase.kt

```
package com.example.travelapp

import android.content.Context
import androidx.room.Database
import androidx.room.Room
import androidx.room.RoomDatabase

@Database(entities = [User::class], version = 1)
abstract class UserDatabase : RoomDatabase() {

    abstract fun userDao(): UserDao

    companion object {

        @Volatile
        private var instance: UserDatabase? = null

        fun getDatabase(context: Context): UserDatabase {
            return instance ?: synchronized(this) {
                val newInstance = Room.databaseBuilder(
                    context.applicationContext,
                    UserDatabase::class.java,
                    "user_database"
                ).build()
                instance = newInstance
                newInstance
```

```
            }
        }
    }
}
```

UserDatabaseHelper.kt

```
package com.example.travelapp

import android.annotation.SuppressLint
import android.content.ContentValues
import android.content.Context
import android.database.Cursor
import android.database.sqlite.SQLiteDatabase
import android.database.sqlite.SQLiteOpenHelper

class UserDatabaseHelper(context: Context) :
    SQLiteOpenHelper(context, DATABASE_NAME, null, DATABASE_VERSION) {

    companion object {
        private const val DATABASE_VERSION = 1
        private const val DATABASE_NAME = "UserDatabase.db"

        private const val TABLE_NAME = "user_table"
        private const val COLUMN_ID = "id"
        private const val COLUMN_FIRST_NAME = "first_name"
        private const val COLUMN_LAST_NAME = "last_name"
        private const val COLUMN_EMAIL = "email"
        private const val COLUMN_PASSWORD = "password"
    }

    override fun onCreate(db: SQLiteDatabase?) {
        val createTable = "CREATE TABLE $TABLE_NAME (" +
                "$COLUMN_ID INTEGER PRIMARY KEY AUTOINCREMENT, " +
                "$COLUMN_FIRST_NAME TEXT, " +
                "$COLUMN_LAST_NAME TEXT, " +
                "$COLUMN_EMAIL TEXT, " +
                "$COLUMN_PASSWORD TEXT" +
                ")"

        db?.execSQL(createTable)
    }

    override fun onUpgrade(db: SQLiteDatabase?, oldVersion: Int,
newVersion: Int) {
        db?.execSQL("DROP TABLE IF EXISTS $TABLE_NAME")
        onCreate(db)
    }

    fun insertUser(user: User) {
        val db = writableDatabase
        val values = ContentValues()
        values.put(COLUMN_FIRST_NAME, user.firstName)
        values.put(COLUMN_LAST_NAME, user.lastName)
        values.put(COLUMN_EMAIL, user.email)
        values.put(COLUMN_PASSWORD, user.password)
        db.insert(TABLE_NAME, null, values)
        db.close()
    }
```

```
    @SuppressLint("Range")
    fun getUserByUsername(username: String): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_FIRST_NAME = ?", arrayOf(username))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
        return user
    }
    @SuppressLint("Range")
    fun getUserById(id: Int): User? {
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME WHERE
$COLUMN_ID = ?", arrayOf(id.toString()))
        var user: User? = null
        if (cursor.moveToFirst()) {
            user = User(
                id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
                email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
            )
        }
        cursor.close()
        db.close()
        return user
    }

    @SuppressLint("Range")
    fun getAllUsers(): List<User> {
        val users = mutableListOf<User>()
        val db = readableDatabase
        val cursor: Cursor = db.rawQuery("SELECT * FROM $TABLE_NAME", null)
        if (cursor.moveToFirst()) {
            do {
                val user = User(
                    id = cursor.getInt(cursor.getColumnIndex(COLUMN_ID)),
                    firstName =
cursor.getString(cursor.getColumnIndex(COLUMN_FIRST_NAME)),
                    lastName =
cursor.getString(cursor.getColumnIndex(COLUMN_LAST_NAME)),
```

```
                    email =
cursor.getString(cursor.getColumnIndex(COLUMN_EMAIL)),
                    password =
cursor.getString(cursor.getColumnIndex(COLUMN_PASSWORD)),
                )
                users.add(user)
            } while (cursor.moveToNext())
        }
        cursor.close()
        db.close()
        return users
    }

}
```

Sample Screen

Singapore