

IT2417 - Mobile Applications Development

Lab Session 09



Lab1. Fragments

1. Start a new project with blank activity
2. Goto `MainActivity.java` and change the code as given bellow.

```
import android.app.Activity;
import android.os.Bundle;
import android.app.FragmentManager;
import android.app.FragmentTransaction;
import android.content.res.Configuration;
public class MainActivity extends Activity
{

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Configuration config = getResources().getConfiguration();
        FragmentManager fragmentManager = getFragmentManager();
        FragmentTransaction fragmentTransaction =
fragmentManager.beginTransaction();

        if (config.orientation == Configuration.ORIENTATION_LANDSCAPE)
        {
            LM_Fragement ls_fragment = new LM_Fragement();
            fragmentTransaction.replace(android.R.id.content, ls_fragment);
        }
        else
        {
            PM_Fragement pm_fragment = new PM_Fragement();
            fragmentTransaction.replace(android.R.id.content, pm_fragment);
        }
        fragmentTransaction.commit();
    }

}
```

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3. Go to activity_main.xml and change the layout as follows

```
<RelativeLayout 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:paddingLeft="@dimen/activity_horizontal_margin"
    android:paddingRight="@dimen/activity_horizontal_margin"
    android:paddingTop="@dimen/activity_vertical_margin"
    android:paddingBottom="@dimen/activity_vertical_margin"
    tools:context=".MainActivity">

    <fragment
        android:name="com.example.pc.tstfrag.LM_Fragement"
        android:id="@+id/lm_fragment"
        android:layout_weight="1"
        android:layout_width="1dp"
        android:layout_height="200dp"
        tools:layout="@layout/lm_fragement" />
    <fragment

        android:id="@+id/pm_fragment"
        android:layout_weight="2"
        android:layout_width="1dp"
        android:layout_height="200dp"
        android:name="com.example.pc.tstfrag.PM_Fragement"
        tools:layout="@layout/pm_fragment" />
</RelativeLayout>
```

4. Add new frgment file LM_Fragement.java and edit the code as follows

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

public class LM_Fragement extends Fragment
{
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState)
    {
        return inflater.inflate(R.layout.lm_fragement, container, false);
    }
}
```

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5. Add new fragment file PM_Fragment.java and edit the code as follows

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

public class PM_Fragment extends Fragment {
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {
        return inflater.inflate(R.layout.pm_fragment, container, false);
    }
}
```

6. Add new layout file pm_fragment.xml and edit the code as follows

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="horizontal"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:background="#666666">
    <TextView
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="@string/portrait_message"
        android:textColor="#000000"
        android:textSize="20px" />
</LinearLayout>
```

7. Add new layout file lm_fragment.xml and edit the code as follows

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="horizontal"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:background="#666666">
    <TextView
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="@string/portrait_message"
        android:textColor="#000000"
        android:textSize="20px" />
</LinearLayout>
```

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8. Edit the string.xml with following code

```
<string name="landscape_message">This is Landscape mode fragment</string>
<string name="portrait_message">This is Portrait mode fragment</string>
```

9. Build and run the App. You will get following outputs for Landscape and portrait orientations.

