

Assignment 9

Write a hibernate example to insert a record of students into database.

RegController.java

```
package com.controller;
import java.io.IOException;
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;
import javax.servlet.http.HttpSession;
import com.dao.RegDAO;
import com.vo.RegVO;
/**
 * Servlet implementation class RegController
 */
@WebServlet("/RegController")
public class RegController extends HttpServlet {
    private static final long serialVersionUID = 1 L;
    /**
     * @see HttpServlet#HttpServlet()
     */
    public RegController() {
        super();
        // TODO Auto-generated constructor stub
    }
    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
    ServletException,
    IOException {
        String flag = request.getParameter("flag");
        if (flag.equals("Search")) {
            Search(request, response);
        }
        if (flag.equals("Delete")) {
            Delete(request, response);
            Search(request, response);
        }
        if (flag.equals("Edit")) {
            Edit(request, response);
        }
        if (flag.equals("Update")) {
```

```

        Update(request, response);
        Search(request, response);
    }
}
/**
 * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
 */
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String flag = request.getParameter("flag");
    if (flag.equals("Insert")) {
        Insert(request, response);
        response.sendRedirect("form.jsp");
    }
}
protected void Insert(HttpServletRequest request, HttpServletResponse response) throws
ServletException,
IOException {
    String fn = request.getParameter("fn");
    String ln = request.getParameter("ln");
    String cn = request.getParameter("cn");
    String add = request.getParameter("add");
    RegVO regVO = new RegVO();
    regVO.setFn(fn);
    regVO.setLn(ln);
    regVO.setCn(cn);
    regVO.setAdd(add);
    RegDAO regDAO = new RegDAO();
    regDAO.Insert(regVO);
}
protected void Search(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    RegDAO regDAO = new RegDAO();
    List searchList = regDAO.Search();
    HttpSession session = request.getSession();
    session.setAttribute("data", searchList);
    response.sendRedirect("search.jsp");
}
protected void Delete(HttpServletRequest request, HttpServletResponse response) throws
ServletException,
IOException {
    int id = Integer.parseInt(request.getParameter("x"));
    RegVO regVO1 = new RegVO();
    regVO1.setId(id);
    RegDAO regDAO = new RegDAO();
    regDAO.Delete(regVO1);
}

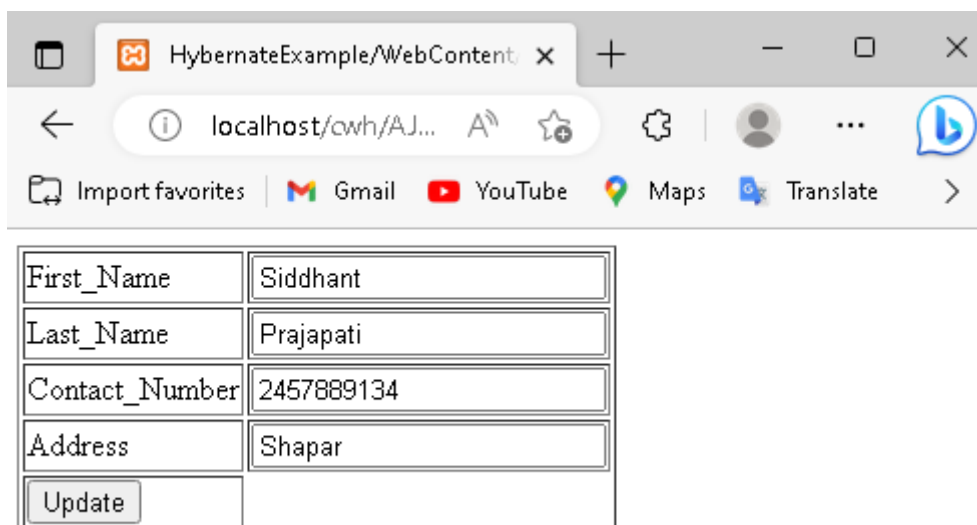
```

protected void Edit(HttpServletRequest request, HttpServletResponse response) throws ServletException,

```
IOException {
    int id1 = Integer.parseInt(request.getParameter("y"));
    RegVO regVO2 = new RegVO();
    regVO2.setId(id1);
    RegDAO regDAO = new RegDAO();
    List ls1 = regDAO.Edit(regVO2);
    HttpSession session = request.getSession();
    session.setAttribute("data1", ls1);
    response.sendRedirect("edit.jsp");
}
```

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

```
    int idu = Integer.parseInt(request.getParameter("idupdate"));
    String fn1 = request.getParameter("fn");
    String ln1 = request.getParameter("ln");
    String cn1 = request.getParameter("cn");
    String add1 = request.getParameter("add");
    RegVO regVO3 = new RegVO();
    regVO3.setId(idu);
    regVO3.setFn(fn1);
    regVO3.setLn(ln1);
    regVO3.setCn(cn1);
    regVO3.setAdd(add1);
    RegDAO regDAO = new RegDAO();
    regDAO.Update(regVO3);
}
}
```

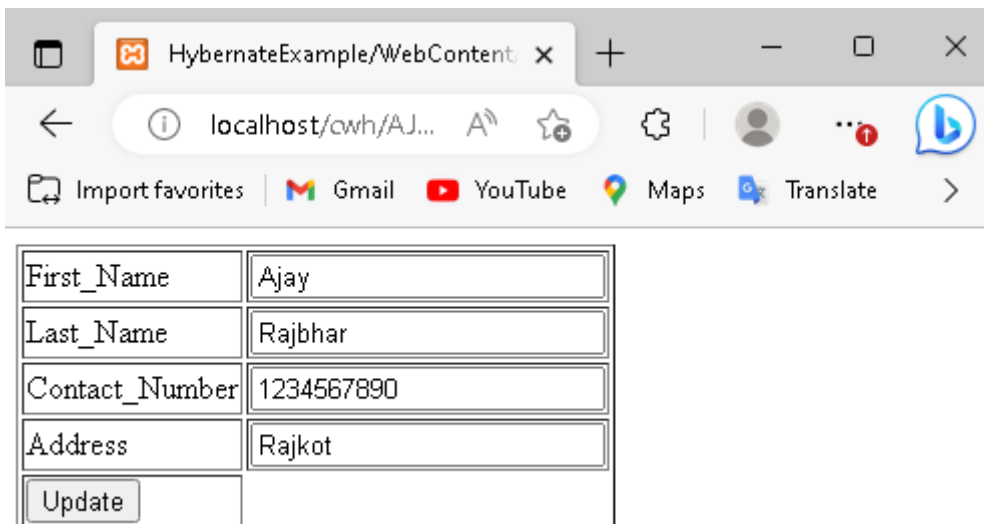


First_Name	Siddhant
Last_Name	Prajapati
Contact_Number	2457889134
Address	Shapar
Update	

RegDAO.java

```
package com.dao;
import java.util.ArrayList;
import java.util.List;
import org.hibernate.Query;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.Transaction;
import org.hibernate.cfg.AnnotationConfiguration;
import org.hibernate.cfg.Configuration;
import com.vo.RegVO;
public class RegDAO {
    public void Insert(RegVO regVO) {
        SessionFactory sessionFactory = new
AnnotationConfiguration().configure().buildSessionFactory();
        Session session = sessionFactory.openSession();
        Transaction transaction = session.beginTransaction();
        session.save(regVO);
        transaction.commit();
        session.close();
    }
    public List Search() {
        SessionFactory sessionFactory = new
AnnotationConfiguration().configure().buildSessionFactory();
        Session session = sessionFactory.openSession();
        Transaction transaction = session.beginTransaction();
        Query q = session.createQuery("from RegVO");
        List searchList = q.list();
        transaction.commit();
        session.close();
        return searchList;
    }
    public void Delete(RegVO regVO1) {
        try {
            SessionFactory sessionFactory = new
AnnotationConfiguration().configure().buildSessionFactory();
            Session session = sessionFactory.openSession();
            Transaction transaction = session.beginTransaction();
            session.delete(regVO1);
            transaction.commit();
            session.close();
        } catch (Exception ex) {
            ex.printStackTrace();
        }
    }
    public List Edit(RegVO regVO2) {
        List ls1 = new ArrayList();
```

```
try {
    SessionFactory sessionFactory = new
    AnnotationConfiguration().configure().buildSessionFactory();
    Session session = sessionFactory.openSession();
    Transaction transaction = session.beginTransaction();
    Query q = session.createQuery("From RegVO where id='" + regVO2.getId() + "'");
    ls1 = q.list();
    ((RegDAO) session).Edit(regVO2);
    transaction.commit();
    session.close();
} catch (Exception ex) {
    ex.printStackTrace();
}
return ls1;
}
public void Update(RegVO regVO3) {
    try {
        SessionFactory sessionFactory = new
        AnnotationConfiguration().configure().buildSessionFactory();
        Session session = sessionFactory.openSession();
        Transaction transaction = session.beginTransaction();
        session.update(regVO3);
        transaction.commit();
        session.close();
    } catch (Exception ex) {
        ex.printStackTrace();
    }
}
}
```



First_Name	Ajay
Last_Name	Rajbhar
Contact_Number	1234567890
Address	Rajkot
Update	

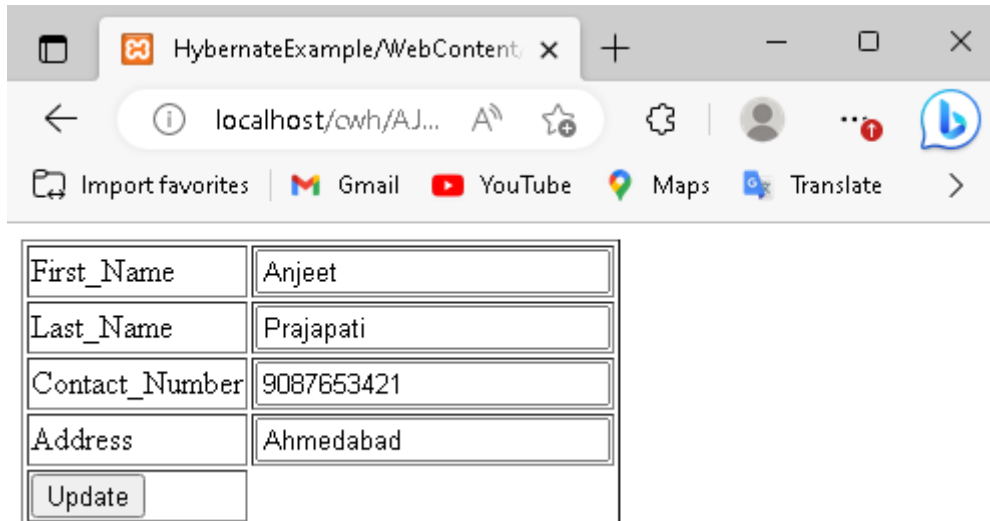
RegVO.java

```
package com.vo;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Table;
@Entity
@Table(name = "hibernate_tbl")
public class RegVO {
    @Id
    @GeneratedValue(strategy = GenerationType.AUTO)
    @Column(name = "id")
    private int id;
    @Column(name = "FirstName")
    private String fn;
    @Column(name = "LastName")
    private String ln;
    @Column(name = "Contact_Number")
    private String cn;
    @Column(name = "Address")
    private String add;
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getFn() {
        return fn;
    }
    public void setFn(String fn) {
        this.fn = fn;
    }
    public String getLn() {
        return ln;
    }
    public void setLn(String ln) {
        this.ln = ln;
    }
    public String getCn() {
        return cn;
    }
    public void setCn(String cn) {
        this.cn = cn;
    }
}
```

```

public String getAdd() {
    return add;
}
public void setAdd(String add) {
    this.add = add;
}
}

```



The screenshot shows a web browser window with the address bar displaying 'localhost/cwh/AJ...'. The page content is a form with the following fields and values:

First_Name	Anjeet
Last_Name	Prajapati
Contact_Number	9087653421
Address	Ahmedabad
Update	

edit.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>
<%@taglib prefix="c" uri="http://java.sun.com/jstl/core_rt" %>
<body>
<form action="RegController" method="get">
<table border="1px solid black">
<c:forEach var="i" items = "${sessionScope.data1}">
<input type="hidden" name=idupdate value="${i.id}">
<tr>
<td>First_Name: </td>
<td><input type="text" name="fn" value="${i.fn}"></td>
</tr>
<tr>
<td>Last_Name: </td>
<td><input type="text" name="ln" value="${i.ln}"></td>

```

```

</tr>
<tr>
<td>Contact_Number: </td>
<td><input type="text" name="cn" value="{i.cn}"></td>
</tr>
<tr>
<td>Address: </td>
<td><input type="text" name="add" value="{i.add}"></td>
<td><input type="hidden" name="flag" value="Update"></td>
</tr>
<tr>
<td><input type="submit" value="Update"></td>
</tr>
</c:forEach>
</table>
</form>
</body>
</html>

```

`SELECT * FROM `student_data``

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: Filter rows:

Extra options

Sr_no.	First_name	Last_name	Contact_no	Address
1	Siddhant	Prajapati	2057889134	Shapar
2	Ajay	Rajbhar	1234567890	Rajkot
3	Anjeet	Prajapati	1087653421	Ahmedabad

Search.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>
<%@taglib prefix="c" uri="http://java.sun.com/jstl/core_rt" %>

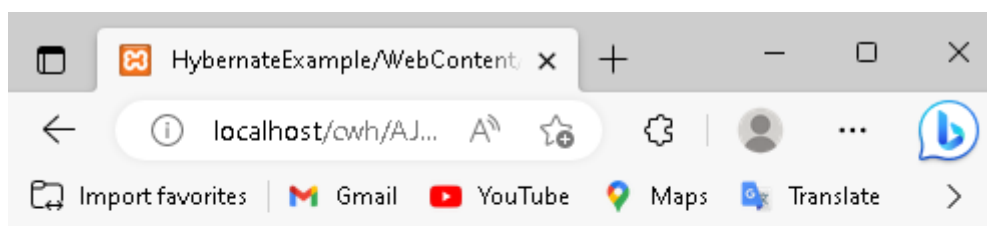
```



```

<body>
<table border="1px solid black">
<tr>
<th>Number</th>
<th>First Name</th>
<th>Last Name</th>
<th>Contact Number</th>
<th>Address</th>
<th>Action</th>
</tr>
<c:forEach items="${sessionScope.data}" var="i" varStatus="j">
<tr>
<td>${j.count}</td>
<td>${i.fn}</td>
<td>${i.ln}</td>
<td>${i.cn}</td>
<td>${i.add}</td>
<td><a href="RegController?flag=Delete&x=${i.id}">Delete</td>
<td><a href="RegController?flag=Edit&y=${i.id}">Edit</a></td>
</tr>
</c:forEach>
</table>
</body>
</html>

```



Number	First_Name	Last_Name	Contact Number	Address	Action
1	Siddhant	Prajapati	2057889134	Shapar	Delete Edit
2	Ajay	Rajbhar	1234567890	Rajkot	Delete Edit
3	Anjeet	Prajapati	1087653421	Ahmedabad	Delete Edit

hibernate.cfg.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE hibernate-configuration PUBLIC
"-//Hibernate/Hibernate Configuration DTD//EN"
"http://hibernate.sourceforge.net/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
<session-factory>
<property name="hibernate.connection.driver_class">com.mysql.jdbc.Driver</property>

```

```

<property name="hibernate.connection.url">jdbc:mysql://localhost/manual</property>
<property name="hibernate.connection.username">root</property>
<property name="hibernate.connection.password">root</property>
<property name="hibernate.connection.pool_size">10</property>
<property name="show_sql">true</property>
<property name="dialect">org.hibernate.dialect.MySQLDialect</property>
<property name="hibernate.hbm2ddl.auto">update</property>
<mapping class="com.vo.RegVO"/>
</session-factory>
</hibernate-configuration>

```

form.jsp File

```

<%@ 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="RegController" method="post">
<table border="1px solid black">
<tr>
<td>First_Name: </td>
<td><input type="text" name="fn"></td>
</tr>
<tr>
<td>Last_Name: </td>
<td><input type="text" name="ln"></td>
</tr>
<tr>
<td>Contact_Number: </td>
<td><input type="text" name="cn"></td>
</tr>
<tr>
<td>Address: </td>
<td><input type="text" name="add"></td>
<td><input type="hidden" name="flag" value="Insert"></td>
</tr>
<tr>
<td><input type="submit" value="Save"></td>
</tr>
</table>
</form>
<a href="RegController?flag=Search">Search</a>
</body>
</html>

```