Date : 12-03-2024

Experiment - 6.1

Aim:

Create User Registration using JSP, Servlet and JDBC.

Code:

1- Create database table for member

```
  <code>CREATE TABLE `member` (
        `uname` varchar(45) NOT NULL,
        `password` varchar(45) DEFAULT NULL,
        `email` varchar(45) DEFAULT NULL,
        `phone` varchar(45) DEFAULT NULL,
        PRIMARY KEY (`uname`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;</code>
```

2- Create a memberRegister.jsp for the user registration

```
<%@ 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="Register" method="post">
		<table>
		<tr> <td>User Name</td>
		<td><input type="text" name="uname"></td> </tr>
		<tr> <td>Password</td>
		<td><input type="password" name="password"></td> </tr> <tr>
		<td>Email</td>
		<td><input type="text" name="email"></td>
		</tr> <tr>
		<td>Phone</td>
		<td><input type="text" name="phone"></td>
		</tr>
		<tr> <td>Submit</td>
		<td><input type="submit" value="register"></td></tr>
		</table>
	</form>
</body>
</html>
```

3- Create a dto class Member.java

```
public class Member {
	ate String uname,password,email,phone;
	public Member() {
	super();
}
public Member(String uname, String password, String email, String phone) {
```

```
        super();
        this.uname = uname;
        this.password = password;
        this.email = email;
        this.phone = phone;
}
public String getUname() {
        return uname;
}
public void setUname(String uname) {
        this.uname = uname;
}
public String getPassword() {
        return password;
}
public void setPassword(String password) {
        this.password = password;
}
public String getEmail() {
        return email;
}
public void setEmail(String email) {
        this.email = email;
}
public String getPhone() {
        return phone;
}
public void setPhone(String phone) {
        this.phone = phone;
} }
```

4- Create a Servlet named Register.java

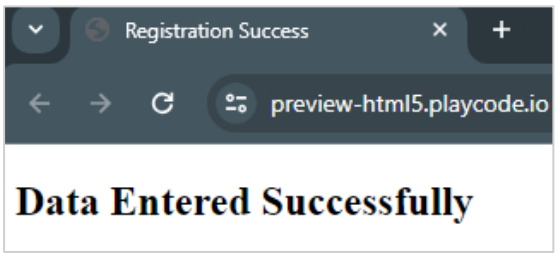
```
import java.io.IOException;
import javax.servlet.*;
@WebServlet("/Register")
public class Register extends HttpServlet {
private static final long serialVersionUID = 1L;
        public Register() {
      super();
   }
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        response.getWriter().append("Served at: ").append(request.getContextPath());
}
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
        String uname=request.getParameter("uname");
        String password=request.getParameter("password");
        String email=request.getParameter("email");
        String phone=request.getParameter("phone");
        Member member=new Member(uname, password, email, phone);
        RegisterDao rdao=new RegisterDao();
        String result=rdao.insert(member);
        response.getWriter().println(result);
```

```
} }
```

5- Create a Dao class RegisterDao.java

```
import java.sql.*;
public class RegisterDao {
private String dburl = "jdbc:mysql://localhost:3306/userdb";
private String dbuname = "root";
private String dbpassword = "mysql";
private String dbdriver = "com.mysql.jdbc.Driver";
public void loadDriver(String dbDriver){
        try {
        Class.forName(dbDriver);
        } catch (ClassNotFoundException e) {
        e.printStackTrace();
        } }
public Connection getConnection() {
        Connection con = null;
        try {
        con = DriverManager.getConnection(dburl, dbuname, dbpassword);
        } catch (SQLException e) {
        e.printStackTrace(); }
        return con; }
        public String insert(Member member) {
        loadDriver(dbdriver);
        Connection con = getConnection();
        String sql = "insert into member values(?,?,?,?)";
        String result="Data Entered Successfully";
        try {
        PreparedStatement ps = con.prepareStatement(sql);
        ps.setString(1, member.getUname());
        ps.setString(2, member.getPassword());
        ps.setString(3, member.getEmail());
        ps.setNString(4, member.getPhone());
        ps.executeUpdate();
        } catch (SQLException e) {
        result="Data Not Entered Successfully";
        e.printStackTrace();
}
return result;
} }
```

Output:



Date : 12-03-2024

Experiment - 6.2

Aim:

Create Employee Registration Form using a combination of JSP, Servlet, JDBC and MySQL Database.

Code:

MySQL Database Setup:

```
CREATE TABLE `employee` (
  `id` int(3) NOT NULL,
  `first_name` varchar(20) DEFAULT NULL,
  `last_name` varchar(20) DEFAULT NULL,
  `username` varchar(250) DEFAULT NULL,
  `password` varchar(20) DEFAULT NULL,
  `address` varchar(45) DEFAULT NULL,
  `contact` varchar(45) DEFAULT NULL,
  PRIMARY KEY (`id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
```

Create a JavaBean - Employee.java:

```
import java.io.Serializable;
public class Employee implements Serializable {
    private static final long serialVersionUID = 1 L;
    private String firstName;
    private String lastName;
    private String username;
    private String password;
    private String address;
    private String contact;
    public String getFirstName() {
        return firstName;
    }
    public void setFirstName(String firstName) {
        this.firstName = firstName;  }
    public String getLastName() {
        return lastName; }
    public void setLastName(String lastName) {
        this.lastName = lastName; }
    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;  }
    public String getAddress() {
        return address;  }
    public void setAddress(String address) {
        this.address = address;  }
```

```
    public String getContact() {
        return contact; }
    public void setContact(String contact) {
        this.contact = contact;
 } }
```

Create an EmployeeDao.java:

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import net.javaguides.registration.model.Employee;
public class EmployeeDao {
    public int registerEmployee(Employee employee) throws ClassNotFoundException {
        String INSERT_USERS_SQL = "INSERT INTO employee" +
            "  (id, first_name, last_name, username, password, address, contact) VALUES " +
            " (?, ?, ?, ?, ?,?,?);";
        int result = 0;
        Class.forName("com.mysql.jdbc.Driver");
        try (Connection connection = DriverManager
            .getConnection("jdbc:mysql://localhost:3306/demo?useSSL=false", "root", "root");
            PreparedStatement preparedStatement =
connection.prepareStatement(INSERT_USERS_SQL)) {
            preparedStatement.setInt(1, 1);
            preparedStatement.setString(2, employee.getFirstName());
            preparedStatement.setString(3, employee.getLastName());
            preparedStatement.setString(4, employee.getUsername());
            preparedStatement.setString(5, employee.getPassword());
            preparedStatement.setString(6, employee.getAddress());
            preparedStatement.setString(7, employee.getContact());
            System.out.println(preparedStatement);
            result = preparedStatement.executeUpdate();
        } catch (SQLException e) {
            printSQLException(e);
        }
        return result; }
    private void printSQLException(SQLException ex) {
        for (Throwable e: ex) {
            if (e instanceof SQLException) {
                e.printStackTrace(System.err);
                System.err.println("SQLState: " + ((SQLException) e).getSQLState());
                System.err.println("Error Code: " + ((SQLException) e).getErrorCode());
                System.err.println("Message: " + e.getMessage());
                Throwable t = ex.getCause();
                while (t != null) {
                    System.out.println("Cause: " + t);
                    t = t.getCause();
                }  }  } } }
```

Create an EmployeeServlet.java:

```
package net.javaguides.employeemanagement.web;
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;
import net.javaguides.employeemanagement.dao.EmployeeDao;
import net.javaguides.employeemanagement.model.Employee;
@WebServlet("/register")
public class EmployeeServlet extends HttpServlet {
   private static final long serialVersionUID = 1 L;
   private EmployeeDao employeeDao;
   public void init() {
      employeeDao = new EmployeeDao();  }
   protected void doPost(HttpServletRequest request, HttpServletResponse response)
   throws ServletException, IOException {
      String firstName = request.getParameter("firstName");
      String lastName = request.getParameter("lastName");
      String username = request.getParameter("username");
      String password = request.getParameter("password");
      String address = request.getParameter("address");
      String contact = request.getParameter("contact");
      Employee employee = new Employee();
      employee.setFirstName(firstName);
      employee.setLastName(lastName);
      employee.setUsername(username);
      employee.setPassword(password);
      employee.setContact(contact);
      employee.setAddress(address);
      try {
         employeeDao.registerEmployee(employee);
      } catch (Exception e) {
         e.printStackTrace();  }
      response.sendRedirect("employeedetails.html"); } }
```

Create an employeeregister.html

```
<!DOCTYPE html>
<html>
<head>
   <meta charset="ISO-8859-1">
   <title>Insert title here</title>
</head>
<body>
   <div align="center">
      <h1>Employee Register Form</h1>
      <form action="register" method="post">
         <table style="with: 80%">
            <tr> <td>First Name</td>
               <td><input type="text" name="firstName" /></td> </tr>
            <tr><td>Last Name</td>
               <td><input type="text" name="lastName" /></td></tr>
            <tr><td>UserName</td>
            <td><input type="text" name="username" /></td></tr>
```

```
            <tr><td>Password</td>
            <td><input type="password" name="password" /></td>    </tr>
            <tr><td>Address</td>
               <td><input type="text" name="address" /></td></tr>

            <tr> <td>Contact No</td>
               <td><input type="text" name="contact" /></td></tr>
         </table>
         <input type="submit" value="Submit" />
      </form>
   </div>
</body>
</html>
```

Create an employeedetail.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
 <h1>Employee successfully registered !</h1>
</body>
</html>
```

Output: