

**EMPLOYEE MANAGEMENT**

**SYSTEM**

**DataBase Management System Lab (16ITL42)**

**Experiment No. 09 - Project Report**

**Submitted by**

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**ABSTRACT:**

**EMPLOYEE MANAGEMENT SYSTEM**

Employee Management System is a distributed application ,developed to maintain the details of employees working in any organization .The Employee Management System has been developed to override the problems prevailing in the practicing manual system .It maintains the information about the personal and official details of the employees .This project aims to simplify the task of maintaining records of the employee of company.

To develop an well-designed database to store employee information .Provides full functional reports to management of company .The objective of this project is to provide a comprehensive approach towards the management of employee information.

This project helps in maintaining the computerized employee details ,calculate the salary ,easy attendance marking ,easy calculation of various leave in categories.

**ER DIAGRAM:**

WORKS

EMPLOYEE

COMPANY

INVOLVES

PROJECT

**SCHEMA FOR DATABASE:**

mysql> use employee;

Database changed

mysql> show tables;

+-------------------------+

| Tables\_in\_employee |

+-------------------------+

| t1 |

| t2 |

| t3 |

+-------------------------+

mysql> describe t1;

+---------------+-----------+-------+------+---------+---------+

| Field | Type | Null | Key | Default | Extra |

+---------------+-----------+-------+------+---------+---------+

| companyname | char(10) | NO | PRI | NULL | |

| branch | char(10) | YES | | NULL | |

|branch code | int(11) | YES | | NULL | |

+---------------+------------+-------+------+----------+--------+

3 rows in set (0.00 sec)

mysql> describe t2;

+-----------------+----------+-------+------+---------+--------+

| Field | Type | NulL | Key | Default | Extra |

+-----------------+----------+-------+------+---------+--------+

|companyname | char(10) | NO | PRI | NULL | |

| branch | char(10) | YES | | NULL | |

| branchcode | int(11) | YES | | NULL | |

+-----------------+----------+--------+-------+----------+-------+

3 rows in set (0.02 sec)

mysql> describe t3;

+---------+----------+-------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+----------+-------+-----+---------+-------+

| id | int(11) | YES | | NULL | |

| name | char(67) | YES | | NULL | |

| age | int(11) | YES | | NULL | |

|dept |char(20)|YES | |NULL | |

|sal |int(11) |YES | | NULL | |

+---------+----------+-------+-----+---------+-------+

3 rows in set (0.00 sec)

**PROJECT CODE:**

package javaapplication23;

import java.sql.\*;

import java.awt.\*;

import java.util.\*;

import javax.swing.\*;

public class NewJFrame extends javax.swing.JFrame {

String s,t,deptm;

String uname="root";

String url="jdbc:mysql://localhost:3306/employee";

String password="dbms";

int i,age,saly;

public NewJFrame() {

initComponents();

}

/\*\*

\* 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">

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();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

jButton4 = new javax.swing.JButton();

jTextField1 = new javax.swing.JTextField();

jTextField2 = new javax.swing.JTextField();

jTextField3 = new javax.swing.JTextField();

jTextField4 = new javax.swing.JTextField();

jTextField5 = new javax.swing.JTextField();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);

jLabel1.setFont(new java.awt.Font("Arial", 1, 18)); // NOI18N

jLabel1.setText("Employee Management System");

jLabel2.setText("Id");

jLabel3.setText("Name");

jLabel4.setText("Age");

jLabel5.setText("Dept");

jLabel6.setText("Salary");

jButton1.setText("insert");

jButton1.addActionListener(new java.awt.event.ActionListener() {

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

jButton1ActionPerformed(evt);

}

});

jButton2.setText("update");

jButton2.addActionListener(new java.awt.event.ActionListener() {

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

jButton2ActionPerformed(evt);

}

});

jButton3.setText("delete");

jButton3.addActionListener(new java.awt.event.ActionListener() {

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

jButton3ActionPerformed(evt);

}

});

jButton4.setText("print");

jButton4.addActionListener(new java.awt.event.ActionListener() {

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

jButton4ActionPerformed(evt);

}

});

jTextField3.addActionListener(new java.awt.event.ActionListener() {

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

jTextField3ActionPerformed(evt);

}

});

jTextField4.addActionListener(new java.awt.event.ActionListener() {

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

jTextField4ActionPerformed(evt);

}

});

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(29, 29, 29)

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

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

.addComponent(jLabel3)

.addComponent(jLabel2)

.addComponent(jLabel4)

.addComponent(jLabel5)

.addComponent(jLabel6))

.addGroup(layout.createSequentialGroup()

.addGap(20, 20, 20)

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 319, javax.swing.GroupLayout.PREFERRED\_SIZE))))

.addGroup(layout.createSequentialGroup()

.addGap(108, 108, 108)

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

.addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED\_SIZE, 134, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED\_SIZE, 134, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED\_SIZE, 134, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jTextField4, javax.swing.GroupLayout.PREFERRED\_SIZE, 134, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED\_SIZE, 134, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGroup(layout.createSequentialGroup()

.addContainerGap()

.addComponent(jButton1)

.addGap(26, 26, 26)

.addComponent(jButton2)

.addGap(31, 31, 31)

.addComponent(jButton3)

.addGap(37, 37, 37)

.addComponent(jButton4)))

.addContainerGap(61, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(36, 36, 36)

.addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED\_SIZE, 27, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(28, 28, 28)

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

.addComponent(jLabel2)

.addComponent(jTextField1, 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(jLabel3)

.addComponent(jTextField2, 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(jTextField3, 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(jLabel5)

.addComponent(jTextField4, 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(jLabel6)

.addComponent(jTextField5, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 20, Short.MAX\_VALUE)

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

.addComponent(jButton1)

.addComponent(jButton2)

.addComponent(jButton3)

.addComponent(jButton4))

.addContainerGap())

);

pack();

}// </editor-fold>

private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

try{

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection con=DriverManager.getConnection(url,uname,password);

Statement st=con.createStatement();

String s1=jTextField1.getText();

String s2=jTextField2.getText();

String s3=jTextField3.getText();

String s4=jTextField4.getText();

String s5=jTextField5.getText();

String s6="update t3 set id='"+s1+"',name='"+s2+"',age='"+s3+"',dept='"+s4+"',sal='"+s5+"' where id='"+s1+"'";

PreparedStatement ps=con.prepareStatement(s6);

ps.execute();

JOptionPane.showMessageDialog(null,"Updated Sucessfully");

} catch(Exception e) {

e.printStackTrace();

}

}

private void jTextField4ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

}

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

try {

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection con=DriverManager.getConnection(url,uname,password);

i=Integer.parseInt(jTextField1.getText());

s=jTextField2.getText();

age=Integer.parseInt(jTextField3.getText());

deptm=jTextField4.getText();

saly=Integer.parseInt(jTextField5.getText());

Statement st=con.createStatement();

String stm="insert into t3 values('"+i+"','"+s+"','"+age+"','"+deptm+"','"+saly+"');";

st.executeUpdate(stm);

JOptionPane.showMessageDialog(null,"Inserted Sucessfully");

st.close();

con.close();

} catch(Exception e) {

e.printStackTrace();

}

}

private void jButton4ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

try

{

int i;

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection con=DriverManager.getConnection(url,uname,password);

Statement st=con.createStatement();

ArrayList<String[]> tableData=new ArrayList<>(); // you need a dynamic sized container for the results

ResultSet rs = st.executeQuery( "SELECT \* FROM t3" ); // query the database

while ( rs.next() ){

i=rs.getInt(1);

s=Integer.toString(i);

tableData.add(new String[]{s, rs.getString(2),rs.getString(3),rs.getString(4),rs.getString(5)});

}

String[][] tableRows = tableData.toArray(new String[tableData.size()][]); // convert the ArrayList to a regular Array

String[] columnNames = {

"Id", "Name" ,"Age","Dept","Sal" // name your table columns

};

JFrame f = new JFrame(); // you need a window to display the JTable

f.setDefaultCloseOperation( JFrame.EXIT\_ON\_CLOSE );

JTable table = new JTable( tableRows, columnNames ); // thats how you put the data into the JTable

f.add( new JScrollPane( table ) ); // add the JTable to the window

f.pack();

f.setVisible( true ); // finished

}

catch(Exception e) {

e.printStackTrace();

}

}

private void jTextField3ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

}

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

// TODO add your handling code here:

try{

Class.forName("com.mysql.jdbc.Driver").newInstance();

Connection con=DriverManager.getConnection(url,uname,password);

String id=jTextField1.getText();

String a="DELETE FROM t3 WHERE id=?";

PreparedStatement st=con.prepareStatement(a);

st.setString(1,id);

st.execute();

JOptionPane.showMessageDialog(null,"Deleted Sucessfully");

} catch(Exception e) {

e.printStackTrace();

}

}

/\*\*

\* @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(NewJFrame.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);

} catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(NewJFrame.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 NewJFrame().setVisible(true);

}

});

}

// Variables declaration - do not modify

private javax.swing.JButton jButton1;

private javax.swing.JButton jButton2;

private javax.swing.JButton jButton3;

private javax.swing.JButton jButton4;

private javax.swing.JLabel jLabel1;

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.JTextField jTextField1;

private javax.swing.JTextField jTextField2;

private javax.swing.JTextField jTextField3;

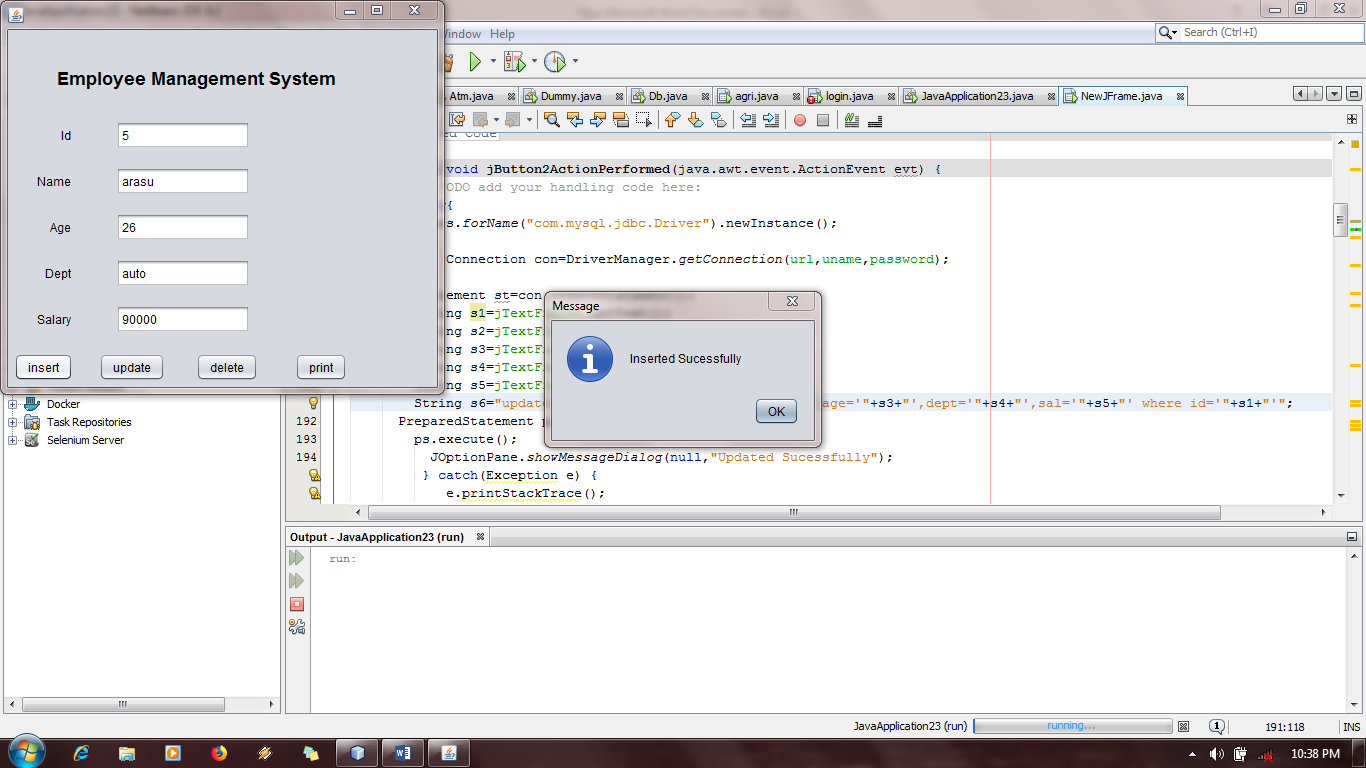
private javax.swing.JTextField jTextField4;

private javax.swing.JTextField jTextField5;

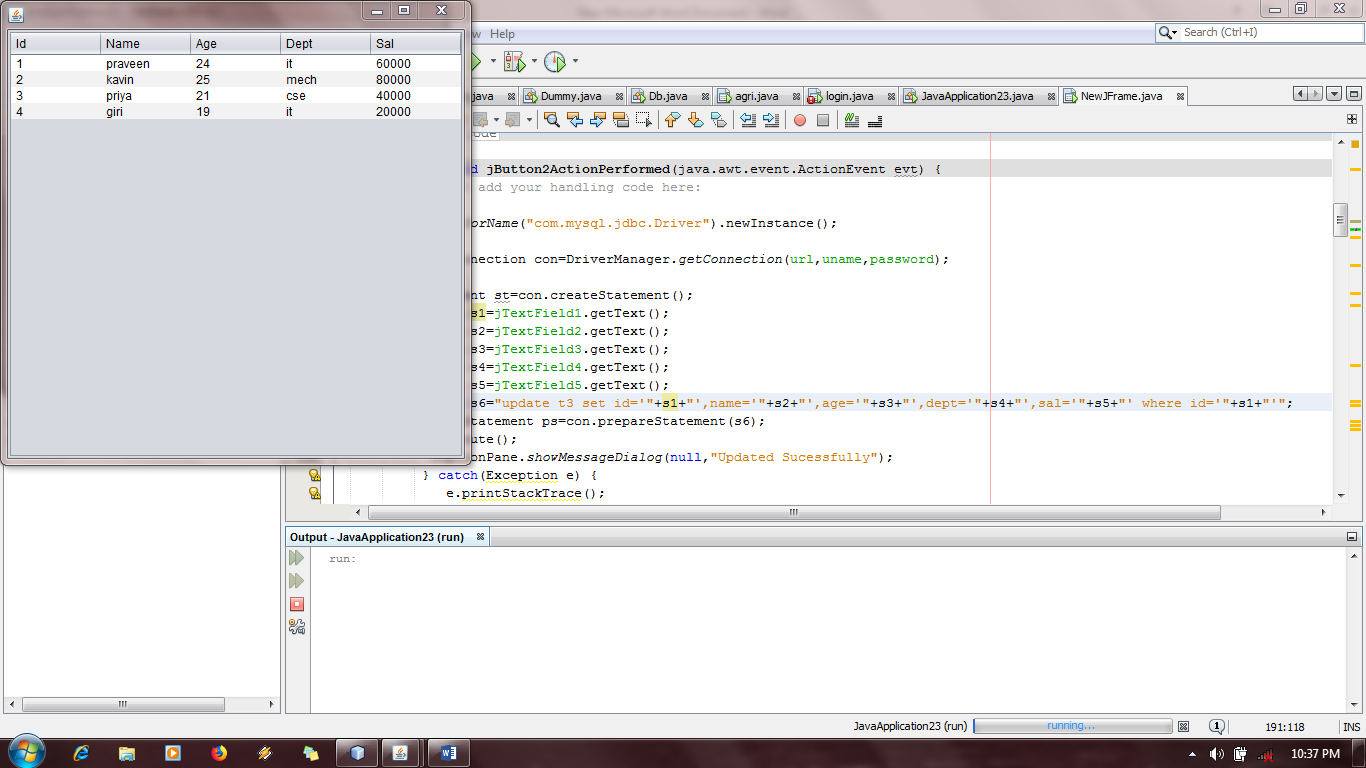
}

**OUTPUT:**

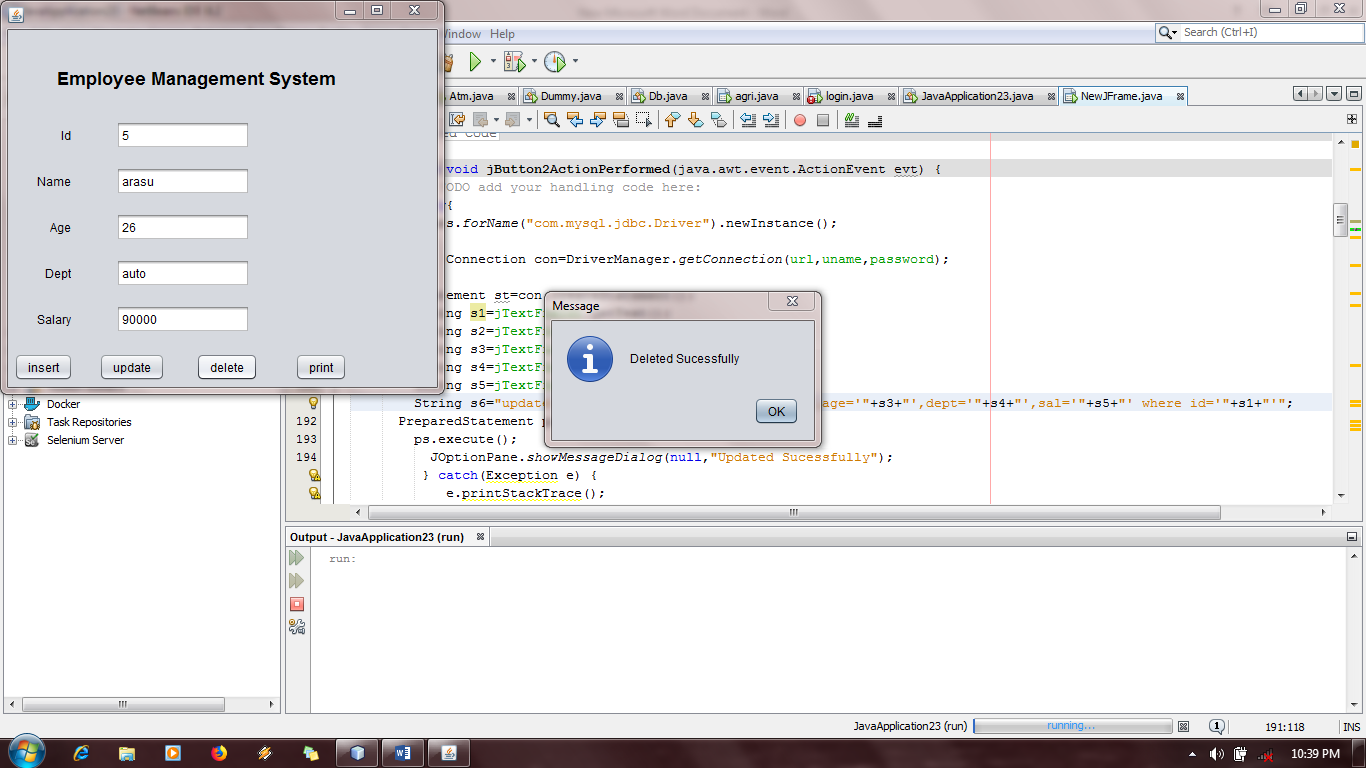
**INSERT:**

****

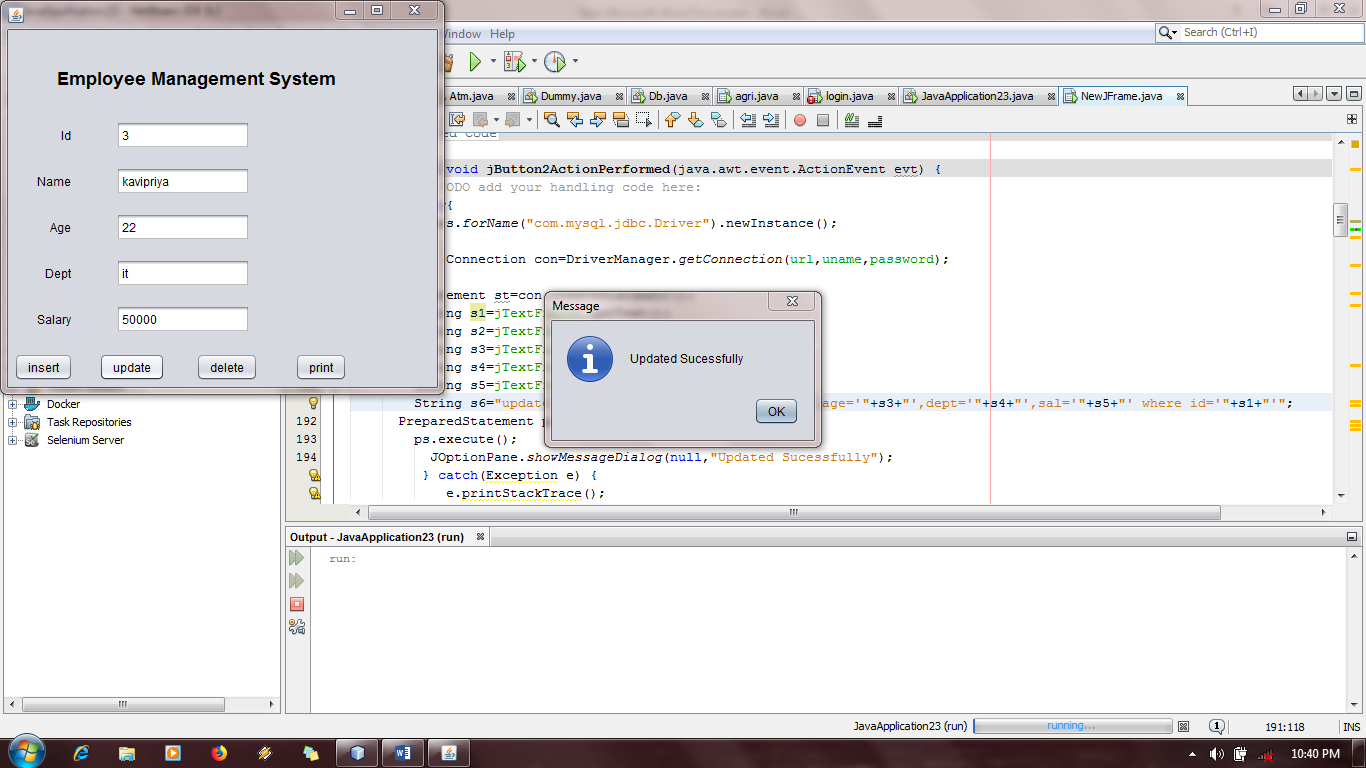
**DISPLAY:**

****

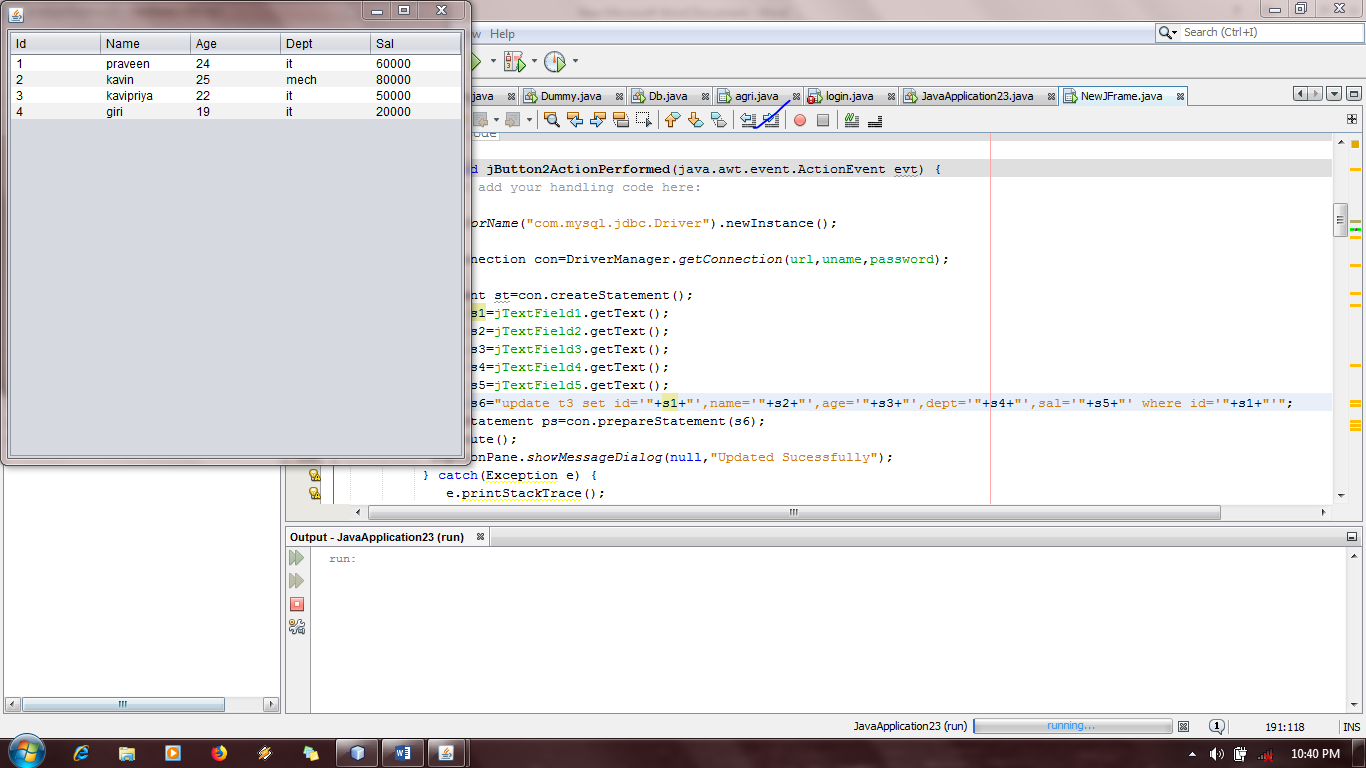
**DELETE:**

****

**UPDATE:**

****

**AFTER UPDATE:**

****

**CONCLUSION:**

The Employee Management System is more efficient and user friendly .There is no possible for any loss of data through this system .It reduces manual work and saves time.

**REFERENCES:**

[WWW.SQLITETUTORIAL.NET](http://WWW.SQLITETUTORIAL.NET)

<HTTPS://ALVINALEXANDER.COM>

<HTTPS://STACKOVERFLOW.COM>

<HTTPS://WWW.CODEJAVA.NET>

**BOOKS:**

Elmasri Navathe Fundamentals of database system.