Program 1 :

JSP Model 1 Architecture:

Login.java

**package** com;

**public** **class** Login {

**private** String user;

**private** String pass;

**public** String getUser() {

**return** user;

}

**public** **void** setUser(String user) {

**this**.user = user;

}

**public** String getPass() {

**return** pass;

}

**public** **void** setPass(String pass) {

**this**.pass = pass;

}

**public** String checkUser() {

**if**(user.equals("abhi") && pass.equals("abhi")) {

**return** "success";

} **else** {

**return** "failure";

}

}

}

Login.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<form action=*"Hello.jsp"* align=*"center"*>

<h1>Login</h1>

<br/> <br/>

Enter Username :

<input type=*"text"* name=*"user"* placeholder=*"Enter UserName"*/>

<br/> <br/>

Enter Password :

<input type=*"password"* name=*"pass"* placeholder=*"Enter Password"*/>

<br/> <br/>

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

</form>

</body>

</html>

Check.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<%@ page import=*"com.Login"* %>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<%!

String name,password;

%>

<%

name = request.getParameter("user");

password = request.getParameter("pass");

Login l = **new** Login();

l.setUser(name);

l.setPass(password);

**if** (l.checkUser().equals("success")) {

out.println("Successfully Logged In");

%>

<jsp:forward page=*"Home.jsp"*></jsp:forward>

<% } **else** {

%>

<jsp:include page=*"Login.jsp"*></jsp:include>

<%

out.println("<h3 align = "+'"'+"center"+'"'+">Invalid Credentials ... Try Again</h3>");

}

%>

</body>

</html>

MVC Architecture

LoginController.java (Servlet)

**package** controller;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.RequestDispatcher;

**import** javax.servlet.ServletException;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.xml.ws.Response;

**import** com.Login;

/\*\*

\* Servlet implementation class LoginController

\*/

**public** **class** LoginController **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** LoginController() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

//response.getWriter().append("Served at: ").append(request.getContextPath());

response.setContentType("text/html");

PrintWriter pw = response.getWriter();

Login l = **new** Login();

l.setUser(request.getParameter("user"));

l.setPass(request.getParameter("pass"));

RequestDispatcher rd = request.getRequestDispatcher("Login.jsp");

**if** (l.checkUser().equals("success")) {

response.sendRedirect("Home.jsp");

} **else** {

rd.include(request, response);

pw.println("Invalid Credentials");

}

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

doGet(request, response);

}

}

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<form action=*"LoginController"* align=*"center"*>

<h1>Login</h1>

<br/> <br/>

Enter Username :

<input type=*"text"* name=*"user"* placeholder=*"Enter UserName"*/>

<br/> <br/>

Enter Password :

<input type=*"password"* name=*"pass"* placeholder=*"Enter Password"*/>

<br/> <br/>

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

</form>

</body>

</html>

**MVC Models Seperated**

Login Controller

**package** controller;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.RequestDispatcher;

**import** javax.servlet.ServletException;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.xml.ws.Response;

**import** com.Login;

**import** service.LoginService;

/\*\*

\* Servlet implementation class LoginController

\*/

**public** **class** LoginController **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** LoginController() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

//response.getWriter().append("Served at: ").append(request.getContextPath());

response.setContentType("text/html");

PrintWriter pw = response.getWriter();

Login l = **new** Login();

LoginService ls = **new** LoginService();

l.setUser(request.getParameter("user"));

l.setPass(request.getParameter("pass"));

RequestDispatcher rd = request.getRequestDispatcher("Login.jsp");

**if** (ls.checkUser(l).equals("success")) {

response.sendRedirect("Home.jsp");

} **else** {

rd.include(request, response);

pw.println("Invalid Credentials");

}

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

doGet(request, response);

}

}

**LoginService.java (Normal java Class)**

**package** service;

**import** com.Login;

**public** **class** LoginService {

**public** String checkUser(Login l) {

**if**(l.getUser().equals("abhi") && l.getPass().equals("abhi")) {

**return** "success";

} **else** {

**return** "failure";

}

}

}

**Login.java (Normal Java Class)**

**package** com;

**public** **class** Login {

**private** String user;

**private** String pass;

**public** String getUser() {

**return** user;

}

**public** **void** setUser(String user) {

**this**.user = user;

}

**public** String getPass() {

**return** pass;

}

**public** **void** setPass(String pass) {

**this**.pass = pass;

}

}

**Dao**

**package** dao;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** com.Login;

**public** **class** LoginDao {

**public** **boolean** checkUser(Login login) {

**try** {

Class.*forName*("oracle.jdbc.driver.OracleDriver");

Connection con = DriverManager.*getConnection*("jdbc:oracle:thin:@172.25.163.114:1521/hyper2","system","Password123");

PreparedStatement pstmt = con.prepareStatement("select 8 from loginData where userName like ? and pass like ?");

pstmt.setString(1, login.getUser());

pstmt.setString(2, login.getPass());

ResultSet rs = pstmt.executeQuery();

**if**(rs.next()) {

**return** **true**;

}

} **catch** (Exception e) {

// **TODO**: handle exception

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

}

**return** **false**;

}

}

**package** controller;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** javax.servlet.RequestDispatcher;

**import** javax.servlet.ServletException;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.xml.ws.Response;

**import** com.Login;

**import** service.LoginService;

/\*\*

\* Servlet implementation class LoginController

\*/

**public** **class** LoginController **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** LoginController() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

//response.getWriter().append("Served at: ").append(request.getContextPath());

response.setContentType("text/html");

PrintWriter pw = response.getWriter();

Login l = **new** Login();

LoginService ls = **new** LoginService();

l.setUser(request.getParameter("user"));

l.setPass(request.getParameter("pass"));

RequestDispatcher rd = request.getRequestDispatcher("Login.jsp");

**if** (ls.checkUser(l).equals("success")) {

response.sendRedirect("Home.jsp");

} **else** {

rd.include(request, response);

pw.println("Invalid Credentials");

}

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

doGet(request, response);

}

}

**package** com;

**public** **class** Login {

**private** String user;

**private** String pass;

**public** String getUser() {

**return** user;

}

**public** **void** setUser(String user) {

**this**.user = user;

}

**public** String getPass() {

**return** pass;

}

**public** **void** setPass(String pass) {

**this**.pass = pass;

}

}

**package** service;

**import** com.Login;

**import** dao.LoginDao;

**public** **class** LoginService {

**public** String checkUser(Login l) {

LoginDao loginDao = **new** LoginDao();

**if**(loginDao.checkUser(l)) {

**return** "success";

} **else** {

**return** "failure";

}

}

}

**DBConnection**

**package** resource;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**public** **class** DBConnection {

**static** Connection *con*;

**public** **static** Connection getDbConnection() {

**try** {

Class.*forName*("oracle.jdbc.driver.OracleDriver");

*con* = DriverManager.*getConnection*("jdbc:oracle:thin:@172.25.163.114:1521/hyper2","system","Pasword123");

} **catch**(Exception e) {

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

}

**return** *con*;

}

}

**package** dao;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** com.Login;

**import** resource.DBConnection;

**public** **class** LoginDao {

**public** **boolean** checkUser(Login login) {

**try** {

PreparedStatement pstmt = DBConnection.*getDbConnection*().prepareStatement("select 8 from loginData where userName like ? and pass like ?");

pstmt.setString(1, login.getUser());

pstmt.setString(2, login.getPass());

ResultSet rs = pstmt.executeQuery();

**if**(rs.next()) {

**return** **true**;

}

} **catch** (Exception e) {

// **TODO**: handle exception

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

}

**return** **false**;

}

}

**Case Study proj :**

**package** bean;

**public** **class** Employee {

**private** **int** empId;

**private** String empName;

**private** **int** empSalary;

**private** String empDesignation;

**public** **int** getEmpId() {

**return** empId;

}

**public** **void** setEmpId(**int** empId) {

**this**.empId = empId;

}

**public** String getEmpName() {

**return** empName;

}

**public** **void** setEmpName(String empName) {

**this**.empName = empName;

}

**public** **int** getEmpSalary() {

**return** empSalary;

}

**public** **void** setEmpSalary(**int** empSalary) {

**this**.empSalary = empSalary;

}

**public** String getEmpDesignation() {

**return** empDesignation;

}

**public** **void** setEmpDesignation(String empDesignation) {

**this**.empDesignation = empDesignation;

}

}

**package** controller;

**import** java.io.IOException;

**import** java.io.PrintWriter;

**import** java.util.List;

**import** javax.servlet.RequestDispatcher;

**import** javax.servlet.ServletException;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

**import** javax.servlet.http.HttpSession;

**import** bean.Employee;

**import** service.EmployeeService;

/\*\*

\* Servlet implementation class EmployeeController

\*/

**public** **class** EmployeeController **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** EmployeeController() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

// response.getWriter().append("Served at: ").append(request.getContextPath());

EmployeeService empService = **new** EmployeeService();

List<Employee> empData = empService.getEmployees();

empData.forEach((emp)->System.***out***.println(emp.getEmpName()));

HttpSession hs = request.getSession();

hs.setAttribute("employeeData", empData);

response.sendRedirect("EmployeeDetails.jsp");

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

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

// **TODO** Auto-generated method stub

//doGet(request, response);

PrintWriter pw = response.getWriter();

RequestDispatcher rd1 = request.getRequestDispatcher("Index.jsp");

Employee emp = **new** Employee();

emp.setEmpId(Integer.*parseInt*(request.getParameter("empId")));

emp.setEmpName(request.getParameter("empName"));

emp.setEmpDesignation(request.getParameter("empDesignation"));

emp.setEmpSalary(Integer.*parseInt*(request.getParameter("empSalary")));

EmployeeService empService = **new** EmployeeService();

**if**(empService.insertEmployee(emp)) {

rd1.include(request, response);

pw.println("Inserted Succesfully");

} **else** {

rd1.include(request, response);

pw.println("Insertion Error");

}

}

}

**package dao;**

**import java.sql.PreparedStatement;**

**import java.sql.ResultSet;**

**import java.util.ArrayList;**

**import java.util.List;**

**import bean.Employee;**

**import resource.DBConnection;**

**public class EmployeeDao {**

**List<Employee> listOfEmp = new ArrayList<>();**

**public List<Employee> getEmployees() {**

**try {**

**PreparedStatement pstmt = DBConnection.getConnection().prepareStatement("select \* from EMPLOYEE39810");**

**ResultSet rs = pstmt.executeQuery();**

**while (rs.next()) {**

**Employee e = new Employee();**

**e.setEmpId(rs.getInt("EMPID"));**

**e.setEmpName(rs.getString("EMPNAME"));**

**e.setEmpDesignation(rs.getString("EMPDESG"));**

**e.setEmpSalary(rs.getInt("EMPSAL"));**

**listOfEmp.add(e);**

**}**

**} catch (Exception e) {**

**System.out.println("DAO EXCEPTION : "+e);**

**}**

**return listOfEmp;**

**}**

**public boolean insertEmployee(Employee employee) {**

**boolean isInserted = false;**

**try {**

**PreparedStatement pstmt = DBConnection.getConnection().prepareStatement("insert into EMPLOYEE39810 values (?,?,?,?)");**

**pstmt.setInt(1, employee.getEmpId());**

**pstmt.setString(2, employee.getEmpName());**

**pstmt.setString(3, employee.getEmpDesignation());**

**pstmt.setInt(4, employee.getEmpSalary());**

**int insertResult = pstmt.executeUpdate();**

**if(insertResult > 0) {**

**isInserted = true;**

**}**

**} catch (Exception e) {**

**// TODO: handle exception**

**}**

**return isInserted;**

**}**

**}**

**package resource;**

**import java.sql.Connection;**

**import java.sql.DriverManager;**

**public class DBConnection {**

**static Connection con;**

**public static Connection getConnection() {**

**try {**

**Class.forName("oracle.jdbc.driver.OracleDriver");**

**con = DriverManager.getConnection("jdbc:oracle:thin:@172.25.163.114:1521/hyper2","system","Password123");**

**} catch(Exception e) {**

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

**}**

**return con;**

**}**

**}**

**package** service;

**import** java.util.List;

**import** bean.Employee;

**import** dao.EmployeeDao;

**public** **class** EmployeeService {

**public** List<Employee> getEmployees() {

EmployeeDao ldao = **new** EmployeeDao();

List<Employee> empData = ldao.getEmployees();

System.***out***.println("empData"+empData.size());

**if**(empData.size() > 0) {

**for**(Employee e : empData) {

**if**(e.getEmpDesignation().equalsIgnoreCase("manager")) {

e.setEmpSalary(e.getEmpSalary() + 10000);

} **else** **if** (e.getEmpDesignation().equalsIgnoreCase("programmer")) {

e.setEmpSalary(e.getEmpSalary() + 5000);

} **else** **if** (e.getEmpDesignation().equalsIgnoreCase("tester")) {

e.setEmpSalary(e.getEmpSalary() + 5000);

}

}

}

**return** empData;

}

**public** **boolean** insertEmployee(Employee employee) {

EmployeeDao ldao = **new** EmployeeDao();

**boolean** isInserted = ldao.insertEmployee(employee);

**return** isInserted;

}

}

<%@page import=*"bean.Employee"*%>

<%@page import=*"java.util.List"*%>

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<table border=*5*>

<%

List<Employee> empData = (List<Employee>) session.getAttribute("employeeData");

**for**(Employee e : empData) {

%>

<tr>

<td> <%= e.getEmpId() %> </td>

<td> <%= e.getEmpName() %> </td>

<td> <%= e.getEmpDesignation() %> </td>

<td> <%= e.getEmpSalary() %> </td>

</tr>

<%

}

%>

</table>

</body>

</html>

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"* content=*"text/html; charset=ISO-8859-1"*>

<title>Insert title here</title>

</head>

<body>

<a href=*"EmployeeController"*>Click to view Employee Details</a>

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

Enter Id : <input type=*"text"* name=*"empId"* placeholder=*"Enter EmpId"*/>

<br/> <br/>

Enter Name : <input type=*"text"* name=*"empName"* placeholder=*"Enter UserName"*/>

<br/> <br/>

Enter Designation : <input type=*"text"* name=*"empDesignation"* placeholder=*"Enter Designation"*/>

<br/> <br/>

Enter Salary : <input type=*"text"* name=*"empSalary"* placeholder=*"Enter Salary"*/>

<br/> <br/>

<input type=*"submit"* value=*"Insert Values"* />

</form>

</body>

</html>

O/P:

[Click to view Employee Details](http://localhost:8080/Organisation/EmployeeController)

Top of Form

Enter Id :    
  
Enter Name :    
  
Enter Designation :    
  
Enter Salary :    
  


Bottom of Form

|  |  |  |  |
| --- | --- | --- | --- |
| 6 | kalpana | manager | 60000 |
| 39791 | SUBRAMANYAM | TESTER | 45000 |
| 39792 | ABHINAYA | MANAGER | 60000 |
| 39793 | GOPI KRISHNA | PROGRAMMER | 50000 |
| 39794 | AKSHATA | PROGRAMMER | 50000 |
| 39795 | SUDHARSANAN | TESTER | 45000 |