**Assignment3 Project** 

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CSC615

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# Overview:

IDE: vim

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SUN JDK 6.0 Linux 64bit (1.6) Compiler:

Ant Makefile: build.xml

Project URL: http://github.com/tanxin/xin\_csc615

#### Version Control Information:

```
commit 757085b9a53876e8f1f7020a76ae0a617c84bff6
```

Author: Xin <tanxincn@gmail.com>
Date: Thu May 14 10:27:00 2009 -0700

added assignment3 lab3

src/edu/nu/csc615/assignment3/Assign3.java 44 +++++ src/edu/nu/csc615/assignment3/FlashThread.java 32 ++++

src/edu/nu/csc615/assignment3/PassCode.java 

src/edu/nu/csc615/lab3/Lab3.java 105 +++++++++

4 files changed, 405 insertions(+), 0 deletions(-)

## Get SourceCode:

From Git (newest version):

tanxin@laptop ~/.workspace-java/csc615 \$ git clone git://github.com/tanxin/xin csc615.git

From CD-ROM:

tanxin@laptop ~/.workspace-java/csc615 \$ cp -r /mnt/cdrom/\* .

## Compile:

```
tanxin@laptop ~/.workspace-java/csc615 $ ant compile
Buildfile: build.xml
```

[mkdir] Created dir: /home/tanxin/documents/school/nu/CSC615/project/build

# Assignment3 P.3

```
compile:
    [javac] Compiling 6 source files to /home/tanxin/documents/school/nu/CSC615/project/build
BUILD SUCCESSFUL
Total time: 1 second
```

#### Run:

```
tanxin@laptop ~/.workspace-java/csc615 $ ant runa3
Buildfile: build.xml

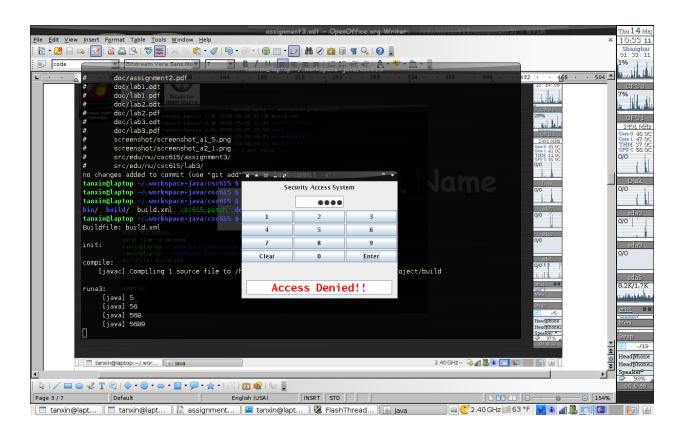
init:

compile:

run:

BUILD SUCCESSFUL
Total time: 11 seconds
```

## Screenshots:



## Memo:

If the computer has not ant build toolkit, it can be also compiled and run as this way.

```
tanxin@laptop ~/.workspace-java/csc615 $ rm -rf build
tanxin@laptop ~/.workspace-java/csc615 $ mkdir build
tanxin@laptop ~/.workspace-java/csc615 $ javac -cp src -d build src/edu/nu/csc615/assignment3/*.java
tanxin@laptop ~/.workspace-java/csc615 $ java -cp build edu.nu.csc615.assignment2.Assign3
```

## Code List:

#### edu.nu.csc615.assignment3.Assign3.java

## edu.nu.csc615.assignment3.FlashThread.java

```
package edu.nu.csc615.assignment3;
import java.awt.Color;
import javax.swing.JFormattedTextField;
public class FlashThread extends Thread {
    public JFormattedTextField textField;
    public final static Color COLOR = Color.white;
    public FlashThread(JFormattedTextField outputField){
        this.textField = outputField;
    public void run(){
        Color buff;
        buff = textField.getForeground();
        for(int j=0; j<5; j++){
            try {
                Thread.sleep(500);
                textField.setForeground(COLOR);
                Thread.sleep(500);
                textField.setForeground(buff);
            } catch (InterruptedException e) {
                //TODO: i eat it
        }
    }
```

3

#### edu.nu.csc615.assignment3.Passcode.java

```
package edu.nu.csc615.assignment3;
import java.awt.Color;
import java.awt.Container;
import java.awt.Dimension;
import java.awt.Font;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.BoxLayout;
import javax.swing.JButton;
import javax.swing.JFormattedTextField;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.JPasswordField;
import javax.swing.JTextField;
import javax.swing.WindowConstants;
import javax.swing.border.EmptyBorder;
public class PassCode extends JFrame {
    public final static int BUTTON_NUM = 12;
    public final static int STATUS_NORMAL = 0;
    public final static int STATUS_RESULT = 1;
    private JPanel titlePane;
    private JPanel passPane;
    private JPanel buttonPane;
    private JPanel outputPane;
    private JButton[] buttonArray;
    private JLabel titleLabel;
    private JTextField passField;
    private JFormattedTextField outputField;
    private int status;
    FlashThread flashThread;
    /* constructure */
    public PassCode() {
         /* initialize object */
        buttonArray = new JButton[BUTTON_NUM];
        titleLabel = new JLabel("Security Access System");
        passField = new JPasswordField();
        outputField = new JFormattedTextField();
        titlePane = new JPanel();
        passPane = new JPanel();
        buttonPane = new JPanel();
        outputPane = new JPanel();
         /* fields initialization */
        Font font = new Font(Font.MONOSPACED, Font.BOLD, 22);
        passField.setPreferredSize(new Dimension(100,25));
        passField.setHorizontalAlignment(JPasswordField.RIGHT);
        passField.setFont(font);
        outputField.setPreferredSize(new Dimension(300,30));
        outputField.setHorizontalAlignment(JTextField.CENTER);
        outputField.setFont(font);
        outputPane.setBorder(new EmptyBorder(5,0,0,0));
        /* create uniform dimension for objects */
```

```
Dimension dimensionB = new Dimension(100, 30);
    /* buttons initialization */
    int j;
    String[] buttonText = { "1", "2" , "3", "4", "5", "6" , "7", "8", "9", "Clear" , "0", "Enter"};
for(j=0; j<buttonArrayLength ; j++){</pre>
        buttonArray[j] = new JButton();
        buttonArray[j].setText(buttonText[j]);
        buttonArray[j].setSize(dimensionB);
        switch(j){
        case 0:
        case 1:
        case 2:
        case 3:
        case 4:
        case 5:
        case 6:
        case 7:
        case 8:
        case 10:
            buttonArray[j].addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent evt) {
                     numButtonActionPerformed(evt);
                }
            }):
            break:
        case 9:
            buttonArray[j].addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent evt) {
                     clearButtonActionPerformed(evt);
            });
            break;
            buttonArray[j].addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent evt) {
                     enterButtonActionPerformed(evt);
            });
        }
    }
    /* layout definition */
    Container contentPane = getContentPane();
    contentPane.setLayout(new BoxLayout(contentPane, BoxLayout.Y AXIS));
    buttonPane.setLayout(new GridLayout(5,6,2,2));
    contentPane.add(titlePane);
    contentPane.add(passPane);
    contentPane.add(buttonPane);
    contentPane.add(outputPane);
    titlePane.add(titleLabel);
    passPane.add(passField);
    for(j=0; j<buttonArray.length; j++){</pre>
        buttonPane.add(buttonArray[j]);
    outputPane.add(outputField);
    contentPane.setPreferredSize(new Dimension(320,240));
    /* apply layout */
    pack();
    /* close button can exit */
    setDefaultCloseOperation(WindowConstants.EXIT ON CLOSE);
}
/* clearButton Action */
private void clearButtonActionPerformed(ActionEvent evt) {
    clearAll();
```

```
}
/* exitButton Action */
private void enterButtonActionPerformed(ActionEvent evt) {
    status = STATUS_RESULT;
if(flashThread != null && flashThread.isAlive())
         flashThread.interrupt();
    flashThread = new FlashThread(outputField);
    int intText;
    try{
         intText = Integer.parseInt(passField.getText());
    }catch (Exception e) {
         intText = 0;
    if( intText < 1000){
         outputField.setText("Access Denied!!");
         outputField.setForeground(Color.RED);
    }else if(intText >= 1645 && intText <=1689){
    outputField.setText("Technical Personnel!!");</pre>
         outputField.setForeground(Color.GREEN);
    else if(intText == 8345){
         outputField.setText("Custodian Services!!");
         outputField.setForeground(Color.GREEN);
    else if(intText == 55875){
         outputField.setText("Special Services!!");
outputField.setForeground(Color.GREEN);
    }else if(intText == 999898 || (intText >= 1000006 && intText <= 1000008)){
         outputField.setText("Science Personnel!!");
         outputField.setForeground(Color.GREEN);
    }else{
         outputField.setText("Access Denied!!");
         outputField.setForeground(Color.RED);
    flashThread.start();
}
private void numButtonActionPerformed(ActionEvent evt) {
    if(status==STATUS_RESULT)
         clearAll();
    JButton btm = (JButton) evt.getSource();
    passField.setText(passField.getText() + btm.getText());
    System.out.println(passField.getText());
private void clearAll(){
    passField.setText("");
outputField.setText("");
status = STATUS_NORMAL;
}
```