**Lab 5**

**Q1) Student Master**

**Java Code:**

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import DataAccess.\*;

import java.sql.ResultSet;

/\*\*

\*

\* @author Abhishek Karan

\*/

public class detailsMaster extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

out.println("<!DOCTYPE html>");

out.println("<html>");

out.println("<head>");

out.println("</head>");

out.println("<body>");

out.println("<h1 align='center'>Student Details</h1>");

out.println("<table align='center' border=true>");

out.println("<tr>");

out.println("<th>");

out.println("Student Name");

out.println("</th>");

out.println("<th>");

out.println("Student Age");

out.println("</th>");

out.println("<th>");

out.println("Student CGPA");

out.println("</th>");

out.println("<th>");

out.println("Student Branch");

out.println("</th>");

out.println("</tr>");

DataAccess da = new DataAccess();

ResultSet rs = da.getDetails();

try {

while (rs.next()) {

out.println("<tr>");

out.println("<td>");

out.println(rs.getString(1));

out.println("</td>");

out.println("<td>");

out.println(rs.getInt(2));

out.println("</td>");

out.println("<td>");

out.println(rs.getInt(3));

out.println("</td>");

out.println("<td>");

out.println(rs.getString(4));

out.println("</td>");

out.println("</tr>");

}//while

} catch (Exception e) {

e.getMessage();

}//try-catch

out.println("</table>");

out.println("</body>");

out.println("</html>");

}//pw try

}//processRequest

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/\*\*

\* Handles the HTTP <code>GET</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Handles the HTTP <code>POST</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Returns a short description of the servlet.

\*

\* @return a String containing servlet description

\*/

@Override

public String getServletInfo() {

return "Short description";

}// </editor-fold>

}

**DataAccess.java**

package DataAccess;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.\*;

/\*\*

\*

\* @author Abhishek Karan

\*/

public class DataAccess {

static final String JDBC\_DRIVER = "com.mysql.jdbc.Driver";

static final String DB\_URL = "jdbc:mysql://localhost/abhi";

static final String USER = "root";

static final String PASS = "student";

Connection con = null;

ResultSet rs = null;

Statement stmt = null;

private Connection getConnection() {

try {

Class.forName(JDBC\_DRIVER);

con = (Connection) DriverManager.getConnection(DB\_URL, USER, PASS);

} catch (Exception e) {

System.out.println(e.getMessage());

}

return con;

}//getConnection()

public ResultSet getDetails() {

con = getConnection();

try {

String query = "select sname,sage,scgpa,sbranch from student\_master";

stmt = con.createStatement();

rs = stmt.executeQuery(query);

} catch (Exception e) {

e.getMessage();

}

return rs;

}//getDetails()

}

Q1) Salary Portal

Java Code:

import DataAccess.DataAccess;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.ResultSet;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\*

\* @author student

\*/

public class staffDetails extends HttpServlet {

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

out.println("<!DOCTYPE html>");

out.println("<html>");

out.println("<head>");

out.println("</head>");

out.println("<body>");

out.println("<h1 align='center'>Staff Salary Details</h1>");

out.println("<table align='center' border=true>");

out.println("<tr>");

out.println("<th>");

out.println("Staff Designation");

out.println("</th>");

out.println("<th>");

out.println("Salary");

out.println("</th>");

out.println("</tr>");

DataAccess da = new DataAccess();

ResultSet rs = da.getStaffDetails(request.getParameter("depts"));

try {

while (rs.next()) {

out.println("<tr>");

out.println("<td>");

out.println(rs.getString(1));

out.println("</td>");

out.println("<td>");

out.println(rs.getInt(2));

out.println("</td>");

out.println("</tr>");

}//while

} catch (Exception e) {

e.getMessage();

}//try-catch

out.println("</table>");

out.println("<a href='/SalaryPortal/index.jsp'>Go Back</a> </body>");

out.println("</html>");

}//pw try

}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/\*\*

\* Handles the HTTP <code>GET</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Handles the HTTP <code>POST</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Returns a short description of the servlet.

\*

\* @return a String containing servlet description

\*/

@Override

public String getServletInfo() {

return "Short description";

}// </editor-fold>

}

**DataAccess.java**

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import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.\*;

/\*\*

\*

\* @author Abhishek Karan

\*/

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static final String DB\_URL = "jdbc:mysql://localhost/abhi";

static final String USER = "root";

static final String PASS = "student";

Connection con = null;

ResultSet rs = null;

PreparedStatement pstmt = null;

Statement stmt = null;

private Connection getConnection() {

try {

Class.forName(JDBC\_DRIVER);

con = (Connection) DriverManager.getConnection(DB\_URL, USER, PASS);

} catch (Exception e) {

System.out.println(e.getMessage());

}

return con;

}//getConnection()

public ResultSet getDepartmentDetails() {

con = getConnection();

try {

String query = "select dname from department\_master";

stmt = con.createStatement();

rs = stmt.executeQuery(query);

} catch (Exception e) {

e.getMessage();

}

return rs;

}//getStaffDetails()

public ResultSet getStaffDetails(String dname) {

con = getConnection();

try {

String query = "select s.sname,s.salary from staff s,department\_master dm where dm.\_id=s.did and dm.dname=?";

pstmt = (PreparedStatement) con.prepareStatement(query);

pstmt.setString(1, dname);

rs = pstmt.executeQuery();

} catch (Exception e) {

e.getMessage();

}

return rs;

}//getStaffDetails()

}

Abhishek Karan

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