



## Dynamic Fragments

The real power of fragments is realized when you add them dynamically to activities during runtime.

This enables you to create a customizable user interface for your application

Fragments must be created inside a secure `FragmentManager` block.

any view produced by the fragment is moved into an UI container of the host activity.

When you use the `replace` method to refresh the UI, the current view in the target area is removed and the new fragment is added to the activity's UI.

## Adding Fragments During runtime:

1. Obtain a reference to the FragmentManager, initiate a transaction

```
FragmentManager fragmentManager = getFragmentManager();  
FragmentTransaction fragmentTransaction = fragmentManager.beginTransaction();
```

2. Create an object of your fragment..

```
BlankFragment f1= new BlankFragment();
```

3. Place the fragment's view on the application's GUI.

```
fragmentTransaction.replace(android.R.id.content, f1);
```

4. Terminate the transaction.

```
fragmentTransaction.commit();
```

5. change the following import statements:

- in the fragment JAVA file

```
import android.app.Fragment;
```

instead of:

```
import android.support.v4.app.Fragment;
```

-In the Main Activity java file

```
import android.app.Activity;
```

instead of

```
import android.support.v7.app.AppCompatActivity;
```

---

### Fragment1: 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="#a5ccf4"  
    tools:context=".FragmentOne">  
  
    <!-- TODO: Update blank fragment layout -->  
    <TextView  
        android:layout_width="match_parent"  
        android:layout_height="match_parent"  
        android:text="@string/fragment_one" />  
  
</FrameLayout>
```

---

## Fragment1: Java

```
package com.example.itech_mgr.myapplication;

import android.os.Bundle;
import android.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;

/**
 * A simple {@link Fragment} subclass.
 */
public class FragmentOne extends Fragment {

    public FragmentOne() {
        // Required empty public constructor
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_fragment_one, container,
false);
    }

}
```

---

## Fragment2: 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="#bd9bcf"
    tools:context=".Fragmenttwo">

    <!-- TODO: Update blank fragment layout -->
    <TextView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:text="@string/fragment_two" />

</FrameLayout>
```

---

## Fragment2: Java

```
package com.example.itech_mgr.myapplication;

import android.os.Bundle;
import android.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
```

```
import android.view.ViewGroup;

/**
 * A simple {@link Fragment} subclass.
 */
public class Fragmenttwo extends Fragment {

    public Fragmenttwo() {
        // Required empty public constructor
    }

    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
                             Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_fragmenttwo, container, false);
    }
}
```

---

## String.XML

```
<resources>
    <string name="app_name">My Application</string>

    <!-- TODO: Remove or change this placeholder text -->
    <string name="fragment_one">Fragment One</string>
    <string name="fragment_two">Fragment Twooooo</string>

</resources>
```

---

## MainActivity: XML

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <EditText
        android:id="@+id/frag_id"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="0"
        android:ems="10"
        android:inputType="textPersonName"
        android:text="Fragment Number" />

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginTop="50dp"
        android:layout_weight="0"
        android:onClick="myfrag"
```

```
        android:text="call a fragment" />
</LinearLayout>
```

---

## MainActivity: Java

```
package com.example.itech_mgr.myapplication;

import android.app.Activity;
import android.app.FragmentManager;
import android.app.FragmentTransaction;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;

public class MainActivity extends Activity {
    EditText fragid;
    public int a=0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    public void myfrag(View view)
    {
        fragid=(EditText) findViewById(R.id.frag_id);
        FragmentManager fm = getFragmentManager();
        FragmentTransaction ft=fm.beginTransaction();
        a=Integer.parseInt( fragid.getText().toString());
        if(a==1)
        {
            FragmentOne f1=new FragmentOne();
            ft.replace(android.R.id.content, f1);
            ft.commit();
        }
        else if(a==2)
        {
            Fragmenttwo f2=new Fragmenttwo();
            ft.replace(android.R.id.content, f2);
            ft.commit();
        }
    }
}
```