**Appendix**

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**Interaction with Cilent:**

|  |  |
| --- | --- |
| **Summary of outcome** | Message transaction with Client |
| **Client found and confirmed** | 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 |
| **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.** | 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] |
| **Expectations of the product identified by the client. See success criteria and test plan.** | Student 2017/11/27 9:20 PM  主要就是你对这个软件（程序）有什么样的预期和要求呢？  Client  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。  Student  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  Client  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。  Client  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。  Student  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  Client  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 |
| **First prototype sent to the client. Client made suggestions based on her ideas and expectation of the final product.**  **Improved model sent to client and agreement.**  **Algorithic of salary, insurrence provided by client.** | Student 2017/12/17 12:57 AM  是的  Client  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  Client  每个模块可以点进去再细化  Student  那方便的话能不能发给我一份你们用Excel做的系统呢？  Client  [File] 信业考勤.xlsx  Client  哈哈，如果程序能够根据请假、绩效直接计算出最后的工资就会更方便一点  Client  我上次去北京培训了华润的人力资源系统，发现在他们系统里面算工资比我用excel还麻烦。。。  Student  你觉得以什么样的形式统计考勤比较好呢？ 我想的是每次请假就录入系统就不用每个月累计起来了。 这样有人离职计算也方便  Client  我的想法就是最好，每个人请假审批通过系统进行，然后系统自动统计请假类型和天数，然后算出请假应该扣除的工资，在薪酬模块可以点击计算直接算出最后的工资。不是月末统计，是请假直接在系统里面申请，无纸化。  Student 2018/02/15 12:57 AM  [Photo]  [Photo]  陈姐， 你看过了吗？  Client  看过了，你可以按照你的这个设想先做。  Student  陈姐。你们公司的保险和养老金是怎么算的呢？  Client  [Photo]  比如说工资是3500一个月，那就按照上面的比例公司和个人分别承担  Student  和员工在职的时间不挂钩是吧  Client  对，没关系 |
| **Final product sent to client for implementing and test** | Student: 2018/02/21 12:57 AM  陈姐，我把弄完的程序发给你了，还一个有介绍功能和使用方法的视频。 你测试下然后给我一个反馈  Client:  好的， 我测试一下。 |
| **Client gave feedback on the final product. Complimented on the function and the fact that it was esay to use, but suggest furture improvement in the displaying features like including a nicer interface.** | 2018/02/22 11：30AM  Client:  我试了下， 功能方面还是挺好的。集成了许多其他的功能。 不过你这个界面还是可以改一下的。  总的来说是不错的。继续加油。 |

**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()

.addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.GroupLayout.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.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.GroupLayout.Alignment.TRAILING, false)

.addComponent(jLabel4)

.addComponent(jLabel3, javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()

.addComponent(jLabel2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jLabel8)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addGroup(layout.createSequentialGroup()

.addComponent(age, javax.swing.GroupLayout.PREFERRED\_SIZE, 49, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel6)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.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(jLabel1)

.addGroup(layout.createSequentialGroup()

.addComponent(first, javax.swing.GroupLayout.PREFERRED\_SIZE, 101, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel9)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addComponent(last, javax.swing.GroupLayout.PREFERRED\_SIZE, 125, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.ComponentPlacement.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.LayoutStyle.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.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.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.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.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.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.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.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.Alignment.BASELINE)

.addComponent(jButton1)

.addComponent(jButton2))

.addContainerGap())

);

pack();

}// </editor-fold>//GEN-END:initComponents

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton2ActionPerformed

// TODO add your handling code here:

this.dispose();

}//GEN-LAST:event\_jButton2ActionPerformed

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {//GEN-FIRST:event\_jButton1ActionPerformed

// 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 QWERTYUIOPLKJHGFDSAZXCVBNM";

for (int i = 0; i < in.length(); i++) {

if (alphas.indexOf(in.charAt(i)) < 0) {

JOptionPane.showMessageDialog(null, "Field not enterred 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 QWERTYUIOPLKJHGFDSAZXCVBNM";

for (int i = 0; i < in.length(); i++) {

if (alphas.indexOf(in.charAt(i)) < 0) {

JOptionPane.showMessageDialog(null, "Field not enterred 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 enterred 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 enterred correctly", "Warning", 1);

break;

}

if(Integer.parseInt(eNum.getText())>0&&Integer.parseInt(eNum.getText())<=200){

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 enterred 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 = "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 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 EOFL

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 EOFL

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()

.addGap(7, 7, 7)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel2)

.addComponent(jLabel1)

.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.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.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(6, 6, 6)

.addComponent(jButton7)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jButton4))

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, 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()

.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.ComponentPlacement.RELATED)

.addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED\_SIZE, 266, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addContainerGap())

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

.addComponent(jLabel9)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED))

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel7)

.addGap(62, 62, 62)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addComponent(jTextField9)

.addComponent(jComboBox1, 0, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jButton2, javax.swing.GroupLayout.PREFERRED\_SIZE, 146, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.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.GroupLayout.Alignment.TRAILING)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.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()

.addGap(3, 3, 3)

.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.ComponentPlacement.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.GroupLayout.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.GroupLayout.Alignment.LEADING, false)

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.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.GroupLayout.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.GroupLayout.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.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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 = "qwertyuioplkjhgfdsazxcvbnmQWERTYUIOPLKJHGFDSAZXCVBNM";

String in = " ";

int index;

final int length = 112; // 111 characters plus EOFL

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 enterred 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 EOFL

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(((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 {

type="Sickness";

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

}

}

}

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 \ncorrectly 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(l \* recL + 25);

raf3.writeBytes("Annual Vacation");//Corresponding Type

raf3.seek(l \* 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.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(CurrentStaff.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 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) {

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 void setInfo() {

jTextField2.setText(einput.getName()); //name

jTextField3.setText(Double.toString(einput.getSal())); //sal

jTextField4.setText(einput.getAddress()); //address

jTextField5.setText(einput.getPhone()); //phone

jTextField6.setText(Integer.toString(einput.GetDays())); //vacation

jTextField7.setText(Integer.toString(einput.getAge())); //age

jComboBox4.setSelectedItem(einput.getIfManager());

jComboBox2.setSelectedItem(einput.getGender());

jComboBox5.setSelectedItem(einput.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 EOFL

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 EOFL

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 EOFL

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("Insurrence");

insurrence.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.Alignment.LEADING)

.addComponent(jLabel3)

.addComponent(jLabel14))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addComponent(change, javax.swing.GroupLayout.DEFAULT\_SIZE, 74, Short.MAX\_VALUE)

.addComponent(sal))

.addGap(32, 32, 32)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel15)

.addComponent(jLabel13))

.addGap(18, 18, 18)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)

.addComponent(Tsal, javax.swing.GroupLayout.DEFAULT\_SIZE, 69, Short.MAX\_VALUE)

.addComponent(insurrence))

.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))

.addGroup(layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addGroup(javax.swing.GroupLayout.Alignment.LEADING, layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(12, 12, 12)

.addComponent(jLabel1))

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jButton1)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED\_SIZE, 56, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)

.addComponent(jLabel2)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED\_SIZE, 124, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(jSeparator3)

.addGroup(layout.createSequentialGroup()

.addComponent(jSeparator1)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addComponent(jLabel5)

.addGap(12, 12, 12)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addGap(70, 70, 70)

.addComponent(jLabel8))

.addGroup(layout.createSequentialGroup()

.addComponent(tt, javax.swing.GroupLayout.PREFERRED\_SIZE, 74, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addPreferredGap(javax.swing.LayoutStyle.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.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(jLabel6)

.addComponent(jLabel7))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addComponent(t2)

.addComponent(t3)))

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel4)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)

.addComponent(t1, javax.swing.GroupLayout.PREFERRED\_SIZE, 80, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 99, Short.MAX\_VALUE)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createSequentialGroup()

.addComponent(jLabel11)

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

.addComponent(jLabel10))

.addComponent(jLabel9))

.addPreferredGap(javax.swing.LayoutStyle.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.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.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.ComponentPlacement.RELATED)))

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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.Alignment.LEADING)

.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.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(jLabel3)

.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.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 = "qwertyuioplkjhgfdsazxcvbnmQWERTYUIOPLKJHGFDSAZXCVBNM";

String in = "";

final int length = 112; // 111 characters plus EOFL

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(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(EmployeeProfile.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 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):**

/\*

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\* 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):**

/\*

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\* 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;

}

}