# Lab Exercise 08(b): Fragments Lifecycle

ActivityMain.java

package com.example.lab08;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.fragment.app.Fragment;  
import androidx.fragment.app.FragmentManager;  
import androidx.fragment.app.FragmentTransaction;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
  
 Button btn;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 btn = findViewById(R.id.*button*);  
 btn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 AddFragment(new BlankFragment());  
 }  
 });  
 }  
  
 private void AddFragment(Fragment fragment) {  
 FragmentManager fragManager = getSupportFragmentManager();  
 FragmentTransaction fraTransaction = fragManager.beginTransaction();  
 fraTransaction.replace(R.id.*frameLayout*, fragment);  
 fraTransaction.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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <FrameLayout  
 android:id="@+id/frameLayout"  
 android:layout\_width="412dp"  
 android:layout\_height="386dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.0">  
  
 </FrameLayout>  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="@string/add\_fragment"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/frameLayout" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

blank\_fragment.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"  
 android:background="#23b0bd"  
 tools:context=".BlankFragment">  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="45sp"  
 android:layout\_marginBottom="45sp"  
 android:fontFamily="serif"  
 android:text="@string/my\_new\_fragment"  
 android:textAlignment="center"  
 android:textColor="#1B5E20"  
 android:textSize="40sp"  
 android:textStyle="bold" />  
</FrameLayout>

Blank\_Fragment.java

package com.example.lab08;  
  
import android.content.Context;  
import android.os.Bundle;  
import android.util.Log;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
  
import androidx.fragment.app.Fragment;  
  
public class BlankFragment extends Fragment {  
  
 private static final String *FragmentName* = BlankFragment.class.getSimpleName();  
 private static final String *TAG* = *FragmentName*;  
  
 @Override  
 public void onAttach(Context context) {  
 super.onAttach(context);  
 Log.*i*(*TAG*, *FragmentName* + " onAttach Function");  
 }  
  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 Log.*i*(*TAG*, *FragmentName* + " onCreate Function");  
 }  
  
 @Override  
 public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 Log.*i*(*TAG*, *FragmentName* + " onCreateView Function");  
 *//Inflate the layout for this fragment* return inflater.inflate(R.layout.*blank\_fragment*, container, false);  
 }  
  
 @Override  
 public void onStart() {  
 super.onStart();  
 Log.*i*(*TAG*, *FragmentName* + " onStart Function");  
 }  
  
 @Override  
 public void onResume() {  
 super.onResume();  
 Log.*i*(*TAG*, *FragmentName* + " onResume Function");  
 }  
  
 @Override  
 public void onPause() {  
 super.onPause();  
 Log.*i*(*TAG*, *FragmentName* + " onPause Function");  
 }  
  
 @Override  
 public void onDestroy() {  
 super.onDestroy();  
 Log.*i*(*TAG*, *FragmentName* + " onDestroy Function");  
 }  
  
 @Override  
 public void onStop() {  
 super.onStop();  
 Log.*i*(*TAG*, *FragmentName* + " onStop Function");  
 }  
  
 @Override  
 public void onDetach() {  
 super.onDetach();  
 Log.*i*(*TAG*, *FragmentName* + " onDetach Function");  
 }  
}

OUTPUT

Graphical user interface, application, Teams

Description automatically generated with medium confidence

Shape, rectangle

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Background pattern

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Shape, rectangle

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Created a New Fragment

Shape, rectangle

Description automatically generated

Graphical user interface, text, application

Description automatically generated