**Hibernate demo using JSP and Servlet with H2 database**

**Create : Maven project as maven-archetype-webapp**

& ensure

**Jdk 1.8**

**Apache Tomcat v7.0**

Step 1 :

pom.xml

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>3.8.1</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>com.h2database</groupId>

<artifactId>h2</artifactId>

<version>1.4.196</version>

</dependency>

<!-- https://mvnrepository.com/artifact/org.hibernate/hibernate-core -->

<dependency>

<groupId>org.hibernate</groupId>

<artifactId>hibernate-core</artifactId>

<version>5.2.12.Final</version>

</dependency>

<dependency>

<groupId>org.hibernate.validator</groupId>

<artifactId>hibernate-validator</artifactId>

<version>6.0.4.Final</version>

</dependency>

</dependencies>

Step 2 :

src/main/java

create a Model package :

place Employee class

**package** Model;

**import** javax.persistence.\*;

@Entity

@Table

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

@Id

**private** **int** id;

**public** **int** getId() {

**return** id;

}

//this is an model for database program

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**private** String name;

}

Step 3 :

Under webapp folder

Create index.jsp

<html>

<body>

<h2>Hello World!</h2>

<form action=*"serv1"* method=*"post"*>

Enter the Id here <input type=*"text"* name=*"t1"*/>

<br/>

Enter the password here <input type=*"text"* name=*"t2"*/>

<br/>

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

</form>

</body>

</html>

Step 4 :

src/main/java

create Controller folder and place serv1

package Controller;

import java.io.IOException;

import javax.persistence.Query;

import javax.servlet.RequestDispatcher;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import java.util.\*;

import org.hibernate.Session;

import org.hibernate.SessionFactory;

import org.hibernate.Transaction;

import org.hibernate.cfg.Configuration;

import Model.Employee;

/\*\*

\* Servlet implementation class serv1

\*/

public class serv1 extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public serv1() {

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

try

{

String name=request.getParameter("t1");

String password=request.getParameter("t2");

if(!(name.equals("")))

{

Configuration config=new Configuration();

config.configure("Hibernate.cfg.xml");

SessionFactory sf=config.buildSessionFactory();

Session sess=sf.openSession();

Transaction tran=sess.beginTransaction();

Employee emp=new Employee();

emp.setId(Integer.parseInt(name));

emp.setName(password);

sess.save(emp);

tran.commit();

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

response.getWriter().append("done");

Query q=sess.createQuery("from Employee");

List<Employee>l=(List<Employee>)q.getResultList();

for(Employee empl:l)

{

response.getWriter().append(empl.getName());

}

}

else

{

RequestDispatcher req= request.getRequestDispatcher("index.jsp");

req.forward(request,response);

}

}catch(Exception e)

{

e.printStackTrace();

}

}

/\*\*

\* @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);

}

}

Step 5 :

Src/main/resources

Place Hibernate.cfg.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<hibernate-configuration>

<session-factory>

<property name=*"hbm2ddl.auto"*>update</property>

<property name=*"hibernate.dialect"*>org.hibernate.dialect.H2Dialect</property>

<property name=*"hibernate.connection.driver\_class"*>org.h2.Driver</property>

<property name=*"hibernate.connection.url"*>jdbc:h2:tcp://localhost/~/test</property>

<property name=*"hibernate.connection.username"*>sa</property>

<property name=*"hibernate.connection.password"*>sa</property>

<mapping class=*"Model.Employee"*></mapping>

</session-factory>

</hibernate-configuration>

Step 6 :

WEB-INF/web.xml

<!DOCTYPE web-app PUBLIC

"-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"

"http://java.sun.com/dtd/web-app\_2\_3.dtd" >

<web-app>

<display-name>Archetype Created Web Application</display-name>

<servlet>

<servlet-name>serv1</servlet-name>

<display-name>serv1</display-name>

<description></description>

<servlet-class>Controller.serv1</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>serv1</servlet-name>

<url-pattern>/serv1</url-pattern>

</servlet-mapping>

</web-app>