Sample Project on Crud Operations while giving I18N Support

1. Index.jsp

<%@taglib uri=*"http://struts.apache.org/tags-html"* prefix=*"html"*%>

<%@taglib uri=*"http://struts.apache.org/tags-bean"* prefix=*"bean"*%>

<<style>

<!--

-->

**a** {

border-style: *dashed*;

}

</style>

<div style="border-color:*maroon*; color:*red*; font-size:*50*">

<center>

<bean:message key=*"title"*/>

</center>

</div>

<html:form action=*"empcrudform"* >

<table>

<tr>

<td><bean:message key=*"id"*/></td>

<td><html:text property=*"id"*/></td>

</tr>

<tr>

<td><bean:message key=*"name"*/></td>

<td><html:text property=*"name"*/></td>

</tr>

<tr>

<td><bean:message key=*"email"*/></td>

<td><html:text property=*"email"*/></td>

</tr>

<tr>

<td><bean:message key=*"address"*/></td>

<td><html:textarea property=*"address"*/></td>

</tr>

<tr>

<td><bean:message key=*"gender"*/></td>

<td><html:radio property=*"gender"* value=*"male"*><bean:message key=*"male"*/></html:radio></td>

<td><html:radio property=*"gender"* value=*"female"*><bean:message key=*"female"*/></html:radio></td>

</tr>

<tr>

<td><html:submit property=*"submit"*><bean:message key=*"save"*/></html:submit></td>

<td><html:submit property=*"submit"*><bean:message key=*"update"*/></html:submit></td>

</tr>

<tr>

<td><html:submit property=*"submit"*><bean:message key=*"delete"*/></html:submit></td>

<td><html:submit property=*"submit"*><bean:message key=*"find"*/></html:submit></td>

</tr>

<tr>

<td><html:submit property=*"submit"*><bean:message key=*"findall"*/></html:submit></td>

</tr>

</table>

<a href=*"./changeLang.do?language=en"*>English</a>

<a href=*"./changeLang.do?language=hi"*>Hindi</a>

</html:form>

1. Web.xml

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

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_3\_1.xsd"* id=*"WebApp\_ID"* version=*"3.1"*>

<display-name>EmpCrud\_DA</display-name>

<welcome-file-list>

<welcome-file>index.jsp</welcome-file>

</welcome-file-list>

<servlet>

<servlet-name>action</servlet-name>

<servlet-class>org.apache.struts.action.ActionServlet</servlet-class>

<init-param>

<param-name>config</param-name>

<param-value>/WEB-INF/struts-config.xml</param-value>

</init-param>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>action</servlet-name>

<url-pattern>\*.do</url-pattern>

</servlet-mapping>

</web-app>

1. Struts-config.xml

<!DOCTYPE struts-config PUBLIC

"-//Apache Software Foundation//DTD Struts Configuration 1.3//EN"

"http://struts.apache.org/dtds/struts-config\_1\_3.dtd">

<struts-config>

<form-beans>

<form-bean name=*"EMP"* type=*"beans.Employee"*></form-bean>

</form-beans>

<action-mappings>

<action path=*"/empcrudform"* name=*"EMP"* input=*"/index.jsp"* type=*"beans.EmpCrudController"* parameter=*"submit"*>

<forward name=*"success"* path=*"/success.jsp"*></forward>

<forward name=*"failure"* path=*"/failure.jsp"*></forward>

<forward name=*"find"* path=*"/find.jsp"*></forward>

</action>

<action path=*"/changelang"* type=*"beans.ChangeLangController"*>

<forward name=*"index"* path=*"/index.jsp"*></forward>

</action>

</action-mappings>

<message-resources parameter=*"resources/empform"*></message-resources>

</struts-config>

1. ChangeLangController

**package** beans;

**import** java.util.Locale;

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

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

**import** org.apache.struts.action.Action;

**import** org.apache.struts.action.ActionForm;

**import** org.apache.struts.action.ActionForward;

**import** org.apache.struts.action.ActionMapping;

**public** **class** ChangeLangController **extends** Action {

@Override

**public** ActionForward execute(ActionMapping mapping, ActionForm form, HttpServletRequest request,

HttpServletResponse response) **throws** Exception {

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

String lang=request.getParameter("language");

Locale locale= **new** Locale(lang);

request.getSession().setAttribute("org.apache.struts.action.LOCALE", locale);

**return** mapping.findForward("index");

}

}

1. EmpDAO

**package** beans;

**import** java.sql.Connection;

**import** java.sql.DriverManager;

**import** java.sql.PreparedStatement;

**import** java.sql.ResultSet;

**import** java.util.ArrayList;

**import** java.util.List;

**public** **class** EmpDAO {

**public** **int** save(**int** id, String name, String email, String address, String gender)

**throws** Exception{

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

Connection con=DriverManager.*getConnection*("jdbc:mysql://localhost/emp","root", "welcome");

PreparedStatement ps=con.prepareStatement("insert into employee values(?,?,?,?,?)");

ps.setInt(1, id);

ps.setString(2, name);

ps.setString(3, email);

ps.setString(4, address);

ps.setString(5, gender);

**int** i=ps.executeUpdate();

con.close();

**return** i;

}

**public** **boolean** update(**int** id, String name, String email, String address, String gender)

**throws** Exception{

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

Connection con= DriverManager.*getConnection*("jdbc:mysql://localhost/EMP","root", "welcome");

PreparedStatement ps=con.prepareStatement("update employee set name=?, email=?, address=?, gender=? where id=?");

ps.setString(1, name);

ps.setString(2, email);

ps.setString(3, address);

ps.setString(4, gender);

ps.setInt(5, id);

**int** i=ps.executeUpdate();

con.close();

**if** (i!=0)

**return** **true**;

**else**

**return** **false**;

}

**public** **boolean** delete(**int** id)

**throws** Exception{

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

Connection con=DriverManager.*getConnection*("jdbc:mysql://localhost/EMP","root", "welcome");

PreparedStatement ps=con.prepareStatement("delete from employee where id=?");

ps.setInt(1, id);

**int** i=ps.executeUpdate();

con.close();

**if** (i!=0)

**return** **true**;

**else**

**return** **false**;

}

**public** List<Employee> find(**int** id) **throws** Exception{

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

Connection con=DriverManager.*getConnection*("jdbc:mysql://localhost/EMP","root", "welcome");

PreparedStatement ps=con.prepareStatement("select \* from employee where id=?");

ps.setInt(1, id);

ResultSet rs=ps.executeQuery();

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

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

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

e.setId(rs.getInt(1));

e.setName(rs.getString(2));

e.setEmail(rs.getString(3));

e.setAddress(rs.getString(4));

e.setGender(rs.getString(5));

l.add(e);

}

con.close();

**return** l;

}

**public** List<Employee> findall() **throws** Exception{

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

Connection con=DriverManager.*getConnection*("jdbc:mysql://localhost/EMP","root", "welcome");

PreparedStatement ps= con.prepareStatement("select \* from employee");

ResultSet rs=ps.executeQuery();

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

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

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

e.setId(rs.getInt(1));

e.setName(rs.getString(2));

e.setEmail(rs.getString(3));

e.setAddress(rs.getString(4));

e.setGender(rs.getString(5));

l.add(e);

}

con.close();

**return** l;

}

}

1. EmpCrudController

**package** beans;

**import** java.util.List;

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

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

**import** org.apache.struts.action.ActionForm;

**import** org.apache.struts.action.ActionForward;

**import** org.apache.struts.action.ActionMapping;

**import** org.apache.struts.actions.DispatchAction;

**public** **class** EmpCrudController **extends** DispatchAction {

//we should not override the execute and dispatch methods

//we have to write custom methods and signature of methods should be same as execute method

//name of methods must same as button value

**public** ActionForward save(ActionMapping am, ActionForm af, HttpServletRequest req, HttpServletResponse res)

**throws** Exception {

Employee e= (Employee) af;

EmpDAO dao= **new** EmpDAO();

**int** i=dao.save(e.getId(), e.getName(), e.getEmail(), e.getAddress(), e.getGender());

**if** (i!=0)

**return** am.findForward("success");

**else**

**return** am.findForward("failure");

}

**public** ActionForward update(ActionMapping am, ActionForm af, HttpServletRequest req, HttpServletResponse res)

**throws** Exception {

Employee e= (Employee) af;

EmpDAO dao= **new** EmpDAO();

**boolean** i=dao.update(e.getId(), e.getName(), e.getEmail(), e.getAddress(), e.getGender());

**if** (i==**true**)

**return** am.findForward("success");

**else**

**return** am.findForward("failure");

}

**public** ActionForward delete(ActionMapping am, ActionForm af, HttpServletRequest req, HttpServletResponse res)

**throws** Exception {

Employee e= (Employee) af;

EmpDAO dao= **new** EmpDAO();

**boolean** i=dao.delete(e.getId());

**if** (i==**true**)

**return** am.findForward("success");

**else**

**return** am.findForward("failure");

}

**public** ActionForward find(ActionMapping am, ActionForm af, HttpServletRequest req, HttpServletResponse res)

**throws** Exception {

Employee e= (Employee) af;

EmpDAO dao= **new** EmpDAO();

List<Employee> list=dao.find(e.getId());

req.setAttribute("list", list);

**return** am.findForward("find");

}

**public** ActionForward findall(ActionMapping am, ActionForm af, HttpServletRequest req, HttpServletResponse res)

**throws** Exception {

EmpDAO dao= **new** EmpDAO();

List<Employee> list=dao.findall();

req.setAttribute("list", list);

**return** am.findForward("find");

}

}

1. Employee

**package** beans;

**import** org.apache.struts.action.ActionForm;

**public** **class** Employee **extends** ActionForm {

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

**private** String name, email, address, gender;

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

**return** id;

}

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

**this**.id = id;

}

**public** String getName() {

**return** name;

}

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

**this**.name = name;

}

**public** String getEmail() {

**return** email;

}

**public** **void** setEmail(String email) {

**this**.email = email;

}

**public** String getAddress() {

**return** address;

}

**public** **void** setAddress(String address) {

**this**.address = address;

}

**public** String getGender() {

**return** gender;

}

**public** **void** setGender(String gender) {

**this**.gender = gender;

}

}

1. Properties file
2. Empform\_en.properties

title=Employee Registeration Form

id=ID

name=Name

email=Email

address=Address

gender=Gender

male=Male

female=Female

save=save

update=update

delete=delete

find=find

findall=findall

1. Empform\_hi.properties

title=&#2325;&#2352;&#2381;&#2350;&#2330;&#2366;&#2352;&#2368; &#2346;&#2344;&#2381;&#2332;&#2368;&#2325;&#2352;&#2339; &#2347;&#2364;&#2366;&#2352;&#2381;&#2350;

id=&#2310;&#2312;&#46; &#2337;&#2368;&#46;

name=&#2344;&#2366;&#2350;

email=&#2312;&#45;&#2350;&#2375;&#2354;

address=&#2346;&#2340;&#2366;

gender=&#2354;&#2367;&#2306;&#2327;

male=&#2346;&#2369;&#2360;&#2381;&#2352;&#2381;&#2359;

female=&#2360;&#2381;&#2340;&#2381;&#2352;&#2368;

save=&#2360;&#2369;&#2352;&#2325;&#2381;&#2359;&#2367;&#2340; &#2325;&#2352;&#2375;&#2306;

update=&#2309;&#2346;&#2337;&#2375;&#2335; &#2325;&#2352;&#2375;&#2306;

delete=&#2361;&#2335;&#2366;&#2320;&#2306;

find=&#2326;&#2379;&#2332;&#2375;&#2306;

findall=&#2360;&#2349;&#2368; &#2326;&#2379;&#2332;&#2375;&#2306;

1. Failure.jsp

<pre>

Registeration Failed :(

or

Update failed :(

</pre>

1. Success.jsp

<pre>

Registeration Sucessfull :)

or

Update Successful :)

</pre>

1. Find.jsp

<%@taglib uri=*"http://struts.apache.org/tags-bean"* prefix=*"bean"*%>

<%@taglib uri=*"http://struts.apache.org/tags-logic"* prefix=*"logic"*%>

<h1>Information</h1>

<style>

**th,td**{

border: *1px solid blue*;

}

**table**{

border: *2px solid blue*;

}

</style>

<table>

<tr>

<th>Serial Number</th>

<th>Id</th>

<th>Name</th>

<th>Email</th>

<th>Address</th>

<th>Gender</th>

</tr>

<logic:iterate id=*"listid"* name=*"list"* indexId=*"ctr"*>

<tr>

<td align=*"right"*><bean:write name=*"ctr"* /></td>

<td align=*"left"*><bean:write name=*"listid"* property=*"id"*/></td>

<td><bean:write name=*"listid"* property=*"name"*/></td>

<td><bean:write name=*"listid"* property=*"email"*/></td>

<td><bean:write name=*"listid"* property=*"address"*/></td>

<td><bean:write name=*"listid"* property=*"gender"*/></td>

</tr>

</logic:iterate>

</table>