ADVANCE -JAVA

**Advance Java class 1:**

-1- Topics

1. **Web Applications- Simple without SQL/JDBC** :

* Servlet(src/main/java):

package p1;

/\*

\* Servlets:

\* 1)servlets is a java class.

\* 2) it is a subclass of HTTP servlets, it is used to perform

\* Back-end coding of the application.

\*

\* Note:

\* 1) @WebServlet("/newRegs") this should be same as that of the

\* name which is present in form action.

\* 2) request is an reference variable which points to request object

\* where all the data is stored as mentioned in the form.

\* \*/

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;

@WebServlet("/newRegs")

public class NewRegistration extends HttpServlet {

private static final long serialVersionUID = 1L;

public NewRegistration() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String name = request.getParameter("firstname");

String city = request.getParameter("ecity");

String email = request.getParameter("email");

String mobile = request.getParameter("mbNumber");

System.out.println(name);

System.out.println(city);

System.out.println(email);

System.out.println(mobile);

}

}

* HTML (source🡪main🡪webapp):

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Registration</title>

</head>

<body>

<form action=*"newRegs"* method=*"post"*>

<table>

<tr>

<td>Name</td>

<td><input type=*"text"* name=*"firstname"*></td>

</tr>

<tr>

<td>City</td>

<td><input type=*"text"* name=*"ecity"*></td>

</tr>

<tr>

<td>Email</td>

<td><input type=*"text"* name=*"email"*></td>

</tr>

<tr>

<td>Mobile</td>

<td><input type=*"text"* name=*"mbNumber"*></td>

</tr>

<tr>

<td><input type=*"submit"* value=*"save"*></td>

</tr>

</table>

</form>

</body>

</html>

**Advance Java class 2:**

-1- Topics: 1

1. **Web Applications- Simple with SQL/JDBC**:

* Example 1:

package p1;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.Statement;

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("/newRegs")

public class NewRegistration extends HttpServlet {

private static final long serialVersionUID = 1L;

public NewRegistration() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String name = request.getParameter("firstname");

String city = request.getParameter("city");

String email = request.getParameter("email");

String mobile = request.getParameter("mbNumber");

try {

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/4pm\_demo\_db\_1", "root", "6361");

Statement stmt = con.createStatement();

stmt.executeUpdate(

"insert into registration values('" + name + "','" + city + "','" + email + "','" + mobile + "')");

} catch (Exception e) {

e.printStackTrace();

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Register</title>

</head>

<body>

<form action=*"newRegs"* method=*"post"*>

<table>

<tr>

<td>Name</td>

<td><input type=*"text"* name=*"firstname"*></td>

</tr>

<tr>

<td>City</td>

<td><input type=*"text"* name=*"city"*></td>

</tr>

<tr>

<td>Email</td>

<td><input type=*"text"* name=*"email"*></td>

</tr>

<tr>

<td>Mobile</td>

<td><input type=*"text"* name=*"mbNumber"*></td>

</tr>

<tr>

<td><input type=*"submit"* value=*"Register"*></td>

</tr>

</table>

</form>

</body>

</html>

* Example 2:

package p1;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.Statement;

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("/updateRegs")

public class UpdateQuery extends HttpServlet {

private static final long serialVersionUID = 1L;

public UpdateQuery() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String email = request.getParameter("email");

String mobile = request.getParameter("mbNumber");

try {

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/4pm\_demo\_db\_1", "root", "6361");

Statement stmt = con.createStatement();

stmt.executeUpdate("update registration set mobile='" + mobile + "' where email='" + email + "'");

} catch (Exception e) {

e.printStackTrace();

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>UPDATE</title>

</head>

<body>

<form action=*"updateRegs"* method=*"post"*>

<table>

<tr>

<td>Enter email of which you want to update Phone number of</td>

</tr>

<tr>

<td>Email</td>

<td><input type=*"text"* name=*"email"*></td>

</tr>

<tr>

<td>Enter new mobile number to be update</td>

</tr>

<tr>

<td>Mobile</td>

<td><input type=*"text"* name=*"mbNumber"*></td>

</tr>

<tr>

<td><input type=*"submit"* value=*"Update"*></td>

</tr>

</table>

</form>

</body>

</html>

* Example 3:

package p1;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.Statement;

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("/deleteRegs")

public class DeleteQuery extends HttpServlet {

private static final long serialVersionUID = 1L;

public DeleteQuery() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String email = request.getParameter("email");

try {

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/4pm\_demo\_db\_1", "root", "6361");

Statement stmt = con.createStatement();

stmt.executeUpdate("Delete from registration where email='" + email + "'");

} catch (Exception e) {

e.printStackTrace();

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>DELETE</title>

</head>

<body>

<form action=*"deleteRegs"* method=*"post"*>

<table>

<tr>

<td>Email</td>

<td><input type=*"text"* name=*"email"*></td>

</tr>

<tr>

<td><input type=*"submit"* value=*"Delete"*></td>

</tr>

</table>

</form>

</body>

</html>

**Advance Java class 3:**

-2- Topics :

1. Retrieve the record from SQL and print it in table of front end:

* Example 1:

package p1;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.Statement;

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("/firstservlet")

public class RetriewTheRecord extends HttpServlet {

private static final long serialVersionUID = 1L;

public RetriewTheRecord() {

super();

}

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

try {

Class.forName("com.mysql.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/4pm\_demo\_db\_1", "root", "6361");

Statement stmt = con.createStatement();

ResultSet result = stmt.executeQuery("select \* from registration");

PrintWriter out = response.getWriter();

out.println("<table border= solid>");

out.println("<tr>");

out.println("<th>");

out.println("name");

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

out.println("<th>");

out.println("city");

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

out.println("<th>");

out.println("email");

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

out.println("<th>");

out.println("mobile");

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

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

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

while(result.next()) {

out.println("<table border= solid>");

out.println("<tr>");

out.println("<td>");

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

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

out.println("<td>");

out.println(result.getString(2) );

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

out.println("<td>");

out.println(result.getString(3) );

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

out.println("<td>");

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

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

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

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

}

} catch (Exception e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

}

}

1. Create a login page:

* Example 1:

package p1;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.Statement;

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("/firstServlet")

public class LoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

public LoginServlet() {

super();

}

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

}

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

String email = request.getParameter("email");

String password = request.getParameter("password");

try {

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/loginapp\_4pm", "root", "6361");

Statement stmt = con.createStatement();

ResultSet result = stmt.executeQuery("select \* from login where email='"+email+"' and password='"+password+"' ");

if(result.next()) {

System.out.println("welcome");

}else {

System.out.println("invalid page");

}

} catch (Exception e) {

e.printStackTrace();

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Login Page</title>

</head>

<body>

<h1>Login Here.....</h1>

<form action="firstServlet" method="post">

Email<input type="text" name="email" />

Password<input type="password" name="password" />

<input type="submit" value="Login">

</form>

</body>

</html>

**Advance Java class 4:**

-1- Topics:

1. Index (login page)🡪servlet (login Servlet)🡪index (welcome page):

* Example 1:

package p1;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.Statement;

import javax.servlet.RequestDispatcher;

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("/firstServlet")

public class LoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

public LoginServlet() {

super();

}

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

}

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

String email = request.getParameter("email");

String password = request.getParameter("password");

try {

Class.forName("com.mysql.cj.jdbc.Driver");

Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/loginapp\_4pm", "root", "6361");

Statement stmt = con.createStatement();

ResultSet result = stmt.executeQuery("select \* from login where email='"+email+"' and password='"+password+"' ");

if(result.next()) {

RequestDispatcher rd = request.getRequestDispatcher("WEB-INF/views/welcome.html");

rd.forward(request, response);

}else {

RequestDispatcher rd = request.getRequestDispatcher("index.html");

rd.include(request, response);

}

} catch (Exception e) {

e.printStackTrace();

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Login Page</title>

</head>

<body>

<h1>Login Here.....</h1>

<form action="firstServlet" method="post">

Email<input type="text" name="email" />

Password<input type="password" name="password" />

<input type="submit" value="Login">

</form>

</body>

</html>

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Welcome</title>

</head>

<body>

<h1>WELCOME............!</h1>

</body>

</html>

**Advance Java class 5:**

-1- Topics: