**Assignment 1**

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Class: TEIT Roll. No.: 20 Batch: T1

Date:14/9/2015

Design and Implement any Database Application using PHP/ python/Java and MongoDB as a back end. Implement Database navigation operations (add, delete, edit etc.) using ODBC/JDBC.

package javaapplication5;

import com.mongodb.\*;

import java.net.UnknownHostException;

import java.util.logging.Level;

import java.util.logging.Logger;

/\*\*

\*

\* @author STUDENT

\*/

public class ad extends javax.swing.JFrame {

/\*\*

\* Creates new form ad

\*/

public ad() {

initComponents();

}

@SuppressWarnings("unchecked")

// <editor-fold defaultstate="collapsed" desc="Generated Code">

private void initComponents() {

jLabel1 = new javax.swing.JLabel();

jLabel2 = new javax.swing.JLabel();

jButton1 = new javax.swing.JButton();

jButton2 = new javax.swing.JButton();

jButton3 = new javax.swing.JButton();

jTextField1 = new javax.swing.JTextField();

jTextField2 = new javax.swing.JTextField();

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

jLabel1.setText("BID");

jLabel2.setText("name");

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);

}

});

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(77, 77, 77)

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

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

.addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED\_SIZE, 68, javax.swing.GroupLayout.PREFERRED\_SIZE)

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

.addGap(119, 119, 119)

.addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED\_SIZE, 64, javax.swing.GroupLayout.PREFERRED\_SIZE)))

.addGroup(layout.createSequentialGroup()

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

.addComponent(jLabel1)

.addComponent(jButton1)

.addComponent(jLabel2))

.addGap(34, 34, 34)

.addComponent(jButton2)

.addGap(27, 27, 27)

.addComponent(jButton3)))

.addContainerGap(73, Short.MAX\_VALUE))

);

layout.setVerticalGroup(

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

.addGroup(layout.createSequentialGroup()

.addGap(78, 78, 78)

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

.addComponent(jLabel1)

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

.addGap(31, 31, 31)

.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))

.addGap(58, 58, 58)

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

.addComponent(jButton1)

.addComponent(jButton2)

.addComponent(jButton3))

.addContainerGap(70, Short.MAX\_VALUE))

);

pack();

}// </editor-fold>

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

MongoClient mongoClient = null;

try {

mongoClient = new MongoClient("localhost", 27017);

} catch (UnknownHostException ex) {

Logger.getLogger(ad.class.getName()).log(Level.SEVERE, null, ex);

}

DB db = mongoClient.getDB("library");

DBCollection coll = db.getCollection("infoo");

BasicDBObject doc = new BasicDBObject("BID",jTextField1.getText()).append("Bkname",jTextField2.getText());

coll.insert(doc);

// TODO add your handling code here:

}

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

MongoClient mongoClient = null;

try {

mongoClient = new MongoClient( "localhost" , 27017 );

} catch (UnknownHostException ex) {

Logger.getLogger(ad.class.getName()).log(Level.SEVERE, null, ex);

}

DB db = mongoClient.getDB( "library" );

DBCollection coll = db.getCollection("infoo");

BasicDBObject query = new BasicDBObject();

query.put("BID", jTextField1.getText());

BasicDBObject newDocument = new BasicDBObject();

newDocument.put("Bkname", jTextField2.getText());

BasicDBObject updateObj = new BasicDBObject();

updateObj.put("$set", newDocument);

coll.update(query, updateObj);

// TODO add your handling code here:

}

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

MongoClient mongoClient = null;

try {

mongoClient = new MongoClient( "localhost" , 27017 );

} catch (UnknownHostException ex) {

Logger.getLogger(ad.class.getName()).log(Level.SEVERE, null, ex);

}

// Now connect to your databases

DB db = mongoClient.getDB( "library" );

System.out.println("Connect to database successfully");

DBCollection coll = db.getCollection("infoo");

BasicDBObject searchQuery = new BasicDBObject();

searchQuery.put("BID", jTextField1.getText());

WriteResult remove = coll.remove(searchQuery) // TODO add your handling code here:

;

}

/\*\*

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

} catch (InstantiationException ex) {

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

} catch (IllegalAccessException ex) {

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

} catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(ad.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 ad().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.JLabel jLabel1;

private javax.swing.JLabel jLabel2;

private javax.swing.JTextField jTextField1;

private javax.swing.JTextField jTextField2;

// End of variables declaration

}

**Database (MongoDB) :-**

Microsoft Windows [Version 6.3.9600]

(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\STUDENT>cd\

C:\>cd C:\Program Files\MongoDB 2.6 Standard\bin

C:\Program Files\MongoDB 2.6 Standard\bin>mongo

MongoDB shell version: 2.6.2

connecting to: test

Server has startup warnings:

2014-09-06T00:01:34.997+1300 [initandlisten]

2014-09-06T00:01:34.997+1300 [initandlisten] \*\* NOTE: This is a 32 bit MongoDB b

inary.

2014-09-06T00:01:34.997+1300 [initandlisten] \*\* 32 bit builds are limited

to less than 2GB of data (or less with --journal).

2014-09-06T00:01:34.997+1300 [initandlisten] \*\* Note that journaling defau

lts to off for 32 bit and is currently off.

2014-09-06T00:01:34.997+1300 [initandlisten] \*\* See http://dochub.mongodb.

org/core/32bit

2014-09-06T00:01:34.997+1300 [initandlisten]

> use library

switched to db library

> db.createCollection("infoo");

{ "ok" : 1 }

> db.infoo.find();

{ "\_id" : ObjectId("54099d939b5229fe6a333c65"), "BID" : "1", "Bkname" : "c" }

{ "\_id" : ObjectId("54099d999b5229fe6a333c66"), "BID" : "2", "Bkname" : "c++" }

{ "\_id" : ObjectId("54099da09b5229fe6a333c67"), "BID" : "3", "Bkname" : "java" }

> db.infoo.find();

{ "\_id" : ObjectId("54099d939b5229fe6a333c65"), "BID" : "1", "Bkname" : "c" }

{ "\_id" : ObjectId("54099d999b5229fe6a333c66"), "BID" : "2", "Bkname" : "c++" }

{ "\_id" : ObjectId("54099da09b5229fe6a333c67"), "BID" : "3", "Bkname" : "java" }

> db.infoo.find();

{ "\_id" : ObjectId("54099d939b5229fe6a333c65"), "BID" : "1", "Bkname" : "c" }

{ "\_id" : ObjectId("54099d999b5229fe6a333c66"), "BID" : "2", "Bkname" : "c++" }

{ "\_id" : ObjectId("54099da09b5229fe6a333c67"), "BID" : "3", "Bkname" : "java" }

> db.infoo.find();

{ "\_id" : ObjectId("54099d939b5229fe6a333c65"), "BID" : "1", "Bkname" : "c" }

{ "\_id" : ObjectId("54099d999b5229fe6a333c66"), "BID" : "2", "Bkname" : "c++" }

{ "\_id" : ObjectId("54099da09b5229fe6a333c67"), "BID" : "3", "Bkname" : "vb.net"

}

>

Output :



