JSP + Servlets CRUD operation

Register.jsp

```jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="SaveServlet">
Username::<input type="text" name="username">
Password::<input type="password" name="password">
<input type="submit" value="submit"> </button>
</form>
<a href="ViewServlet">View Employee List</a>
</body>
</html>
```

Employee.java

```java
package com.test;

public class Employee {

    int id;
    String username;
    String password;

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
```

```java
        }

        public String getUsername() {
                return username;
        }

        public void setUsername(String username) {
                this.username = username;
        }

        public String getPassword() {
                return password;
        }

        public void setPassword(String password) {
                this.password = password;
        }

        @Override
        public String toString() {
                return "Employee [id=" + id + ", username=" +
username + ", password=" + password + "]";
        }

}
```

SaveServlet.java

package com.test;

import java.io.IOException;

import java.util.ArrayList;

import java.util.List;

import javax.servlet.RequestDispatcher;

```java
import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/SaveServlet ")

public class SaveServlet extends HttpServlet {


    /**
     *
     */
    private static final long serialVersionUID = -711373866551588448L;


    protected void service(HttpServletRequest request, HttpServletResponse response)
                    throws ServletException, IOException {


        //get the data from user
        String name = request.getParameter("username");
        System.out.println("name>>" + name);
        String pass = request.getParameter("password");
        System.out.println("pass>>" + pass);


        //process the data
        Employee employee= new Employee();
        employee.setUsername(name);
```

```java
            employee.setPassword(pass);


            DBUTIL.save(employee);



    }


}
```

ViewServlet.java

```java
package com.test;

import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class ViewServlet
 */
@WebServlet("/ViewServlet")
public class ViewServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException {

        PrintWriter out= response.getWriter();
        out.print("<h1>Employee List>></h1>");
        List<Employee> list=DBUTIL.getAllEmployee();
        System.out.println("list>>"+list);
```

```java
            out.print("<table border=1 width='100%'>");

        out.print("<tr><th>ID</th><th>Username</th><th>Password</th>");
            for(Employee e: list) {

        out.print("<tr><td>"+e.getId()+"</td><td>"+e.getUsername
()+"</td><td>"+e.getPassword()+"</td><td><a
href='DeleteServlet?id="+e.getId()+"'>Delete</a></td></tr>")
;
            }
        }

    }
```

DeleteServlet.java

package com.test;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/**

 * Servlet implementation class DeleteServlet

 */

@WebServlet("/DeleteServlet")

public class DeleteServlet extends HttpServlet {

```java
        private static final long serialVersionUID = 1L;


        protected void doGet(HttpServletRequest request, HttpServletResponse response)
                        throws ServletException, IOException {


                String empId=request.getParameter("id");

                int id=Integer.parseInt(empId);

                //System.out.println("id>>"+id);

                DBUTIL.delete(id);


        }


}
```

DBUTIL.java

```java
package com.test;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.*;

public class DBUTIL {

    // design utility for connection

    public static Connection getConnection() throws SQLException {
```

```java
        Connection con = null;
        try {
            Class.forName("com.mysql.jdbc.Driver");
            con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/tes
t", "root", "root");
        } catch (ClassNotFoundException e) {
            e.printStackTrace();
        }

        return con;

    }

    public static void save(Employee employee) {

        try {
            Connection con = DBUTIL.getConnection();
            PreparedStatement ps =
con.prepareStatement("insert into
employee(username,password)values(?,?)");
            ps.setString(1, employee.getUsername());
            ps.setString(2, employee.getPassword());

            ps.executeUpdate();
            con.close();
        } catch (Exception e) {
            e.printStackTrace();
        }

    }

    public static List<Employee> getAllEmployee() {

        List<Employee> list = new ArrayList<Employee>();

        try {
            Connection con = DBUTIL.getConnection();
```

```java
            PreparedStatement ps =
con.prepareStatement("select * from employee");
            ResultSet rs = ps.executeQuery();
            while (rs.next()) {
                Employee employee = new Employee();
                employee.setId(rs.getInt(1));
                employee.setUsername(rs.getString(2));
                employee.setPassword(rs.getString(3));
                list.add(employee);
            }
        } catch (Exception e) {
            e.printStackTrace();
        }

        return list;

    }


    public static int delete(int id) {

        int status=0;
        try {

            Connection con = DBUTIL.getConnection();
            PreparedStatement ps =
con.prepareStatement("delete from employee where id=?");
            ps.setInt(1, id);
            status=ps.executeUpdate();
        } catch (Exception e) {
            e.printStackTrace();
        }
        return status;
    }
}
```