# Android Programming Assignment

## INTRODUCTION:

Objective of the assignment is to create Table Layout for Restaurant Data Entry Form: to write a program that uses a table layout to create a restaurant data Entry form. Including fields like "Restaurant Name," "Location," and "Cuisine Type." To add a set of radio buttons to let the user select the type of restaurant (e.g., "Fast Food," "Fine Dining," or "Cafe"). To use this to design a user-friendly Interface for restaurant owners to input their data.

## TOOLS & TECHNOLOGIES USED

Android Studio
Language: Kotlin , Open Android Studio and create a new project.
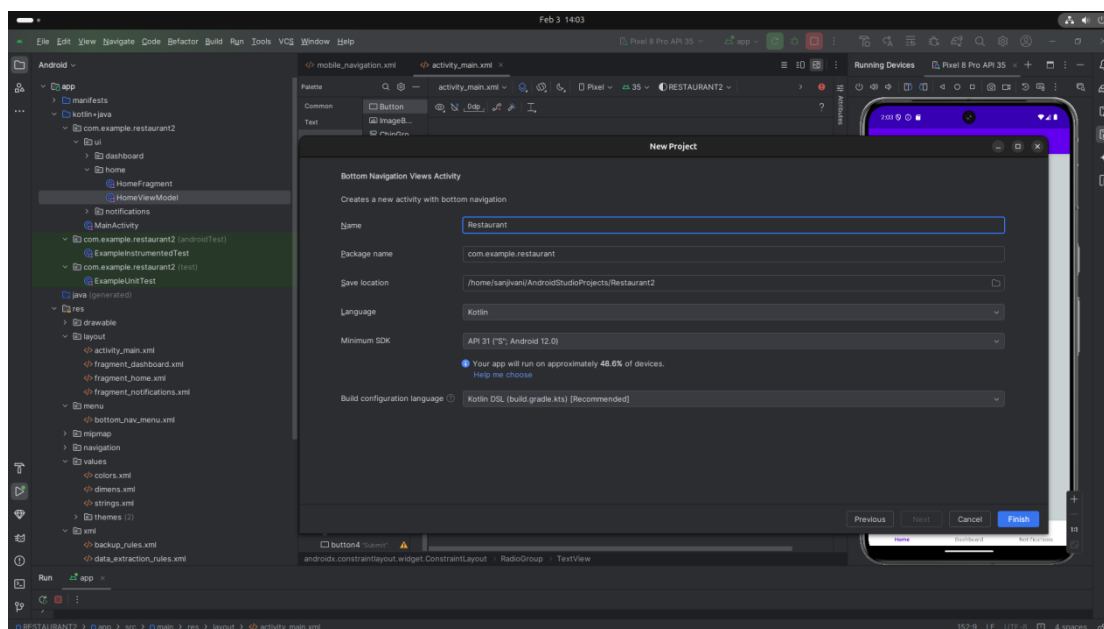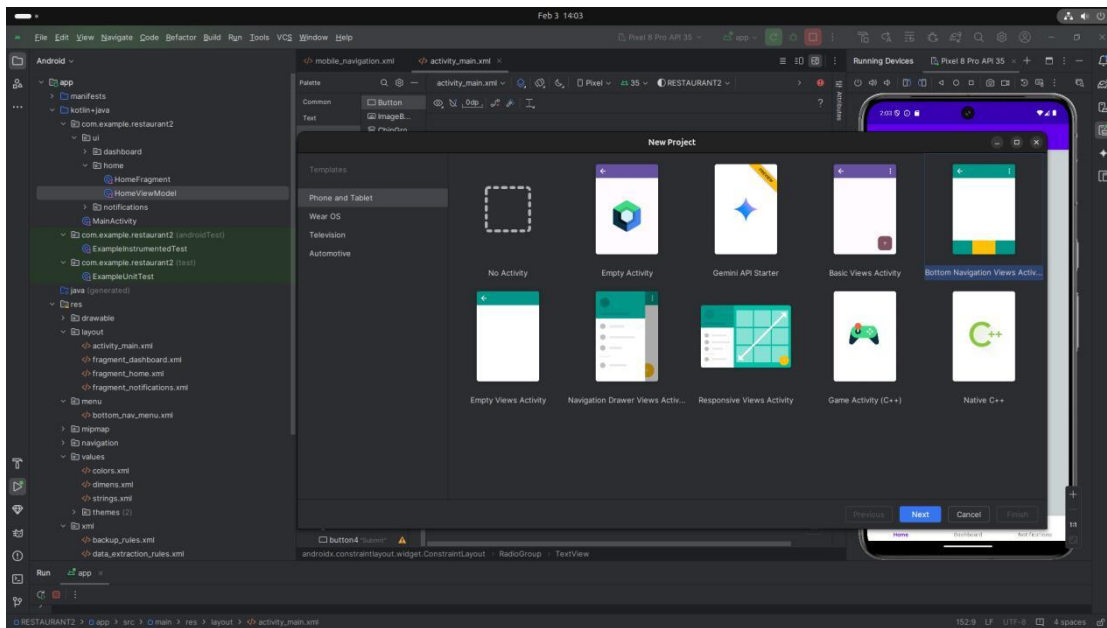Emulator or Physical Device (Android API 35)

## PROCEDURE & STEPS

### Step 1: Create a New Project

Choose an Bottom Navigation Activity template.
Set the project name and package name.
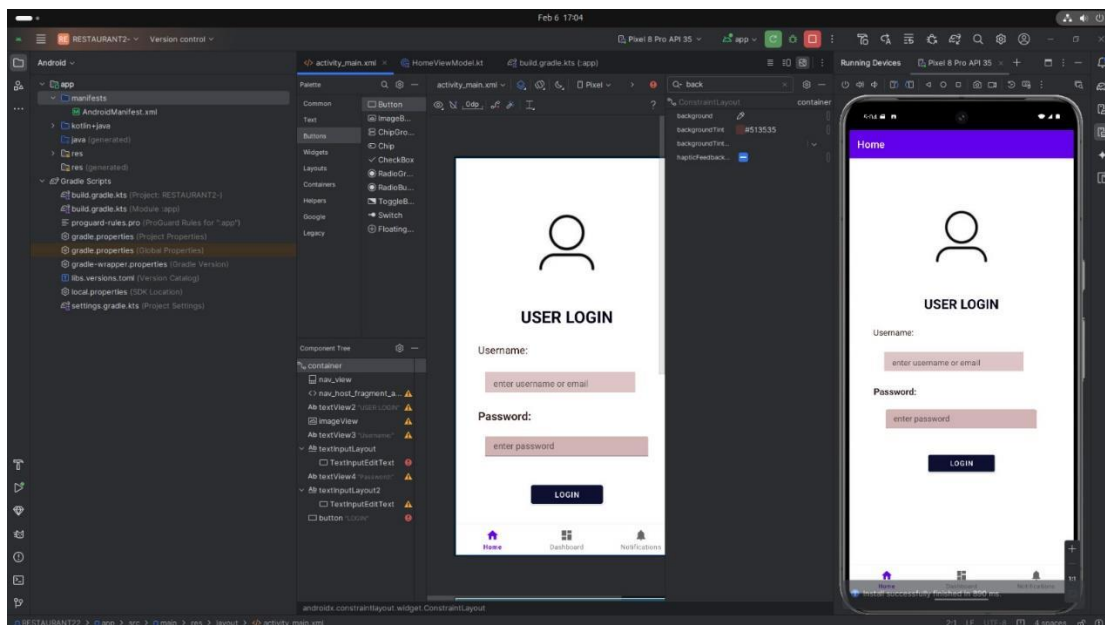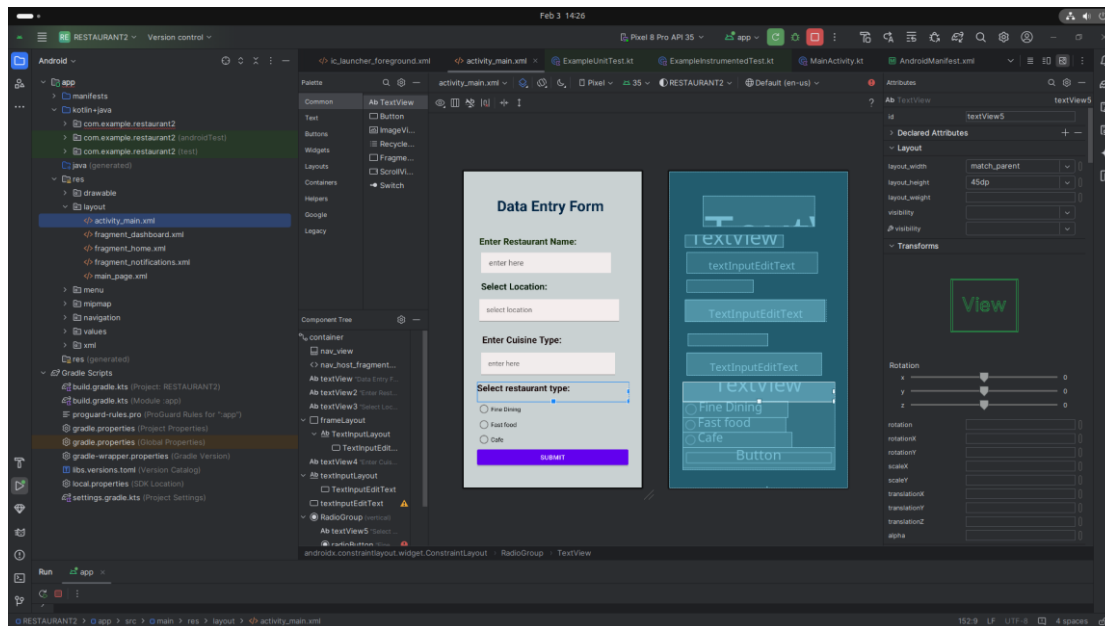Select the programming language (Kotlin).

## Step 2: Designing the UI

- After creating project Open activity_main.xml set layout as table layout to ensure proper alignment
- For login page added the input fields like username and password and login button.
- For Data Entry form, i have Added text fields and text input fields for entering details like Restaurant Name location and cuisine type. I have added radio Buttons for selecting type of restaurant like fast food, fine dining, cafe etc. Then Added a submit button to submit the data after filling the form.

LOGIN PAGE:

# Step 3: Writing the code:

## FOR LOGIN PAGE:

```xml
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/container"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#A5F2EB"
    android:paddingTop="?attr/actionBarSize">

    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:id="@+id/nav_view"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="0dp"
        android:layout_marginEnd="0dp"
        android:background="?android:attr/windowBackground"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:menu="@menu/bottom_nav_menu" />

    <fragment
        android:id="@+id/nav_host_fragment_activity_main"
        android:name="androidx.navigation.fragment.NavHostFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:defaultNavHost="true"
        app:layout_constraintBottom_toTopOf="@id/nav_view"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:navGraph="@navigation/mobile_navigation" />

    <ImageView
```

```xml
        android:id="@+id/imageView"
        android:layout_width="311dp"
        android:layout_height="169dp"
        android:layout_marginTop="32dp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextText3"
        app:srcCompat="@drawable/hotel" />

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="269dp"
        android:layout_height="55dp"
        android:layout_marginTop="60dp"
        android:background="#93CAFB"
        android:ems="10"
        android:fontFamily="@font/adamina"
        android:inputType="text"
        android:text="USERNAME"
        android:textAlignment="center"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.542"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/imageView" />

    <EditText
        android:id="@+id/editTextText2"
        android:layout_width="269dp"
        android:layout_height="47dp"
        android:layout_marginTop="12dp"
        android:background="#93CAFB"
        android:ems="10"
        android:fontFamily="@font/adamina"
        android:inputType="text"
        android:text="PASSWORD"
        android:textAlignment="center"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.542"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextText" />

    <EditText
        android:id="@+id/editTextText3"
        android:layout_width="257dp"
        android:layout_height="48dp"
        android:layout_marginTop="60dp"
        android:background="#9CF69F"
        android:ems="10"
        android:inputType="text"
        android:text="LOGIN PAGE"
        android:textAlignment="center"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="76dp"
        android:text="SUBMIT"
        app:layout_constraintBottom_toTopOf="@+id/nav_view"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextText2"
        app:layout_constraintVertical_bias="0.464" />
```

```xml
 <?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/container"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingTop="?attr/actionBarSize">

    <com.google.android.material.bottomnavigation.BottomNavigationView
        android:id="@+id/nav_view"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_marginStart="0dp"
        android:layout_marginEnd="0dp"
        android:background="?android:attr/windowBackground"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:menu="@menu/bottom_nav_menu" />

    <fragment
        android:id="@+id/nav_host_fragment_activity_main"
        android:name="androidx.navigation.fragment.NavHostFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        app:defaultNavHost="true"
        app:layout_constraintBottom_toTopOf="@id/nav_view"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:navGraph="@navigation/mobile_navigation" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="144dp"
        android:text="Enter number:"
        android:textSize="70px"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.261"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:id="@+id/floatingActionButton"
        android:layout_width="70dp"
        android:layout_height="54dp"
        android:layout_marginTop="60dp"
        android:clickable="true"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.453"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/editTextPhone"
        app:srcCompat="@android:drawable/sym_action_call" />

    <EditText
        android:id="@+id/editTextPhone"
        android:layout_width="wrap_content"
```
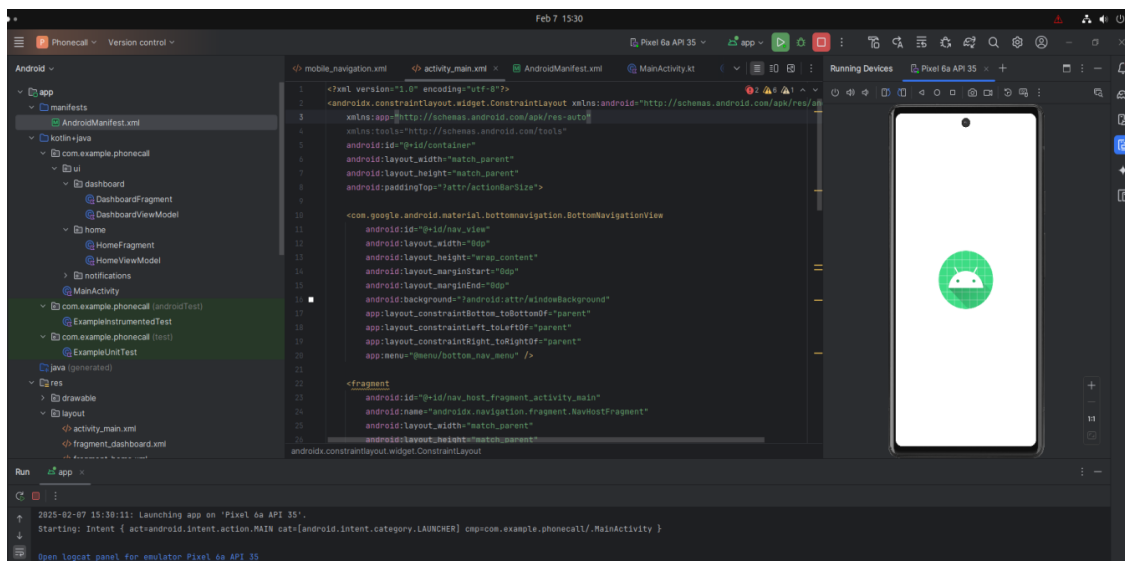
```
        android:layout_height="wrap_content"
            android:layout_marginTop="50dp"
            android:ems="10"
            android:inputType="phone"
            android:layout_marginHorizontal="50dp"
            app:layout_constraintEnd_toEndOf="parent"
            android:hint="@string/please_enter_your_number"
            app:layout_constraintHorizontal_bias="0.313"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/textView" />
</androidx.constraintlayout.widget.ConstraintLayout>
```
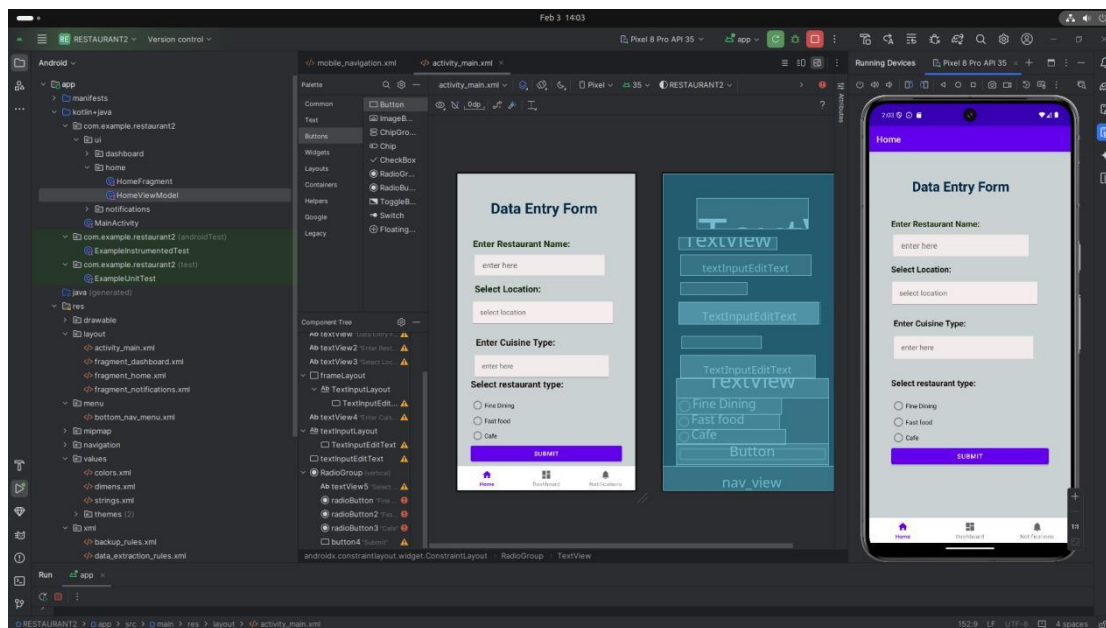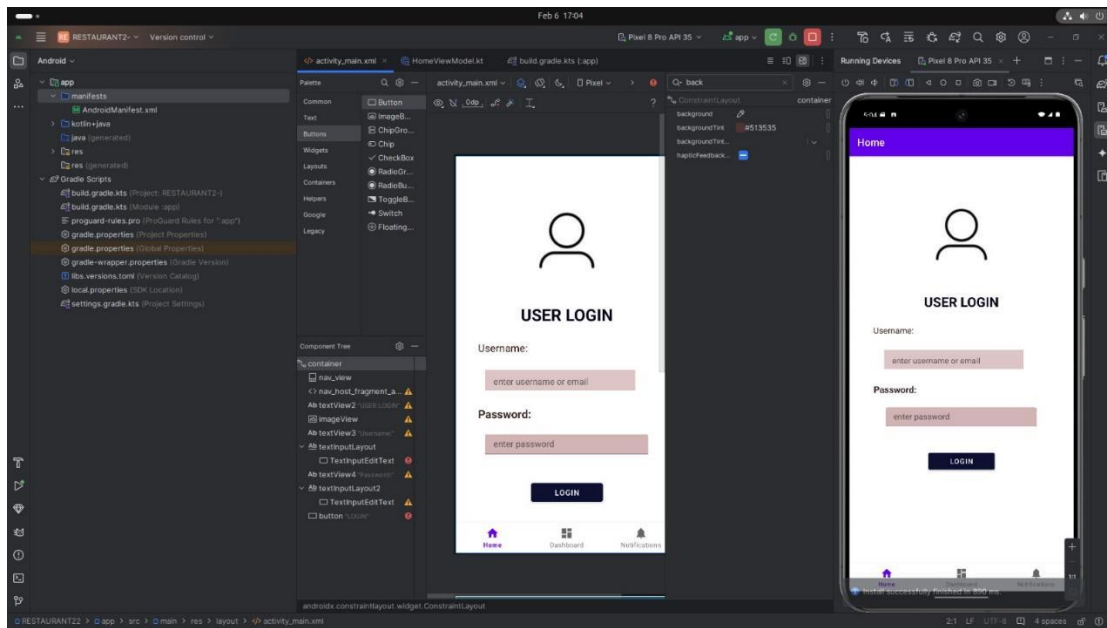
## Step 4: Running the Application on Emulator

Click on the Run button in Android Studio.
Select the emulator and launch the app.



## Step 5: Testing & Output

1. Test different functionalities of the app.
2. Capture the output results.

## Conclusion:

I have successfully completed the assignment of designing a login page and a
Restaurant data registration form. Through this project, I have demonstrated my
Understanding of user interface design principles and data registration
Processes.

-Sumita Turakane