LAYOUT CODE:

*<?***xml version="1.0" encoding="utf-8"***?>*<**androidx.drawerlayout.widget.DrawerLayout  
 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/drawer\_layout"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:fitsSystemWindows="true"  
 tools:context=".MainActivity"  
 tools:openDrawer="start"  
 android:background="@color/teal\_200"**>  
 <**LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"**>  
  
  
 <**androidx.appcompat.widget.Toolbar  
 android:id="@+id/toolbar"  
 android:layout\_width="match\_parent"  
 android:layout\_height="?attr/actionBarSize"  
 android:background="@color/design\_default\_color\_primary"  
 android:elevation="4dp"  
 android:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"  
 app:popupTheme="@style/ThemeOverlay.AppCompat.Light"** />  
  
 <**FrameLayout  
 android:id="@+id/fragment\_container"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"** >  
  
 <**TextView  
 android:id="@+id/homepage"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:text="Lets see the seasons"  
 android:textSize="30sp"  
 android:textStyle="bold"**/>  
 </**FrameLayout**>  
  
 </**LinearLayout**>  
  
 <**com.google.android.material.navigation.NavigationView  
 android:id="@+id/nav\_view"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="match\_parent"  
 android:layout\_gravity="start"  
 android:background="@color/teal\_200"  
 app:headerLayout="@layout/nav\_header"  
 app:menu="@menu/nav\_draw"** />  
  
  
</**androidx.drawerlayout.widget.DrawerLayout**>

FRAGMENT AUTUM

*<?***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=".autumn\_season"**>  
  
 *<!--* ***TODO: Update blank fragment layout*** *-->* <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:text="@string/hello\_blank\_fragment"** />  
  
 <**include  
 layout="@layout/tab\_layout\_toolbar"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"** />  
  
  
  
</**FrameLayout**>

RAINY

*<?***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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".rainy\_season"**>  
  
 *<!--* ***TODO: Update blank fragment layout*** *-->* <**Button  
 android:id="@+id/button\_back"  
 android:layout\_width="198dp"  
 android:layout\_height="62dp"  
 android:text="Go to Summer"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textview"** />  
  
 <**ImageButton  
 android:id="@+id/imageButton5"  
 android:layout\_width="413dp"  
 android:layout\_height="711dp"  
 android:src="@drawable/rain"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"** />  
  
 <**TextView  
 android:id="@+id/textview"  
 android:layout\_width="227dp"  
 android:layout\_height="104dp"  
 android:text="text display"  
 android:textColor="@color/purple\_500"  
 android:textSize="25sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.086"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.657"** />  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

SUMMER  
*<?***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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".summer\_season"**>  
  
 *<!--* ***TODO: Update blank fragment layout*** *-->* <**ImageButton  
 android:id="@+id/imageButton"  
 android:layout\_width="410dp"  
 android:layout\_height="232dp"  
 android:src="@drawable/s1"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0"** />  
  
 <**ImageButton  
 android:id="@+id/imageButton3"  
 android:layout\_width="410dp"  
 android:layout\_height="232dp"  
 android:scaleType="fitCenter"  
 android:src="@drawable/s2"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageButton"  
 app:layout\_constraintVertical\_bias="0.183"** />  
  
 <**EditText  
 android:id="@+id/stb1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageButton3"  
 app:layout\_constraintVertical\_bias="0.219"  
 android:hint="Enter A Reminder For Rainy Season"  
 tools:ignore="MissingConstraints"** />  
  
 <**Button  
 android:id="@+id/sbt1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@color/white"  
 android:text="Make it rainy Season"  
 android:textColor="#9C27B0"  
 android:textColorHint="#DD2222"  
 app:iconTint="#FFFFFF"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/stb1"** />  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

WINTER

*<?***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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".winter\_season"**>  
  
 *<!--* ***TODO: Update blank fragment layout*** *-->* <**ImageButton  
 android:id="@+id/imageButton2"  
 android:layout\_width="407dp"  
 android:layout\_height="254dp"  
 android:scaleType="fitCenter"  
 android:src="@drawable/winter1"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.006"** />  
  
 <**ImageButton  
 android:id="@+id/imageButton4"  
 android:layout\_width="402dp"  
 android:layout\_height="372dp"  
 android:scaleType="fitCenter"  
 android:src="@drawable/winter2"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.444"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageButton2"  
 app:layout\_constraintVertical\_bias="0.0"** />  
</**androidx.constraintlayout.widget.ConstraintLayout**>

JAVA CODE:

**package** com.example.lab13;  
  
**import** androidx.annotation.NonNull;  
**import** androidx.appcompat.app.ActionBarDrawerToggle;  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** androidx.appcompat.widget.Toolbar;  
**import** androidx.core.view.GravityCompat;  
**import** androidx.drawerlayout.widget.DrawerLayout;  
**import** androidx.viewpager.widget.ViewPager;  
  
**import** android.content.ActivityNotFoundException;  
**import** android.content.Intent;  
**import** android.net.Uri;  
**import** android.os.Bundle;  
**import** android.provider.CalendarContract;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.Toast;  
  
**import** com.google.android.material.navigation.NavigationView;  
**import** com.google.android.material.tabs.TabLayout;  
  
**import** java.util.Calendar;  
  
**public class** MainActivity **extends** AppCompatActivity **implements** NavigationView.OnNavigationItemSelectedListener {  
 **private** DrawerLayout drawer;  
 View main;  
 TabLayout tabLayout;  
  
  
 ActionBarDrawerToggle toggle;  
 NavigationView navigationView;  
 ViewPager viewPager;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
  
  
  
 Toolbar toolbar = findViewById(R.id.toolbar);  
 setSupportActionBar(toolbar);  
 drawer = findViewById(R.id.drawer\_layout);  
  
 NavigationView navigationView = findViewById(R.id.nav\_view);  
 navigationView.setNavigationItemSelectedListener(**this**);  
  
 ActionBarDrawerToggle toggle = **new** ActionBarDrawerToggle(**this**, drawer, toolbar,  
 R.string.navigation\_drawer\_open, R.string.navigation\_drawer\_close);  
 drawer.addDrawerListener(toggle);  
 toggle.syncState();  
  
 getSupportActionBar().setTitle(**""**);  
  
 }  
 @Override  
 **public void** onBackPressed() {  
 **if** (drawer.isDrawerOpen(GravityCompat.START)) {  
 drawer.closeDrawer(GravityCompat.START);  
 } **else** {  
 **super**.onBackPressed();  
 }  
 }  
 @SuppressWarnings(**"StatementWithEmptyBody"**)  
 @Override  
 **public boolean** onNavigationItemSelected(@NonNull MenuItem item) {  
 **switch** (item.getItemId()) {  
  
 **case** R.id.winter:  
 getSupportFragmentManager().beginTransaction().replace(R.id.fragment\_container,  
 **new** winter\_season()).addToBackStack(**null**).commit();  
 **break**;  
  
 **case** R.id.summer:  
 getSupportFragmentManager().beginTransaction().replace(R.id.fragment\_container,  
 **new** summer\_season()).addToBackStack(**null**).commit();  
 **break**;  
  
 **case** R.id.rainy:  
 getSupportFragmentManager().beginTransaction().replace(R.id.fragment\_container,  
 **new** rainy\_season()).addToBackStack(**null**).commit();  
 **break**;  
  
 **case** R.id.nav\_exit:  
 Toast.makeText(**this**, **"Application Closed"**, Toast.LENGTH\_SHORT).show();  
 finish();  
 **break**;  
  
 **case** R.id.autumn:  
 getSupportFragmentManager().beginTransaction().replace(R.id.fragment\_container,  
 **new** autumn\_season()).addToBackStack(**null**).commit();  
 **break**;  
  
 **case** R.id.nav\_temp:  
 Intent intent = **new** Intent(**this**, temperature.**class**);  
 startActivity(intent);  
 **break**;  
  
 **case** R.id.nav\_event:  
 Intent calendarIntent = **new** Intent(Intent.ACTION\_INSERT, CalendarContract.Events.CONTENT\_URI);  
 Calendar beginTime = Calendar.getInstance();  
 beginTime.set(2021, 0, 23, 7, 30);  
 Calendar endTime = Calendar.getInstance();  
 endTime.set(2021, 0, 23, 10, 30);  
 calendarIntent.putExtra(CalendarContract.EXTRA\_EVENT\_BEGIN\_TIME, beginTime.getTimeInMillis());  
 calendarIntent.putExtra(CalendarContract.EXTRA\_EVENT\_END\_TIME, endTime.getTimeInMillis());  
 calendarIntent.putExtra(CalendarContract.Events.TITLE, **"Mobile Application"**);  
 calendarIntent.putExtra(CalendarContract.Events.EVENT\_LOCATION, **"GC"**);  
 startActivity(calendarIntent);  
 **return true**;  
 }  
 drawer.closeDrawer(GravityCompat.START);  
 **return true**;  
 }  
}

RAINY

**package** com.example.lab13;  
  
**import** android.os.Bundle;  
**import** androidx.fragment.app.Fragment;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** androidx.annotation.Nullable;  
**import** androidx.fragment.app.Fragment;  
**import** androidx.fragment.app.FragmentManager;  
**import** androidx.fragment.app.FragmentTransaction;  
  
**public class** rainy\_season **extends** Fragment {  
  
 TextView **textView**;  
 Button **button**;  
String **name1**;  
  
 **public** rainy\_season() {  
 *// Required empty public constructor* }  
  
  
 **public** rainy\_season(String name) {  
 **name1**=name;  
 }  
  
  
 @Override  
 **public** View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 *// Inflate the layout for this fragment* View view = inflater.inflate(R.layout.***fragment\_rainy\_season***, container, **false**);  
  
 **textView**=view.findViewById(R.id.***textview***);  
 **textView**.setText(**name1**);  
 **button** = view.findViewById(R.id.***button\_back***);  
 **button**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 summer\_season fragment =**new** summer\_season();  
 FragmentManager fragmentManager = getFragmentManager();  
 FragmentTransaction fragmentTransaction = fragmentManager.beginTransaction();  
 fragmentTransaction.replace(R.id.***fragment\_container***, fragment);  
 fragmentTransaction.commit();  
 }  
 });  
 **return** view;  
 }  
}

SUMMER  
**package** com.example.lab13;  
  
**import** android.os.Bundle;  
**import** androidx.fragment.app.Fragment;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
**import** androidx.annotation.Nullable;  
**import** androidx.fragment.app.Fragment;  
**import** androidx.fragment.app.FragmentManager;  
**import** androidx.fragment.app.FragmentTransaction;  
  
  
**public class** summer\_season **extends** Fragment {  
  
  
 EditText **editText**;  
 Button **button**;  
  
 @Override  
 **public** View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 *// Inflate the layout for this fragment* View view = inflater.inflate(R.layout.***fragment\_summer\_season***, container, **false**);  
  
 **editText**=view.findViewById(R.id.***stb1***);  
 **button**=view.findViewById(R.id.***sbt1***);  
 **button**.setOnClickListener(**new** View.OnClickListener() {  
@Override  
 **public void** onClick(View view) {  
 String name=**editText**.getText().toString().trim();  
 **if**(name.equals(**""**)){  
 Toast.*makeText*(getActivity(), **"Please fill the field"**, Toast.***LENGTH\_SHORT***).show();  
 }**else** {  
 rainy\_season fragment =**new** rainy\_season(name);  
 FragmentManager fragmentManager=getFragmentManager();  
 FragmentTransaction fragmentTransaction=fragmentManager.beginTransaction();  
 fragmentTransaction.replace(R.id.***fragment\_container***,fragment);  
 fragmentTransaction.commit();  
 }  
 }  
 });  
  
  
 **return** view;  
 }  
}

WINTER

**package** com.example.lab13;  
  
**import** android.os.Bundle;  
  
**import** androidx.fragment.app.Fragment;  
  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
  
*/\*\*  
 \* A simple {****@link*** *Fragment} subclass.  
 \* Use the {****@link*** *winter\_season#newInstance} factory method to  
 \* create an instance of this fragment.  
 \*/***public class** winter\_season **extends** Fragment {  
  
 *//* ***TODO: Rename parameter arguments, choose names that match*** *// the fragment initialization parameters, e.g. ARG\_ITEM\_NUMBER* **private static final** String ***ARG\_PARAM1*** = **"param1"**;  
 **private static final** String ***ARG\_PARAM2*** = **"param2"**;  
  
 *//* ***TODO: Rename and change types of parameters* private** String **mParam1**;  
 **private** String **mParam2**;  
  
 **public** winter\_season() {  
 *// 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 winter\_season.  
 \*/  
 //* ***TODO: Rename and change types and number of parameters* public static** winter\_season newInstance(String param1, String param2) {  
 winter\_season fragment = **new** winter\_season();  
 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* **return** inflater.inflate(R.layout.***fragment\_winter\_season***, container, **false**);  
 }  
}

SCREENSHOTS



