MainActivity.java

package com.example.weatherapp;

import android.app.FragmentTransaction;

import android.os.Bundle;

import androidx.activity.EdgeToEdge;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.graphics.Insets;

import androidx.core.view.ViewCompat;

import androidx.core.view.WindowInsetsCompat;

import androidx.fragment.app.Fragment;

public class MainActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

EdgeToEdge.enable(this);

setContentView(R.layout.activity\_main);

if (savedInstanceState == null) {

loadInitialFragment();

}

}

// Load the initial fragment (CitySelectionFragment)

public void loadInitialFragment() {

getSupportFragmentManager()

.beginTransaction()

.add(R.id.fragmentContainerView3, new city\_selection(), "CitySelectionFragment")

.commit();

}

// Navigate to a new fragment and add it to the back stack

public void navigateToFragment(Fragment fragment, String tag) {

getSupportFragmentManager()

.beginTransaction()

.replace(R.id.fragmentContainerView3, fragment, tag)

.addToBackStack(tag) // Adds to the back stack for default back navigation

.commit();

}

}

activity\_main.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/main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:endColor="#b1e8e1"

android:startColor="#f3fbfb"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView9"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="121dp"

android:layout\_marginTop="17dp"

android:layout\_marginEnd="122dp"

android:layout\_marginBottom="21dp"

android:text="Weather App"

android:textSize="30dp"

android:textStyle="bold|italic"

app:layout\_constraintBottom\_toTopOf="@+id/textView10"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<TextView

android:id="@+id/textView10"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="53dp"

android:layout\_marginTop="21dp"

android:layout\_marginEnd="54dp"

android:text="Know your Weather, Plan your Day!!"

android:textSize="20dp"

android:textStyle="italic"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView9" />

<TextView

android:id="@+id/textView11"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="28dp"

android:layout\_marginTop="24dp"

android:layout\_marginEnd="264dp"

android:text="Select you City:"

android:textSize="17dp"

android:textStyle="bold"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView10" />

<Spinner

android:id="@+id/spinner5"

android:layout\_width="335dp"

android:layout\_height="52dp"

android:layout\_marginStart="46dp"

android:layout\_marginTop="11dp"

android:layout\_marginEnd="38dp"

android:layout\_marginBottom="18dp"

app:layout\_constraintBottom\_toTopOf="@+id/imageView5"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView11" />

<TextView

android:id="@+id/textView12"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="36dp"

android:layout\_marginTop="26dp"

android:layout\_marginEnd="45dp"

android:layout\_marginBottom="103dp"

android:text="Select Date:"

android:textSize="17dp"

android:textStyle="bold"

app:layout\_constraintBottom\_toTopOf="@+id/time\_of\_day\_group"

app:layout\_constraintEnd\_toStartOf="@+id/imageView5"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/spinner5" />

<ImageView

android:id="@+id/imageView5"

android:layout\_width="140dp"

android:layout\_height="113dp"

android:layout\_marginStart="32dp"

android:layout\_marginTop="24dp"

android:layout\_marginEnd="111dp"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toEndOf="@+id/textView12"

app:layout\_constraintTop\_toBottomOf="@+id/spinner5"

app:srcCompat="@drawable/calender" />

<RadioGroup

android:id="@+id/time\_of\_day\_group"

android:layout\_width="374dp"

android:layout\_height="109dp"

android:layout\_marginStart="21dp"

android:layout\_marginTop="15dp"

android:layout\_marginEnd="16dp"

android:orientation="vertical"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/imageView5">

<!-- First Row -->

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginBottom="8dp"

android:orientation="horizontal">

<RadioButton

android:id="@+id/radio\_morning"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="Morning"

android:textSize="17dp" />

<RadioButton

android:id="@+id/radio\_afternoon"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="Afternoon"

android:textSize="17dp" />

</LinearLayout>

<!-- Second Row -->

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="horizontal">

<RadioButton

android:id="@+id/radio\_evening"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="Evening"

android:textSize="17dp" />

<RadioButton

android:id="@+id/radio\_night"

android:layout\_width="0dp"

android:layout\_height="wrap\_content"

android:layout\_weight="1"

android:text="Night"

android:textSize="17dp" />

</LinearLayout>

</RadioGroup>

<Button

android:id="@+id/button2"

android:layout\_width="117dp"

android:layout\_height="58dp"

android:layout\_marginStart="147dp"

android:layout\_marginTop="12dp"

android:layout\_marginEnd="147dp"

android:text="Select"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/time\_of\_day\_group" />

<androidx.fragment.app.FragmentContainerView

android:id="@+id/fragmentContainerView3"

android:name="com.example.weatherapp.city\_selection"

android:layout\_width="392dp"

android:layout\_height="154dp"

tools:layout\_editor\_absoluteX="11dp"

tools:layout\_editor\_absoluteY="570dp" />

</androidx.constraintlayout.widget.ConstraintLayout>

City\_slection.java

package com.example.weatherapp;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.Spinner;

/\*\*

\* A simple {@link Fragment} subclass.

\* Use the {@link city\_selection#newInstance} factory method to

\* create an instance of this fragment.

\*/

public class city\_selection extends Fragment {

public Spinner citySpinner; // A Spinner to select a city

public Button selectCityButton;

// Fragment initialization parameters

public static final String ARG\_PARAM1 = "param1";

public static final String ARG\_PARAM2 = "param2";

public String mParam1;

public String mParam2;

public city\_selection() {

// Required empty public constructor

}

/\*\*

\* Use this factory method to create a new instance of

\* this fragment using the provided parameters.

\*

\* @param param1 Parameter 1.

\* @param param2 Parameter 2.

\* @return A new instance of fragment city\_selection.

\*/

public static city\_selection newInstance(String param1, String param2) {

city\_selection fragment = new city\_selection();

Bundle args = new Bundle();

args.putString(ARG\_PARAM1, param1);

args.putString(ARG\_PARAM2, param2);

fragment.setArguments(args);

return fragment;

}

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

if (getArguments() != null) {

mParam1 = getArguments().getString(ARG\_PARAM1);

mParam2 = getArguments().getString(ARG\_PARAM2);

}

}

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

// Inflate the layout for this fragment

View view = inflater.inflate(R.layout.fragment\_city\_selection, container, false);

citySpinner = view.findViewById(R.id.spinner5);

selectCityButton = view.findViewById(R.id.button2);

// Setup the Spinner (assuming cities array or list is available)

ArrayAdapter<String> cityAdapter = new ArrayAdapter<>(

getContext(),

android.R.layout.simple\_spinner\_item,

new String[]{"New York", "Los Angeles", "Chicago", "Miami", "San Francisco"}

);

cityAdapter.setDropDownViewResource(android.R.layout.simple\_spinner\_dropdown\_item);

citySpinner.setAdapter(cityAdapter);

selectCityButton.setOnClickListener(v -> {

String selectedCity = citySpinner.getSelectedItem().toString();

// Navigate to WeatherFragment with the selected city

WeatherFragment weatherFragment = WeatherFragment.newInstance(selectedCity, null);

((MainActivity) requireActivity()).navigateToFragment(weatherFragment, "WeatherFragment");

});

return view;

}

}

fragment\_city\_selection.xml

<?xml version="1.0" encoding="utf-8"?>

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".city\_selection">

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:padding="16dp">

<Spinner

android:id="@+id/spinner\_city"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content" />

<RadioGroup

android:id="@+id/radioGroup\_time\_of\_day"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:orientation="vertical">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginBottom="8dp"

android:orientation="horizontal">

<RadioButton

android:id="@+id/radio\_Morning"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Morning"

android:textSize="17dp"/>

<RadioButton

android:id="@+id/radio\_Afternoon"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Afternoon"

android:textSize="17dp"/>

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginBottom="8dp"

android:orientation="horizontal">

<RadioButton

android:id="@+id/radio\_Evening"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Evening"

android:textSize="17dp"/>

<RadioButton

android:id="@+id/radio\_Night"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Night"

android:textSize="17dp"/>

</LinearLayout>

</RadioGroup>

<Button

android:id="@+id/button\_select\_date"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Select Date" />

</LinearLayout>

</FrameLayout>

weather.java

package com.example.weatherapp;

import android.app.DatePickerDialog;

import android.os.Bundle;

import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;

import android.view.View;

import android.view.ViewGroup;

import android.widget.Button;

import android.widget.RadioButton;

import android.widget.RadioGroup;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Calendar;

/\*\*

\* A simple {@link Fragment} subclass.

\* Use the {@link WeatherFragment#newInstance} factory method to

\* create an instance of this fragment.

\*/

public class WeatherFragment extends Fragment {

TextView weatherCityName, weatherData;

RadioGroup timeOfDayGroup;

RadioButton radioMorning, radioAfternoon, radioEvening, radioNight;

Button selectDateButton;

int selectedYear, selectedMonth, selectedDay;

// Fragment initialization parameters

static final String ARG\_PARAM1 = "param1";

static final String ARG\_PARAM2 = "param2";

String mParam1;

String mParam2;

public WeatherFragment() {

// Required empty public constructor

}

/\*\*

\* Use this factory method to create a new instance of

\* this fragment using the provided parameters.

\*

\* @param param1 Parameter 1.

\* @param param2 Parameter 2.

\* @return A new instance of fragment WeatherFragment.

\*/

public static WeatherFragment newInstance(String param1, String param2) {

WeatherFragment fragment = new WeatherFragment();

Bundle args = new Bundle();

args.putString(ARG\_PARAM1, param1);

args.putString(ARG\_PARAM2, param2);

fragment.setArguments(args);

return fragment;

}

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

if (getArguments() != null) {

mParam1 = getArguments().getString(ARG\_PARAM1);

mParam2 = getArguments().getString(ARG\_PARAM2);

}

}

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

// Inflate the layout for this fragment

View view = inflater.inflate(R.layout.fragment\_weather, container, false);

weatherCityName = view.findViewById(R.id.text\_city);

weatherData = view.findViewById(R.id.text\_weather\_info);

timeOfDayGroup = view.findViewById(R.id.time\_of\_day\_group);

radioMorning = view.findViewById(R.id.radio\_morning);

radioAfternoon = view.findViewById(R.id.radio\_afternoon);

radioEvening = view.findViewById(R.id.radio\_evening);

radioNight = view.findViewById(R.id.radio\_night);

selectDateButton = view.findViewById(R.id.text\_date);

// Set default city name and placeholder for weather data

weatherCityName.setText("New York");

weatherData.setText("Weather data will appear here");

// Handle Time of Day Selection

timeOfDayGroup.setOnCheckedChangeListener((group, checkedId) -> {

String timeOfDay = "";

switch (checkedId) {

case R.id.radio\_morning:

timeOfDay = "Morning";

break;

case R.id.radio\_afternoon:

timeOfDay = "Afternoon";

break;

case R.id.radio\_evening:

timeOfDay = "Evening";

break;

case R.id.radio\_night:

timeOfDay = "Night";

break;

}

Toast.makeText(getContext(), "Selected Time of Day: " + timeOfDay, Toast.LENGTH\_SHORT).show();

});

// Handle Select Date Button Click

selectDateButton.setOnClickListener(v -> showDatePickerDialog());

return view;

}

// Show Date Picker Dialog

public void showDatePickerDialog() {

// Get the current date

Calendar calendar = Calendar.getInstance();

selectedYear = calendar.get(Calendar.YEAR);

selectedMonth = calendar.get(Calendar.MONTH);

selectedDay = calendar.get(Calendar.DAY\_OF\_MONTH);

// Properly construct the DatePickerDialog

DatePickerDialog datePickerDialog = new DatePickerDialog(

getContext(),

(view, year, monthOfYear, dayOfMonth) -> {

String selectedDate = (monthOfYear + 1) + "/" + dayOfMonth + "/" + year;

Toast.makeText(getContext(), "Selected Date: " + selectedDate, Toast.LENGTH\_SHORT).show();

},

selectedYear,

selectedMonth,

selectedDay

);

datePickerDialog.show();

}

}

fragment\_weather.xml

<?xml version="1.0" encoding="utf-8"?>

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".weather">

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical"

android:padding="16dp">

<TextView

android:id="@+id/text\_city"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="City: "

android:textSize="18sp" />

<TextView

android:id="@+id/text\_date"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Date: "

android:textSize="18sp" />

<TextView

android:id="@+id/text\_time\_of\_day"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Time of Day: "

android:textSize="18sp" />

<TextView

android:id="@+id/text\_weather\_info"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Weather info will appear"/>

</LinearLayout>

</FrameLayout>

Where I have errors:



