**Generic Tags**

IterateAction.java

**package** com.raj.struts2;

**import** java.util.ArrayList;

**import** com.opensymphony.xwork2.ActionSupport;

**public** **class** IterateAction **extends** ActionSupport

{

**public** String execute() **throws** Exception

{

fruits = **new** ArrayList<String>();

cities = **new** ArrayList<String>();

colors = **new** ArrayList<String>();

fruits.add("Apple");

fruits.add("Mango");

fruits.add("Orange");

cities.add("Delhi");

cities.add("Mumbai");

cities.add("Pune");

colors.add("Red");

colors.add("Green");

colors.add("Blue");

**return** ***SUCCESS***;

}

ArrayList<String> fruits;

ArrayList<String> cities;

ArrayList<String> colors;

**public** ArrayList<String> getFruits()

{

**return** fruits;

}

**public** **void** setFruits(ArrayList<String> fruits)

{

**this**.fruits = fruits;

}

**public** ArrayList<String> getCities()

{

**return** cities;

}

**public** **void** setCities(ArrayList<String> cities)

{

**this**.cities = cities;

}

**public** ArrayList<String> getColors()

{

**return** colors;

}

**public** **void** setColors(ArrayList<String> colors)

{

**this**.colors = colors;

}

}

**generic.jsp**

<%@taglib prefix=*"s"* uri=*"/struts-tags"* %>

<body>

<s:url id=*"url"* action=*"iterateAction"*/>

<s:a href=*"%{url}"*>Iteration</s:a>

</body>

**Iterator.jsp**

<%@taglib prefix=*"s"* uri=*"/struts-tags"* %>

<body>

<b>Using Iterator</b>

<s:iterator status=*"stat"* value=*"{23,12,34,12,15,89}"*>

[ <s:property value=*"#stat.index"*/> | <s:property value=*"top"*/> ]

<s:if test=*"#stat.last==false"*>, </s:if>

</s:iterator>

<br><br>

<b>Using generator and iterator tag:</b>

<s:generator separator=*","* val=*"%{'Mon, Tue, Wed, Thu, Fri, Sat, Sun'}"* count=*"6"* id=*"someid"*>

<s:iterator>

<s:property/>

</s:iterator>

</s:generator>

<br><br>

<b>Iterating over the Arraylist:</b><br>

ArrayList Fruits:

<s:iterator value=*"fruits"*>

<s:property/>

</s:iterator>

<br>

ArrayList Cities:

<s:iterator value=*"cities"*>

<s:property/>

</s:iterator>

<br>

ArrayList Colors:

<s:iterator value=*"colors"*>

<s:property/>

</s:iterator>

<br><br>

<b>Appending Iterators:</b><br>

<s:append id=*"appendItr"*>

<s:param value=*"%{fruits}"*/>

<s:param value=*"%{cities}"*/>

<s:param value=*"%{colors}"*/>

</s:append>

<s:iterator value=*"%{#appendItr}"*>

<s:property/>,

</s:iterator>

</body>

**struts.xml**

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

<!DOCTYPE struts PUBLIC

"-//Apache Software Foundation//DTD Struts Configuration 2.0//EN"

"http://struts.apache.org/dtds/struts-2.0.dtd">

<struts>

<constant name=*"struts2.devMode"* value=*"true"*/>

<package name=*"generictags"* extends=*"struts-default"*>

<action name=*"iterateAction"* class=*"com.raj.struts2.IterateAction"*>

<result>/iterator.jsp</result>

</action>

</package>

</struts>

**Struts2 Validations**

**AddEmployeeAction.java**

**package** com.raj.struts2;

**import** java.util.Date;

**import** com.opensymphony.xwork2.ActionSupport;

**public** **class** AddEmployeeAction **extends** ActionSupport

{

**public** String execute() **throws** Exception

{

**return** ***SUCCESS***;

}

**private** String empid;

**private** String password;

**private** String password1;

**private** String empname;

**private** Date doj;

**private** Integer age;

**private** String city;

**private** String email;

**public** String getEmpid()

{

**return** empid;

}

**public** **void** setEmpid(String empid)

{

**this**.empid = empid;

}

**public** String getPassword()

{

**return** password;

}

**public** **void** setPassword(String password)

{

**this**.password = password;

}

**public** String getPassword1()

{

**return** password1;

}

**public** **void** setPassword1(String password1)

{

**this**.password1 = password1;

}

**public** String getEmpname()

{

**return** empname;

}

**public** **void** setEmpname(String empname)

{

**this**.empname = empname;

}

**public** Date getDoj()

{

**return** doj;

}

**public** **void** setDoj(Date doj)

{

**this**.doj = doj;

}

**public** Integer getAge()

{

**return** age;

}

**public** **void** setAge(Integer age)

{

**this**.age = age;

}

**public** String getCity()

{

**return** city;

}

**public** **void** setCity(String city)

{

**this**.city = city;

}

**public** String getEmail()

{

**return** email;

}

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

{

**this**.email = email;

}

}

**AddEmployeeAction-validation.xml (create in com.raj.struts2 package)**

<!DOCTYPE validators PUBLIC "-//OpenSymphony Group//XWork Validator 1.0.2//EN" "http://www.opensymphony.com/xwork/xwork-validator-1.0.2.dtd">

<validators>

<field name=*"empid"*>

<field-validator type=*"requiredstring"*>

<message>Employee Id is required.</message>

</field-validator>

<field-validator type=*"regex"*>

<param name=*"expression"*>

<![CDATA[([K][I][0-9][0-9][0-9])]]>

</param>

<message>Valid Employee Id required. Eg. KI101</message>

</field-validator>

</field>

<field name=*"password"*>

<field-validator type=*"requiredstring"*>

<message>Password is required.</message>

</field-validator>

<field-validator type=*"stringlength"*>

<param name=*"maxLength"*>10</param>

<param name=*"minLength"*>4</param>

<param name=*"trim"*>true</param>

<message>Password should be 4-10 character long.</message>

</field-validator>

</field>

<field name=*"password1"*>

<field-validator type=*"fieldexpression"*>

<param name=*"expression"*>(password==password1)</param>

<message>Password and Re-Enter Password must be same.</message>

</field-validator>

</field>

<field name=*"empname"*>

<field-validator type=*"requiredstring"*>

<message>Employee Name is required.</message>

</field-validator>

</field>

<field name=*"doj"*>

<field-validator type=*"date"*>

<param name=*"max"*>01/01/2010</param>

<param name=*"min"*>01/01/2009</param>

<message>Enter a date between ${min} and ${max}</message>

</field-validator>

</field>

<field name=*"age"*>

<field-validator type=*"int"*>

<param name=*"min"*>20</param>

<param name=*"max"*>45</param>

<message>Age must be within 20 and 45.</message>

</field-validator>

</field>

<field name=*"email"*>

<field-validator type=*"requiredstring"*>

<message>Email is required.</message>

</field-validator>

<field-validator type=*"email"*>

<message>Enter a valid E-Mail Id.</message>

</field-validator>

</field>

</validators>

**addemployee.jsp**

<%@ taglib prefix=*"s"* uri=*"/struts-tags"* %>

<body>

<h3>Using Field Validators</h3>

<b>Enter New Employee Details : </b>

<s:form action=*"addEmployee"*>

<s:textfield label=*"Employee Id"* name=*"empid"*/>

<s:password label=*"Password"* name=*"password"*/>

<s:password label=*"Re-Enter Password"* name=*"password1"*/>

<s:textfield label=*"Employee Name"* name=*"empname"*/>

<s:textfield label=*"Date of Joining"* name=*"doj"*/>

<s:textfield label=*"Age"* name=*"age"*/>

<s:textfield label=*"City"* name=*"city"*/>

<s:textfield label=*"E-Mail"* name=*"email"*/>

<s:submit value=*"Add Employee"*/>

</s:form>

</body>

**employee.jsp**

<%@ taglib prefix=*"s"* uri=*"/struts-tags"* %>

<body>

<h3>Employee Added Sucessfully</h3>

<table cellspacing=*"5"*>

<tr>

<td>Employee Id:</td>

<td><s:property value=*"empid"*/></td>

</tr>

<tr>

<td>Password:</td>

<td><s:property value=*"password"*/></td>

</tr>

<tr>

<td>Employee Name:</td>

<td><s:property value=*"empname"*/></td>

</tr>

<tr>

<td>Date of Joining:</td>

<td><s:property value=*"doj"*/></td>

</tr>

<tr>

<td>Age:</td>

<td><s:property value=*"age"*/></td>

</tr>

<tr>

<td>City:</td>

<td><s:property value=*"city"*/></td>

</tr>

<tr>

<td>E-Mail:</td>

<td><s:property value=*"email"*/></td>

</tr>

</table>

</body>

**validations.xml (create in WEB-INF/classes folder)**

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

<!DOCTYPE struts PUBLIC

"-//Apache Software Foundation//DTD Struts Configuration 2.0//EN"

"http://struts.apache.org/dtds/struts-2.0.dtd">

<struts>

<package name=*"validation"* extends=*"struts-default"*>

<action name=*"addEmployee"* class=*"com.raj.struts2.AddEmployeeAction"*>

<result name=*"success"*>/employee.jsp</result>

<result name=*"input"*>/addemployee.jsp</result>

</action>

</package>

</struts>

In struts.xml file include the following code

<include file=*"validations.xml"*/>