

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 GET and POST
     * 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 GET and POST
     * 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

```
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;
```

```
    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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