

# GUI (1A)

---

Copyright (c) 2011 Young W. Lim.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

Please send corrections (or suggestions) to [youngwlim@hotmail.com](mailto:youngwlim@hotmail.com).

This document was produced by using OpenOffice.

# Skeleton

```
class MyFrame extends JFrame {
    MyFrame () {
        setSize(500, 300);
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setTitle("111 222 333");

        setLayout(new BorderLayout());
```

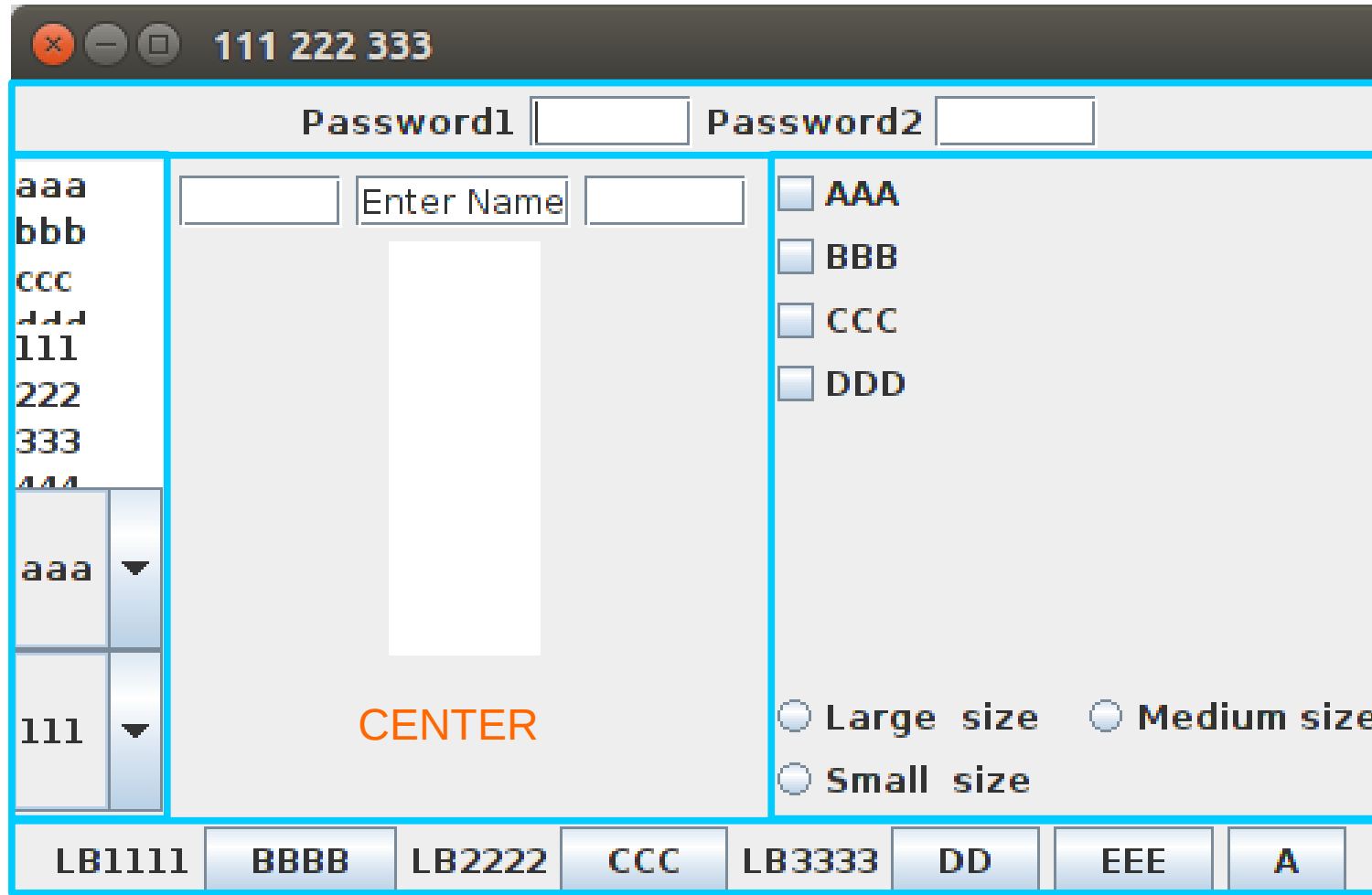
```
        this.add(p_north, BorderLayout.NORTH);
        this.add(p_west,  BorderLayout.WEST);
        this.add(p_east,  BorderLayout.EAST);
        this.add(p_south, BorderLayout.SOUTH);
        this.add(p_center, BorderLayout.CENTER);
```

```
        setVisible(true);
    }
}
```

```
public class TestFrame2 {

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

# Result



NORTH

WEST

EAST

CENTER

SOUTH

# NORTH

```
// NORTH -----  
JLabel pf1lb = new JLabel("Password1");  
JLabel pf2lb = new JLabel("Password2");  
  
JPasswordField pf1 = new JPasswordField(5);  
JPasswordField pf2 = new JPasswordField(5);  
  
JPanel p_north = new JPanel();  
  
p_north.setLayout(new FlowLayout());  
p_north.add(pf1lb);  
p_north.add(pf1);  
p_north.add(pf2lb);  
p_north.add(pf2);
```

# WEST

```
// WEST -----  
String [] names = new String[5];  
names[0] = "aaa";  
names[1] = "bbb";  
names[2] = "ccc";  
names[3] = "ddd";  
names[4] = "eee";  
  
String [] numbers = {"111", "222", "333", "444", "555"};  
  
JList ls1 = new JList(names);  
JList ls2 = new JList(numbers);  
  
JComboBox cbx1 = new JComboBox(names);  
JComboBox cbx2 = new JComboBox(numbers);  
  
JPanel p_west = new JPanel();  
  
p_west.setLayout(new GridLayout(0, 1));  
p_west.add(ls1);  
p_west.add(ls2);  
p_west.add(cbx1);  
p_west.add(cbx2);
```

```
// EAST -----
JCheckBox cb1 = new JCheckBox("AAA");
JCheckBox cb2 = new JCheckBox("BBB");
JCheckBox cb3 = new JCheckBox("CCC");
JCheckBox cb4 = new JCheckBox("DDD");

JRadioButton rb1 = new JRadioButton("Large size");
JRadioButton rb2 = new JRadioButton("Medium size");
JRadioButton rb3 = new JRadioButton("Small size");

ButtonGroup bg = new ButtonGroup();
bg.add(rb1); bg.add(rb2); bg.add(rb3);

// pn1 : checkbox 1, 2, 3, 4 in GridLayout
// pn2 : radiobutton 1, 2, 3 in BoxLayout
JPanel pn1 = new JPanel();
JPanel pn2 = new JPanel();

pn2.setLayout(new GridLayout(2,2));
pn1.setLayout(new BoxLayout(pn1, BoxLayout.Y_AXIS));

pn1.add(cb1); pn1.add(cb2); pn1.add(cb3); pn1.add(cb4);
pn2.add(rb1); pn2.add(rb2); pn2.add(rb3);

JPanel p_east = new JPanel();

p_east.setLayout(new BorderLayout());
p_east.add(pn1, BorderLayout.NORTH);
p_east.add(pn2, BorderLayout.SOUTH);
```

# SOUTH

```
// SOUTH -----  
JButton b1 = new JButton("BBBB");  
JButton b2 = new JButton("CCC");  
JButton b3 = new JButton("DD");  
JButton b4 = new JButton("EEE");  
JButton b5 = new JButton("A");  
  
JLabel lb1 = new JLabel("LB1111");  
JLabel lb2 = new JLabel("LB2222");  
JLabel lb3 = new JLabel("LB3333");  
  
JPanel p_south = new JPanel();  
  
p_south.add(lb1);  
p_south.add(b1);  
p_south.add(lb2);  
p_south.add(b2);  
p_south.add(lb3);  
p_south.add(b3);  
p_south.add(b4);  
p_south.add(b5);
```



# CENTER

```
// CENTER -----  
JTextField tf1 = new JTextField(5);  
JTextField tf2 = new JTextField("Enter Name");  
JTextField tf3 = new JTextField(5);  
  
JTextArea ta1 = new JTextArea(10, 5);  
  
JPanel p_center = new JPanel();  
  
p_center.add(tf1);  
p_center.add(tf2);  
p_center.add(tf3);  
p_center.add(ta1);
```

## References

- [1] Java in a nutshell, 4<sup>th</sup> ed, David Flanagan
- [2] An Introduction to Object-Oriented Programming with Java, C. Thomas, Wu
- [3] Power Java, I. K. Chun (in Korean)