Appendix_C

Source code

FirstFragment.java

```java
package com.isb.mateoceballos.computerscienceinternalassesment;

import android.app.Fragment;
import android.content.Context;
import android.os.Bundle;
import android.support.annotation.Nullable;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
import android.widget.Button;
import android.widget.Toast;

import java.io.BufferedReader;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.InputStreamReader;
//import android.content.Context;


public class FirstFragment extends Fragment{
    View myView;

    Button plusbtn1, minusbtn1, plusbtn2, minusbtn2, savebtn, loadbtn;
    TextView textView1, textView2, displayVals;

    static int Item1;
    static int Item2;

    String FileName;
    String it1;
    String it2;

    @Nullable
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle
savedInstanceState) {
        myView = inflater.inflate(R.layout.first_objective, container, false);

        plusbtn1 = (Button)myView.findViewById(R.id.plsubtn1);
        plusbtn2 = (Button)myView.findViewById(R.id.plusbtn1);
        minusbtn1 = (Button)myView.findViewById(R.id.minusbtn1);
        minusbtn2 = (Button)myView.findViewById(R.id.minusbtn2);

        savebtn = (Button)myView.findViewById(R.id.savebtn);
        loadbtn = (Button)myView.findViewById(R.id.loadbtn);

        textView1 = (TextView)myView.findViewById(R.id.textView1);
        textView2 = (TextView)myView.findViewById(R.id.textView2);
```

```
        displayVals = (TextView)myView.findViewById(R.id.displayVals);


        Item1 = 0;
        Item2 = 0;

        plusbtn1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Item1++;
                textView1.setText(Integer.toString(Item1));
            }
        });
        plusbtn2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Item2++;
                textView2.setText(Integer.toString(Item2));


            }
        });
        minusbtn1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(Item1 <= 0) {
                    Item1 = 0;
                    textView1.setText(Integer.toString(Item1));
                } else {
                    Item1--;
                    textView1.setText(Integer.toString(Item1));
                }
            }
        });
        minusbtn2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if(Item2 <= 0) {
                    Item2 = 0;
                    textView2.setText(Integer.toString(Item2));
                } else {
                    Item2--;
                    textView2.setText(Integer.toString(Item2));
                }


            }
        });
        savebtn.setOnClickListener(new View.OnClickListener() {
                @Override
                public void onClick(View v) {
                    FileName = "Obj1vals";
                    it1 = textView1.getText().toString()+"\n";
                    it2 = textView2.getText().toString()+"\n";
                    try {
                        FileOutputStream fileOutputStream =
getActivity().openFileOutput(FileName, Context.MODE_PRIVATE);;
                        fileOutputStream.write(it1.getBytes());
                        fileOutputStream.write(it2.getBytes());
                        fileOutputStream.close();
                        Toast.makeText(getActivity(), "Text saved to " + FileName,
Toast.LENGTH_LONG).show();

                        textView1.setText("0");
```

```java
                    textView2.setText("0");

                } catch (FileNotFoundException e) {
                    e.printStackTrace();
                } catch (IOException e) {
                    e.printStackTrace();
                }
            }
        });

    loadbtn.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            String Message;
            try {
                FileInputStream fileInputStream =
getActivity().openFileInput(FileName);
                InputStreamReader inputStreamReader = new
InputStreamReader(fileInputStream);
                BufferedReader bufferedReader = new
BufferedReader(inputStreamReader);
                StringBuffer stringBuffer = new StringBuffer();
                while((Message=bufferedReader.readLine()) !=null ){
                    stringBuffer.append(Message + "\n");
                }
                displayVals.setText(stringBuffer.toString());
            } catch (FileNotFoundException e) {
                e.printStackTrace();
            } catch (IOException e) {
                e.printStackTrace();
            }
        }
    });


    return myView;


    }
}
```

SecondFragment.java

```java
package com.isb.mateoceballos.computerscienceinternalassesment;

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

/**
 * Created by miguelceballosoldmac on 26/05/16.
 */
public class SecondFragment extends Fragment {

    View myView;

    @Nullable
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle
savedInstanceState) {
        myView = inflater.inflate(R.layout.second_objective, container, false);
        return myView;
    }

}
```

ThirdFragment.java

```java
package com.isb.mateoceballos.computerscienceinternalassesment;

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

/**
 * Created by miguelceballosoldmac on 26/05/16.
 */
public class ThirdFragment extends Fragment {

    View myView;

    @Nullable
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle
savedInstanceState) {
        myView = inflater.inflate(R.layout.third_objective, container, false);
        return myView;
    }

}
```

FirstObjective.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent" android:layout_height="match_parent">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="ITEM1"
        android:id="@+id/textView3"
        android:layout_marginTop="77dp"
        android:layout_marginLeft="26dp"
        android:layout_marginStart="26dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="ITEM2"
        android:id="@+id/textView4"
        android:layout_below="@+id/textView3"
        android:layout_alignLeft="@+id/textView3"
        android:layout_alignStart="@+id/textView3"
        android:layout_marginTop="40dp" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        android:id="@+id/plsubtn1"
        android:layout_above="@+id/textView4"
        android:layout_centerHorizontal="true" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="-"
        android:id="@+id/minusbtn1"
        android:layout_alignTop="@+id/plsubtn1"
        android:layout_toRightOf="@+id/plsubtn1"
        android:layout_toEndOf="@+id/plsubtn1" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="+"
        android:id="@+id/plusbtn1"
        android:layout_alignBottom="@+id/textView4"
        android:layout_centerHorizontal="true" />

    <Button
        style="?android:attr/buttonStyleSmall"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
```

```xml
        android:text="-"
        android:id="@+id/minusbtn2"
        android:layout_alignTop="@+id/plusbtn1"
        android:layout_alignLeft="@+id/minusbtn1"
        android:layout_alignStart="@+id/minusbtn1" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="0"
        android:id="@+id/textView2"
        android:layout_marginRight="38dp"
        android:layout_marginEnd="38dp"
        android:layout_alignBottom="@+id/minusbtn2"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="0"
        android:id="@+id/textView1"
        android:layout_alignBottom="@+id/minusbtn1"
        android:layout_alignLeft="@+id/textView2"
        android:layout_alignStart="@+id/textView2" />

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Values appear here"
        android:id="@+id/displayVals"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:layout_below="@+id/savebtn" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Save"
        android:id="@+id/savebtn"
        android:layout_alignTop="@+id/loadbtn"
        android:layout_toRightOf="@+id/textView4"
        android:layout_toEndOf="@+id/textView4" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Load"
        android:id="@+id/loadbtn"
        android:layout_centerVertical="true"
        android:layout_toRightOf="@+id/savebtn"
        android:layout_toEndOf="@+id/savebtn" />

</RelativeLayout>
```

SecondObjective.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent" android:layout_height="match_parent">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Second Layout"
        android:id="@+id/textView2"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="171dp" />
</RelativeLayout>
```

ThirdObjective.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent" android:layout_height="match_parent">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceLarge"
        android:text="Third Layout"
        android:id="@+id/textView2"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="171dp" />
</RelativeLayout>
```

Activity_main_drawer.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">

    <group android:checkableBehavior="single">
        <item
            android:id="@+id/nav_first_objective"
            android:title="First Objective" />
        <item
            android:id="@+id/nav_second_objective"
            android:title="Second Objective" />
        <item
            android:id="@+id/nav_third_objective"
            android:title="Third Objective" />
    </group>

</menu>
```