

STUDENT MANAGEMENT SYSTEM

(VERSION 2)

Programming Project 2022



JANUARY 7, 2022 **ABDELRAHMAN RASLAN – REWAN SALAH**20221460102 - 20221447143

1. Classes:

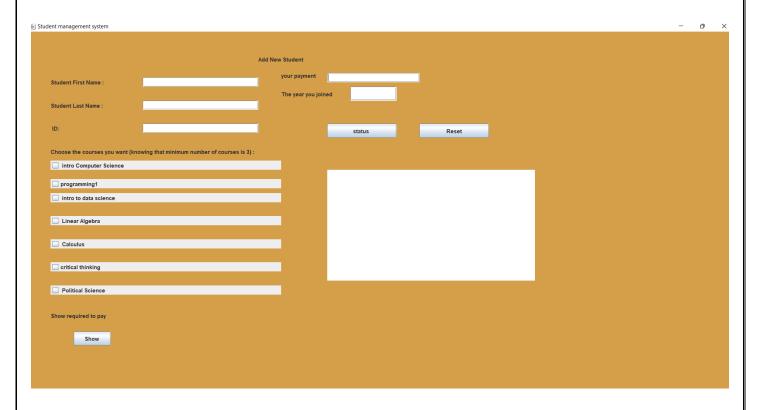
AddStudent

2. Libraries:

```
java.awt.event;*.
javax.swing;*.
javax.swing.JFrame;
java.awt.Color;*.
java.awt;*.
java.io.*;
```

3. Method:

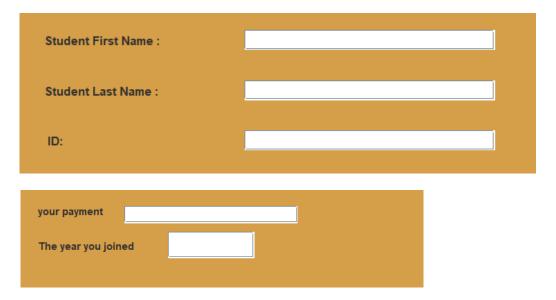
1) <u>Interface</u>



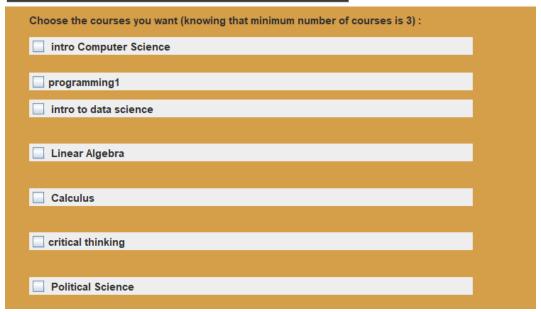
Main

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

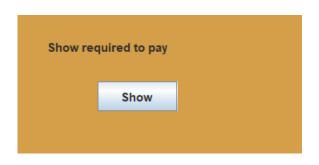
• Enter personal information.

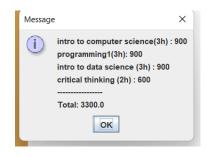


Chosess to Check from 7 courses.

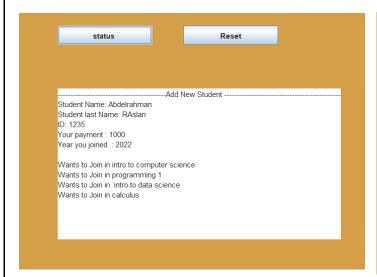


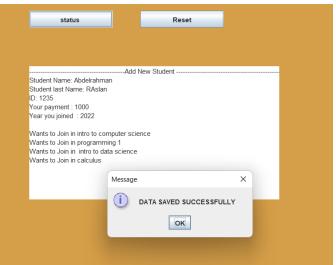
• Show Balance in message when click on button (show)



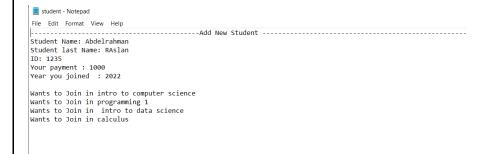


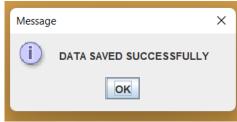
• Show Statue of Student





• Add information to text file





2) <u>Code</u>

```
Project_GUI_v2;
java.awt.event.*;
JLabel 11, 12, 13, 14, 15, 16, 17,18;
JTextField t1, t2, t3, t4,t5;
              public void keyTyped(KeyEvent e) {
   if (t3.getText().length() >= 4 )
```

```
t5- new ofextricid(),
t5.setBounds(700, 120, 100, 30);
t5.addKeyListener(new KeyAdapter() {
    public void keyTyped(KeyEvent e) {
        if (t5.getText().length() >= 4 )
```

1. Declaration of Classes in Java Swing

```
JLabel l1, l2, l3, l4, l5, l6, l7,l8;
JTextField t1, t2, t3, t4,t5;
JCheckBox checkbox1, checkbox2, checkbox3, checkbox4, checkbox5, checkbox6, checkbox7;
JButton b;
JTextArea area2;
JFrame frame = new JFrame( title: "Student management system");
```

- The JLablel class is used to create a label
- The JTextField class to create text field
- The JCheckBox class is used to create a checkbox
- The JButton class to used button
- The JTextArea class to used text area
- The JFrame class to used create frame named by (Student management System)

2. Add Classes to frame by setting Location

```
AddStudent() {

frame.setSize( width: 1500, height: 1500);

frame.setLayout(null);

l1 = new JLabel( text "Add New Student ");

l1.setBounds( x: 500, y: 50, width: 250, height: 20);

frame.add(l1);

l2 = new JLabel( text "Student First Name :");

l2.setBounds( x: 50, y: 100, width: 250, height: 20);

frame.add(l2);

t1 = new JTextField();

t1.setBounds( x: 250, y: 100, width: 250, height: 20);

frame.add(t1);

l3 = new JLabel( text "Student Last Name :");

l3.setBounds( x: 50, y: 150, width: 250, height: 20);

frame.add(l3);

t2 = new JTextField();

t2.setBounds( x: 250, y: 150, width: 250, height: 20);

frame.add(t2);

l5 = new JLabel( text " ID:");

l5.setBounds( x: 50, y: 200, width: 250, height: 20);

frame.add(l5);
```

3. Make text field max number entered is 4 number

```
t3 = new JTextField();
t3.setBounds(x: 250, y: 200, width: 250, height: 20);
t3.addKeyListener(new KeyAdapter() {
    public void keyTyped(KeyEvent e) {
        if (t3.getText().length() >= 4 )
            e.consume();
    }
});
```

4. Add checkbox to the frame

```
checkbox1 = new JCheckBox( text: " intro Computer Science ");
checkbox1.setBounds( x: 50, y: 280, width: 500, height: 20);
frame.add(checkbox1);
checkbox2 = new JCheckBox( text: "programming1");
checkbox2.setBounds( x: 50, y: 320, width: 500, height: 20);
frame.add(checkbox2);
checkbox3 = new JCheckBox( text: " intro to data science");
checkbox3.setBounds( x: 50, y: 350, width: 500, height: 20);
frame.add(checkbox3);
checkbox4 = new JCheckBox( text: " Linear Algebra");
checkbox4.setBounds( x: 50, y: 400, width: 500, height: 20);
frame.add(checkbox4);
checkbox5 = new JCheckBox( text: " Calculus ");
checkbox5.setBounds( x: 50, y: 450, width: 500, height: 20);
frame.add(checkbox5);
checkbox6 = new JCheckBox( text: "critical thinking ");
checkbox6.setBounds( x: 50, y: 500, width: 500, height: 20);
frame.add(checkbox6);
checkbox7 = new JCheckBox( text: " Political Science ");
checkbox7.setBounds( x: 50, y: 550, width: 500, height: 20);
frame.add(checkbox7);
```

5. Add a button with action show total of courses

```
b = new JButton( text: "Show ");
b.setBounds( x: 100, y: 650, width: 80, height: 30);
b.addActionListener( I: this);
frame.add(b);
```

6. Add text area

```
area2 = new JTextArea();
area2.setBounds( x: 650, y: 300, width: 450, height: 240);
frame.add(area2);
```

7. Add button show with action to show all typed text and checked box in text area 2 and save them to text file

```
final JButton showStatus = new JButton( text: "status ");
frame.add(showStatus);
showStatus.setBounds( x: 650, y: 200, width: 150, height: 30);
```

8. Add button with function reset to delete all information written in text area and text fields

9. Add color to frame and make a frame visible & add end the program end run when the user used close tab

```
Color c = new Color( r. 213, g. 158, b. 72);

frame.getContentPane().setBackground(c);

frame.setVisible(true);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
```

We hope that you will like the program

Source Code:

https://drive.google.com/drive/folders/1R4t46cRzA YkyXw6BIdb6EyFpOY7olGSR?usp=sharing

Thank You

