

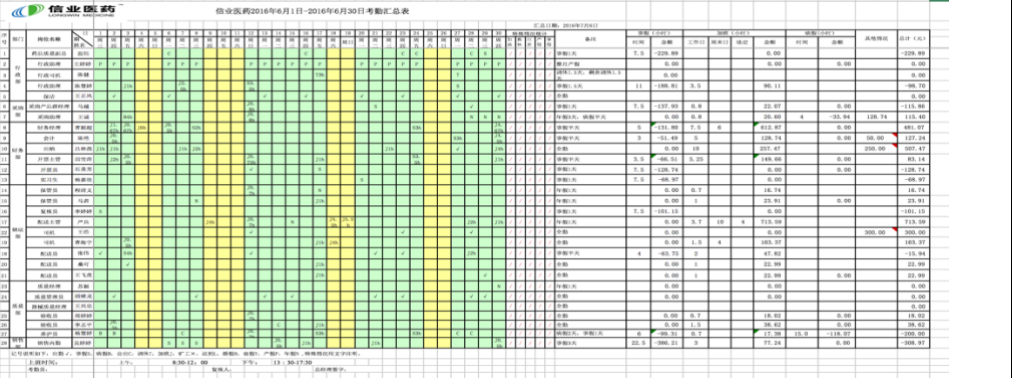
## Appendix

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1. Interaction with client. (Page 1-4)
2. Code of the product. (Page 5-57)

### Interaction with Client:

<b>Summary of outcome</b>	Message transaction with Client
<b>Client found and confirmed</b>	Student 2017/11/19 11:36 PM 你好，陈姐。 Client 你好呀，找我啥事？ Student 我有一个作业，关于编程的。想请你冲当我的客户
<b>Solution purposed regarding inefficiency of using MicroSoft Excel, offering that the product will be incorporation of other functions, for instance, add/edit/delete employee and then display all information related to taxable salary the employee will receive.</b>	Student 2017/11/20 12:07 AM 我想的是你们不是用excel计算工资吗？ Client 是的 Student 我觉得挺慢而且挺繁琐同时会有时候出错吗？ Client 现在EXCEL对于以前人工来讲是方便的多，但是如果人员比较多的话算起来就不是那么方便了。如果工资涉及的项目比较多的话也比较麻烦 Student 我想的就是做一个可以结合人员变动+工资计算的程序。功能可已包含删，添员工。修改职位，月薪，还有统计这个假那个假的软件。你觉得会帮到你们工作吗？同时，你有什么好提议觉得办公流程可以简化的。 Client 可以，比如说工资一张表里面是涉及很多其他的数据的，比如说事假病假、比如说社保公积金，比如说个人所得税，项目要齐全，而且数据要可以批量导入导出。 Student 对对对，我就是这么想的。具体的项目还得你方便的时候提供给我，以及数据。或者我到时发我一张你们的工资表。我捣鼓捣鼓。 Client [Photo]

	
<p><b>Expectations of the product identified by the client. See success criteria and test plan.</b></p>	<p><b>Student 2017/11/27 9:20 PM</b>  主要就是你对这个软件（程序）有什么样的预期和要求呢？</p> <p><b>Client</b>  因为我之前也没有接触过人力资源系统，目前我自己的想法就是有完整的入离职模块，人事信息、人事档案模块，还有人事的制度流程、以及休假审批程序，还有就是工资、社保公积金以及绩效考核统计模块，还有劳动合同台账。</p> <p><b>Student</b>  人事的制度流程、以及休假审批程序，社保公积金，绩效考核统计模块，劳动合同台账</p> <p><b>Client</b>  比如说人事的制度包括考勤制度、入离职制度、休息休假制度、工资制度、绩效考核制度、员工手册、劳动合同实施细则等等，这些制度在你做的程序上面要有一个模块是可以进行公示的，就是所有登录这个系统的员工都看得到。</p> <p><b>Client</b>  休假审批里面要包含可选的休假种类，比如说年假，事假、病假、产假、婚假等等，有些假期的休假需要附附件，比如病假证明，结婚证明之类的，还有请假的时间长短要提前多长时间申请，流程可以由请假员工选择经过哪些人审批。</p> <p><b>Student</b>  好的，那我准备做的一个像请假的功能需要结合把具体的事项发送给需要签字的人马</p> <p><b>Client</b>  就是请假人提交申请，审批人是可以看得到他提交的内容，然后选择同意或者不同意，可以签署意见</p>
<p><b>First prototype sent to the client. Client made suggestions based on her ideas and expectation of</b></p>	<p><b>Student 2017/12/17 12:57 AM</b>  是的</p> <p><b>Client</b>  我觉得以我的想法，可以有个欢迎的主界面，进去之后，就是这个系统的几个模块，包括员工信息档案，考勤，薪酬计算，培训档案等等</p> <p><b>Client</b>  每个模块可以点进去再细化</p> <p><b>Student</b>  那方便的话能不能发给我一份你们用Excel做的系统呢？</p> <p><b>Client</b></p>



<b>and the fact that it was esay to use, but suggest furture improvement in the displaying features like including a nicer interface.</b>	
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## Full record of Code.

### Home interface:

```
/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package EasyAdmin;

/**
 *
 * @author 3406446
 */
public class Home extends javax.swing.JFrame {
    /**
     * Creates new form Home
     */
    public Home() {
        initComponents();
        //newStaff.setVisible(false);
        //current.setVisible(false);
        //profile.setVisible(false);
    }
    /**
     * This method is called from within the constructor to initialize the
form.
     * WARNING: Do NOT modify this code. The content of this method is
always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-
BEGIN: initComponents
    private void initComponents() {

        jTextField1 = new javax.swing.JTextField();
```

```

add = new javax.swing.JButton();
change = new javax.swing.JButton();
view = new javax.swing.JButton();
jButton4 = new javax.swing.JButton();
jLabel1 = new javax.swing.JLabel();
jLabel2 = new javax.swing.JLabel();
jLabel3 = new javax.swing.JLabel();

jTextField1.setText("jTextField1");

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

add.setBackground(new java.awt.Color(255, 255, 255));
add.setText("New Employee");
add.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        addActionPerformed(evt);
    }
});

change.setBackground(new java.awt.Color(255, 255, 255));
change.setText("Current Employee");
change.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        changeActionPerformed(evt);
    }
});

view.setBackground(new java.awt.Color(255, 255, 255));
view.setText("Individual Summary");
view.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        viewActionPerformed(evt);
    }
});

jButton4.setBackground(new java.awt.Color(255, 255, 255));
jButton4.setText("Exit");
jButton4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton4ActionPerformed(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Luminari", 1, 24)); // NOI18N
jLabel1.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel1.setText("Easy Admin");

jLabel3.setForeground(new java.awt.Color(165, 86, 37));
jLabel3.setText("Nanjing CR Pharmaceutical Group Limited");

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .add(layout.createParallelGroup()
            .addContainerGap()

```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.
t.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING, false)
                    .addComponent(change,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(add,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING, false)
                    .addComponent(view,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(jButton4,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
                .addContainerGap())
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addGap(0, 0, Short.MAX_VALUE)
                .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 143,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(71, 71, 71)
                .addComponent(jLabel2)
                .addContainerGap()))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
            .addComponent(jLabel3)
            .addGap(43, 43, 43))
    );
    layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addContainerGap()
            .addComponent(jLabel1,
javax.swing.GroupLayout.PREFERRED_SIZE, 38,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
            .addComponent(jLabel2)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
            .addComponent(jLabel3)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayou
t.Alignment.LEADING, false)
                .addComponent(view,
javax.swing.GroupLayout.DEFAULT_SIZE, 67, Short.MAX_VALUE)

```

```

        .addComponent(add,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING, false)
        .addComponent(change,
javax.swing.GroupLayout.DEFAULT_SIZE, 64, Short.MAX_VALUE)
        .addComponent(jButton4,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    );

```

```

    pack();
} // </editor-fold> // GEN-END: initComponents

```

```

private void addActionPerformed(java.awt.event.ActionEvent evt) { // GEN-
FIRST:event_addActionPerformed
    // TODO add your handling code here:
    AddStaff newStaff=new AddStaff();
    newStaff.setVisible(true);
    // a.loadinfo("Student", 19, 1000.00, "9053241894", "2R",
"sad",001 , true); testing
} // GEN-LAST:event_addActionPerformed

```

```

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_jButton4ActionPerformed
    // TODO add your handling code here:
    System.exit(0);
} // GEN-LAST:event_jButton4ActionPerformed

```

```

private void changeActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_changeActionPerformed
    // TODO add your handling code here:
    CurrentStaff current=new CurrentStaff();
    current.setVisible(true);
    //System.out.println(a.out()); testing
} // GEN-LAST:event_changeActionPerformed

```

```

private void viewActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_viewActionPerformed
    // TODO add your handling code here:
    EmployeeProfile profile=new EmployeeProfile();
    profile.setVisible(true);
} // GEN-LAST:event_viewActionPerformed

```

```

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel
setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with
the default look and feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html

```

```

        */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
                javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {
                    javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;
                }
            }
        } catch (ClassNotFoundException ex) {
            java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {
            java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {
            java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {
            java.util.logging.Logger.getLogger(Home.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
        }
    }
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new Home().setVisible(true);
        }
    });
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton add;
private javax.swing.JButton change;
private javax.swing.JButton jButton4;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JTextField jTextField1;
private javax.swing.JButton view;
// End of variables declaration//GEN-END:variables
}

```

## New employee:

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

```



```

package EasyAdmin;

import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import java.io.PrintWriter;
import java.io.RandomAccessFile;
import javax.swing.JOptionPane;
import EasyAdmin.Employee;
import EasyAdmin.Managers;

/**
 *
 * @author 3406446
 */
public class AddStaff extends javax.swing.JFrame {

    String fname = " ";
    String lname = " ";
    int Age = 0;
    double salary = 0.0;
    String phoneNum = " ";
    String Address = " ";
    String department = " ";
    int employeeNumber = 0;
    int yearsOfService = 0;
    String gender = " ";
    boolean manager = false;
    RandomAccessFile raf; // define first file instance
    RandomAccessFile raf2; // second
    String FileName = ("EmployeesFile.txt");
    File inFile = new File(FileName);
    String File2 = ("ManagersFile.txt");
    File sndFile = new File(File2);
    boolean restart;
    public AddStaff() {
        initComponents();
        restart=false;
        //Checking file state DO NOT MODIFY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
        if (inFile.exists() && inFile.length() != 0) {
            try {
                raf = new RandomAccessFile(inFile, "rw"); // open file
                System.out.println("File opened");
            } catch (IOException ex) {
                ex.printStackTrace();
            }

        } else {
            JOptionPane.showMessageDialog(null, "Employee profile could not
be found, creating a blank file");
            String ten = "          ";
            String fields[] = new String[250];
            for (int i = 0; i < fields.length; i++) {
                fields[i] = ten + ten + ten + ten + ten + ten + ten + ten +
ten + ten + ten + " "; //111 spaces
            }
            writefile(fields, FileName);
            restart=true;
        }
        // Employees File opened
    }

```

```

//checking ManagerFile
    if (sndFile.exists() && sndFile.length() != 0) {
        try {
            raf2 = new RandomAccessFile(sndFile, "rw"); // open
file
            System.out.println("File opened");
        } catch (IOException ex) {
            ex.printStackTrace();
        }
    } else {
        JOptionPane.showMessageDialog(null, "Manager profile could
not be found, creating a blank file");
        String ten = "          ";
        String fields[] = new String[10];
        for (int i = 0; i < fields.length; i++) {
            fields[i] = ten + ten + ten + ten + ten;//50 spaces
        }
        writefile(fields, File2);
        restart=true;
    }
// Managers File opened
// restart to prevent null-pointer reached
if(restart){
    JOptionPane.showMessageDialog(null, "File instances have been
created and initialized. "
        + "Please restart the program");
    System.exit(0);
    restart=false;
}
}

/**
 * This method is called from within the constructor to initialize the
form.
 * WARNING: Do NOT modify this code. The content of this method is
always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-
BEGIN:initComponents
private void initComponents() {

    jComboBox1 = new javax.swing.JComboBox<>();
    jLabel1 = new javax.swing.JLabel();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jLabel2 = new javax.swing.JLabel();
    first = new javax.swing.JTextField();
    age = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    pNum = new javax.swing.JTextField();
    jLabel5 = new javax.swing.JLabel();
    address = new javax.swing.JTextField();
    jLabel6 = new javax.swing.JLabel();
    eNum = new javax.swing.JTextField();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    last = new javax.swing.JTextField();

```

```

jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
sal = new javax.swing.JTextField();
jLabel11 = new javax.swing.JLabel();
jComboBox2 = new javax.swing.JComboBox<>();
posn = new javax.swing.JComboBox<>();
jComboBox3 = new javax.swing.JComboBox<>();

jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Item 1", "Item 2", "Item 3", "Item 4" }));

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
setTitle("NewStaff");

jLabel1.setText("New Employee");

jButton1.setText("Confirm");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jButton2.setText("Cancel");
jButton2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton2ActionPerformed(evt);
    }
});

jLabel2.setText("Name");

first.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        firstFocusLost(evt);
    }
});

age.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        ageFocusLost(evt);
    }
});

jLabel3.setText("Age");

jLabel4.setText("Phone Number");

jLabel5.setText("Home Address");

jLabel6.setText("Employee Number");

eNum.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        eNumFocusLost(evt);
    }
});

jLabel7.setText("Department");

```

```

jLabel8.setText("(first)");

last.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        lastFocusLost(evt);
    }
});

jLabel9.setText("(last)");

jLabel10.setText("Salary");

sal.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        salFocusLost(evt);
    }
});

jLabel11.setText("Gender");

jComboBox2.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Female", "Male" }));

posn.setModel(new javax.swing.DefaultComboBoxModel<>(new String[]
{ "Administration", "Inventory", "Sales", "Storage", "Delivering",
"Finance", "Quality Control" }));

jComboBox3.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Employee", "Manager" }));

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.TRAILING, false)
                    .addComponent(jLabel4)
                    .addComponent(jLabel3,
javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createParallelGroup.Alignment.LEA
DING, layout.createSequentialGroup()
                    .addComponent(jLabel2)
                    .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                    .addComponent(jLabel8)))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
                .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING, false)
                    .addGroup(layout.createSequentialGroup()

```

```

        .addComponent(age,
javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED)
        .addComponent(jLabel6)
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED)
        .addComponent(eNum) )
        .addComponent(pNum,
javax.swing.GroupLayout.PREFERRED_SIZE, 152,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.TRAILING)
        .addComponent(jLabel11)
        .addGroup(layout.createSequentialGroup(
)
        .addComponent(first,
javax.swing.GroupLayout.PREFERRED_SIZE, 101,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.RELATED)
        .addComponent(jLabel9)))
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.UNRELATED)
        .addComponent(last,
javax.swing.GroupLayout.PREFERRED_SIZE, 125,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SI
ZE, Short.MAX_VALUE))
        .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.TRAILING)
        .addGroup(layout.createSequentialGroup())
        .addComponent(jButton1)
        .addGap(191, 191, 191)
        .addComponent(jButton2))
        .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel5)
        .addComponent(jLabel7)
        .addComponent(jLabel10)
        .addComponent(jLabel11))
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
        .addComponent(address,
javax.swing.GroupLayout.PREFERRED_SIZE, 100,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(sal,
javax.swing.GroupLayout.PREFERRED_SIZE, 71,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jComboBox2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addGroup(layout.createSequentialGroup(
)
        .addComponent(posn,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.RELATED)
        .addComponent(jComboBox3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))))
        .addGap(0, 16, Short.MAX_VALUE))))
);
layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel1)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jLabel2)
            .addComponent(first,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel8)
            .addComponent(last,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel9))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(age,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel3)
            .addComponent(jLabel6)
            .addComponent(eNum,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jLabel4)
            .addComponent(pNum,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)

```

```

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jLabel5)
            .addComponent(address,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jLabel7)
            .addComponent(posn,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jComboBox3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jLabel10)
            .addComponent(sal,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jComboBox2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel11))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
            .addComponent(jButton1)
            .addComponent(jButton2))
        .addContainerGap()
    );

    pack();
}

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    this.dispose();
}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
    // TODO add your handling code here:
    Employee temp = new Employee();
}

```

```

Managers input = new Managers();
// Get data entered
fname = first.getText();
lname = last.getText();
Age = Integer.parseInt(age.getText());
salary = Double.parseDouble(sal.getText());
phoneNum = pNum.getText();
Address = address.getText();
department = posn.getSelectedItem().toString();
employeeNumber = Integer.parseInt(eNum.getText());
gender = jComboBox2.getSelectedItem().toString();
temp.loadinfo(fname + lname, Age, gender, salary, phoneNum,
Address, department, employeeNumber, manager);
    if
(jComboBox3.getSelectedItem().toString().equalsIgnoreCase("Manager")) {
        manager = true;
        temp.ifManager(manager);
        input.loadinfo(fname + lname, Age, gender, salary, phoneNum,
Address, department, employeeNumber, manager);
        getEntered(input);

input.changeCode(Integer.parseInt(JOptionPane.showInputDialog("Please set a
code for authorizing absences!")));
    int index=posn.getSelectedIndex();
    if(checkUnique(index, raf2, 51)){
        writeInfo(temp, raf);
        writeInfo(input, raf2);
    }
    else{
        JOptionPane.showMessageDialog(null, "Not able to create
manager under"
                                + " selected department \nBecause department
manager exist!", "Conflict", 1);
    }
}
else{
    writeInfo(temp, raf);
}
this.dispose();
} //GEN-LAST:event_jButton1ActionPerformed

private void firstFocusLost(java.awt.event.FocusEvent evt) { //GEN-
FIRST:event_firstFocusLost
    // TODO add your handling code here:
    String in = first.getText();
    String alphas = "qwertyuiopasdfghjklzxcvbnm
QWERTYUIOPLKJHGFDSA ZXCVCBNM";
    for (int i = 0; i < in.length(); i++) {
        if (alphas.indexOf(in.charAt(i)) < 0) {
            JOptionPane.showMessageDialog(null, "Field not entered
correctly", "Warning", 1);
            first.setText("");
            break;
        }
    }
}
} //GEN-LAST:event_firstFocusLost

private void lastFocusLost(java.awt.event.FocusEvent evt) { //GEN-
FIRST:event_lastFocusLost
    // TODO add your handling code here:

```



```

        String in = last.getText();
        String alphas = "qwertyuiopasdfghjklzxcvbnm
QWERTYUIOPLKJHGFDSA ZXC VBNM";
        for (int i = 0; i < in.length(); i++) {
            if (alphas.indexOf(in.charAt(i)) < 0) {
                JOptionPane.showMessageDialog(null, "Field not entered
correctly", "Warning", 1);
                last.setText("");
                break;
            }
        }
    } //GEN-LAST:event_lastFocusLost

    private void ageFocusLost(java.awt.event.FocusEvent evt) { //GEN-
FIRST:event_ageFocusLost
        // TODO add your handling code here:
        String in = (age.getText());
        String ints = "1234567890";
        for (int i = 0; i < in.length(); i++) {
            if (ints.indexOf(in.charAt(i)) < 0) {
                JOptionPane.showMessageDialog(null, "Field not entered
correctly", "Warning", 1);
                age.setText("");
                break;
            }
        }
    } //GEN-LAST:event_ageFocusLost

    private void eNumFocusLost(java.awt.event.FocusEvent evt) { //GEN-
FIRST:event_eNumFocusLost
        // TODO add your handling code here:
        String in = (eNum.getText());
        String ints = "1234567890";
        for (int i = 0; i < in.length(); i++) {
            if (ints.indexOf(in.charAt(i)) < 0) {
                JOptionPane.showMessageDialog(null, "Field not entered
correctly", "Warning", 1);
                break;
            }
        }

        if (Integer.parseInt(eNum.getText()) > 0 && Integer.parseInt(eNum.getText()) <= 20
0) {
            if (checkUnique(Integer.parseInt(eNum.getText()) - 1, raf, 112)) {
                System.out.println("Unique primary Key!");
            }
            else {
                JOptionPane.showMessageDialog(null, "Employee Number Has
been Taken!", "Warning", 1);
                eNum.setText("");
            }
        }
        else {
            JOptionPane.showMessageDialog(null, "Please enter a number
from 1 to 200", "Warning", 1);
            eNum.setText("");
        }
    }

    } //GEN-LAST:event_eNumFocusLost

```

```

        private void salFocusLost(java.awt.event.FocusEvent evt) { //GEN-FIRST:event_salFocusLost
            // TODO add your handling code here:
            String in = (sal.getText());
            String ints = "1234567890.";
            for (int i = 0; i < in.length(); i++) {
                if (ints.indexOf(in.charAt(i)) < 0) {
                    JOptionPane.showMessageDialog(null, "Field not entered correctly", "Warning", 1);
                    sal.setText("");
                    break;
                }
            }
        } //GEN-LAST:event_salFocusLost

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
     * For details see
     * http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
     */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info : javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(AddStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(AddStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(AddStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(AddStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
} //</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new AddStaff().setVisible(true);
    }
}

```

```

    });
}

public void getEntered(Managers temp) {
    System.out.println("Information entered; Name: " + temp.getName() +
        " ,aged " + temp.getAge() + " " + gender
        + ", in " + temp.getPosn() + " department." + " Employee
Number: " + temp.getENUM()
        + " With a salary of $" + temp.getSal() + " monthly" +
        "\nPhone Number: " + temp.getPhone() + ".");
}

public boolean checkUnique(int temp, RandomAccessFile raf,final int
length){
    boolean unique = false;
    String in="";

    try{
        raf.seek(temp*length);
        in=raf.readLine();
    }
    catch(IOException ex) {
        ex.printStackTrace();
    }
    String anything =
"1234567890qwertyuiopasdfghjklzxcvbnmQWERTYUIOPLKJHGFDSA ZXCVBNM";// no
space
    for (int i = 0; i < in.length(); i++) {
        if (anything.indexOf(in.charAt(i)) >= 0) {
            System.out.println(i);
            unique=false;
            break;
        }
        else{
            unique=true;
            break;
        }
    }

    return unique;
}

public static void writefile(String variables[], String fName) {
    try {
        PrintWriter out = new PrintWriter(new FileWriter(fName));
        for (int i = 0; i < variables.length; i++) {
            out.println(variables[i]); // output the values to the
"out" stream
        }
        out.close(); // output to file
    } catch (java.io.IOException e) {
        System.out.println(e);
    }
}

public void writeInfo(Employee temp, RandomAccessFile raf) {
    final int length = 112; // 111 characters plus EOF
int count = temp.getENUM() - 1;
    try {
        raf.seek(count * length);
        raf.writeBytes(temp.getName());
    }
}

```

```

        raf.seek(count * length + 20);
        raf.writeBytes(Integer.toString(temp.getAge()));
        raf.seek(count * length + 25);
        raf.writeBytes(Double.toString(temp.getSal()));
        raf.seek(count * length + 35);
        raf.writeBytes(temp.getPhone());
        raf.seek(count * length + 47);
        raf.writeBytes(Integer.toString(temp.GetDays()));
        raf.seek(count * length + 50);
        raf.writeBytes(temp.getAddress());
        raf.seek(count * length + 70);
        raf.writeBytes(temp.getPosn());
        raf.seek(count * length + 85);
        raf.writeBytes(Integer.toString(temp.getENUM()));
        raf.seek(count * length + 90);
        raf.writeBytes(temp.getGender());
        raf.seek(count * length + 100);
        raf.writeBytes(temp.getIfManager());
    } catch (IOException ex) {
        ex.printStackTrace();
    }
}

public void writeInfo(Managers temp, RandomAccessFile raf) {
    final int length = 51; // 50 characters plus EOF
    int count = posn.getSelectedIndex();
    try {
        raf.seek(count * length);
        raf.writeBytes(fname + lname);
        raf.seek(count * length + 20);
        raf.writeBytes(department);
        raf.seek(count * length + 35);
        raf.writeBytes(Integer.toString(temp.getCode()));

    } catch (IOException ex) {
        ex.printStackTrace();
    }
}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JTextField address;
private javax.swing.JTextField age;
private javax.swing.JTextField eNum;
private javax.swing.JTextField first;
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JComboBox<String> jComboBox1;
private javax.swing.JComboBox<String> jComboBox2;
private javax.swing.JComboBox<String> jComboBox3;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;

```

```

private javax.swing.JLabel jLabel9;
private javax.swing.JTextField last;
private javax.swing.JTextField pNum;
private javax.swing.JComboBox<String> posn;
private javax.swing.JTextField sal;
// End of variables declaration//GEN-END:variables
}

```

## Current employee:

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

```

```
package EasyAdmin;
```

```

import static EasyAdmin.AddStaff.writefile;
import java.io.File;
import java.io.FileWriter;
import java.io.IOException;
import java.io.PrintWriter;
import java.io.RandomAccessFile;
import javax.swing.JOptionPane;

```

```

/**
 *
 * @author 3406446
 */

```

```
public class CurrentStaff extends javax.swing.JFrame {
```

```

    RandomAccessFile raf; // define file instance
    String FileName = ("EmployeesFile.txt");
    File inFile = new File(FileName);
    boolean checked = false;
    Employee einput;
    Managers minput;
    RandomAccessFile raf2;
    String File2 = ("ManagersFile.txt");
    File sndFile = new File(File2);
    String File3 = ("Record of Absence.txt");
    File record = new File(File3);
    RandomAccessFile raf3;
    boolean valid = true;

```

```

/**
 * Creates new form CurrentStaff
 */

```

```

public CurrentStaff() {
    initComponents();
    einput = new Employee();
    minput = new Managers();
    jTextField2.setEditable(false);
    jTextField3.setEditable(false);
    jTextField4.setEditable(false);
    jTextField5.setEditable(false);
    jTextField6.setEditable(false);
}

```

```

jTextField7.setEditable(false);
jTextField8.setEditable(false);
jTextField9.setEditable(false);
if (inFile.exists() && inFile.length() != 0) {
    try {
        raf = new RandomAccessFile(inFile, "rw"); // open file
        System.out.println("File opened");
    } catch (IOException ex) {
        ex.printStackTrace();
    }
} else {
    System.out.println("File not found.");
}
// Open Manager profile
if (sndFile.exists() && sndFile.length() != 0) {
    try {
        raf2 = new RandomAccessFile(sndFile, "rw"); // open
file
        System.out.println("File opened");
    } catch (IOException ex) {
        ex.printStackTrace();
    }
} else {
    JOptionPane.showMessageDialog(null, "Managers profile could
not be found.");
}
// end of opening file
}

/**
 * This method is called from within the constructor to initialize the
form.
 * WARNING: Do NOT modify this code. The content of this method is
always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-
BEGIN: initComponents
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField5 = new javax.swing.JTextField();
    jTextField6 = new javax.swing.JTextField();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    jLabel9 = new javax.swing.JLabel();
    jTextField8 = new javax.swing.JTextField();
    jTextField9 = new javax.swing.JTextField();
    jButton1 = new javax.swing.JButton();
    jButton2 = new javax.swing.JButton();
    jButton3 = new javax.swing.JButton();
    jButton4 = new javax.swing.JButton();

```

```

jScrollPane1 = new javax.swing.JScrollPane();
jTextArea1 = new javax.swing.JTextArea();
jButton5 = new javax.swing.JButton();
jComboBox1 = new javax.swing.JComboBox<>();
jButton6 = new javax.swing.JButton();
jButton7 = new javax.swing.JButton();
jComboBox2 = new javax.swing.JComboBox<>();
jComboBox4 = new javax.swing.JComboBox<>();
jLabel10 = new javax.swing.JLabel();
jTextField7 = new javax.swing.JTextField();
jLabel11 = new javax.swing.JLabel();
jTextField3 = new javax.swing.JTextField();
jLabel12 = new javax.swing.JLabel();
jTextField4 = new javax.swing.JTextField();
jComboBox5 = new javax.swing.JComboBox<>();

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);

jLabel1.setText("Employee Number");

jLabel2.setText("Name");

jLabel3.setText("Gender");

jLabel4.setText("Department");

jLabel5.setText("Phone Number");

jLabel6.setText("Annual Vacations Left");

jTextField1.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        jTextField1FocusLost(evt);
    }
});

jTextField2.setText(" ");

jTextField6.setText(" ");

jLabel7.setText("Type");

jLabel8.setText("Duration");

jLabel9.setText("Authorization");

jTextField8.setText(" ");
jTextField8.setEnabled(false);
jTextField8.addFocusListener(new java.awt.event.FocusAdapter() {
    public void focusLost(java.awt.event.FocusEvent evt) {
        jTextField8FocusLost(evt);
    }
});

jTextField9.setEnabled(false);

jButton1.setText("Update info");
jButton1.setEnabled(false);
jButton1.addActionListener(new java.awt.event.ActionListener() {

```

```

        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton1ActionPerformed(evt);
        }
    });

    jButton2.setText("Request New Leave");
    jButton2.setEnabled(false);
    jButton2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton2ActionPerformed(evt);
        }
    });

    jButton3.setText("Submit Request");
    jButton3.setEnabled(false);
    jButton3.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton3ActionPerformed(evt);
        }
    });

    jButton4.setText("Close");
    jButton4.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton4ActionPerformed(evt);
        }
    });

    jTextArea1.setEditable(false);
    jTextArea1.setColumns(20);
    jTextArea1.setRows(5);
    jTextArea1.setText("Please enter Employee Number\nto enable further
operations!");
    jScrollPane1.setViewportView(jTextArea1);

    jButton5.setText("Remove Employee");
    jButton5.setEnabled(false);
    jButton5.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton5ActionPerformed(evt);
        }
    });

    jComboBox1.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Personal", "Business", "Marriage", "Pregnancy", "Annual
Vacation", "Sickness" }));
    jComboBox1.setEnabled(false);

    jButton6.setText("Get Info");
    jButton6.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton6ActionPerformed(evt);
        }
    });

    jButton7.setText("Save");
    jButton7.setEnabled(false);
    jButton7.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jButton7ActionPerformed(evt);
        }
    });

```



```

        }
    });

    jComboBox2.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Female", "Male" }));
    jComboBox2.setEnabled(false);

    jComboBox4.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Employee", "Manager" }));
    jComboBox4.setEnabled(false);

    jLabel10.setText("Age");

    jLabel11.setText("Salary");

    jLabel12.setText("Home Address");

    jComboBox5.setModel(new javax.swing.DefaultComboBoxModel<>(new
String[] { "Administration", "Inventory", "Sales", "Storage", "Delivering",
"Finance", "Quality Control" }));
    jComboBox5.setEnabled(false);

    javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
    getContentPane().setLayout(layout);
    layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.
Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                            .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jLabel2)
                                .addComponent(jLabel11)
                                .addComponent(jLabel3)
                                .addComponent(jLabel4)
                                .addComponent(jLabel10))
                            .addGap(18, 18, 18)
                            .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
                                .addComponent(jComboBox2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE, 120,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE, 70,
javax.swing.GroupLayout.PREFERRED_SIZE)
                                .addComponent(jTextField7,
javax.swing.GroupLayout.PREFERRED_SIZE, 49,
javax.swing.GroupLayout.PREFERRED_SIZE)

```

```

        .addComponent(jComboBox5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(layout.createParallelGroup(javax.swing.
GroupLayout.Alignment.TRAILING)
        .addGroup(layout.createSequentialGroup()
        .addComponent(jComboBox4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jLabel11)
        .addPreferredGap(javax.swing.LayoutStyle
e.ComponentPlacement.RELATED)
        .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE, 75,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING, false)
        .addComponent(jTextField5,
javax.swing.GroupLayout.DEFAULT_SIZE, 117, Short.MAX_VALUE)
        .addComponent(jTextField4)))
        .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel5)
        .addGroup(layout.createSequentialGroup()
        .addContainerGap()
        .addComponent(jLabel12))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED, 20, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addGap(6, 6, 6)
        .addComponent(jButton7)
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent(jButton4))
        .addGroup(javax.swing.GroupLayout.Alignment.TRA
ILING, layout.createSequentialGroup()
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jButton6)
        .addGap(43, 43, 43)
        .addComponent(jButton1))
        .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createSequentialGroup()
        .addComponent(jLabel8)
        .addGap(37, 37, 37)
        .addComponent(jTextField8,
javax.swing.GroupLayout.PREFERRED_SIZE, 66,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

        .addGroup(layout.createSequentialGroup(
)
        .addComponent(jLabel6)
        .addGap(18, 18, 18)
        .addComponent(jTextField6,
javax.swing.GroupLayout.PREFERRED_SIZE, 70,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createSequentialGroup(
)
        .addGap(48, 48, 48)
        .addComponent(jButton5)))
        .addGap(0, 0, Short.MAX_VALUE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
        .addComponent(jScrollPane1,
javax.swing.GroupLayout.PREFERRED_SIZE, 266,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap())
        .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRA
ILING, layout.createSequentialGroup()
        .addComponent(jLabel9)
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED))
        .addGroup(layout.createSequentialGroup())
        .addComponent(jLabel7)
        .addGap(62, 62, 62)))
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING, false)
        .addComponent(jTextField9)
        .addComponent(jComboBox1, 0,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
        .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 146,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
        .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 124,
javax.swing.GroupLayout.PREFERRED_SIZE))))
);
layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayou
t.Alignment.TRAILING)
        .addGroup(layout.createSequentialGroup()
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.BASELINE)
        .addComponent(jComboBox1,
javax.swing.GroupLayout.PREFERRED_SIZE, 27,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel7)

```

```

        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel1))
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGroup(layout.createParallelGroup(javax.s
wing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel9)
                .addComponent(jTextField9,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(layout.createSequentialGroup()
                .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel2)
                    .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
                .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(jLabel3)
                    .addComponent(jComboBox2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))))
            .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.BASELINE)
                .addComponent(jButton2,
javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(jButton3,
javax.swing.GroupLayout.PREFERRED_SIZE, 81,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.UNRELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayou
t.Alignment.LEADING, false)
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.s
wing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel8)
                        .addComponent(jTextField8,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
                        .addComponent(jLabel10)
                        .addComponent(jTextField7,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

```

```

        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.BASELINE)
            .addComponent(jLabel4)
            .addComponent(jTextField6,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel6)
            .addComponent(jComboBox5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(8, 8, 8)
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.BASELINE)
            .addComponent(jComboBox4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel11)
            .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jButton6)
            .addComponent(jButton1))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.BASELINE)
            .addComponent(jLabel5)
            .addComponent(jTextField5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jButton5))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.Gr
oupLayout.Alignment.BASELINE)
            .addComponent(jLabel12)
            .addComponent(jTextField4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jButton7)
            .addComponent(jButton4))
        .addComponent(jScrollPane1)
        .addContainerGap()
    );

    getAccessibleContext().setAccessibleName("current");

    pack();
} // </editor-fold> // GEN-END: initComponents

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST: event_jButton4ActionPerformed
    // TODO add your handling code here:

```

```

        this.dispose();

    } //GEN-LAST:event_jButton4ActionPerformed

    private void jButton6ActionPerformed(java.awt.event.ActionEvent evt)
    { //GEN-FIRST:event_jButton6ActionPerformed
        // TODO add your handling code here:
        //Checking file state DO NOT MODIFY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

        String chars =
        "qwertyuioplkjhgfdsazxcvbnmQWERTYUIOPLKJHGFDSA ZXC VBNM";
        String in = " ";
        int index;
        final int length = 112; // 111 characters plus EOF
        if (jTextField1.getText().isEmpty()) {
            JOptionPane.showMessageDialog(null, "Please enter Employee
Number"
                + " to enable further operations");

        } else {
            index = Integer.parseInt(jTextField1.getText()) - 1;
            try {
                raf.seek(length * index);
                in = raf.readLine();
                for (int i = 0; i < in.length(); i++) {
                    if (chars.indexOf(in.charAt(i)) >= 0) {
                        checked = true;
                        break;
                    } else {
                        JOptionPane.showMessageDialog(null, "No record
under entered employee number!");
                        break;
                    }
                }
            } catch (IOException ex) {
                ex.printStackTrace();
            }
        }
        if (checked) {
            loadEmployee(in);
            setInfo();
            jButton1.setEnabled(true);
            jButton2.setEnabled(true);
            jButton5.setEnabled(true);
            jTextArea1.setText("Click on buttons to proceed!");
        } else {
            jButton1.setEnabled(false);
            jButton2.setEnabled(false);
            jButton3.setEnabled(false);
            jButton5.setEnabled(false);
            jButton7.setEnabled(false);
        }
    } //GEN-LAST:event_jButton6ActionPerformed

    private void jTextField1FocusLost(java.awt.event.FocusEvent evt)
    { //GEN-FIRST:event_jTextField1FocusLost
        // TODO add your handling code here:
        String in = (jTextField1.getText());
        String ints = "1234567890";
    }

```

```

        for (int i = 0; i < in.length(); i++) {
            if (ints.indexOf(in.charAt(i)) < 0) {
                JOptionPane.showMessageDialog(null, "Field not entered
correctly", "Warning", 1);
                break;
            }
        }
    }
}

//GEN-LAST:event_jTextField1FocusLost

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{
    //GEN-FIRST:event_jButton1ActionPerformed
    // TODO add your handling code here:
    jButton2.setEnabled(false);
    jButton3.setEnabled(false);
    jButton5.setEnabled(false);
    if (jComboBox4.getSelectedItem().equals("Manager")) {
        jButton1.setEnabled(true);
        jButton2.setEnabled(true);
        jButton5.setEnabled(true);
        jTextArea1.setText("Managers' profile is protected. "
            + "\n Access declined!" + "\nClick on buttons to
proceed!");
    } else {
        jTextField1.setEditable(false);
        jTextField2.setEditable(true);
        jTextField3.setEditable(true);
        jTextField4.setEditable(true);
        jTextField5.setEditable(true);
        jTextField7.setEditable(true);
        jTextField8.setEditable(true);
        jTextField9.setEditable(true);
        jButton7.setEnabled(true);
        jComboBox2.setEnabled(true);
        jComboBox5.setEnabled(true);
        jComboBox4.setEnabled(true);
        jTextArea1.setText("Data input activated!!!");
    }
}

//GEN-LAST:event_jButton1ActionPerformed

private void jButton7ActionPerformed(java.awt.event.ActionEvent evt)
{
    //GEN-FIRST:event_jButton7ActionPerformed
    // TODO add your handling code here:
    if (jComboBox4.getSelectedItem().equals("Manager")) {
        if (checkUnique(jComboBox5.getSelectedIndex(), raf2, 51)) {
            writeInfo(einput, raf);
        }
    }
    minput.changeCode(Integer.parseInt(JOptionPane.showInputDialog("Please set
a code for authorizing absences!")));
    minput.changeName(einput.getName());
    minput.changePosn(einput.getPosn());
    writeInfo(minput, raf2);
    System.out.println("Manager promoted!");
}
else{
    JOptionPane.showMessageDialog(null, "Not able to create
manager under"
        + " selected department \nBecause department
manager exist!", "Conflict", 1);
    this.dispose();
}
}

```

```

    }
}
else{
    //System.out.println("Is " + einput.getIfManager());
    writeInfo(einput, raf);
}
jTextArea1.setText("Data Saved");
jTextField2.setEditable(false);
jTextField3.setEditable(false);
jTextField4.setEditable(false);
jTextField5.setEditable(false);
jTextField7.setEditable(false);
jTextField8.setEditable(false);
jTextField9.setEditable(false);
jButton7.setEnabled(false);
jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField7.setText("");
jTextField4.setText("");
jTextField5.setText("");

jTextField8.setText("");
jTextField9.setText("");
jButton1.setEnabled(false);
jTextField1.setEditable(true);

} //GEN-LAST:event_jButton7ActionPerformed

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton5ActionPerformed
    // TODO add your handling code here:
    if (jComboBox4.getSelectedItem().equals("Manager")) {
        jButton1.setEnabled(true);
        jButton2.setEnabled(true);
        jButton5.setEnabled(true);
        jTextArea1.setText("Managers' profile is protected. "
            + "\n Access declined!" + "\nRefer to other options.");
    } else {
        int showConfirmDialog = JOptionPane.showConfirmDialog(null,
            "Confirm Deletion of " + einput.getName() + ".");
        if (showConfirmDialog == 0) {
            final int length = 112; // 111 characters plus EOF
            int count = einput.getENUM() - 1;
            String ten = "          ";
            try {
                raf.seek(count * length);
                raf.writeBytes(ten + ten + ten + ten + ten + ten + ten
                    + ten + ten + ten + ten + " ");
            } catch (IOException ex) {
                ex.printStackTrace();
            }
            jTextArea1.setText("Selected employee deleted from file.");
            jTextField2.setEditable(false);
            jTextField3.setEditable(false);
            jTextField4.setEditable(false);
            jTextField5.setEditable(false);
            jTextField7.setEditable(false);
            jTextField8.setEditable(false);
            jTextField9.setEditable(false);

```



```

jButton7.setEnabled(false);
jTextField1.setText("");
jTextField2.setText("");
jTextField3.setText("");
jTextField7.setText("");
jTextField4.setText("");
jTextField5.setText("");
jTextField6.setText("");
jTextField8.setText("");
jTextField9.setText("");
jButton1.setEnabled(false);
jButton5.setEnabled(false);
jTextField1.setEditable(true);
if (record.exists() && record.length() != 0) {
    try {
        raf3 = new RandomAccessFile(record, "rw"); // open
file
        System.out.println("File opened");
        for (int d=0;d<5;d++){
            raf3.seek(((einput.getENUM()-1)*6+d)*71);
            raf3.writeBytes(ten+ten+ten+ten+ten+ten+ten);
            String type="";
            if(d==0){
                type = "Personal";
                raf3.seek(((einput.getENUM()-1)*6+d)*71);

//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 25);
                raf3.writeBytes(type);//Corresponding Type
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 45);
                raf3.writeBytes("0.00");//default time in days
            }
            else if(d==1){
                type="Business";
                raf3.seek(((einput.getENUM()-1)*6+d)*71);

//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 25);
                raf3.writeBytes(type);//Corresponding Type
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 45);
                raf3.writeBytes("0.00");//default time in days
            }
            else if(d==2){
                type="Marriage";
                raf3.seek(((einput.getENUM()-1)*6+d)*71);

//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 25);
                raf3.writeBytes(type);//Corresponding Type
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 45);
                raf3.writeBytes("0.00");//default time in days
            }
            else if(d==3){
                type="Pregnancy";
                raf3.seek(((einput.getENUM()-1)*6+d)*71);

//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 25);
                raf3.writeBytes(type);//Corresponding Type
                raf3.seek(((einput.getENUM()-1)*6+d)*71+ 45);

```

```

        raf3.writeBytes("0.00");//default time in days
    }
    else if(d==4){
        type="Annual Vacation";
        raf3.seek(((input.getENUM()-1)*6+d)*71);
//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
        raf3.seek(((input.getENUM()-1)*6+d)*71+ 25);
        raf3.writeBytes(type);//Corresponding Type
        raf3.seek(((input.getENUM()-1)*6+d)*71+ 45);
        raf3.writeBytes("0.00");//default time in days
    }
    else {
        type="Sickness";
        raf3.seek(((input.getENUM()-1)*6+d)*71);
//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
        raf3.seek(((input.getENUM()-1)*6+d)*71+ 25);
        raf3.writeBytes(type);//Corresponding Type
        raf3.seek(((input.getENUM()-1)*6+d)*71+ 45);
        raf3.writeBytes("0.00");//default time in days
    }

}
}
catch (IOException ex) {
    ex.printStackTrace();
}
}
// refresh the interface

}

}
}
}

} //GEN-LAST:event_jButton5ActionPerformed


private void jButton2ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton2ActionPerformed
    // TODO add your handling code here:
    //Disabling all other buttons
    jButton1.setEnabled(false);
    jButton3.setEnabled(true);
    jButton5.setEnabled(false);
    jButton6.setEnabled(false);
    jButton7.setEnabled(false);
    //Activate related text fields
    jComboBox1.setEnabled(true);
    jTextField8.setEnabled(true);
    jTextField9.setEnabled(true);
    jTextField8.setEditable(true);
    jTextField9.setEditable(true);
    JTextArea1.setText("Click Submit Request after \nincorrectly entering required field");

} //GEN-LAST:event_jButton2ActionPerformed


private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton3ActionPerformed
    // TODO add your handling code here:
    valid=true;

```

```

        if (jTextField8.getText().isEmpty()) {
            valid = false;
            JOptionPane.showMessageDialog(null, "Blank input found!");
        }
        if (jTextField9.getText().isEmpty()) {
            valid = false;
            JOptionPane.showMessageDialog(null, "Blank input found!");
        }
        if (jComboBox1.getSelectedItem().equals("Annual Vacation"))
            {

if(Integer.parseInt(noSpace(jTextField6.getText()))<Integer.parseInt(noSpace(jTextField8.getText()))){
            JOptionPane.showMessageDialog(null, "Vacation Days
are not enough!");
            valid=false;
        }

        ;
    }
    if (valid) {

        // Get input
        Absence leave = new Absence();
        String code = "";
        code = noSpace(jTextField9.getText());
        leave.loadInfo(einput.getName(), einput.getENUM(),
            jComboBox1.getSelectedItem().toString(),
            Double.parseDouble(noSpace(jTextField8.getText()))),
einput.getPosn());
        String authorization =
getAuthorization(jComboBox5.getSelectedIndex(), raf2);
        if (code.equalsIgnoreCase(authorization)) {
            final int recL = 71;//70+1
            int count;
            leave.setState(true);
            jTextArea1.setText(leave.getState());
            //write into record file
            //check record file
            if (record.exists() && record.length() != 0) {
                try {
                    raf3 = new RandomAccessFile(record, "rw"); // open
file

                    System.out.println("File opened");
                    // all good, write new instance to record
                    System.out.println("Type- "+leave.getType());
                    if (leave.getType().equalsIgnoreCase("Personal")) {
                        count = 0;
                    } else if
(leave.getType().equalsIgnoreCase("Business")) {
                        count = 1;
                    } else if
(leave.getType().equalsIgnoreCase("Marriage")) {
                        count = 2;
                    } else if
(leave.getType().equalsIgnoreCase("Pregnancy")) {
                        count = 3;
                    } else if (leave.getType().equalsIgnoreCase("Annual
Vacation")) {
                        count = 4;

```

```

        int change=einput.GetDays();
        change-=leave.getLength();
        raf.seek(112 * (leave.getId()-1) + 47);
        raf.writeBytes("    "); //wipes the original

record

        if(change<10&&change>=0){
            raf.seek(112 * (leave.getId()-1) + 48);
            raf.writeBytes(Integer.toString(change));
        }
        else if(change>=10&&change<15){
            raf.seek(112 * (leave.getId()-1) + 47);
            raf.writeBytes(Integer.toString(change));
        }

    } else {
        count = 5;
    }
    System.out.println("Index is "+count);
    double sum;
    String input;
    //writing in
    raf3.seek(((leave.getId() - 1)*6 + count) * recL);
    //System.out.println("Fetching "+(leave.getId()-
1+count)*recL);

    raf3.writeBytes(leave.getName());
    raf3.seek(((leave.getId() - 1)*6 + count) * recL +
20);

    raf3.writeBytes(Integer.toString(leave.getId()));
    raf3.seek(((leave.getId() - 1)*6 + count) * recL +
45);

    input = noSpace(raf3.readLine()).substring(0, 4);
    System.out.println("Reads" + input);
    sum = Double.parseDouble(input);
    sum += leave.getLength();
    System.out.println("Total time changed to " + sum);
    raf3.seek(((leave.getId() - 1)*6 + count) * recL +
45);

    raf3.writeBytes(Double.toString(sum));
    raf3.seek(((leave.getId() - 1)*6 + count) * recL +
50);

    raf3.writeBytes(leave.getDepartment());

    // new data entrance written
    jTextArea1.setText("Record updated.");
    jTextField2.setEditable(false);
    jTextField3.setEditable(false);
    jTextField4.setEditable(false);
    jTextField5.setEditable(false);
    jTextField7.setEditable(false);
    jTextField8.setText("");
    jTextField9.setText("");
    jTextField8.setEditable(false);
    jTextField9.setEditable(false);
    jButton7.setEnabled(false);
    jComboBox1.setEnabled(false);
    jButton1.setEnabled(false);
    jButton5.setEnabled(false);
    jButton3.setEnabled(false);
    jButton6.setEnabled(true);
    jTextField1.setEditable(true);

```

```

        } catch (IOException ex) {
            ex.printStackTrace();
        }
    } else { // exception when record is not found
        JOptionPane.showMessageDialog(null, "Record file could
not be found, creating a blank file");
        String ten = "          ";
        String fields[] = new String[1500];
        for (int i = 0; i < fields.length; i++) {
            fields[i] = ten + ten + ten + ten + ten + ten +
ten; // 70 spaces
        }
        writefile(fields, File3);
        JOptionPane.showMessageDialog(null, "Blank file
created");

        // create a file if not created before for first data
        entrance.

        // write in default values
        try {
            raf3 = new RandomAccessFile(record, "rw"); // open
            file

            System.out.println("File opened");
            for (int i = 0; i < 1200; i += 6) {
                raf3.seek(i * recL + 20);
                //
            raf3.writeBytes(Integer.toString(c)); // Corresponding eNUM
                raf3.seek(i * recL + 25);
                raf3.writeBytes("Personal"); // Corresponding
            Type

                raf3.seek(i * recL + 45);
                raf3.writeBytes("0.00"); // default time in days
            }
            //
            for (int j = 1; j < 1201; j += 6) {
                raf3.seek(j * recL + 20);

            // raf3.writeBytes(Integer.toString(c)); // Corresponding eNUM
                raf3.seek(j * recL + 25);
                raf3.writeBytes("Business"); // Corresponding
            Type

                raf3.seek(j * recL + 45);
                raf3.writeBytes("0.00"); // default time in days
            }
            //
            for (int h = 2; h < 1202; h += 6) {
                raf3.seek(h * recL + 20);

            // raf3.writeBytes(Integer.toString(c)); // Corresponding eNUM
                raf3.seek(h * recL + 25);
                raf3.writeBytes("Marriage"); // Corresponding
            Type

                raf3.seek(h * recL + 45);
                raf3.writeBytes("0.00"); // default time in days
            }
            //
            for (int k = 3; k < 1203; k += 6) {
                raf3.seek(k * recL + 20);

            // raf3.writeBytes(Integer.toString(c)); // Corresponding eNUM
                raf3.seek(k * recL + 25);

```

```

        raf3.writeBytes("Pregnancy");//Corresponding
Type
        raf3.seek(k * recL + 45);
        raf3.writeBytes("0.00");//default time in days
    }
    //
for (int l = 4; l < 1204; l += 6) {
    raf3.seek(l * recL + 20);

//raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
    raf3.seek(1 * recL + 25);
    raf3.writeBytes("Annual
Vacation");//Corresponding Type
    raf3.seek(1 * recL + 45);
    raf3.writeBytes("0.00");//default time in days
}
//
for (int m = 5; m < 1205; m += 6) {
    raf3.seek(m * recL + 20);
    //
raf3.writeBytes(Integer.toString(c));//Corresponding eNUM
    raf3.seek(m * recL + 25);
    raf3.writeBytes("Sickness");//Corresponding
Type
    raf3.seek(m * recL + 45);
    raf3.writeBytes("0.00");//default time in days
}
// default values written to file.
} catch (IOException ex) {
    ex.printStackTrace();
}
}
else {
    jTextArea1.setText("Not satisfied, check authorization
code");
    jTextField9.setText("");
}
else {
    jTextArea1.setText("Please ensure all \ninformation is entered
correctly\n"
        + "Then re-submit.");
    valid=true;
}

}

}

//GEN-LAST:event_jButton3ActionPerformed

private void jTextField8FocusLost(java.awt.event.FocusEvent evt)
{
//GEN-FIRST:event_jTextField8FocusLost
    // TODO add your handling code here:
    if (noSpace(jTextField8.getText()).length() > 4) {
        JOptionPane.showMessageDialog(null, "Only 2 decimals are
allowed!", "Warning", 1);
        //jTextField8.setText("");
    }
//GEN-LAST:event_jTextField8FocusLost
}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {

```

```

        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel
setting code (optional) ">
        /* If Nimbus (introduced in Java SE 6) is not available, stay with
the default look and feel.
        * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
        */
        try {
            for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
                if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());
                    break;

                }
            }
        } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.u
til.logging.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.u
til.logging.Level.SEVERE, null, ex);
        } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.u
til.logging.Level.SEVERE, null, ex);
        } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.u
til.logging.Level.SEVERE, null, ex);
        }
        //</editor-fold>

        /* Create and display the form */
        java.awt.EventQueue.invokeLater(new Runnable() {
            public void run() {
                new CurrentStaff().setVisible(true);
            }
        });
    }

    public boolean checkUnique(int temp, RandomAccessFile raf,final int
length){
        boolean unique = false;
        String in="";
        try{
            raf.seek(temp*length);
            in=raf.readLine();
            System.out.println("Checking"+ in);
        }
        catch(IOException ex) {
            ex.printStackTrace();
        }
        String anything =
"1234567890qwertyuiopasdfghjklzxcvbnmQWERTYUIOPLKJHGFDSAZXCVBNM";// no
space
        for (int i = 0; i < in.length(); i++) {
            if (anything.indexOf(in.charAt(i)) >= 0) {

```

```

        System.out.println(i);
        unique=false;
        break;
    }
    else{
        unique=true;
        break;
    }
}

return unique;
}

public void loadEmployee(String in) {
    input.changeAge(Integer.parseInt(noSpace(in.substring(20, 22))));
    input.changeAddress(noSpace(in.substring(50, 70)));
    input.changePhone(noSpace(in.substring(35, 47)));
    input.updateVacation(Integer.parseInt(noSpace(in.substring(47,
50))));
    input.changePosn(noSpace(in.substring(70, 85)));
    input.changeSal(Double.parseDouble(noSpace(in.substring(25,
35))));
    input.changeName(noSpace(in.substring(0, 20)));
    input.changeENum(Integer.parseInt(noSpace(in.substring(85, 90))));
    input.changeGender(noSpace(in.substring(90, 100)));
    if (noSpace(in.substring(100, 111)).equalsIgnoreCase("Manager")) {
        input.ifManager(true);
    } else {
        input.ifManager(false);
    }
    //System.out.println(input.getAll());
}

public void setInfo() {
    jTextField2.setText(input.getName()); //name
    jTextField3.setText(Double.toString(input.getSal())); //sal
    jTextField4.setText(input.getAddress()); //address
    jTextField5.setText(input.getPhone()); //phone
    jTextField6.setText(Integer.toString(input.GetDays()));
//vacation
    jTextField7.setText(Integer.toString(input.getAge())); //age
    jComboBox4.setSelectedItem(input.getIfManager());
    jComboBox2.setSelectedItem(input.getGender());
    jComboBox5.setSelectedItem(input.getPosn());
}

public String noSpace(String temp) {
    String out = "";
    String space = " ";
    for (int i = 0; i < temp.length(); i++) {
        if (temp.charAt(i) == space.charAt(0)) {
        } else {
            out += temp.charAt(i);
        }
    }
    return out;
}

public void writeInfo(Employee temp, RandomAccessFile raf) {
    final int length = 112; // 111 characters plus EOF
    int count = temp.getENUM() - 1;

```



```

String ten = "          ";
try {
    //wipes the original record
    raf.seek(count * length);
    raf.writeBytes(ten + ten + ten + ten + ten + ten + ten + ten +
ten + ten + ten + " ");
    // write data input to the match field in the employee file.
    raf.seek(count * length);
    raf.writeBytes(jTextField2.getText());
    raf.seek(count * length + 20);
    raf.writeBytes(jTextField7.getText());
    raf.seek(count * length + 25);
    raf.writeBytes(jTextField3.getText());
    raf.seek(count * length + 35);
    raf.writeBytes(jTextField5.getText());
    raf.seek(count*length+47);
    raf.writeBytes(jTextField6.getText());
    raf.seek(count * length + 50);
    raf.writeBytes(jTextField4.getText());
    raf.seek(count * length + 70);
    raf.writeBytes(jComboBox5.getSelectedItem().toString());
    raf.seek(count * length + 85);
    raf.writeBytes(Integer.toString(temp.getENUM()));
    raf.seek(count * length + 90);
    raf.writeBytes(jComboBox2.getSelectedItem().toString());
    raf.seek(count * length + 100);
    raf.writeBytes(jComboBox4.getSelectedItem().toString());
} catch (IOException ex) {
    ex.printStackTrace();
}
}

```

```

public void writeInfo(Managers temp, RandomAccessFile raf) {
    final int length = 51; // 50 characters plus EOF
    int count = jComboBox5.getSelectedIndex();
    try {
        raf.seek(count * length);
        raf.writeBytes(temp.getName());
        raf.seek(count * length + 20);
        raf.writeBytes(temp.getPosn());
        raf.seek(count * length + 35);
        raf.writeBytes(Integer.toString(temp.getCode()));

        } catch (IOException ex) {
            ex.printStackTrace();
        }
    }

    public String getAuthorization(int temp, RandomAccessFile raf) {
        String out = "";
        String in = "";
        final int length = 51; // 50 characters plus EOF
        try {
            raf.seek(temp * length);
            in = raf.readLine();
            System.out.println("Manager reached " + in);
        } catch (IOException ex) {
            ex.printStackTrace();
        }
        out = noSpace(in.substring(35, 50));
        return out;
    }
}

```

```

}

// Variables declaration - do not modify//GEN-BEGIN:variables
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton2;
private javax.swing.JButton jButton3;
private javax.swing.JButton jButton4;
private javax.swing.JButton jButton5;
private javax.swing.JButton jButton6;
private javax.swing.JButton jButton7;
private javax.swing.JComboBox<String> jComboBox1;
private javax.swing.JComboBox<String> jComboBox2;
private javax.swing.JComboBox<String> jComboBox4;
private javax.swing.JComboBox<String> jComboBox5;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel11;
private javax.swing.JLabel jLabel12;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JTextArea jTextArea1;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
private javax.swing.JTextField jTextField3;
private javax.swing.JTextField jTextField4;
private javax.swing.JTextField jTextField5;
private javax.swing.JTextField jTextField6;
private javax.swing.JTextField jTextField7;
private javax.swing.JTextField jTextField8;
private javax.swing.JTextField jTextField9;
// End of variables declaration//GEN-END:variables
}

```

## Individual summary:

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package EasyAdmin;

import java.io.File;
import java.io.IOException;
import java.io.RandomAccessFile;
import javax.swing.JOptionPane;

/**
 *
 * @author 3406446

```

```

*/
public class EmployeeProfile extends javax.swing.JFrame {

    /**
     * Creates new form EmployeeProfile
     */
    RandomAccessFile raf; // define file instance
    String FileName = ("EmployeesFile.txt");
    File inFile = new File(FileName);
    String File3 = ("Record of Absence.txt");
    File record = new File(File3);
    RandomAccessFile raf3; // define file instance
    boolean valid;
    Employee einput;
    public EmployeeProfile() {
        initComponents();
        einput= new Employee();
        valid=true;
        if (inFile.exists() && inFile.length() != 0) {
            try {
                raf = new RandomAccessFile(inFile, "rw"); // open file
                System.out.println("File opened");
            } catch (IOException ex) {
                ex.printStackTrace();
            }
        } else {
            JOptionPane.showMessageDialog(null, "Employee profile could not
be found.");
            valid=false;
        }

        if (record.exists() && record.length() != 0) {
            try {
                raf3 = new RandomAccessFile(record, "rw"); // open file
                System.out.println("File opened");
            } catch (IOException ex) {
                ex.printStackTrace();
            }
        } else {
            JOptionPane.showMessageDialog(null, "Record could not be
found.");
            valid=false;
        }
    }

    /**
     * This method is called from within the constructor to initialize the
form.
     * WARNING: Do NOT modify this code. The content of this method is
always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code"> //GEN-
BEGIN: initComponents
    private void initComponents() {

        jLabel1 = new javax.swing.JLabel();
        jTextField1 = new javax.swing.JTextField();
        jLabel2 = new javax.swing.JLabel();

```

```

jTextField2 = new javax.swing.JTextField();
jSeparator1 = new javax.swing.JSeparator();
jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel5 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
tt = new javax.swing.JTextField();
jSeparator2 = new javax.swing.JSeparator();
jButton1 = new javax.swing.JButton();
jButton3 = new javax.swing.JButton();
jLabel7 = new javax.swing.JLabel();
jLabel8 = new javax.swing.JLabel();
jLabel9 = new javax.swing.JLabel();
jLabel10 = new javax.swing.JLabel();
jLabel11 = new javax.swing.JLabel();
jLabel12 = new javax.swing.JLabel();
t1 = new javax.swing.JTextField();
t4 = new javax.swing.JTextField();
t2 = new javax.swing.JTextField();
t5 = new javax.swing.JTextField();
t3 = new javax.swing.JTextField();
t6 = new javax.swing.JTextField();
jSeparator3 = new javax.swing.JSeparator();
sal = new javax.swing.JTextField();
jLabel13 = new javax.swing.JLabel();
insurrence = new javax.swing.JTextField();
jLabel14 = new javax.swing.JLabel();
change = new javax.swing.JTextField();
jLabel15 = new javax.swing.JLabel();
Tsal = new javax.swing.JTextField();

```

```

setDefaultCloseOperation(javax.swing.WindowConstants.DISPOSE_ON_CLOSE);
setTitle("profile");

```

```

jLabel1.setText("Employee Number ");

```

```

jLabel2.setText("Name");

```

```

jTextField2.setEditable(false);

```

```

jLabel3.setText("Receivable Salary ");

```

```

jLabel4.setForeground(new java.awt.Color(255, 51, 51));

```

```

jLabel4.setText("Personal");

```

```

jLabel4.setToolTipText("");

```

```

jLabel5.setText("Time of absences (days)");

```

```

jLabel6.setText("Business");

```

```

tt.setEditable(false);

```

```

jButton1.setText("Search");

```

```

jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

```

```

jButton3.setText("Close");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jLabel7.setText("Marriage");

jLabel9.setText("Pregnancy");

jLabel11.setText("Vacation");

jLabel12.setForeground(new java.awt.Color(127, 15, 15));
jLabel12.setText("Sickness");

t1.setEditable(false);
t1.setToolTipText("");

t4.setEditable(false);

t2.setEditable(false);

t5.setEditable(false);

t3.setEditable(false);

t6.setEditable(false);

sal.setEditable(false);

jLabel13.setText("Insurrenence");

insurrenence.setEditable(false);

jLabel14.setText("Adjustment");

change.setEditable(false);

jLabel15.setText("Taxable Salary");

Tsal.setEditable(false);

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addGap(16, 16, 16)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.
t.Alignment.LEADING)
            .addComponent(jLabel13)
            .addComponent(jLabel14))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING, false)

```



```

        .addGroup(layout.createSequentialGroup(
)
        .addComponent(tt,
javax.swing.GroupLayout.PREFERRED_SIZE, 74,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.UNRELATED)
        .addComponent(jSeparator2,
javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING, false)
        .addGroup(layout.createSequentialGroup(
)
        .addGroup(layout.createParallelGrou
p(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel6)
        .addComponent(jLabel7))
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGrou
p(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(t2)
        .addComponent(t3)))
        .addGroup(layout.createSequentialGroup(
)
        .addComponent(jLabel4)
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.UNRELATED)
        .addComponent(t1,
javax.swing.GroupLayout.PREFERRED_SIZE, 80,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addPreferredGap(javax.swing.LayoutStyle.Co
mponentPlacement.RELATED, 99, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Align
ment.TRAILING, layout.createSequentialGroup())
        .addGroup(layout.createParallelGrou
p(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequenti
alGroup())
        .addComponent(jLabel11)
        .addPreferredGap(javax.swin
g.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jLabel10))
        .addComponent(jLabel9))
        .addPreferredGap(javax.swing.Layout
Style.ComponentPlacement.RELATED))
        .addGroup(layout.createSequentialGroup(
)
        .addComponent(jLabel12)
        .addGap(15, 15, 15)))
        .addGroup(layout.createParallelGroup(javax.
swing.GroupLayout.Alignment.TRAILING, false)
        .addComponent(t6,
javax.swing.GroupLayout.DEFAULT_SIZE, 80, Short.MAX_VALUE)

```

```

        .addComponent(t4,
javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(t5,
javax.swing.GroupLayout.Alignment.LEADING))
        .addGap(12, 12, 12))
        .addGroup(layout.createSequentialGroup())
        .addGap(0, 0, Short.MAX_VALUE)
        .addComponent(jButton3))))
        .addGap(10, 10, 10))
);
layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
        .addComponent(jTextField1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel1)
        .addComponent(jLabel2)
        .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup())
        .addComponent(jButton1)
        .addGap(2, 2, 2))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup())
        .addComponent(jButton3)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentP
lacement.RELATED)))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING)
        .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.BASELINE)
        .addComponent(jLabel5)
        .addComponent(tt,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jSeparator1,
javax.swing.GroupLayout.PREFERRED_SIZE, 10,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jSeparator2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.LEADING)
        .addGroup(layout.createParallelGroup(javax.swing.GroupL
ayout.Alignment.BASELINE)

```



```

        .addComponent(jLabel4)
        .addComponent(t1,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jLabel8)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel9)
        .addComponent(t4,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel6)
        .addComponent(t2,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jLabel10)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel11)
        .addComponent(t5,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addGap(18, 18, 18)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel7)
        .addComponent(t3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel12)
        .addComponent(t6,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(jSeparator3,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jLabel13)

```

```

        .addComponent(sal,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel13)
        .addComponent(insurrence,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement
.RELATED)
        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout
t.Alignment.BASELINE)
        .addComponent(jLabel14)
        .addComponent(change,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jLabel15)
        .addComponent(Tsal,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(0, 0, Short.MAX_VALUE))
    );

```

```

    pack();
} // </editor-fold> // GEN-END: initComponents

```

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt)
{ // GEN-FIRST:event_jButton1ActionPerformed
    // TODO add your handling code here:
    if(jTextField1.getText().isEmpty()){
        valid=false;
    }
    if(jTextField2.getText().isEmpty()){
        valid=false;
    }
    String eNum = noSpace(jTextField1.getText());
    int index = Integer.parseInt(eNum)-1;
    String chars =
"qwertyuioplkjhgfdsazxcvbnmQWERTYUIOPLKJHGFDSA ZXCVCBNM";
    String in = "";

    final int length = 112; // 111 characters plus EOF
    if (jTextField1.getText().isEmpty()) {
        JOptionPane.showMessageDialog(null, "Please enter Employee
Number"
        + " to enable further operations");
    } else {
        try {
            raf.seek(length * index);
            in = raf.readLine();
            for (int i = 0; i < in.length(); i++) {
                if (chars.indexOf(in.charAt(i)) >= 0) {
                    valid = true;
                    break;
                } else {

```

```

        JOptionPane.showMessageDialog(null, "No record
under entered employee number!");
        break;
    }
}
} catch (IOException ex) {
    ex.printStackTrace();
}
}
if(valid){
    jTextField1.setEditable(false);
    loadEmployee(in);
    jTextField2.setText(einput.getName());
    sal.setText(Double.toString(einput.getSal()));
    double sal=0;
    sal=einput.getSal();
    double adjust=0;
    double realSal;
    String Personal="";
    String Business="";
    String Marriage="";
    String Pregnancy="";
    String Vacation="";
    String Sickness="";
    String input []=new String[6];

input=loadRec(einput,Personal,Business,Marriage,Pregnancy,Vacation,Sickness
);

    double sum=0;
    for(int i=0;i<6;i++){
        sum+=Double.parseDouble(input[i]);
    }
    t1.setText(input[0]);
    t2.setText(input[1]);
    t3.setText(input[2]);
    t4.setText(input[3]);
    t5.setText(input[4]);
    t6.setText(input[5]);
    tt.setText(Double.toString(sum));
    double p=0;
    double s=0;
    p=Double.parseDouble(input[0]);
    s=Double.parseDouble(input[5]);
    adjust=-sal*p/21.75+1416/21.75*s-sal/21.75*s;//21.75 working
days per month
    realSal=sal+adjust;
    String Adjust = String.format("%.2f%n", adjust);
    String RealSal = String.format("%.2f%n", realSal);
    String Insurrence = String.format("%.2f%n", realSal*0.185+10);
    System.out.println(sal+adjust+" = "+realSal);
    insurrence.setText(Insurrence);
    change.setText(Adjust);
    Tsal.setText(RealSal);
}
} //GEN-LAST:event_jButton1ActionPerformed

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt)
{ //GEN-FIRST:event_jButton3ActionPerformed
    // TODO add your handling code here:
    this.dispose();
}

```

```

} //GEN-LAST:event_jButton3ActionPerformed

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel
setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with
the default look and feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {

javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(jav
a.util.logging.Level.SEVERE, null, ex);
    }
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new EmployeeProfile().setVisible(true);
        }
    });
}
public String noSpace(String temp) {
    String out = "";
    String space = " ";
    for (int i = 0; i < temp.length(); i++) {
        if (temp.charAt(i) == space.charAt(0)) {
        } else {
            out += temp.charAt(i);
        }
    }
    return out;
}

```

```

    public void loadEmployee(String in) {
        einput.changeAge(Integer.parseInt(noSpace(in.substring(20, 22))));
        einput.changeAddress(noSpace(in.substring(50, 70)));
        einput.changePhone(noSpace(in.substring(35, 47)));
        einput.updateVacation(Integer.parseInt(noSpace(in.substring(47,
50))));
        einput.changePosn(noSpace(in.substring(70, 85)));
        einput.changeSal(Double.parseDouble(noSpace(in.substring(25,
35))));
        einput.changeName(noSpace(in.substring(0, 20)));
        einput.changeENum(Integer.parseInt(noSpace(in.substring(85, 90))));
        einput.changeGender(noSpace(in.substring(90, 100)));
        if (noSpace(in.substring(100, 111)).equalsIgnoreCase("Manager")) {
            einput.ifManager(true);
        } else {
            einput.ifManager(false);
        }
        System.out.println(einput.getAll());
    }

    public String[] loadRec(Employee temp,String p,String b, String
m,String preg,String v,String s){
        int count = temp.getENUM()-1;
        final int recLength = 71;

        try{
            raf3.seek((count*6)*recLength);
            p=raf3.readLine().substring(45, 49);
            b=raf3.readLine().substring(45, 49);
            m=raf3.readLine().substring(45, 49);
            preg=raf3.readLine().substring(45, 49);
            v=raf3.readLine().substring(45, 49);
            s=raf3.readLine().substring(45, 49);
            System.out.println("Records are\n"+
p+"\n"+b+"\n"+m+"\n"+preg+"\n"+v+"\n"+s);
        }
        catch (IOException ex) {
            ex.printStackTrace();
        }

        String [] output = {p,b,m,preg,v,s};
        return output;
    }

    // Variables declaration - do not modify//GEN-BEGIN:variables
    private javax.swing.JTextField Tsal;
    private javax.swing.JTextField change;
    private javax.swing.JTextField insurrence;
    private javax.swing.JButton jButton1;
    private javax.swing.JButton jButton3;
    private javax.swing.JLabel jLabel1;
    private javax.swing.JLabel jLabel10;
    private javax.swing.JLabel jLabel11;
    private javax.swing.JLabel jLabel12;
    private javax.swing.JLabel jLabel13;
    private javax.swing.JLabel jLabel14;
    private javax.swing.JLabel jLabel15;
    private javax.swing.JLabel jLabel2;
    private javax.swing.JLabel jLabel3;
    private javax.swing.JLabel jLabel4;
    private javax.swing.JLabel jLabel5;

```

```

private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JSeparator jSeparator1;
private javax.swing.JSeparator jSeparator2;
private javax.swing.JSeparator jSeparator3;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
private javax.swing.JTextField sal;
private javax.swing.JTextField t1;
private javax.swing.JTextField t2;
private javax.swing.JTextField t3;
private javax.swing.JTextField t4;
private javax.swing.JTextField t5;
private javax.swing.JTextField t6;
private javax.swing.JTextField tt;
// End of variables declaration//GEN-END:variables
}

```

## Employee (Super Class):

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package EasyAdmin;

/**
 *
 * @author 3406446
 */
public class Employee {
    private String name;
    private int age;
    private String gender;
    private double salary;
    private String phoneNum;
    private String address;
    private String department;
    private int employeeNumber;
    private boolean isManager;
    private int vacation;
    public Employee(){// constructor:Set initial values for class
        name = " ";
        age = 0;
        salary=0.00;
        phoneNum=" ";
        address=" ";
        department=" ";
        gender=" ";
        employeeNumber=0;
        isManager=false;
        vacation = 15;
    }

    public Employee(String name, int age, String sex, double sal,String
cell,String home,

```

```

        String title, int ID,int years, boolean manager){// overload
constructor
    this.name = name;
    this.age = age;
    gender=sex;
    salary=sal;
    phoneNum=cell;
    address=home;
    department=title;
    employeeNumber=ID;
    isManager=manager;
}
public void loadinfo(String name, int age,String sex,double sal,String
cell,String home,
        String title, int ID,boolean manager){//mutator
    this.name = name;
    this.age = age;
    salary=sal;
    gender=sex;
    phoneNum=cell;
    address=home;
    department=title;
    employeeNumber=ID;
    isManager=manager;
}
public void changeName(String temp){
    this.name=temp;
}
public void changePosn(String temp){
    department = temp;
}
public void changeAge(int temp){
    age = temp;
}
public void changeSal(double temp){
    salary = temp;
}
public void changePhone(String temp){
    phoneNum = temp;
}
public void changeAddress(String temp){
    address = temp;
}
public void changeENum(int temp){
    employeeNumber=temp;
}
public void changeGender(String temp){
    gender=temp;
}
public void updateVacation(int temp){
    vacation=temp;
}
public void ifManager(boolean temp){
    isManager=temp;
}
public int GetDays(){
    return vacation;
}
public String getName(){
    return name;
}

```

```

}
public String getGender(){
    return gender;
}
public double getSal(){
    return salary;
}
public String getPhone(){
    return phoneNum;
}
public String getAddress(){
    return address;
}
public String getPosn(){
    return department;
}
public String getIfManager(){
    if(this.isManager){
        return "Manager";
    }
    else{
        return "Employee";
    }
}
public int getENUM(){
    return employeeNumber;
}
public int getAge(){
    return age;
}
public String getAll(){
    String all="";
    all+=name+" ,aged "+age+" "+gender
        + ", in "+department + " Employee Number: "
        + employeeNumber + " With a salary of $" + salary + " monthly"+
        "\nPhone Number: "+phoneNum+"." +isManager;
    return all;
}
}

```

## Managers (Extened Class):

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package EasyAdmin;

/**
 *
 * @author 3406446
 */
public class Managers extends Employee {
    private int code;

    public Managers(){
        super();
    }
}

```



```

        code=000000;
    }
    public Managers(String name, int age, String sex, double sal,String
cell,String home,
        String title, int ID,int years,boolean manager ,int
password){// overload constructor
        super(name,age,sex,sal,cell,home,title,ID,years,manager);
        this.code = password;
    }

    public void changeCode(int temp){
        code = temp;
    }
    public int getCode(){
        return code;
    }
}

```

## Absence (Class object):

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package EasyAdmin;

/**
 *
 * @author 3406446
 */
public class Absence {
    private String name;        //constant
    private int EmployeeNum; //constant
    private String type;
    private double timeInDays; // 8 working hours a day
    private String department;
    private boolean approval;
    public Absence(){
        name="Unknown";
        EmployeeNum=000;
        type="Unknown";
        timeInDays=0; // 8 working hours a day
        department="Unknown";
        approval=false;
    }

    public void loadInfo(String name, int ID, String type, double time,
String department){
        this.name=name;
        EmployeeNum=ID;
        this.type=type;
        timeInDays=time; // 8 working hours a day
        this.department=department;
    }
    public String getName(){
        return name;
    }
    public String getType(){

```

```

        return type;
    }
    public String getDepartment(){
        return department;
    }
    public int getId(){
        return EmployeeNum;
    }
    public double getLength(){
        return timeInDays;
    }
    public String getState(){
        String out=name+" "+EmployeeNum+" "+type+" "+department+"
        "+timeInDays+" days"+".";
        if(approval){
            out += "Approved!";
        }
        return out;
    }
    public void setType(String temp){
        type=temp;
    }
    public void setDuration(double time){
        this.timeInDays=time;
    }
    public void setState(boolean temp){
        approval=temp;
    }
}

```