Further rev

LU4-5

```java
public class PROG6112_LU5_rev {

    public static void main(String[] args) {
        // TODO code application logic here
        try {
            BufferedWriter file = new BufferedWriter (new FileWriter ("file.txt"));
            //PrintWriter file = new PrintWriter("file.txt");
            file.write("a record\n");
            file.write("another record");
            file.close();
        } catch (IOException e) {
            e.printStackTrace();
        }

        try (BufferedReader file = new BufferedReader (new FileReader ("file.txt"))) {
            String record;

            while ((record = file.readLine()) != null) {
                String[] parts = record.split(",");

                String name = parts[0];
                int grade = Integer.parseInt(parts[1]);
            }
        } catch (IOException e) {
```

```java
            e.printStackTrace();

    }


    try (RandomAccessFile file = new RandomAccessFile("file.txt", "rw")) {

        file.writeUTF("ben");

        file.writeInt(22);

    } catch (IOException e) {

        e.printStackTrace();

    }


    try (RandomAccessFile file = new RandomAccessFile("file.txt", "r")) {

        file.seek(file.readUTF().length() +2);


        String name = file.readUTF();

        int age = file.readInt();

    } catch (IOException e) {

        e.printStackTrace();

    }


    /*

    file.getFilePointer();

    file.length();

    file.seek(position);


    IOException

    EOFException

    FileNotFoundException

    NumberFormatException
```

```
        */

    }


}


/*

filewriter/reader

bufferedwriter/reader

printwriter

randomaccessfile

*/
```

LU6

```java
public class PROG6112_LU6_rev {

    public static void main(String[] args) {
        // Create a window (JFrame)
        JFrame win = new JFrame("My First GUI");
        win.setSize(700, 300);
        win.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);


        // Create a panel to hold components
        JPanel panel = new JPanel();
        win.add(panel);
        panel.setLayout(new FlowLayout());
        panel.setBackground(Color.RED);


        JLabel label = new JLabel("you can't enter text here");
        label.setToolTipText("icon description");
        panel.add(label);


        //====================objects===============================
        JTextField header = new JTextField("print button");


        JTextArea subHeader = new JTextArea("");


        JScrollPane scrollPane = new JScrollPane(subHeader);

scrollPane.setVerticalScrollBarPolicy(JScrollPane.VERTICAL_SCROLLBAR_ALWAYS);
```

```java
scrollPane.setHorizontalScrollBarPolicy(JScrollPane.HORIZONTAL_SCROLLBAR_NEVER);
    scrollPane.setPreferredSize(new Dimension(100, 100));


    panel.add(header);
    //panel.add(subHeader);
    panel.add(scrollPane);


    //====================Create a button=========================
    JButton button = new JButton("Click to print");
    panel.add(button);


    // Add an event listener to the button
    button.addActionListener( new ActionListener() {
      public void actionPerformed(ActionEvent e) {
        //String strInput= inputBar.getText();
        //output.setText(strInput);
      }
    } );


    /*
    panel.addMouseListener(new MouseAdapter() {
      @Override
      public void mouseClicked(MouseEvent e) {
        System.out.println("Mouse clicked at: " + e.getX() + ", " + e.getY());
      }
    });
    */
```

```java
        //==================Make it visible========================
        win.pack(); // Adjusts the frame size to fit its contents
        win.setVisible(true);
    }


}
```

JComboBox

```java
public class PROG6112_rev2 extends Win {

    public JComboBox c1;

    public JLabel l1;


    public void main(String[] args) {
        JFrame win = new JFrame("testGUI");

        win.setSize(300, 200);

        win.setLayout(new FlowLayout());

        win.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);


        JButton button = new JButton("click me");

        win.add(button);


        //====================objects=============================

        JTextField header = new JTextField("print button");

        JTextArea subHeader = new JTextArea("click this button, "
                + "and text will be printed");

        win.add(header);

        win.add(subHeader);


        String[] options = {"option 1", "option 2", "option 3"};

        c1 = new JComboBox(options);


        c1.setSelectedIndex(3);
```

```java
        Win s = new Win();

        c1.addItemListener(s);


        c1.setEditable(true);


        win.add(c1);






        JCheckBox check = new JCheckBox("accept terms");

        win.add(check);


        if(check.isSelected()) System.out.println("box ticked");


        //===================Make it visible======================

        win.setVisible(true);
    }


    public void itemStateChanged(ItemEvent e) {
        if (e.getSource() == c1) {
            l1.setText(c1.getSelectedItem() + " selected");
        }
    }
}


/*
```

Describe the swing components;

Use the JFrame;

Extend the JFrame;

Add JTextField, JButtons and tool tips to a JFrame;

Use the JLabel Class;

Use a layout manager;

Use the content panels;

Use colour and JPanels to increase layout options;

Create JscrollPanels;

Handle mouse events and using menus.

*/

```
//====================================================
// END-OF-FILE
//====================================================
```