Step 1 - Create 2 Fragments (right click app → New → Fragment → Fragment(Blank)

Step 2 - Include the fragments to the activity\_main.xml using <fragment> element.

Step 3 - Create Interface class (right click app → New → Java Class → Give name of the interface, change *Kind* from **class** to **interface**). Ensure that the interface is in the same package as the other java files.If it is outside move the interface into the package.

Step 4 - Make the MainActivity implement the interface and update the logic for communication in fragment1, activity and fragment2.

Interface name - Communicator.java

**package** com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview;

**public interface** Communicator {

**public void** respond(String i);

}

Activity\_main.xml

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

<**android.widget.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"**

**tools:context=".MainActivity"**

**android:orientation="vertical"**>

<**fragment**

**android:layout\_width="match\_parent"**

**android:layout\_height="250dp"**

**android:id="@+id/fragment1" android:name="com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview.Fragment1"**>

</**fragment**>

<**fragment**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:id="@+id/fragment2"**

**android:name="com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview.Fragment2"**>

</**fragment**>

</**android.widget.LinearLayout**>

MainActvity.java

**package** com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview;

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

**import** android.os.Bundle;

**public class** MainActivity **extends** AppCompatActivity **implements** Communicator {

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

}

// implementing the method defined in the interface

@Override

**public void** respond(String i) {

android.support.v4.app.FragmentManager fm=

getSupportFragmentManager();

Fragment2 f2= (Fragment2)fm.

findFragmentById(R.id.***fragment2***);

f2.changedata(i);

}

}

Fragment\_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="@android:color/holo\_blue\_light"**

**tools:context=".Fragment1"**>

<**Button**

**android:id="@+id/btn"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_margin="40dp"**

**android:layout\_gravity="center\_horizontal"**

**android:text="counter"** />

</**FrameLayout**>

Fragment1.java

**package** com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview;

**import** android.content.Context;

**import** android.net.Uri;

**import** android.os.Bundle;

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

**import** android.view.LayoutInflater;

**import** android.view.View;

**import** android.view.ViewGroup;

**import** android.widget.Button;

**public class** Fragment1 **extends** Fragment **implements** View.OnClickListener{

**int count**=0; // int to maintain the no of button clicks

Button **bt**; //object for button

Communicator **comm**; //object for interface to pass the message to the activity

@Override

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

*// Inflate the layout for this fragment*

**return** inflater.inflate(R.layout.***fragment\_fragment1***, container, **false**);

}

@Override

**public void** onActivityCreated(Bundle savedInstanceState) {

**super**.onActivityCreated(savedInstanceState);

//Get access to the activity object to pass the message

**comm**= (Communicator) getActivity();

**bt**=(Button)getActivity().findViewById(R.id.***btn***);

**bt**.setOnClickListener(**this**);

}

@Override

**public void** onClick(View v) {

// on button click increment the counter and pass the message to the activity using the //method defined in the interface

**count**++;

**comm**.respond(**"The button is clicked "**+ **count**+**" times"**);

}

}

Fragment\_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="@android:color/holo\_green\_light"**

**tools:context=".Fragment2"**>

<**TextView**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**android:gravity="center"**

**android:textSize="20sp"**

**android:textStyle="bold"**

**android:textColor="@color/colorAccent"**

**android:id="@+id/tv"**

**android:text="Count"** />

</**FrameLayout**>

Fragment2.java

**package** com.example.jevitha.a18\_3\_fragment\_communication\_button\_textview;

**import** android.content.Context;

**import** android.net.Uri;

**import** android.os.Bundle;

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

**import** android.view.LayoutInflater;

**import** android.view.View;

**import** android.view.ViewGroup;

**import** android.widget.TextView;

**public class** Fragment2 **extends** Fragment {

TextView **txt**; // object to hold the text view

@Override

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

*// Inflate the layout for this fragment*

**return** inflater.inflate(R.layout.***fragment\_fragment2***, container, **false**);

}

/\* This method we discussed in class. But having the logic to get the activity inside changedata method also works.

@Override

**public void** onActivityCreated( Bundle savedInstanceState) {

**super**.onActivityCreated(savedInstanceState);

// get access to the textview object

**txt**=(TextView)getActivity().findViewById(R.id.***tv***);

}\*/

// method to accept the message from the activity and update the UI

**public void** changedata(String i)

{

// get access to the textview object

**txt**=(TextView)getActivity().findViewById(R.id.***tv***);

**txt**.setText(i);

}

}