Practical-8

Aim - Create web application in java to store the data in table using mongodb and display data in table & Design the Form with Insert, Delete, Update and Load Db Button.

CODE:

import com.mongodb.BasicDBObject; import com.mongodb.DB; import com.mongodb.DBCollection; import com.mongodb.DBCursor; import com.mongodb.MongoClient; import

javax.swing.table.DefaultTableModel;

/\*

* 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.

\*/

/\*\*

\*

* @author baps

\*/

public class Jay extends javax.swing.JFrame {

/\*\*

* Creates new form Urmi

\*/

public MongoClient mongo; public DB db; public DBCollection table;

DefaultTableModel tb;

public Jay() {

initComponents();

}

public void con\_db(){ mongo= new

MongoClient("localhost",27017); db=(DB) mongo.getDB("xyz"); tb = (DefaultTableModel) jTable.getModel(); table =

db.getCollection("urmijava"); tb.setRowCount(0);

DBCursor cr =table.find(); while(cr.hasNext()){

BasicDBObject obj = (BasicDBObject) cr.next();

Object[] ROW =

{obj.getString("enrollment"),obj.getString("firstname"),obj.getString("lastname"),obj.getString("branch name")};

tb.addRow(ROW);

}

}

/\*\*

* 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(); enrollment = new javax.swing.JTextField(); firstname = new javax.swing.JTextField(); lastname = new javax.swing.JTextField(); jScrollPane1 = new javax.swing.JScrollPane(); jTable = new javax.swing.JTable(); btninsert = new javax.swing.JButton(); btnupdate = new javax.swing.JButton(); btndelete = new javax.swing.JButton(); btnload = new javax.swing.JButton(); branchname = new javax.swing.JTextField(); jLabel5 = new

javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE); setBackground(new java.awt.Color(204, 204, 255));

jLabel1.setFont(new java.awt.Font("Yu Gothic UI", 0, 18)); // NOI18N

jLabel1.setText("Enter Enrollment No.");

jLabel2.setFont(new java.awt.Font("Yu Gothic UI", 0, 18)); // NOI18N

jLabel2.setText("Enter First Name");

jLabel3.setFont(new java.awt.Font("Yu Gothic UI", 0, 18)); // NOI18N jLabel3.setText("Enter Last Name");

jLabel4.setFont(new java.awt.Font("Yu Gothic UI", 0, 18)); // NOI18N

jLabel4.setText("Enter Branch");

enrollment.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

firstname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

lastname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

jTable.setFont(new java.awt.Font("Times New Roman", 1, 14)); // NOI18N jTable.setModel(new javax.swing.table.DefaultTableModel(

new Object [][] {

{null, null, null, null},

{null, null, null, null},

{null, null, null, null},

{null, null, null, null}

},

new String [] {

"Enrollment No. ", "First Name", "Last Name", "Branch"

}

));

jTable.addMouseListener(new java.awt.event.MouseAdapter() { public void mouseClicked(java.awt.event.MouseEvent evt) {

jTableMouseClicked(evt);

}

});

jScrollPane1.setViewportView(jTable);

btninsert.setBackground(new java.awt.Color(204, 204, 204)); btninsert.setFont(new java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N btninsert.setForeground(new java.awt.Color(102, 102, 102)); btninsert.setText("INSERT");

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

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

{ btninsertActionPerformed(evt);

}

});

btnupdate.setBackground(new java.awt.Color(204, 204, 204)); btnupdate.setFont(new java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N btnupdate.setForeground(new java.awt.Color(102, 102, 102)); btnupdate.setText("UPDATE"); btnupdate.addActionListener(new

java.awt.event.ActionListener() {

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

{ btnupdateActionPerformed(evt);

}

});

btndelete.setBackground(new java.awt.Color(204, 204, 204)); btndelete.setFont(new java.awt.Font("Rockwell Condensed", 0, 18)); // NOI18N btndelete.setForeground(new java.awt.Color(102, 102, 102)); btndelete.setText("DELETE");

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

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

{ btndeleteActionPerformed(evt);

}

});

btnload.setBackground(new java.awt.Color(153, 153, 255)); btnload.setFont(new java.awt.Font("Calibri", 1, 18)); // NOI18N

btnload.setForeground(new java.awt.Color(255, 255, 255));

btnload.setText("LOAD DB"); btnload.addActionListener(new

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

{ btnloadActionPerformed(evt);

}

});

branchname.setFont(new java.awt.Font("Tahoma", 1, 14)); // NOI18N

jLabel5.setBackground(new java.awt.Color(153, 153, 255)); jLabel5.setFont(new java.awt.Font("Stencil", 1, 24)); // NOI18N jLabel5.setForeground(new java.awt.Color(255, 255, 255)); jLabel5.setText("Student Data");

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(96, 96, 96)

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

.addGroup(layout.createSequentialGroup()

.addComponent(btninsert, javax.swing.GroupLayout.PREFERRED\_SIZE, 138, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

.addComponent(btnload, javax.swing.GroupLayout.PREFERRED\_SIZE, 268, javax.swing.GroupLayout.PREFERRED\_SIZE)

.addGap(0, 214, Short.MAX\_VALUE))

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

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

.addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.LEADING)

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

.addGap(193, 193, 193)

.addComponent(btnupdate, javax.swing.GroupLayout.PREFERRED\_SIZE, 145, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

.addComponent(btndelete, javax.swing.GroupLayout.PREFERRED\_SIZE, 154, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGap(56, 56, 56))))

.addGroup(layout.createSequentialGroup()

.addGap(135, 135, 135)

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

.addComponent(jLabel1)

.addComponent(jLabel2)

.addGroup(layout.createSequentialGroup()

.addGap(1, 1, 1)

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

.addComponent(jLabel3)

.addComponent(jLabel4))))

.addGap(38, 38, 38)

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

.addComponent(firstname, javax.swing.GroupLayout.Alignment.TRAILING, javax.swing.GroupLayout.DEFAULT\_SIZE, 312, Short.MAX\_VALUE)

.addComponent(lastname, javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(branchname)

.addComponent(enrollment))

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

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

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

.addComponent(jLabel5)

.addGap(272, 272, 272))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(27, 27, 27)

.addComponent(jLabel5)

.addGap(18, 18, 18)

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

.addComponent(jLabel1, javax.swing.GroupLayout.Alignment.TRAILING)

.addComponent(enrollment, 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) .addComponent(jLabel2)

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

.addComponent(jLabel3))

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

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

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

.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 22, javax.swing.GroupLayout.PREFERRED\_SIZE))

.addGap(34, 34, 34)

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

.addComponent(btnupdate)

.addComponent(btndelete))

.addGap(18, 18, 18)

.addComponent(btnload)

.addGap(26, 26, 26)

.addComponent(jScrollPane1, javax.swing.GroupLayout.DEFAULT\_SIZE, 106, Short.MAX\_VALUE)

.addContainerGap())

);

pack();

}// </editor-fold>

private void btnloadActionPerformed(java.awt.event.ActionEvent evt) { // TODO add your handling code here:

con\_db();

}

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

// TODO add your handling code here:

BasicDBObject document = new BasicDBObject(); document.put("firstname",firstname.getText()); document.put("lastname",lastname.getText()); document.put("branchname",branchname.getText()); document.put("enrollment",enrollment.getText());

table.insert(document); firstname.setText(""); lastname.setText(""); branchname.setText(""); enrollment.setText("");

System.out.println("Successful");

}

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

// TODO add your handling code here:

enrollment.setEditable(false);

BasicDBObject search = new BasicDBObject(); String eno1 = enrollment.getText().toString(); search.put("enrollment",eno1 );

BasicDBObject newDocument = new BasicDBObject();

|  |  |
| --- | --- |
| newDocument.put("enrollment",eno1 | ); |
| newDocument.put("firstname",firstname.getText().toString() | ); |
| newDocument.put("lastname",lastname.getText().toString() | ); |

newDocument.put("branchname",branchname.getText().toString() );

BasicDBObject updateObj = new BasicDBObject();

updateObj.put("$set",newDocument); table.update(search,newDocument

);

firstname.setText("");

lastname.setText(""); branchname.setText(""); enrollment.setText("");

}

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

// TODO add your handling code here:

BasicDBObject search = new BasicDBObject(); String eno1 = enrollment.getText().toString(); search.put("enrollment",eno1); table.remove(search);

firstname.setText(""); lastname.setText(""); branchname.setText(""); enrollment.setText("");

}

private void jTableMouseClicked(java.awt.event.MouseEvent evt) { // TODO add your handling code here: int pindex = jTable.getSelectedRow(); enrollment.setText(tb.getValueAt(pindex,0 ).toString()); firstname.setText(tb.getValueAt(pindex,1 ).toString()); lastname.setText(tb.getValueAt(pindex,2).toString()); branchname.setText(tb.getValueAt(pindex,3 ).toString());

}

/\*\*

\* @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  javax.swing.UIManager.getInstalledLookAndFeels()) { | info | | : |
| if ("Nimbus".equals(info.getName()))  javax.swing.UIManager.setLookAndFeel(info.getClassName());  break;  }  } |  |  | { |
| } catch (ClassNotFoundException |  | ex) | { |

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

catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

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

//</editor-fold>

/\* Create and display the form \*/

java.awt.EventQueue.invokeLater(() -> { new Jay().setVisible(true);

});

}

// Variables declaration - do not modify

private javax.swing.JTextField branchname; private javax.swing.JButton btndelete; private javax.swing.JButton btninsert; private javax.swing.JButton btnload; private

javax.swing.JButton btnupdate; private javax.swing.JTextField enrollment; private javax.swing.JTextField firstname; 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.JScrollPane jScrollPane1; private javax.swing.JTable jTable; private javax.swing.JTextField lastname;

// End of variables declaration

}





