Student Lab Activity Report

Course Code:	223 CSM-3
Course Name:	Advanced Object-Oriented Programming
Section Number:	6465
Deadline	31 / 3 / 2021
Student ID:	441814250
Student Name:	Omar Adel Badawy Ali

Activity 6: Student Info (GUI-2)

- Write a Java program that creates "student info" as shown in the following interface.

When **New** JButton is clicked all the data from the components must be cleared.
When **Save** JButton is clicked all the data of the components must be displayed on the empty JTextArea in a proper format.
When **Cancel** JButton is clicked program should be exited (uses System.exit(0);)
NOTE: Use a combination of layouts to get the desired outputs (BorderLayout, GridLayout, and FlowLayout).

Points out of 10	
Date	23 / 3 / 2021
Instructor	Khalid Alasiri

Your Answer:

Program When opening

When filling textfields and selecting the checkbox and choosing from combobox

When you clicked Save button

Department :

IT

441814250   Omar   Adel   22   Male   OOP   Operating System   IT

When you clicked <u>new</u> button

checkbox   — □ ✕

ID no. :   Course :

First Name :   ☐ OOP

Last Name :   ☐ Date Structure

Age :   ☐ Operating System

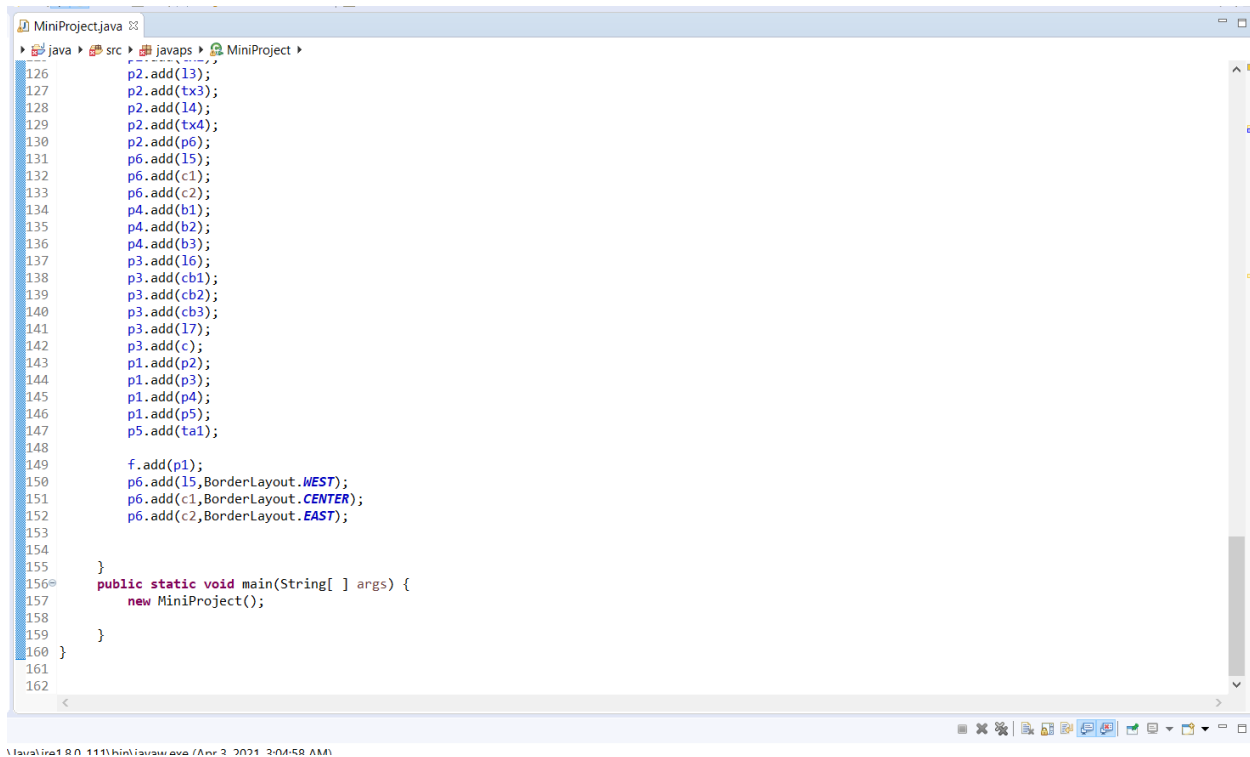   Department :

Gender :   ⦿ Male   ○ Female

                                                                             CS

         New   Save   Cancel

Code photos

```java
package javaps;

import javax.swing.*;

class MiniProject {
    private JFrame f;
    private JPanel p1 , p2 ,p3, p4,p5,p6;
    private JLabel l1 , l2 , l3 , l4 , l5 , l6 , l7 ;
    private TextField tx1 , tx2 , tx3, tx4 ;
    private CheckboxGroup cg;
    private JButton b1 , b2 , b3 ;
    private Checkbox cb1 , cb2 , cb3 ;
    private JComboBox c;
    private JTextArea ta1 ;

    MiniProject(){
        f = new JFrame( );
        f.setVisible(true);
        f.setSize(500,500);
        f.setTitle("checkbox");
        f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        p1 =new JPanel(new GridLayout(2,2) );
        p2 =new JPanel(new GridLayout(5,2) );
        p3 =new JPanel(new GridLayout(6,1) );
        p4 =new JPanel( );
        p5 =new JPanel();
        p6 =new JPanel(new GridLayout(1,3) );

        l1=new JLabel("  ID no. : ");
        l2=new JLabel("  First Name : ");
        l3=new JLabel("  Last Name : ");
        l4=new JLabel("  Age : ");
        l5=new JLabel("  Gender :   ");
        l6=new JLabel("  Course : ");
```

```java
        l6=new JLabel("  Course : ");
        l7=new JLabel("   Department : ");
        tx1 = new TextField(5);
        tx2 = new TextField(5);
        tx3 = new TextField(5);
        tx4 = new TextField(5);
        cg = new CheckboxGroup( );
        Checkbox c1 = new Checkbox("Male",cg,true);
        Checkbox c2 = new Checkbox("Female",cg,false);
        b1 = new JButton( "New");
        b2 = new JButton("Save" );
        b3 = new JButton( "Cancel");
        cb1 = new Checkbox("OOP");
        cb2 = new Checkbox("Date Structure");
        cb3 = new Checkbox("Operating System");
        String[] items={"CS","IS","IT","CE"};
        c = new JComboBox (items);
        ta1 = new JTextArea(20,85);
        b1.addActionListener(new ActionListener(){
            public void actionPerformed(ActionEvent e)
            {
                tx1.getSelectedText().toString();
                tx1.setText("");
                tx2.getSelectedText().toString();
                tx2.setText("");
                tx3.getSelectedText().toString();
                tx3.setText("");
                tx4.getSelectedText().toString();
                tx4.setText("");
                cb1.setState(false);
                cb2.setState(false);
                cb3.setState(false);
                c1.setState(true);


            c.setSelectedItem("CS");
            ta1.setText("");
```

```java
 78                });
 79        b2.addActionListener(new ActionListener(){
 80            public void actionPerformed(ActionEvent e)
 81
 82            {
 83                String n = tx1.getText().toString();
 84                String s = tx2.getText().toString();
 85
 86                String m = tx3.getText().toString();
 87                String l = tx4.getText().toString();
 88
 89                 ta1.append("" + n+ "    "+s+"      "+m+"      "+l+"        ");
 90
 91                 ta1.append(cg.getSelectedCheckbox().getLabel().toString()+ "\t");
 92
 93
 94                    if(cb1.getState())
 95                    {
 96                        ta1.append(cb1.getLabel().toString() + "\t");
 97                    }
 98
 99                    if(cb2.getState())
100                    {
101                        ta1.append(cb2.getLabel().toString() + "\t");
102
103                    }
104
105                    if(cb3.getState())
106                    {
107                        ta1.append(cb3.getLabel().toString() + "\t");
108
109                    }
110
111                    ta1.append(c.getSelectedItem().toString());
112
113                }
114            });
```

```java
108
109                    }
110
111                    ta1.append(c.getSelectedItem().toString());
112
113                }
114            });
115
116
117        b3.addActionListener(new ActionListener(){
118            public void actionPerformed(ActionEvent e)
119            {System.exit(0); }
120            });
121
122        p2.add(l1);
123        p2.add(tx1);
124        p2.add(l2);
125        p2.add(tx2);
126        p2.add(l3);
127        p2.add(tx3);
128        p2.add(l4);
129        p2.add(tx4);
130        p2.add(p6);
131        p6.add(l5);
132        p6.add(c1);
133        p6.add(c2);
134        p4.add(b1);
135        p4.add(b2);
136        p4.add(b3);
137        p3.add(l6);
138        p3.add(cb1);
139        p3.add(cb2);
140        p3.add(cb3);
141        p3.add(l7);
142        p3.add(c);
143        p1.add(p2);
144        p1.add(p3);
145        p1.add(p4);
```

```
126            p2.add(l3);
127            p2.add(tx3);
128            p2.add(l4);
129            p2.add(tx4);
130            p2.add(p6);
131            p6.add(l5);
132            p6.add(c1);
133            p6.add(c2);
134            p4.add(b1);
135            p4.add(b2);
136            p4.add(b3);
137            p3.add(l6);
138            p3.add(cb1);
139            p3.add(cb2);
140            p3.add(cb3);
141            p3.add(l7);
142            p3.add(c);
143            p1.add(p2);
144            p1.add(p3);
145            p1.add(p4);
146            p1.add(p5);
147            p5.add(ta1);
148
149            f.add(p1);
150            p6.add(l5,BorderLayout.WEST);
151            p6.add(c1,BorderLayout.CENTER);
152            p6.add(c2,BorderLayout.EAST);
153
154
155        }
156⊝        public static void main(String[ ] args) {
157            new MiniProject();
158
159        }
160 }
161
162
```

\Java\jre1.8.0_111\bin\javaw.exe (Apr 3, 2021, 3:04:58 AM)

The code

```java
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;


class MiniProject {
        private JFrame f;
        private JPanel p1 , p2 ,p3, p4,p5,p6;
        private JLabel l1 , l2 , l3 , l4 , l5 , l6 , l7 ;
        private TextField tx1 , tx2 , tx3, tx4 ;
        private CheckboxGroup cg;
        private JButton b1 , b2 , b3 ;
        private Checkbox cb1 , cb2 , cb3 ;
```

```java
private JComboBox c;
private JTextArea ta1 ;


MiniProject(){
    f = new JFrame( );
    f.setVisible(true);
    f.setSize(500,500);
    f.setTitle("checkbox");
    f.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

    p1 =new JPanel(new GridLayout(2,2) );
    p2 =new JPanel(new GridLayout(5,2) );
    p3 =new JPanel(new GridLayout(6,1) );
    p4 =new JPanel( );
    p5 =new JPanel();
    p6 =new JPanel(new GridLayout(1,3) );

    l1=new JLabel("  ID no. : ");
    l2=new JLabel("  First Name : ");
    l3=new JLabel("  Last Name : ");
    l4=new JLabel("  Age : ");
    l5=new JLabel("  Gender :  ");
    l6=new JLabel("  Course : ");
    l7=new JLabel("  Department : ");
    tx1 = new TextField(5);
    tx2 = new TextField(5);
    tx3 = new TextField(5);
    tx4 = new TextField(5);
    cg = new CheckboxGroup( );
    Checkbox c1 = new Checkbox("Male",cg,true);
    Checkbox c2 = new Checkbox("Female",cg,false);
    b1 = new JButton( "New");
    b2 = new JButton("Save" );
    b3 = new JButton( "Cancel");
```

```java
cb1 = new Checkbox("OOP");
cb2 = new Checkbox("Date Structure");
cb3 = new Checkbox("Operating System");
String[] items={"CS","IS","IT","CE"};
c = new JComboBox (items);
ta1 = new JTextArea(20,85);
b1.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e)
        {
                tx1.getSelectedText().toString();
                tx1.setText("");
                tx2.getSelectedText().toString();
                tx2.setText("");
                tx3.getSelectedText().toString();
                tx3.setText("");
                tx4.getSelectedText().toString();
                tx4.setText("");
                cb1.setState(false);
                cb2.setState(false);
                cb3.setState(false);
                c1.setState(true);


c.setSelectedItem("CS");
    ta1.setText("");


        }
        });
    b2.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e)

        {
                String n = tx1.getText().toString();
                String s = tx2.getText().toString();
```

```java
                    String m = tx3.getText().toString();
                    String l = tx4.getText().toString();

                        ta1.append("" + n+ "   "+s+"      "+m+"      "+l+"       ");


ta1.append(cg.getSelectedCheckbox().getLabel().toString()+ "\t");


                        if(cb1.getState())
                        {
                                ta1.append(cb1.getLabel().toString() +
"\t");

                        }

                        if(cb2.getState())
                        {
                                ta1.append(cb2.getLabel().toString() +
"\t");

                        }

                        if(cb3.getState())
                        {
                                ta1.append(cb3.getLabel().toString() +
"\t");

                        }

                        ta1.append(c.getSelectedItem().toString());

                }
                });
```

```java
b3.addActionListener(new ActionListener(){
     public void actionPerformed(ActionEvent e)
     {System.exit(0); }
     });

p2.add(l1);
p2.add(tx1);
p2.add(l2);
p2.add(tx2);
p2.add(l3);
p2.add(tx3);
p2.add(l4);
p2.add(tx4);
p2.add(p6);
p6.add(l5);
p6.add(c1);
p6.add(c2);
p4.add(b1);
p4.add(b2);
p4.add(b3);
p3.add(l6);
p3.add(cb1);
p3.add(cb2);
p3.add(cb3);
p3.add(l7);
p3.add(c);
p1.add(p2);
p1.add(p3);
p1.add(p4);
p1.add(p5);
p5.add(ta1);

f.add(p1);
p6.add(l5,BorderLayout.WEST);
p6.add(c1,BorderLayout.CENTER);
```

```java
                p6.add(c2,BorderLayout.EAST);


        }
        public static void main(String[ ] args) {
                new MiniProject();

        }
}
```