1. LF Part Classes
   1. Overview – LearnITy part classes are the most important component of the framework. It creates different HTML components in the screen with some additional wrappers. This helps the developer to create difficult components/behavior much easily. For an example, part class “DBGrid” helps the user to create table much more easily. Table is one of the most important component of any traditional website. Handling pagination, sorting, filtering and fixed headers are the nightmare of the developers. “DBGrid” handles almost all of the known issues of table. Similarly form validation is another vital thing in any website. The data in the form must be checked for avoiding obvious error conditions. This is also made very much easy with “DBForm” class. Also, it provides us complex HTML structures like tree. This part classes are defined in the structure section of an interface.xml. In the structure section there can be any number of “part” elements. Each part element must contain a “class” attribute and an “id” attribute. This “id” attribute helps us to refer this element in to the other sections of the interface. This “id” creates the “id” attribute of the corresponding HTML element of the part class.

<structure>

<part id="accloginback" class="label"></part>

<part id="acclogincompanyname\_container" class="label"></part>

<part id="acclogincompanyname" class="label"></part>

</structure>

Few important classes are –

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Class** | **Attributes** |
| Label | label | None |
| Span | Span | None |
| Image | image | None |
| Password | password | * tabindex * name * maxLength * size |
| Text Box | inputtext | * tabindex * name * maxLength * size * autocomplete |
| Button | button | * type * name |
| Text with hyper linked | textlink | None |
| Unordered List Items | list (for main topic under which subtopics are listed) | None |
| Unordered List Items | listitem (For sub topics) | None |
| Text Area | textarea | * name * maxLength * size * cols * rows * tabindex |
| Combo Box | combo | * name |
| Radio button | radio | * option   id  name  value  eventname  eventvalue |
| Form | form | * name |
| Fieldset | fieldset | * name |
| Legend | legend | * name |
| I frame | iframe | * Width * height * frameborder * allowtransparency * scrolling * background-color * name |
| AjaxComponent | ajaxcomponent | javaclass(**deprecated**) |
| Tree Structure | tree | * treedataremotefunction * onselectremotefunction * autocollapse * initialiseonload |
| statictree | * lazynode * tooltip * onselectremotefunction * initialiseonload |
| dynamictree | * lazynode * tooltip * onselectremotefunction * initialiseonload * autocollapse * parentquery * childquery * parameter |
| reportwindow | reportwindow | * name |
| report | Report | * name |
| chart | Chart | * name |
| Simple Grid | DBgrid | * loadurl * editurl * caption * sortname * sortorder * gridnavbar * autoencode * generateExcel * onSelectRow * resetSearchOnClose * multipleSearch * toolbarSearch * searchOperators * showsearchboxonload * searchboxtop |
| Grid with Combo | Conditionalgrid | * loadurl * editurl * caption * sortname * sortorder * gridnavbar * autoencode * generateExcel * onSelectRow * resetSearchOnClose * multipleSearch * toolbarSearch * searchOperators * showsearchboxonload * searchboxtop |
| DBform | DBform | * name |

* 1. Label – Class “label” is used to create a “<div>”tag. This is used to create a division or a section in an HTML document. It also helps us to group block-elements.
  2. Span – Class “span” is used to create a “<span>” tag. This is used to group inline-elements in a document. The class provides no visual change by itself. It provides us a way to add a hook to a part of a text or a part of a document.

The main difference between this two classes are “label” should be used to wrap sections of a document, while “span” should be used to wrap small portions of text, images, etc. The default nature of “label” class is block where the default nature of “span” is float.

* 1. Button – To create a button the page we need to use “button” class. It has two attributes
     + Type
     + name
  2. Input Text – To create a text field for getting input from user one needs to use “inputtext”. It has the following attributes –
     + tabindex – The number of tab which will take the cursor to this field
     + name – name of the input field
     + maxLength – maximum length of the input text
     + size – size of the input text box
     + autocomplete – set the browser autocomplete “on” or “off”
  3. Input Password – To create a password field for getting input from user one needs to use “password”. It has the following attributes –
     + tabindex – The number of tab which will take the cursor to this field
     + name – name of the input field
     + maxLength – maximum length of the input text
     + size – size of the input text box
  4. Image – To add an image in the screen user needs to use the “image” class.To use an image, we have to add that image in the “resource”section in the interface.xml, and the id of the “resourceitem” has to be included in the value in the “content” tag and mention the “valuetype” property as reference.
     + Example of all of the above mentioned classes –

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="LoginPage" title="LoginPage" type="Interface">

<configuration createsession="true" checkrole="false" TemplateID="Bootstrap"></configuration>

<structure>

**<part id="accloginback" class="label"></part>**

<part id="acclogincompanyname\_container" class="label"></part>

<part id="acclogincompanyname" class="label"></part>

<part id="loginmain\_container" class="label"></part>

<part id="acclogincompanylogo\_container" class="label"></part>

<part id="acclogincompanylogo" class="image"></part>

<part id="login\_container" class="label"></part>

<part id="accfislabel" class="label"></part>

<part id="accinputouter" class="label"></part>

<part id="accinputinnerheader" class="label"></part>

**<part id="accsigninlogo" class="image"></part>**

<part id="accinputinner" class="label"></part>

<part id="userid\_container" class="label"></part>

<part id="accuseridinputlabel" class="label"></part>

<part id="accuseridinput\_container" class="label"></part>

**<part id="accuseridinput" class="inputtext" tabindex="1"**

**autocomplete="on"></part>**

<part id="password\_container" class="label"></part>

<part id="accpasswordinputlabel" class="label"></part>

<part id="accpasswordinput\_container" class="label"></part>

**<part id="accpasswordinput" class="password" tabindex="2"></part>**

<part id="accsigninbutton\_container" class="label"></part>

**<part id="accsigninbutton" class="button"></part>**

<part id="incorrectuser\_container" class="label"></part>

<part id="incorrectuser" class="label"></part>

<part id="accportallogo\_container" class="label"></part>

<part id="accportallogo" class="image"></part>

<part id="accloginajax" class="ajaxcomponent"></part>

</structure>

<layout id="Loginlayout">

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</layout>

<content id="Logincontent">

<part id="accportallogo" value="portallogo" valuetype="reference"></part>

**<part id="accsigninlogo" value="signin" valuetype="reference"></part>**

<part id="acclogincompanylogo" value="msmelogo" valuetype="reference"></part>

<part id="acclogincompanyname" value="MSME TOOLROOM KOLKATA eUNIVERSITY"

valuetype="inline"></part>

<part id="accfislabel" value="Learner Portal" valuetype="inline"></part>

<part id="accuseridinputlabel" value="User ID" valuetype="inline"></part>

<part id="accpasswordinputlabel" value="Password" valuetype="inline"></part>

<part id="accsigninbutton" value="Sign In" valuetype="inline"></part>

</content>

<style id="Loginstyle">

<part id="acclogincompanyname\_container" value="row row-padding text-center"

valuetype="reference"></part>

<part id="acclogincompanyname" value="col-md-12 text-center"

valuetype="reference"></part>

<part id="acclogincompanyname" value="[CDATA[text-align:center;font-family:times;font-weight:normal;font-size:25px;color:black;]]" valuetype="inline"></part>

<part id="loginmain\_container" value="row" valuetype="reference"></part>

<part id="loginmain\_container" value="[CDATA[background-color: #6BB8EF;]]"

valuetype="inline"></part>

<part id="acclogincompanylogo\_container" value="col-md-6 text-center"

valuetype="reference"></part>

<part id="acclogincompanylogo\_container" value="[CDATA[padding-top: 175px;]]"

valuetype="inline"></part>

<part id="login\_container" value="col-md-5" valuetype="reference"></part>

<part id="login\_container"

value="[CDATA[margin-top: 125px;border: 1px solid black;border-radius:5px; background-color: #F7F7F7;]]" valuetype="inline"></part>

<part id="accfislabel" value="col-md-12 row-padding" valuetype="reference"></part>

<part id="accinputinnerheader" value="col-md-12 row-padding"

valuetype="reference"></part>

<part id="accinputinner" value="form-group form-horizontal col-md-12"

valuetype="reference"></part>

<part id="userid\_container" value="row row-padding" valuetype="reference"></part>

<part id="accuseridinputlabel" value="col-md-2 control-label"

valuetype="reference"></part>

<part id="accuseridinput\_container" value="col-md-8" valuetype="reference"></part>

<part id="password\_container" value="row row-padding" valuetype="reference"></part>

<part id="accpasswordinputlabel" value="col-md-2 control-label"

valuetype="reference"></part>

<part id="accpasswordinput\_container" value="col-md-8" valuetype="reference"></part>

<part id="accsigninbutton\_container" value="row row-padding text-right col-md-10"

valuetype="reference"></part>

<part id="incorrectuser\_container" value="row row-padding text-center col-md-10"

valuetype="reference"></part>

<part id="accportallogo\_container" value="row row-padding text-center"

valuetype="reference"></part>

<part id="accpasswordinput" value="form-control" valuetype="reference"></part>

<part id="accuseridinput" value="form-control" valuetype="reference"></part>

<part id="accsigninbutton" value="btn btn-primary" valuetype="reference"></part>

</style>

<behaviour id="Loginbehaviour">

<part id="accpasswordinput">

<event name="onkeypress" type="simple" function="checkEnter"

valuetype="inline" parameter="event" resourceid="loginj" ></event>

</part>

**<part id="accsigninbutton">**

**<event name="onclick" type="simple" function="login\_onclick"**

**valuetype="inline" resourceid="loginj"></event>**

**</part>**

<part id="accloginajax">

<event name="ajax" type="simple" function="dummy" javaclass="Portal"></event>

</part>

</behaviour>

<resource>

<resourceitem id="portallogo" href="LearnITy-Portal.gif" valuetype="image"></resourceitem>

**<resourceitem id="signin" href="SignIn.gif" valuetype="image"></resourceitem>**

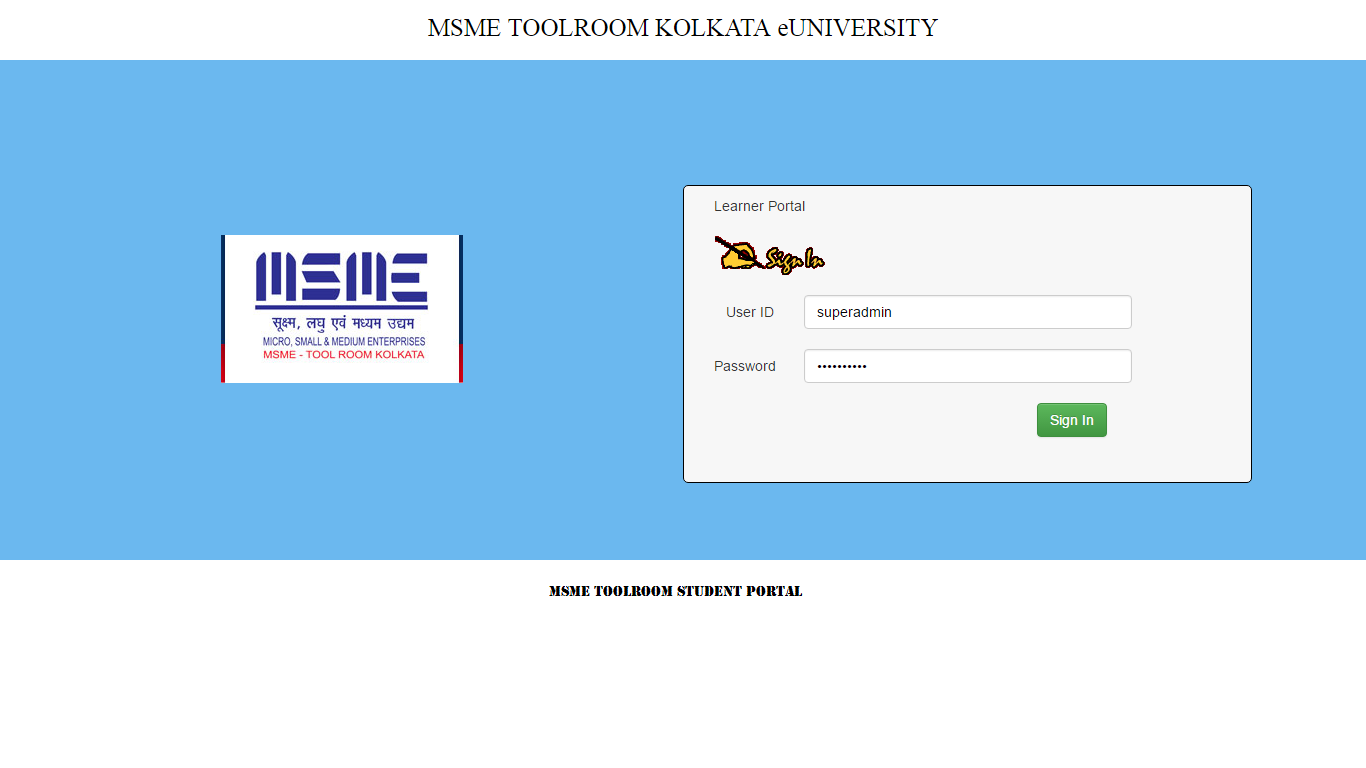
<resourceitem id="msmelogo" href="msmelogo.jpg" valuetype="image"></resourceitem>

<resourceitem id="loginj" href="loginjs.js" valuetype="js"></resourceitem>

</resource>

</interface>

The output screen –



* 1. Link - When we want to use a text with hyper link, we have to use class as “textlink”, and in the <behavior> part we have to mention the URL in the function attribute for that part id.Example of “textlink”-

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://learnityframework.org/" xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd" id="home" title="home" type="Interface">

<configuration createsession="true" checkrole="false" > </configuration>

<structure>

<part id="homemain" class="label"></part>

<part id="center" class="label"></part>

<part id="centerimage" class="image"></part>

**<part id="GoTo" class="textlink"></part>**

</structure>

<layout id="defaultlayout">

<part id="homemain" height="420px" width="99.5%" left="1px" top="1px" position="absolute"></part>

<part id="center" height="240px" width="63%" left="165px" top="2px" position="absolute" parent\_id="homemain"></part>

<part id="centerimage" height="200px" width="99.9%" left="1px" top="34px" position="absolute" parent\_id="center"></part>

<part id="GoTo" height="20px" width="10%" left="430px" top="280px" position="absolute" parent\_id="homemain"></part>

</layout>

<content id="defaultcontent">

<part id="centerimage" value="companymotoimager" valuetype="reference"></part>

**<part id="GoTo" value="Visit our site..." valuetype="inline"></part>**

</content>

<style id="defaultstyle">

<part id="homemain" value="stylesheet1" valuetype="reference"></part>

<part id="center" value="[CDATA[border-style:solid;border-color:#0080FF;border-width:1px;]]" valuetype="inline"></part>

<part id="GoTo" value="[CDATA[border-style:solid;border-color:#0080FF;border-width:1px;font-weight:bold;font-size:11pt;text-align:center;]]" valuetype="inline"></part>

</style>

<behaviour id="defaultbehaviour">

**<part id="GoTo">**

**<event name="onclick" type="simple" function="http://abc.com/" target="self" valuetype="inline"></event>**

**</part>**

</behaviour>

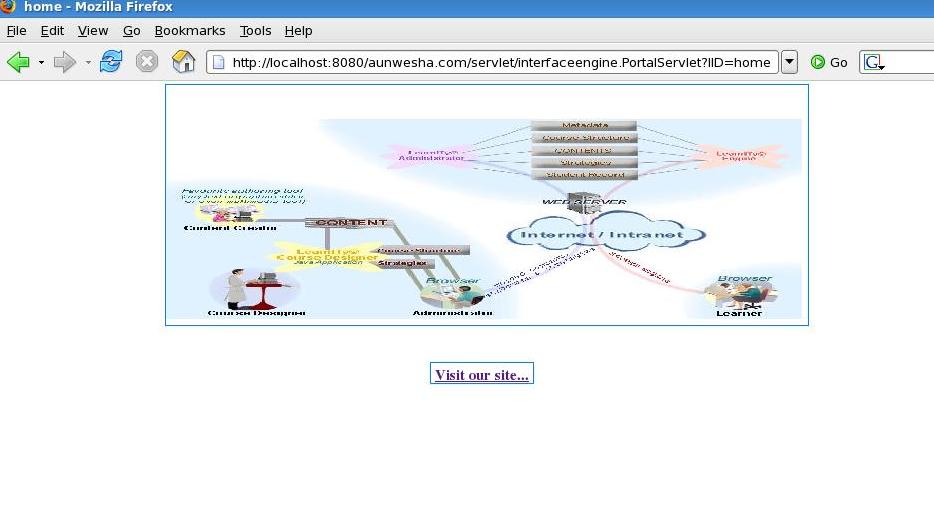
<resource>

<resourceitem id="stylesheet1" href="homestyle.css" valuetype="css"></resourceitem>

<resourceitem id="companymotoimager" href="LearnITy.jpg" valuetype="image"></resourceitem>

</resource>

</interface>

The snapshot of the above interface – 

“Visit our site” is the example of “textlink”.

* 1. List & List Item - To use unordered bullet to a text, we have to use class "list" for parent topic and use class "listitem" for their child topic. Example –

<interface id="home" title="home" type="Interface">

<configuration createsession="true" checkrole="false" >

</configuration>

<structure>

<part id="homemain" class="label"></part>

<part id="center" class="label"></part>

**<part id="corporate" class="list"></part>**

**<part id="corporatechild1" class="listitem"></part>**

**<part id="corporatechild2" class="listitem"></part>**

**<part id="corporatechild3" class="listitem"></part>**

**<part id="corporatechild4" class="listitem"></part>**

<part id="GoTo" class="textlink"></part>

</structure>

<layout id="defaultlayout">

<part id="homemain" height="420px" width="99.5%" left="1px" top="1px" position="absolute"></part>

<part id="center" height="240px" width="63%" left="165px" top="2px" position="absolute" parent\_id="homemain"></part>

<part id="GoTo" height="20px" width="10%" left="430px" top="280px" position="absolute" parent\_id="homemain"></part>

**<part id="corporate" position="absolute" parent\_id="center"></part>**

**<part id="corporatechild1" parent\_id="corporate"></part>**

**<part id="corporatechild2" parent\_id="corporate"></part>**

**<part id="corporatechild3" parent\_id="corporate"></part>**

**<part id="corporatechild4" parent\_id="corporate"></part>**

</layout>

<content id="defaultcontent">

**<part id="corporate" value="Capabilities for CORPORATE" valuetype="inline"></part>**

**<part id="corporatechild1" value="Exhaustive Skill Management" valuetype="inline"></part>**

**<part id="corporatechild2" value="Extensive reporting with configurable dashboards" valuetype="inline"></part>**

**<part id="corporatechild3" value="Brand and customize the LearnITy portal" valuetype="inline"></part>**

**<part id="corporatechild4" value="Track training requirements" valuetype="inline"></part>**

<part id="GoTo" value="Visit our site..." valuetype="inline"></part>

</content>

<style id="defaultstyle">

<part id="homemain" value="stylesheet1" valuetype="reference"></part>

<part id="center" value="[CDATA[background-color: #FCFFE5;color:#006699;font-family:Verdana,Arial;border-style:solid;border-color:#0080FF;border-width:1px;]]" valuetype="inline"></part>

<part id="GoTo" value="[CDATA[border-style:solid;border-color:#0080FF;border-width:1px;font-weight:bold;font-size:11pt;text-align:center;]]" valuetype="inline"></part>

</style>

<behaviour id="defaultbehaviour">

<part id="GoTo">

<event name="onclick" type="simple" function="http://aunwesha.com/" target="self" valuetype="inline" ></event>

</part>

</behaviour>

<resource>

<resourceitem id="stylesheet1" href="homestyle.css" valuetype="css"></resourceitem>

</resource>

</interface>

The snapshot of the above interface –

* 1. Text Area – This class is required to take lengthy user input. The corresponding partclass is “textarea”.

The supported attributes are –

* + - tabindex – The number of tab which will take the cursor to this field
    - name – name of the text area
    - maxLength – maximum length of the text area
    - size – size of the text area
    - rows – The number of rows(height)
    - cols – The number of columns(width)
  1. Combo –To create a drop down, we need to use class combo in the interface.xml.The options which are to be included in the combo box, have to be mentioned in the name and value attribute of the <combooption> under <content> tag. The “valuetype” for that part id is set to “fixed” for static content.To use a combo box whose values are to be fetched by a select query from a database, the “valuetype” of the combo class is set to be "query".

The example of text area and combo box –

<interface id="home" title="home" type="Interface">

<configuration createsession="true" checkrole="false" >

</configuration>

<structure>

<part id="homemain" class="label"></part>

<part id="login" class="label"></part>

<part id="addr" class="label"></part>

**<part id="addrtext" class="textarea" rows="2" cols="23"></part>**

<part id="country" class="label"></part>

**<part id="countrytext" class="combo"></part>**

</structure>

<layout id="defaultlayout">

<part id="homemain" height="420px" width="99.5%" left="1px" top="1px" position="absolute"></part>

<part id="login" height="240px" width="63%" left="165px" top="2px" position="absolute" parent\_id="homemain"></part>

<part id="addr" height="20px" width="100px" left="200px" top="15px" position="absolute" parent\_id="login"></part>

<part id="addrtext" height="20px" width="10px" left="285px" top="15px" position="absolute" parent\_id="login"></part>

<part id="country" height="20px" width="100px" left="200px" top="85px" position="absolute" parent\_id="login"></part>

<part id="countrytext" height="20px" width="10px" left="285px" top="85px" position="absolute" parent\_id="login"></part>

</layout>

<content id="defaultcontent">

<part id="addr" value="Address" valuetype="inline"></part>

<part id="country" value="Country" valuetype="inline"></part>

**<part id="countrytext" valuetype="fixed">**

**<combooption name="Afghanistan" value="Afghanistan"></combooption>**

**<combooption name="Algeria" value="Albania"></combooption>**

**<combooption name="Georgia" value="Georgia"></combooption>**

**<combooption name="Germany" value="Germany"></combooption>**

**<combooption name="Ghana" value="Ghana"></combooption>**

**<combooption name="India" value="India"></combooption>**

**</part>**

</content>

<style id="defaultstyle">

<part id="homemain" value="stylesheet1" valuetype="reference"></part>

<part id="login" value="[CDATA[background-color:#E6E6FF;font-size:10pt;]]" valuetype="inline"></part>

<part id="addr" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="country" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

</style>

<resource>

<resourceitem id="stylesheet1" href="homestyle.css" valuetype="css"></resourceitem>

</resource>

</interface>

The snapshot for the above interface xml – 

For fetching combo box data from database –

<content id="scormInitializeContent">

<part id="CourseID" valuetype="query" value="select a.course\_id, a.course\_name from course a, course\_creation\_details b where a.course\_id=b.course\_id"></part>

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</content>

* 1. Radio - To create a radio button, we need to use class "radio" inside the <structure> tag of interface.xml. The options which are to be included in the radio button have to be mentioned under <option> tag of <structure> tag.

“id” attribute of option tag is the id of each radio button inside the radio button group.

“name” attribute is the label of each radio button in the group.

“value” attribute is the value of each radio button in the group.

“eventname” attribute is the type of js event to be called like “onclick”.

“eventvalue” attribute is the name of javascript function to be called.

The example of “radio” –

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="DialogStateTransition" title="Dialog State Transition" type="Interface">

<structure>

<part id="BodyDiv" class="label"></part>

<part id="ConditionTypeRowContainer" class="label"></part>

<part id="ConditionTypeTitleLabel" class="label"></part>

<part id="ConditionTypeRadio" class="radio">

<option id="ConditionTypeRadio1" name="Match Intent" value="MATCH\_INTENT" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio2" name="Match Entity" value="MATCH\_ENTITY" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio3" name="Match Response Select Option" value="MATCH\_RESPONSE\_SELECT\_OPTION" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio4" name="Manual" value="MANUAL" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio5" name="None" value="NONE" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

</part>

</structure>

<layout id="DialogStateTransitionLayout">

<part id="BodyDiv"></part>

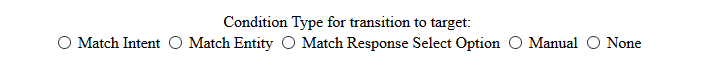
<part id="ConditionTypeRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="ConditionTypeTitleLabel" parent\_id="ConditionTypeRowContainer"></part>

<part id="ConditionTypeRadio" parent\_id="ConditionTypeRowContainer"></part>

</layout>

The result of the above xml –



* 1. Form - This is the same as the use of form in html page. When we need to use a form in a web page, we have to use class form. The fields which have to be included in the form are the children of the form. i.e. the “parent\_id” of those fields is the part id of class form.

The example of “form” –

<interface id="feedback" title="feedback" type="Interface">

<configuration createsession="true" checkrole="false" >

</configuration>

<structure>

<part id="feedbackmain" class="label"></part>

<part id="feedback" class="label"></part>

**<part id="form1" class="form"></part>**

<part id="visitorname" class="label"></part>

<part id="visitornametext" class="inputtext" size="20"></part>

<part id="address" class="label"></part>

<part id="addresstextarea" class="textarea" rows="2" cols="23"></part>

<part id="city" class="label"></part>

<part id="citytext" class="inputtext" size="20"></part>

<part id="state" class="label"></part>

<part id="statetext" class="inputtext" size="20"></part>

<part id="pin" class="label"></part>

<part id="pintext" class="inputtext" size="20"></part>

<part id="organisation" class="label"></part>

<part id="organisationtext" class="inputtext" size="20"></part>

<part id="designation" class="label"></part>

<part id="designationtext" class="inputtext" size="20"></part>

<part id="country" class="label"></part>

<part id="countrytext" class="combo"></part>

<part id="telno" class="label"></part>

<part id="telnotext" class="inputtext" size="20"></part>

<part id="comment" class="label"></part>

<part id="commenttextarea" class="textarea" size="30" rows="7" cols="65"></part>

<part id="submitbutton" class="button" size="20" jscontrol="custom"></part>

<part id="resetbutton" class="button" size="20" jscontrol="custom"></part>

</structure>

<layout id="defaultlayout">

<part id="feedbackmain" height="400px" width="99.5%" left="1px" top="1px" position="absolute"></part>

<part id="feedback" height="405px" width="77.5%" left="12.5%" top="12px" position="absolute" parent\_id="feedbackmain"></part>

**<part id="form1" parent\_id="feedback"></part>**

**<part id="visitorname" height="20px" width="100px" left="10px" top="15px" position="absolute" parent\_id="form1"></part>**

**<part id="visitornametext" height="20px" width="10px" left="115px" top="15px" position="absolute" parent\_id="form1"></part>**

**<part id="address" height="20px" width="100px" left="52%" top="25px" position="absolute" parent\_id="form1"></part>**

**<part id="addresstextarea" height="20px" width="10px" left="68%" top="15px" position="absolute" parent\_id="form1"></part>**

**<part id="city" height="20px" width="100px" left="10px" top="45px" position="absolute" parent\_id="form1"></part>**

**<part id="citytext" height="20px" width="10px" left="115px" top="45px" position="absolute" parent\_id="form1"></part>**

**<part id="state" height="20px" width="100px" left="52%" top="75px" position="absolute" parent\_id="form1"></part>**

**<part id="statetext" height="20px" width="10px" left="68%" top="75px" position="absolute" parent\_id="form1"></part>**

**<part id="pin" height="20px" width="100px" left="10px" top="75px" position="absolute" parent\_id="form1"></part>**

**<part id="pintext" height="20px" width="10px" left="115px" top="75px" position="absolute" parent\_id="form1"></part>**

**<part id="country" height="20px" width="100px" left="52%" top="105px" position="absolute" parent\_id="form1"></part>**

**<part id="countrytext" height="20px" width="10px" left="68%" top="105px" position="absolute" parent\_id="form1"></part>**

**<part id="organisation" height="20px" width="100px" left="10px" top="165px" position="absolute" parent\_id="form1"></part>**

**<part id="organisationtext" height="20px" width="10px" left="115px" top="165px" position="absolute" parent\_id="form1"></part>**

**<part id="designation" height="20px" width="100px" left="52%" top="165px" position="absolute" parent\_id="form1"></part>**

**<part id="designationtext" height="20px" width="10px" left="68%" top="165px" position="absolute" parent\_id="form1"></part>**

**<part id="telno" height="20px" width="100px" left="10px" top="105px" position="absolute" parent\_id="form1"></part>**

**<part id="telnotext" height="20px" width="10px" left="115px" top="105px" position="absolute" parent\_id="form1"></part>**

**<part id="comment" height="20px" width="100px" left="10px" top="315px" position="absolute" parent\_id="form1"></part>**

**<part id="commenttextarea" height="20px" width="10px" left="115px" top="270px" position="absolute" parent\_id="form1"></part>**

**<part id="submitbutton" height="20px" width="10px" left="660px" top="310px" position="absolute" parent\_id="form1"></part>**

**<part id="resetbutton" height="20px" width="10px" left="660px" top="340px" position="absolute" parent\_id="form1"></part>**

</layout>

<content id="defaultcontent">

<part id="visitorname" value="\*Name" valuetype="inline"></part>

<part id="address" value="Address" valuetype="inline"></part>

<part id="city" value="City" valuetype="inline"></part>

<part id="state" value="State" valuetype="inline"></part>

<part id="pin" value="Pin" valuetype="inline"></part>

<part id="country" value="Country" valuetype="inline"></part>

<part id="countrytext" valuetype="fixed">

<combooption name="Afghanistan" value="Afghanistan"></combooption>

<combooption name="Algeria" value="Albania"></combooption>

<combooption name="American Samoa" value="American Samoa"></combooption>

<combooption name="Hungary" value="Hungary"></combooption>

<combooption name="Italy" value="Italy"></combooption>

<combooption name="Ivory Coast (Cote dIvoire)" value="Ivory Coast (Cote dIvoire)"></combooption>

<combooption name="India" value="India"></combooption>

<combooption name="Japan" value="Japan"></combooption>

<combooption name="Jordan" value="Jordan"></combooption>

</part>

<part id="organisation" value="Organisation" valuetype="inline"></part>

<part id="designation" value="Designation" valuetype="inline"></part>

<part id="telno" value="Telephone No." valuetype="inline"></part>

<part id="comment" value="Comment" valuetype="inline"></part>

<part id="submitbutton" value="Submit" valuetype="inline"></part>

<part id="resetbutton" value="Reset" valuetype="inline"></part>

</content>

<style id="defaultstyle">

<part id="feedbackmain" value="stylesheet1" valuetype="reference"></part>

<part id="visitorname" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="visitorname" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="address" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="city" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="state" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="pin" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="country" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="organisation" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="designation" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="telno" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="comment" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="howdidu" value="[CDATA[font-size:10pt;font-weight:bold;]]" valuetype="inline"></part>

<part id="submitbutton" value="[CDATA[background-color:#006699;color:#FFFFFF;font-size:10pt;font-weight:bold;width:90px;]]" valuetype="inline"></part>

<part id="resetbutton" value="[CDATA[background-color:#006699;color:#FFFFFF;font-size:10pt;font-weight:bold;width:90px;]]" valuetype="inline"></part>

</style>

<behaviour id="defaultbehaviour">

<part id="submitbutton">

<event name="onclick" type="simple" function="submit\_onclick" valuetype="jsevent" ></event>

</part>

<part id="resetbutton">

<event name="onclick" type="simple" function="formReset" valuetype="jsevent" ></event>

</part>

</behaviour>

<resource>

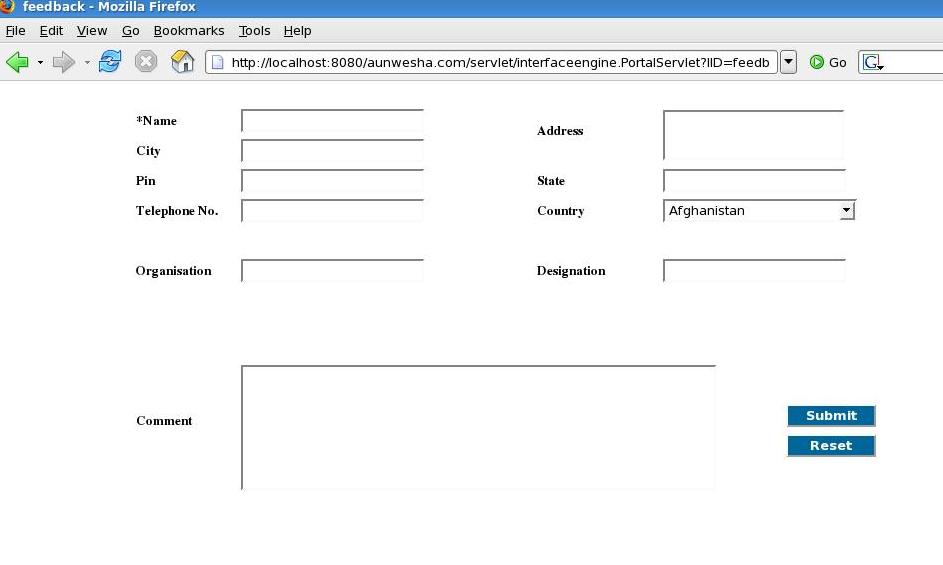
<resourceitem id="stylesheet1" href="feedbackstyle.css" valuetype="css"></resourceitem>

<resourceitem id="feedbackjs" href="feedbackjs.js" valuetype="js"></resourceitem>

</resource>

</interface>

The result of the above xml –



* 1. Fieldset - This tag is used to group related elements in a form. This tag draws a box around the related elements.

The example of “fieldset” –

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="DialogStateTransition" title="Dialog State Transition" type="Interface">

<configuration checkrole="false"></configuration>

<structure>

<part id="BodyDiv" class="label"></part>

<part id="AddEditForm" class="form"></part>

<part id="AddEditFormFieldset" class="fieldset"></part>

<part id="DialogStateTransitionId" class="hidden"></part>

<part id="EventTypeRowContainer" class="label"></part>

<part id="EventTypeTitleLabel" class="label"></part>

<part id="EventTypeRadio" class="radio">

<option id="EventTypeRadio1" name="Wait for user input before transition" value="WAIT\_FOR\_USER\_INPUT\_BEFORE\_TRANSITION" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio2" name="Continue to target without waiting for user input" value="CONTINUE\_TO\_TARGET\_WITHOUT\_WAITING\_FOR\_USER\_INPUT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio3" name="Custom Event" value="CUSTOM\_EVENT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

</part>

<part id="EventTextRowContainer" class="label"></part>

<part id="EventTextLabel" class="label"></part>

<part id="EventText" class="inputtext"></part>

<part id="ConditionTypeRowContainer" class="label"></part>

<part id="ConditionTypeTitleLabel" class="label"></part>

<part id="ConditionTypeRadio" class="radio">

<option id="ConditionTypeRadio1" name="Match Intent" value="MATCH\_INTENT" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio2" name="Match Entity" value="MATCH\_ENTITY" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio3" name="Match Response Select Option" value="MATCH\_RESPONSE\_SELECT\_OPTION" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio4" name="Manual" value="MANUAL" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio5" name="None" value="NONE" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

</part>

<part id="ConditionTextRowContainer" class="label"></part>

<part id="BotIntentNameLabel" class="label"></part>

<part id="BotIntentName" class="combo"></part>

<part id="BotEntityNameLabel" class="label"></part>

<part id="BotEntityName" class="combo"></part>

<part id="OperatorValueLabel" class="label"></part>

<part id="OperatorValue" class="combo"></part>

<part id="ExpressionValueLabel" class="label"></part>

<part id="ExpressionValue" class="inputtext"></part>

<part id="ResponseTemplateComponentValueLabel" class="label"></part>

<part id="ResponseTemplateComponentValue" class="combo"></part>

<part id="ConditionValueLabel" class="label"></part>

<part id="ConditionValue" class="inputtext"></part>

<part id="TargetDialogStateRowContainer" class="label"></part>

<part id="TargetDialogStateLabel" class="label"></part>

<part id="TargetDialogState" class="combo"></part>

<part id="CommentLabel" class="label"></part>

<part id="CommentValue" class="textarea" rows="5" cols="20"></part>

<part id="SaveButtonRowContainer" class="label"></part>

<part id="SaveButton" class="button"></part>

<part id="DialogStateTransitionAjaxComp" class="ajaxcomponent"></part>

</structure>

<layout id="DialogStateTransitionLayout">

<part id="BodyDiv"></part>

<part id="AddEditForm" parent\_id="BodyDiv"></part>

<part id="AddEditFormFieldset" parent\_id="AddEditForm"></part>

<part id="DialogStateTransitionId" parent\_id="AddEditFormFieldset"></part>

<part id="EventTypeRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="EventTypeTitleLabel" parent\_id="EventTypeRowContainer"></part>

<part id="EventTypeRadio" parent\_id="EventTypeRowContainer"></part>

<part id="EventTextRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="EventTextLabel" parent\_id="EventTextRowContainer"></part>

<part id="EventText" parent\_id="EventTextRowContainer"></part>

<part id="ConditionTypeRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="ConditionTypeTitleLabel" parent\_id="ConditionTypeRowContainer"></part>

<part id="ConditionTypeRadio" parent\_id="ConditionTypeRowContainer"></part>

<part id="ConditionTextRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="BotIntentNameLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="BotIntentName" parent\_id="ConditionTextRowContainer"></part>

<part id="BotEntityNameLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="BotEntityName" parent\_id="ConditionTextRowContainer"></part>

<part id="OperatorValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="OperatorValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ExpressionValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ExpressionValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ResponseTemplateComponentValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ResponseTemplateComponentValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ConditionValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ConditionValue" parent\_id="ConditionTextRowContainer"></part>

<part id="TargetDialogStateRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="TargetDialogStateLabel" parent\_id="TargetDialogStateRowContainer"></part>

<part id="TargetDialogState" parent\_id="TargetDialogStateRowContainer"></part>

<part id="CommentLabel" parent\_id="TargetDialogStateRowContainer"></part>

<part id="CommentValue" parent\_id="TargetDialogStateRowContainer"></part>

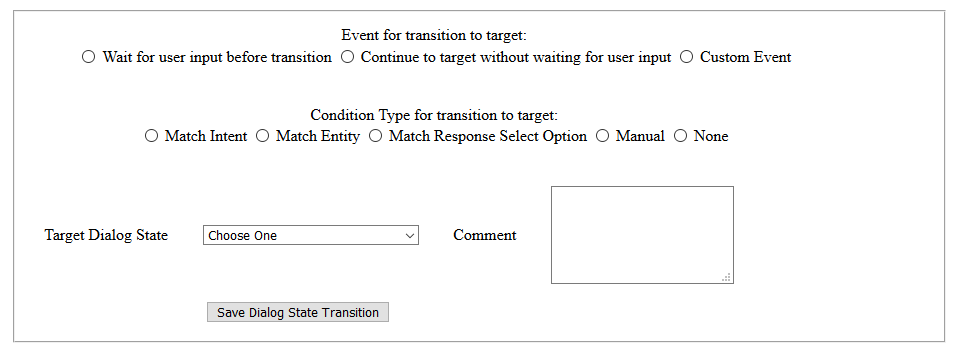
<part id="SaveButtonRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="SaveButton" parent\_id="SaveButtonRowContainer"></part>

<part id="DialogStateTransitionAjaxComp" parent\_id="BodyDiv"></part>

</layout>

The result of the above xml –



* 1. Legend – This tag is used to define the title for the child contents. The **legend** elements are the parent element. This tag is used to define the caption for the <fieldset> element.

The example of “legend” –

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="DialogStateTransition" title="Dialog State Transition" type="Interface">

<configuration checkrole="false"></configuration>

<structure>

<part id="BodyDiv" class="label"></part>

<part id="AddEditForm" class="form"></part>

<part id="AddEditFormFieldset" class="fieldset"></part>

<part id="AddEditFormLegend" class="legend"></part>

<part id="DialogStateTransitionId" class="hidden"></part>

<part id="EventTypeRowContainer" class="label"></part>

<part id="EventTypeTitleLabel" class="label"></part>

<part id="EventTypeRadio" class="radio">

<option id="EventTypeRadio1" name="Wait for user input before transition" value="WAIT\_FOR\_USER\_INPUT\_BEFORE\_TRANSITION" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio2" name="Continue to target without waiting for user input" value="CONTINUE\_TO\_TARGET\_WITHOUT\_WAITING\_FOR\_USER\_INPUT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio3" name="Custom Event" value="CUSTOM\_EVENT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

</part>

<part id="EventTextRowContainer" class="label"></part>

<part id="EventTextLabel" class="label"></part>

<part id="EventText" class="inputtext"></part>

<part id="ConditionTypeRowContainer" class="label"></part>

<part id="ConditionTypeTitleLabel" class="label"></part>

<part id="ConditionTypeRadio" class="radio">

<option id="ConditionTypeRadio1" name="Match Intent" value="MATCH\_INTENT" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio2" name="Match Entity" value="MATCH\_ENTITY" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio3" name="Match Response Select Option" value="MATCH\_RESPONSE\_SELECT\_OPTION" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio4" name="Manual" value="MANUAL" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio5" name="None" value="NONE" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

</part>

<part id="ConditionTextRowContainer" class="label"></part>

<part id="BotIntentNameLabel" class="label"></part>

<part id="BotIntentName" class="combo"></part>

<part id="BotEntityNameLabel" class="label"></part>

<part id="BotEntityName" class="combo"></part>

<part id="OperatorValueLabel" class="label"></part>

<part id="OperatorValue" class="combo"></part>

<part id="ExpressionValueLabel" class="label"></part>

<part id="ExpressionValue" class="inputtext"></part>

<part id="ResponseTemplateComponentValueLabel" class="label"></part>

<part id="ResponseTemplateComponentValue" class="combo"></part>

<part id="ConditionValueLabel" class="label"></part>

<part id="ConditionValue" class="inputtext"></part>

<part id="TargetDialogStateRowContainer" class="label"></part>

<part id="TargetDialogStateLabel" class="label"></part>

<part id="TargetDialogState" class="combo"></part>

<part id="CommentLabel" class="label"></part>

<part id="CommentValue" class="textarea" rows="5" cols="20"></part>

<part id="SaveButtonRowContainer" class="label"></part>

<part id="SaveButton" class="button"></part>

<part id="DialogStateTransitionAjaxComp" class="ajaxcomponent"></part>

</structure>

<layout id="DialogStateTransitionLayout">

<part id="BodyDiv"></part>

<part id="AddEditForm" parent\_id="BodyDiv"></part>

<part id="AddEditFormFieldset" parent\_id="AddEditForm"></part>

<part id="AddEditFormLegend" parent\_id="AddEditFormFieldset"></part>

<part id="DialogStateTransitionId" parent\_id="AddEditFormFieldset"></part>

<part id="EventTypeRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="EventTypeTitleLabel" parent\_id="EventTypeRowContainer"></part>

<part id="EventTypeRadio" parent\_id="EventTypeRowContainer"></part>

<part id="EventTextRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="EventTextLabel" parent\_id="EventTextRowContainer"></part>

<part id="EventText" parent\_id="EventTextRowContainer"></part>

<part id="ConditionTypeRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="ConditionTypeTitleLabel" parent\_id="ConditionTypeRowContainer"></part>

<part id="ConditionTypeRadio" parent\_id="ConditionTypeRowContainer"></part>

<part id="ConditionTextRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="BotIntentNameLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="BotIntentName" parent\_id="ConditionTextRowContainer"></part>

<part id="BotEntityNameLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="BotEntityName" parent\_id="ConditionTextRowContainer"></part>

<part id="OperatorValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="OperatorValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ExpressionValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ExpressionValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ResponseTemplateComponentValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ResponseTemplateComponentValue" parent\_id="ConditionTextRowContainer"></part>

<part id="ConditionValueLabel" parent\_id="ConditionTextRowContainer"></part>

<part id="ConditionValue" parent\_id="ConditionTextRowContainer"></part>

<part id="TargetDialogStateRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="TargetDialogStateLabel" parent\_id="TargetDialogStateRowContainer"></part>

<part id="TargetDialogState" parent\_id="TargetDialogStateRowContainer"></part>

<part id="CommentLabel" parent\_id="TargetDialogStateRowContainer"></part>

<part id="CommentValue" parent\_id="TargetDialogStateRowContainer"></part>

<part id="SaveButtonRowContainer" parent\_id="AddEditFormFieldset"></part>

<part id="SaveButton" parent\_id="SaveButtonRowContainer"></part>

<part id="DialogStateTransitionAjaxComp" parent\_id="BodyDiv"></part>

</layout>

<content id="DialogStateTransitionContent">

<part id="AddEditFormLegend" value="Add / Edit Form" valuetype="inline"></part>

<part id="EventTypeTitleLabel" value="Event for transition to target: " valuetype="inline"></part>

<part id="EventTextLabel" value="Custom Event Value" valuetype="inline"></part>

<part id="ConditionTypeTitleLabel" value="Condition Type for transition to target: " valuetype="inline"></part>

<part id="BotIntentNameLabel" value="Select Intent" valuetype="inline"></part>

<part id="BotIntentName" value="select intent\_name, intent\_name from BOT\_INTENT" valuetype="query"></part>

<part id="BotEntityNameLabel" value="Select Entity" valuetype="inline"></part>

<part id="BotEntityName" value="select bot\_entity\_name, bot\_entity\_name from BOT\_ENTITY" valuetype="query"></part>

<part id="OperatorValueLabel" value="Operator" valuetype="inline"></part>

<part id="OperatorValue" value="searchtype" valuetype="fixed">

<combooption name="=~" value="Exists"></combooption>

<combooption name="==" value="Equals To"></combooption>

<combooption name="!=" value="Not Equal To"></combooption>

<combooption name="&gt;" value="Greater than"></combooption>

<combooption name="&lt;" value="Less than"></combooption>

<combooption name="&gt;=" value="Greater than Equals To"></combooption>

<combooption name="&lt;=" value="Less than Equals To"></combooption>

</part>

<part id="ExpressionValueLabel" value="Value" valuetype="inline"></part>

<part id="ResponseTemplateComponentValueLabel" value="Response Template Component Value" valuetype="inline"></part>

<part id="ResponseTemplateComponentValue" value="SELECT a.response\_template\_component\_value,a.response\_template\_component\_value FROM dialog\_state\_response a, response\_template\_component b where a.response\_template\_component\_id=b.response\_template\_component\_id and b.response\_template\_component\_type=\'SELECTOPTION\'" valuetype="query"></part>

<part id="ConditionValueLabel" value="Condition" valuetype="inline"></part>

<part id="TargetDialogStateLabel" value="Target Dialog State" valuetype="inline"></part>

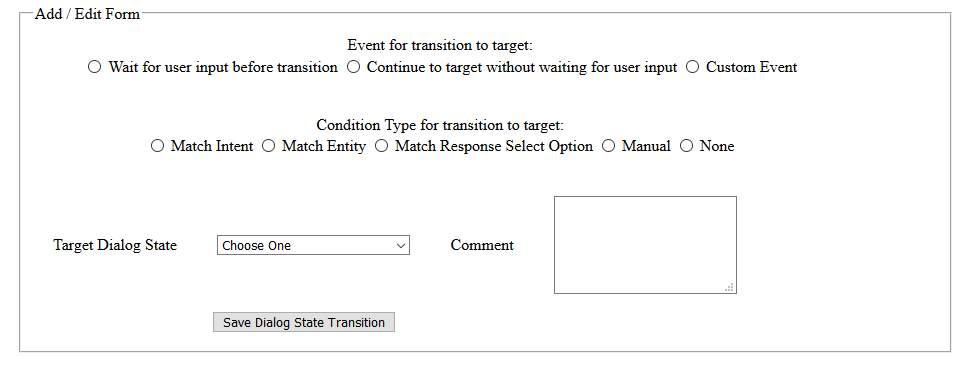
<part id="TargetDialogState" value="select DS.dialog\_state\_id,concat(DSM.dialog\_state\_machine\_name,\' - \',DS.dialog\_state\_name) from DIALOG\_STATE DS, DIALOG\_STATE\_MACHINE DSM where DSM.dialog\_state\_machine\_id=DS.dialog\_state\_machine\_id and DSM.dialog\_state\_machine\_id=%dialog\_state\_machine\_id%" valuetype="query"></part>

<part id="CommentLabel" value="Comment" valuetype="inline"></part>

<part id="SaveButton" value="Save Dialog State Transition" valuetype="inline"></part>

</content>

The result of the above xml –



* 1. iFrame- To use iFrame in the HTML the corresponding part class is – “iframe”. The possible attributes are -
* Width – The width of the iFrame.
* Height – The height of the iFrame
* Frameborder – To show the frame border or not.
* allowtransparency
* scrolling – to allow scroll in to iFrame or not
* background-color
* name

The example-

<interface id="home" title="home" type="Interface">

<configuration createsession="true" checkrole="false" >

</configuration>

<structure>

<part id="homemain" class="label"></part>

**<part id="left\_frame" class="iframe"></part>**

**<part id="right\_frame" class="iframe"></part>**

</structure>

<layout id="defaultlayout">

<part id="homemain" height="420px" width="99.5%" left="1px" top="1px" position="absolute"></part>

**<part id="left\_frame" height="440px" width="40%" left="1px" top="2px" scrolling="yes" position="absolute" parent\_id="homemain"></part>**

**<part id="right\_frame" height="440px" width="85%" left="230px" top="2px" scrolling="yes" position="absolute" parent\_id="homemain"></part>**

</layout>

<style id="defaultstyle">

<part id="homemain" value="stylesheet1" valuetype="reference"></part>

**<part id="left\_frame" value="[CDATA[border:0px solid #ff0000;]]" valuetype="inline"></part>**

**<part id="right\_frame" value="[CDATA[overflow:auto;]]" valuetype="inline"></part>**

</style>

<behaviour id="defaultbehaviour">

**<part id="left\_frame">**

**<event name="invokeurl" type="simple" function="http://aunwesha.com" target="left\_frame" valuetype="inline" ></event>**

**</part>**

**<part id="right\_frame">**

**<event name="invokeurl" type="simple" function="./interfaceengine.PortalServlet?IID=feedback" target="right\_frame" valuetype="inline" ></event>**

**</part>**

</behaviour>

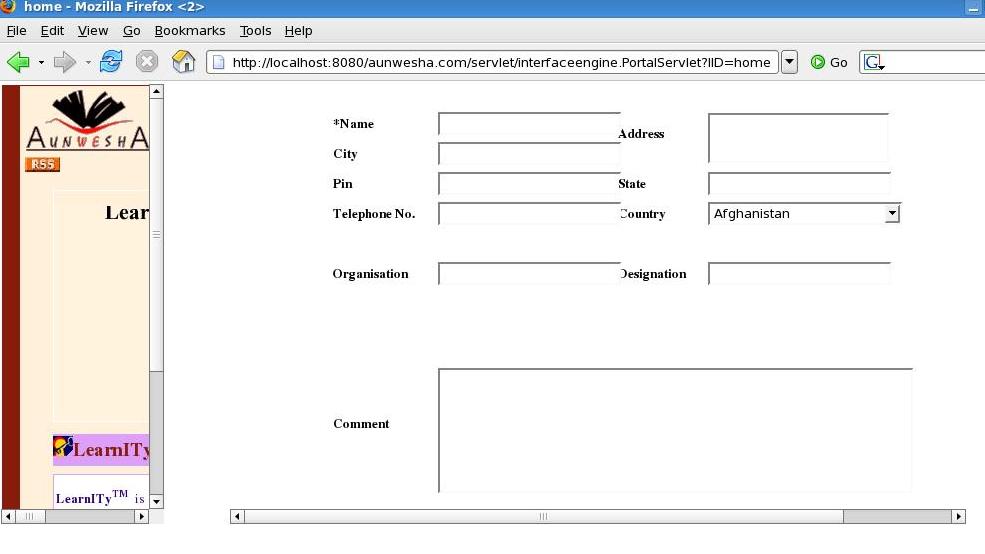
<resource>

<resourceitem id="stylesheet1" href="homestyle.css" valuetype="css"></resourceitem>

</resource>

</interface>

The snapshot of the above example –



* 1. Tree – To create a tree structure we need to use the “tree” class. There can be two types of tree – dynamic tree and static tree. The tree is supported by jQuery framework “jquery.dynatree”. The example -

<interface id="DeliveryEngine" title="DeliveryEngine" type="Interface">

<structure>

<part id="deliverymain" class="label"></part>

<part id="deliverytop" class="label"></part>

<part id="poweredbylearnity" class="label"></part>

<part id="notebooklink" class="label"></part>

<part id="quitlink" class="label"></part>

<part id="deliverytopstrip" class="label"></part>

<part id="showhidetoc" class="imagelink"></part>

<part id="showhidetoclabel" class="textlink"></part>

<part id="deliverysearchlabel" class="label"></part>

<part id="query" class="inputtext"></part>

<part id="deliverysearchgo" class="button"></part>

<part id="showtree" class="label"></part>

<part id="coursename" class="label"></part>

**<part id="treediv" class="tree" treedataremotefunction="launchcourse.treeConstruct" onselectremotefunction="f1" autocollapse="true" initialiseonload="true"></part>**

<part id="nodeKey" class="hidden"></part>

<part id="deliveryIframe" class="iframe"></part>

<part id="ee" class="ajaxcomponent" ></part>

<part id="previousitem" class="imagelink" ></part>

<part id="topitem" class="imagelink" ></part>

<part id="nextitem" class="imagelink" ></part>

<part id="unitedit" class="button" ></part>

<part id="APIAdapter" class="applet" archieve="cmidatamodel.jar,lmsclient.jar,debug.jar" codebase="../html/" mayscript="true"></part>

<part id="maxresults" class="inputtext" size="5"></part>

<part id="contentsearchlabel" class="label"></part>

<part id="contensearchform" class="form"></part>

</structure>

<layout id="DeliveryEnginelayout">

<part id="deliverymain" height="100%" width="100%" left="0px" top="0px" position="absolute"></part>

<part id="deliverytop" height="100px" width="900px" left="0px" top="0px" position="absolute" parent\_id="deliverymain"></part>

<part id="deliverytopstrip" height="40px" width="900px" left="0px" top="100px" position="absolute" parent\_id="deliverymain"></part>

<part id="showhidetoc" height="30px" width="25px" left="10px" top="5px" position="absolute" parent\_id="deliverytopstrip"></part>

<part id="showhidetoclabel" height="20px" width="70px" left="40px" top="10px" position="absolute" parent\_id="deliverytopstrip"></part>

<part id="showtree" height="490px" width="250px" left="0px" top="140px" position="absolute" parent\_id="deliverymain"></part>

<part id="coursename" parent\_id="showtree"></part>

**<part id="treediv" height="490px" width="250px" left="0px" top="0px" position="absolute" parent\_id="showtree"></part>**

<part id="deliveryIframe" height="490px" width="650px" left="250px" top="140px" position="absolute" parent\_id="deliverymain"></part>

<part id="poweredbylearnity" height="40%" left="50%" top="5%" position="absolute" parent\_id="deliverytop"></part>

<part id="notebooklink" height="20%" width="10%" left="60%" top="70%" position="absolute" parent\_id="deliverytop"></part>

<part id="quitlink" height="20%" width="5%" left="95%" top="70%" position="absolute" parent\_id="deliverytop"></part>

<part id="ee" parent\_id="deliverymain"></part>

<part id="previousitem" height="28px" width="28px" left="10px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="topitem" height="28px" width="28px" left="40px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="nodeKey" parent\_id="deliverymain"></part>

<part id="nextitem" height="28px" width="28px" left="70px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="APIAdapter" position="absolute" parent\_id="deliverymain"></part>

<part id="contensearchform" parent\_id="deliverytopstrip"></part>

<part id="deliverysearchgo" height="30px" width="45px" left="610px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="deliverysearchlabel" height="20px" width="50px" left="150px" top="10px" position="absolute" parent\_id="contensearchform"></part>

<part id="query" height="40px" width="70px" left="205px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="maxresults" height="40px" width="30px" left="530px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="contentsearchlabel" height="30px" width="130px" left="400px" top="5px" position="absolute" parent\_id="contensearchform"></part>

</layout>

<layout id="DeliveryEnginelayoutContentEditor">

<part id="deliverymain" height="100%" width="100%" left="0px" top="0px" position="absolute"></part>

<part id="deliverytop" height="100px" width="900px" left="0px" top="0px" position="absolute" parent\_id="deliverymain"></part>

<part id="deliverytopstrip" height="40px" width="900px" left="0px" top="100px" position="absolute" parent\_id="deliverymain"></part>

<part id="showhidetoc" height="30px" width="25px" left="10px" top="5px" position="absolute" parent\_id="deliverytopstrip"></part>

<part id="showhidetoclabel" height="20px" width="70px" left="40px" top="10px" position="absolute" parent\_id="deliverytopstrip"></part>

<part id="showtree" height="490px" width="250px" left="0px" top="140px" position="absolute" parent\_id="deliverymain"></part>

<part id="coursename" parent\_id="showtree"></part>

**<part id="treediv" height="490px" width="250px" left="0px" top="0px" position="absolute" parent\_id="showtree"></part>**

<part id="deliveryIframe" height="490px" width="650px" left="250px" top="140px" position="absolute" parent\_id="deliverymain"></part>

<part id="poweredbylearnity" height="40%" left="50%" top="5%" position="absolute" parent\_id="deliverytop"></part>

<part id="notebooklink" height="20%" width="10%" left="60%" top="70%" position="absolute" parent\_id="deliverytop"></part>

<part id="quitlink" height="20%" width="5%" left="95%" top="70%" position="absolute" parent\_id="deliverytop"></part>

<part id="ee" parent\_id="deliverymain"></part>

<part id="previousitem" height="28px" width="28px" left="10px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="topitem" height="28px" width="28px" left="40px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="nodeKey" parent\_id="deliverymain"></part>

<part id="nextitem" height="28px" width="28px" left="70px" top="50%" position="absolute" parent\_id="deliverytop"></part>

<part id="unitedit" height="60%" left="570px" top="30%" position="absolute" parent\_id="deliverytop"></part>

<part id="APIAdapter" position="absolute" parent\_id="deliverymain"></part>

<part id="contensearchform" parent\_id="deliverytopstrip"></part>

<part id="deliverysearchgo" height="30px" width="45px" left="610px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="deliverysearchlabel" height="20px" width="50px" left="150px" top="10px" position="absolute" parent\_id="contensearchform"></part>

<part id="query" height="40px" width="70px" left="205px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="maxresults" height="40px" width="30px" left="530px" top="5px" position="absolute" parent\_id="contensearchform"></part>

<part id="contentsearchlabel" height="30px" width="130px" left="400px" top="5px" position="absolute" parent\_id="contensearchform"></part>

</layout>

<content id="DeliveryEnginecontent">

<part id="showhidetoc" value="hidetoc" valuetype="reference"></part>

<part id="showhidetoclabel" value="Hide toc" valuetype="inline"></part>

<part id="deliverysearchlabel" value="Search" valuetype="inline"></part>

<part id="deliverysearchgo" value="GO" valuetype="inline"></part>

<part id="poweredbylearnity" valuetype="cdata"><![CDATA[<font size="2"><b><i>Powered By</i></b><font color=\"#FF0000\"><b>&nbsp;&nbsp;LearnITy&#8482;</b></font></font>]]></part>

<part id="notebooklink" valuetype="cdata"><![CDATA[<a href="javascript:launchNoteBook()" style="text-decoration:none"><font size="2">NoteBook</font></a>]]></part>

<part id="quitlink" valuetype="cdata"><![CDATA[<a href="javascript:doConfirm()" style="text-decoration:none"><font size="2">Quit</font></a>]]></part>

<part id="previousitem" value="previousitem" valuetype="reference"></part>

<part id="topitem" value="topitem" valuetype="reference"></part>

<part id="nextitem" value="nextitem" valuetype="reference"></part>

<part id="contentsearchlabel" value="Results Per Page" valuetype="inline"></part>

</content>

<content id="DeliveryEnginecontentEditor">

<part id="showhidetoc" value="hidetoc" valuetype="reference"></part>

<part id="showhidetoclabel" value="Hide toc" valuetype="inline"></part>

<part id="deliverysearchlabel" value="Search" valuetype="inline"></part>

<part id="deliverysearchgo" value="GO" valuetype="inline"></part>

<part id="poweredbylearnity" valuetype="cdata"><![CDATA[<font size="2"><b><i>Powered By</i></b><font color=\"#FF0000\"><b>&nbsp;&nbsp;LearnITy&#8482;</b></font></font>]]></part>

<part id="notebooklink" valuetype="cdata"><![CDATA[<a href="javascript:launchNoteBook()" style="text-decoration:none"><font size="2">NoteBook</font></a>]]></part>

<part id="quitlink" valuetype="cdata"><![CDATA[<a href="javascript:doConfirm()" style="text-decoration:none"><font size="2">Quit</font></a>]]></part>

<part id="previousitem" value="previousitem" valuetype="reference"></part>

<part id="topitem" value="topitem" valuetype="reference"></part>

<part id="nextitem" value="nextitem" valuetype="reference"></part>

<part id="unitedit" value="Edit" valuetype="inline"></part>

<part id="contentsearchlabel" value="Results Per Page" valuetype="inline"></part>

</content>

<style id="DeliveryEnginestyle">

<part id="deliverymain" value="[CDATA[background-color: #FFFFFF]]" valuetype="inline"></part>

<part id="deliverytop" value="[CDATA[background-color: #FFF7E5]]" valuetype="inline"></part>

<part id="deliverytopstrip" value="[CDATA[background-color: #6699CC]]" valuetype="inline"></part>

<part id="showhidetoclabel" value="[CDATA[color: #FFFFFF;text-decoration:none;font-size: 12px;]]" valuetype="inline"></part>

<part id="deliverysearchlabel" value="[CDATA[color: #FFFFFF;text-decoration:none;font-size: 12px;]]" valuetype="inline"></part>

<part id="showtree" value="[CDATA[background-color: #D6D6C0;overflow:auto]]" valuetype="inline"></part>

<part id="coursename" value="[CDATA[background-color: #D6D6C0]]" valuetype="inline"></part>

<part id="poweredbylearnity" value="[CDATA[background-color: #FFF7E5]]" valuetype="inline"></part>

<part id="notebooklink" value="[CDATA[background-color: #FFF7E5]]" valuetype="inline"></part>

<part id="quitlink" value="[CDATA[background-color: #FFF7E5]]" valuetype="inline"></part>

<part id="deliveryIframe" value="[CDATA[background-color: #FFFFFF]]" valuetype="inline"></part>

<part id="contentsearchlabel" value="[CDATA[color: #FFFFFF;text-decoration:none;font-size: 14px;]]" valuetype="inline"></part>

</style>

<behaviour id="DeliveryEnginebehaviour">

<part id="root">

<event name="onload\_onclick();init()" type="simple" resourceid="deliveryjs"></event>

</part>

<part id="deliveryIframe">

<event name="invokeurl" type="simple" function="./interfaceengine.PortalServlet?IID=DeliveryHomePage" valuetype="inline" ></event>

</part>

<part id="previousitem">

<event name="onclick" type="simple" function="previousitem1" valuetype="jsevent" ></event>

</part>

<part id="topitem">

<event name="onclick" type="simple" function="topitem\_onclick" valuetype="jsevent" ></event>

</part>

<part id="nextitem">

<event name="onclick" type="simple" function="nextitem1" valuetype="jsevent" ></event>

</part>

<part id="nextitem">

<event name="onclick" type="simple" function="show\_hide\_toc" valuetype="jsevent" ></event>

</part>

<part id="showhidetoc">

<event name="onclick" type="simple" function="show\_hide\_toc" valuetype="jsevent" ></event>

</part>

<part id="showhidetoclabel">

<event name="onclick" type="simple" function="show\_hide\_toc" valuetype="jsevent" ></event>

</part>

<part id="deliverysearchgo">

<event name="onclick" type="simple" function="delivery\_search\_onclick" valuetype="jsevent" ></event>

</part>

<part id="APIAdapter">

<event name="dummy" type="simple" function="org.adl.samplerte.client.APIAdapterApplet.class" valuetype="jsevent" ></event>

</part>

</behaviour>

<behaviour id="DeliveryEnginebehaviourContentEditor">

<part id="root">

<event name="onload\_onclick();init()" type="simple" valuetype="jsevent" resourceid="deliveryjs"></event>

</part>

<part id="ee">

<event name="dummy" type="simple" javaclass="launchcourse" valuetype="jsevent" ></event>

</part>

<part id="deliveryIframe">

<event name="invokeurl" type="simple" function="./interfaceengine.PortalServlet?IID=DeliveryHomePage" valuetype="inline" ></event>

</part>

<part id="previousitem">

<event name="onclick" type="simple" function="previousitem1" valuetype="jsevent" ></event>

</part>

<part id="topitem">

<event name="onclick" type="simple" function="topitem\_onclick" valuetype="jsevent" ></event>

</part>

<part id="nextitem">

<event name="onclick" type="simple" function="nextitem1" valuetype="jsevent" ></event>

</part>

<part id="unitedit">

<event name="onclick" type="simple" function="launch\_editor" valuetype="jsevent" ></event>

</part>

<part id="showhidetoc">

<event name="onclick" type="simple" function="show\_hide\_toc" valuetype="jsevent" ></event>

</part>

<part id="showhidetoclabel">

<event name="onclick" type="simple" function="show\_hide\_toc" valuetype="jsevent" ></event>

</part>

<part id="deliverysearchgo">

<event name="onclick" type="simple" function="delivery\_search\_onclick" valuetype="jsevent" ></event>

</part>

<part id="APIAdapter">

<event name="dummy" type="simple" function="org.adl.samplerte.client.APIAdapterApplet.class" valuetype="jsevent" ></event>

</part>

</behaviour>

<resource>

<resourceitem id="deliveryjs" href="deliveryjs.js" valuetype="js"></resourceitem>

<resourceitem id="previousitem" href="PreviousArrow.gif" valuetype="image"></resourceitem>

<resourceitem id="topitem" href="TOCIcon.gif" valuetype="image"></resourceitem>

<resourceitem id="nextitem" href="NextArrow.gif" valuetype="image"></resourceitem>

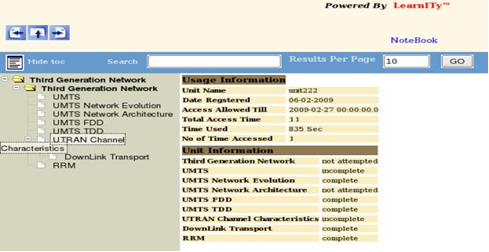
<resourceitem id="hidetoc" href="hidetoc.gif" valuetype="image"></resourceitem>

<resourceitem id="treejs" href="dynatree.js" valuetype="js"></resourceitem>

</resource>

</interface>

Snapshot of the above xml -



Generating Javascript code for tree class inside source code:

function GenerateTree()

{

launchcourse.treeConstruct

(function(data){

setValue('treediv',data);

$("#treediv").dynatree({

title: "Sample",

autoCollapse: true,

keyboard: true,

onSelect: function(dtnode) {

f1(dtnode)

} });});

}

function f1(dtnode){

var url1=dtnode.data.url;

var length1=url1.length;

var s1=url1.substring(length1-4,length1);

var browserName = navigator.appName;

var browserVersion = parseInt(navigator.appVersion);

if(s1!='asmt'){

//alert(s1);

document.getElementById("deliveryIframe").src = dtnode.data.url;

$("#nodeKey").val(dtnode.data.key);

launchcourse.onselectTitle(dtnode.data.key,dtnode.data.tooltip,function(data) {

var b=data;

//alert("..."+b);

if(b=='true')

{

location.href="./interfaceengine.PortalServlet?IID=LoginPage";

}

});

}

else{

$("#nodeKey").val(dtnode.data.key);

launchcourse.getEmbeddedAssessment(dtnode.data.url,function(data){

var filename1=data[0];

var cid=data[1];

if(browserName == 'Microsoft Internet Explorer' && browserVersion >=4){

document.getElementById("deliveryIframe").src = "./learnityasmtserver.assessmentportal.embeddedasmt.Assessment?s="+filename1+"&cid="+cid+"&identifier="+dtnode.data.key;

}

else {

document.getElementById("deliveryIframe").src = "./learnityasmtserver.assessmentportal.embeddedasmt.AssessmentXHTML?s="+filename1+"&cid="+cid+"&identifier="+dtnode.data.key;

}

});

}

}

The Procedure of defining tree class in interface.xml is -

<part id="treediv" class="tree" treedataremotefunction="launchcourse.treeConstruct" onselectremotefunction="f1" autocollapse="true" initialiseonload="true"></part>

Here “launchcourse” is pojo class name and “treeConstruct” is function name of the pojo class name. For on select event in tree links if you want to call any function please write function name, here f1 is the function name. After that whatever you want to write inside function f1, please write in a js file and define it in interface.xml file using resource tag.

<behaviour>

<part id="treeDiv">

<event name="dummy" type="simple" valuetype="jsevent" resourceid="treejs"></event>

</part>

</behaviour>

<resource>

<resourceitem id="treejs" href="dynatree.js" valuetype="js"></resourceitem>

</resource>

Here dynatree.js is the js file and it is defined here using resourceitem id treejs.

When interface engine reads the name of the js file it finds that file and read contents from it and in generating code paste inside of function f1 in source code.autocollapse="true" means tree nodes will automatic collapse. initialiseonload="true" means GenerateTree function will call at the time of page loading otherwise write false and call GenerateTree function from anywhere else as you need.

* + - Static Tree - statictree class is require to create a tree whose nodes are fixed and known to application programmer.

Code snippet -

<structure>

**<part id="lex-admin-menu" class="statictree" tooltip="true" onselectremotefunction="f12" initialiseonload="true">**

**<treedata>**

**<node key="1" title="Lexicographer Admin" isFolder="true" >**

**<node key="1a" title="Lexicographer Load Summary" url="./interfaceengine.PortalServlet?IID=loadSummary" isFolder="false"></node>**

**<node key="2a" title="Lexicographer Load Management" url="./interfaceengine.PortalServlet?IID=individualLoadSummary" isFolder="false"></node>**

**<node key="3a" title="Lexicographer Assign Words" url="./interfaceengine.PortalServlet?IID=AssignWords" isFolder="false"></node>**

**<node key="4a" title="Lexicographer Auto Load Assignment" url="./interfaceengine.PortalServlet?IID=AutoLoadAssignments" isFolder="false"></node>**

**<node key="5a" title="Tl Lexicographer Association" url="./interfaceengine.PortalServlet?IID=TlLexAssociation" isFolder="false"></node>**

**<node key="6a" title="Word Completion Criteria" url="./interfaceengine.PortalServlet?IID=wordcompletioncriteria" isFolder="false"></node>**

**<node key="7a" title="Export Management" url="./interfaceengine.PortalServlet?IID=crawlerexport" isFolder="false"></node>**

**<node key="8a" title="Import Management" url="./interfaceengine.PortalServlet?IID=crawlerimport" isFolder="false"></node>**

**<node key="9a" title="Performance Dashboard" url="./interfaceengine.PortalServlet?IID=performancedashboard" isFolder="false"></node>**

**<node key="10a" title="Browse" isFolder="true">**

**<node key="10a1" title="Sentence Queue" url="./interfaceengine.PortalServlet?IID=BrowseSentenceQueue" isFolder="false"></node>**

**<node key="10a2" title="Image Queue" url="./interfaceengine.PortalServlet?IID=BrowseImageQueue" isFolder="false"></node>**

**<node key="10a3" title="Video Queue" url="./interfaceengine.PortalServlet?IID=BrowseVideoQueue" isFolder="false"></node>**

**<node key="10a4" title="Pronunciation Queue" url="./interfaceengine.PortalServlet?IID=BrowsePronunQueue" isFolder="false"></node>**

**</node>**

**<node key="11a" title="Lex Status Export" url="./interfaceengine.PortalServlet?IID=LexStatusExport" isFolder="false"></node>**

**<node key="12a" title="Reports" isFolder="true">**

**<node key="12a1" title="View Report" url="./interfaceengine.PortalServlet?IID=Reports" isFolder="false"></node>**

**</node>**

**</node>**

**</treedata>**

**</part>**

<part id="lex-tl-menu" class="statictree" lazynode="true" tooltip="true" onselectremotefunction="f12" initialiseonload="true">

<treedata>

<node key="1" title="Team Leader" isFolder="true" >

<node key="1a" title="View Unapproved Item" url="./interfaceengine.PortalServlet?IID=ViewItem" isFolder="false"></node>

<node key="1aa" title="View Approved Item" url="./interfaceengine.PortalServlet?IID=Production" isFolder="false"></node>

<node key="11a" title="View Discarded Item" url="./interfaceengine.PortalServlet?IID=ViewDiscardedItem" isFolder="false"></node>

</node>

</treedata>

</part>

</structure>

Behaviour

<behaviour id="lex-admin-behaviour">

<part id="lex-admin-menu">

<event name="dummy" type="simple" valuetype="jsevent" resourceid="treejs"/>

</part>

<part id="lex-mn-menu">

<event name="dummy" type="simple" valuetype="jsevent" resourceid="treejs"/>

</part>

</behaviour>

<resource>

<resourceitem id="treejs" href="tree.js" valuetype="js"/>

</resource>

“lazynode” attribute defines, if all node will create or only root node will create at the time of initialization. lazynode="true" means only root node will create at the time of initialization and after loading page, when you click a node its child nodes will be created. lazynode="false" means all node will create at the time of initialization.tooltip="true" will show tooltip of a node. “Onselectremotefunction” attribute defines a function name. This function is called when a node is clicked.onselectremotefunction="f12", Here f12 is the function name.autocollapse="true" means tree nodes will automatic collapse.initialiseonload="true" means GenerateTree function will call at the time of page loading otherwise write false and call GenerateTree function from anywhere else as needed.

<resourceitem id="treejs" href="tree.js" valuetype="js"/>

Here treejs.js is the js file and it is define here using resourceitem id treejs.When interface engine reads the name of the js file it finds that file and read contents from it and in generating code paste inside of function f12 in source code.In given example node Browse is one of parent the parent node and Sentence Queue, Image Queue, Video Queue all are child node of node Browse.

Write xml structure of nodes inside tag <treedata></treedata>

Such as,

<treedata>

<node key="1" title="Team Leader" isFolder="true" >

<node key="1a" title="View Unapproved Item" url="./interfaceengine.PortalServlet?IID=ViewItem" isFolder="false"></node>

</node>

</treedata>

Attribute title is the node name and key is its unique identity. Node team Leader is the parent node of node “View Unapproved” Item.

Generated javascript code inside for statictree class inside source code, when lazynode is true -

function GenerateTree()

{

$("#lex-tl-menu").dynatree({

initAjax: {url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-tl-menu&islazynode=true&tooltip=true&classname=statictree",

data: {key: "root"}

},

onActivate: function(dtnode) {

f12(dtnode);

}

,onLazyRead: function(dtnode){

dtnode.appendAjax(

{url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-tl-menu&islazynode=true&tooltip=true&classname=statictree",

data: {key: dtnode.data.key

}

});

}

});

}

function f12(dtnode){

document.getElementById('lex-admin-iframe').src = dtnode.data.url;

$("#lex-admin-header-page").text(dtnode.data.title);

Generated javascript code inside for statictree class inside source code, when lazynode is false -

function GenerateTree()

{

$("#lex-mn-menu").dynatree({

initAjax: {url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-mn-menu&islazynode=&tooltip=true&classname=statictree",

data: {key: "root"}

},

onActivate: function(dtnode) {

f12(dtnode);

}

});

}

function f12(dtnode){

document.getElementById('lex-admin-iframe').src = dtnode.data.url;

$("#lex-admin-header-page").text(dtnode.data.title);

}

* Dynamictree - dynamictree class is required to create a tree whose nodes will be dynamically generated from database. -

Interface snippet -

<structure>

<part id="lex-admin-menu" class="dynamictree" autocollapse="true" lazynode="false" tooltip="false" onselectremotefunction="f12" initialiseonload="true" parentquery="select a.c\_id,a.topic\_name from admintree a,admintree\_main m where a.p\_id='0' and a.course\_id=m.course\_id and m.course\_id=%course\_id%" childquery="select a.c\_id,a.topic\_name from admintree a,admintree\_main m where a.p\_id=? and a.course\_id=m.course\_id and m.course\_id=%course\_id%" parameter="course\_id"></part>

</structure>

<behaviour id="lex-admin-behaviour">

<part id="lex-admin-menu">

<event name="dummy" type="simple" valuetype="jsevent" resourceid="treejsadmin"/>

</part>

</behaviour>

<resource>

<resourceitem id="treejsadmin" href="tree1.js" valuetype="js"/>

</resource>

lazynode attribute defines, if all node will create or only root node will create at the time of initialization. lazynode="true" means only root node will create at the time of initialization and after loading page, when a node is clicked its child nodes will be created. lazynode="false" means all node will create at the time of initialization.tooltip="true" will show tooltip of a node. Onselectremotefunction attribute defines a function name. This function is called when a node is clicked.onselectremotefunction="f12", Here f12 is the function name.

autocollapse="true" means tree nodes will automatic collapse.initialiseonload="true" means GenerateTree function will call at the time of page loading otherwise write false and call GenerateTree function from anywhere else as you need.

<resourceitem id="treejsadmin" href="tree1.js" valuetype="js"/>

Here tree1.js is the js file and it is define here using resourceitem id treejsadmin.

When interface engine reads the name of the js file it finds that file and read contents from it and in generating code paste inside of function f12 in source code.

parentquery attribute defines a query to access root nodes from database. childquery attribute defines a query to access child nodes from database. parameter defines parameters of the both queries.In given example course\_id is a parameter name.

Generated javascript code inside for dynamictree class inside source code when lazynode is true.

function GenerateTree()

{

$("#lex-tl-menu").dynatree({

initAjax: {url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-tl-menu&islazynode=true&tooltip=true&classname=statictree",

data: {key: "root"}

},

onActivate: function(dtnode) {

f12(dtnode);

}

,onLazyRead: function(dtnode){

dtnode.appendAjax(

{url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-tl-menu&islazynode=true&tooltip=true&classname=statictree",

data: {key: dtnode.data.key

}

});

}

});

}

function f12(dtnode){

document.getElementById('lex-admin-iframe').src = dtnode.data.url;

$("#lex-admin-header-page").text(dtnode.data.title);

Generated javascript code inside for dynamictree class inside source code when lazynode is false -

function GenerateTree()

{

$("#lex-mn-menu").dynatree({

initAjax: {url: "./interfaceengine.jsonWriter?interface\_id=lexAdmin&part\_id=lex-mn-menu&islazynode=&tooltip=true&classname=statictree",

data: {key: "root"}

},

onActivate: function(dtnode) {

f12(dtnode);

}

});

}

function f12(dtnode){

document.getElementById('lex-admin-iframe').src = dtnode.data.url;

$("#lex-admin-header-page").text(dtnode.data.title);

}

* 1. Report and Report Window –To generate report we can use these two classes – “report” and “reportwindow”.

<interface id="TLProdictivityMetrics" title="TLProdictivityMetrics" type="Interface">

<configuration createsession="true" checkrole="true" />

<structure>

<part id="reportsmain" class="label" />

<part id="reporttypelabel" class="label" />

<part id="reporttype" class="combo" />

**<part id="reportframe" class="report" />**

<part id="showreport" class="button" />

<part id="accloginajax" class="ajaxcomponent" />

</structure>

<layout id="TLProdictivityMetricsLayout">

<part id="reportsmain" height="500px" width="768px" left="0px" top="0px" position="absolute" />

<part id="reporttypelabel" height="30px" width="100px" left="20px" top="20px" position="absolute" parent\_id="reportsmain" />

<part id="reporttype" height="30px" width="150px" left="130px" top="20px" position="absolute" parent\_id="reportsmain" />

**<part id="reportframe" height="400px" width="700px" left="1px" top="50px" position="absolute" parent\_id="reportsmain" />**

<part id="showreport" height="30px" width="50px" left="160px" top="110px" position="absolute" parent\_id="reportsmain" />

<part id="accloginajax" parent\_id="reportsmain" />

</layout>

<content id="TLProdictivityMetricsContent">

<part id="reporttypelabel" value="Select report" valuetype="inline" />

<part id="reporttype" valuetype="query" value="Select u.user\_id,concat(u.first\_name,\' \',u.sname) from user\_details u, user\_role ur, role r where u.user\_id=ur.user\_id and ur.role\_id=r.role\_id and r.title=\'TEAMLEADER\'">

</part>

**<part id="reportframe" viewer\_type="html" rpt\_file="tl\_productivity\_metrics.rptdesign">**

**<report\_parameters>**

**<report\_parameter name="tl\_id" value="tl\_id()" value\_type="function"></report\_parameter>**

**</report\_parameters>**

**</part>**

<part id="showreport" value="Show Report" valuetype="inline" />

</content>

<style id="TLProdictivityMetricsStyle">

<part id="reportsmain" value="[CDATA[font: 12px Arial Bold;]]" valuetype="inline"/>

</style>

<behaviour id="TLProdictivityMetricsBehaviour">

<part id="reporttype">

<event name="onchange" type="simple" function="tlselect\_onchange()" valuetype="inline" resourceid="reportsjs"/>

</part>

**<part id="showreport">**

**<event name="onclick" type="simple" function="LoadReport" valuetype="jsevent"/>**

**</part>**

</behaviour>

<resource>

<resourceitem id="reportsjs" href="reports.js" valuetype="js"/>

<resourceitem id="tlproductivitycss" href="tlproductivity.css" valuetype="css"></resourceitem>

</resource>

</interface>

* 1. Chart –To use chart we need to use the part class “chart”. In the structure section -

<part id="chart1" class="chart"></part>

In content part we have to add all parameters for that chart in between <chartstructure></chartstructure> tag.

<part id="chart1">

<chartstructure>

<matric\_title>Active User</matric\_title>

<description>Active User</description>

<X\_axis\_query>select account\_status from student\_details group by account\_status</X\_axis\_query>

<series1\_query>select count(account\_status) from student\_details group by account\_status</series1\_query>

<series2\_query>2</series2\_query>

<series3\_query>3</series3\_query>

<legenddata1>User Type</legenddata1>

<legenddata2>2l</legenddata2>

<legenddata3>3l</legenddata3>

<chart\_type>pie</chart\_type>

<subtype>0</subtype>

<width>700</width>

<height>700</height>

<yaxis\_label>Active User</yaxis\_label>

<color>3</color>

<chart\_dimension>TwoDimensionalwithdepth</chart\_dimension>

</chartstructure>

</part>

An interface.xml using the chart class –

<interface id="userChart" title="userChart" type="Interface">

<configuration createsession="true" checkrole="true" >

</configuration>

<structure>

<part id="mainpage" class="label"></part>

**<part id="chart1" class="chart"></part>**

<part id="Passajaxcomp" class="ajaxcomponent"></part>

</structure>

<layout id="userChartLay">

<part id="mainpage" height="100%" width="100%" left="0px" top="0px" position="absolute" ></part>

**<part id="chart1" height="96%" width="96%" left="5px" top="10px" position="absolute" parent\_id="mainpage"></part>**

<part id="Passajaxcomp" parent\_id="mainpage"></part>

</layout>

<content id="userChartCont">

**<part id="chart1">**

**<chartstructure>**

**<matric\_title>Active User</matric\_title>**

**<description>Active User</description>**

**<X\_axis\_query>select account\_status from student\_details group by account\_status</X\_axis\_query>**

**<series1\_query>select count(account\_status) from student\_details group by account\_status</series1\_query>**

**<series2\_query>2</series2\_query>**

**<series3\_query>3</series3\_query>**

**<legenddata1>User Type</legenddata1>**

**<legenddata2>2l</legenddata2>**

**<legenddata3>3l</legenddata3>**

**<chart\_type>pie</chart\_type>**

**<subtype>0</subtype>**

**<width>700</width>**

**<height>700</height>**

**<yaxis\_label>Active User</yaxis\_label>**

**<color>3</color> <chart\_dimension>TwoDimensionalwithdepth</chart\_dimension>**

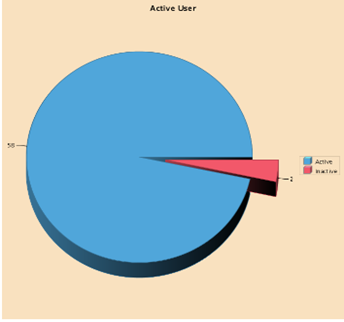
**</chartstructure>**

**</part>**

</content>

</interface>

The screen for the above interface.xml –



* 1. DBForm and its related part classes – This part class is used to create a form and its corresponding members inside it.

The “part” having class “DBForm” can contain any number of “element” sections under it. The “element” section is same as the “part” section of the “structure” section. It contains the “class” name which can be any of the available part classes. It also contains an id for the element and the attributes available for the corresponding class.The “DBForm” specific part classes –

* formlabel - This is “label” corresponding to an input element. It has a “for” attribute which specifies for which input element the “formlabel” is created.
* formtext - It is same as “inputtext” class.
* formdate – It is for date input. User can select a date from the datepicker.
* formemail - It is for mail input. It checks if the input is email or not.
* formnumber- It is for number input. It checks if the input is number or not.
* formpassword - It is for password input.
* fieldset – It is not specific no to “DBForm”. It creates HTML “fieldset” element. It hold all the element inside it as described in the “layout” section.
* submitbutton – This is same as a button which submits the form but it validates the form befor submitting. On success of the validation it calls the function mentioned on th “success\_method” attribute of the “DBForm” class. “error\_method” is also present for calling a function in validation failure.

The “DBForm” helps us to validate the form which is very important before submitting any form. To use the validation feature user should use the “submitbutton” class to submit the form.

Different types of validation properties are supported by the “elements” –

* required and requiredmess – “required” attributes helps us to make the element mandatory and “requiredmess“ helps us in showing the corresponding message if the mandatory field is left blank.
* minlength and minlengthmess - “minlength” attributes helps us to make the element’sminimum length and “minlengthmess“ helps us in showing the corresponding message if the minimum length is not fulfilled.
* maxlength and maxlengthmess - - “maxlength” attributes helps us to make the element’s maximum length and “maxlengthmess “ helps us in showing the corresponding message if the maximum length is not fulfilled.
* equalto and equaltomess - “equalto” attributes helps us to check the corresponding element is equal to thw mentioned element or not and “equaltomess “ helps us in showing the corresponding error message if the condition is not fulfilled.
* emailand emailmess– “email” attributes make it sure that the input has to be an email and “emailmess” shows the corresponding error message if it is not an email.
* numbercheckand numbermess –“numbercheck” attributes make it sure that the input has to be a number and “numbermess” shows the corresponding error message.

All of the validation attributes except “equalto” can have only two values “true” or “false”. “equalto” contains the id of the part with which the comparison will be made. The message attributes contains the validation message.

The “element” also contains some special attributes for “DBForm” class except the “part” attributes-

* type – The “element” value will be entered or auto populated. It can have two values – “entered” or “auto”.
* insertindex–this attribute helps the insert query for fetching the elements value. Depending upon the index the “paramters” attribute in the insert query are replaced.
* selectindex–this attribute helps us to populate the value in different fields. The select query output populates the values in corresponding fields depending upon the select index.
* modifyindex - this attribute helps the modify query for fetching the elements value. Depending upon the index the “paramters” attribute in the modify query are replaced.

The “element” section also contains the queries for “select”, “modify” and “insert”.

An example interface –

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="ChangePassword" title="Change LMS Admin Password" type="Interface">

<configuration TemplateID="GridTreeNew"></configuration>

<structure>

<part id="mainpage" class="label"></part>

<part id="mainDiv" class="label"></part>

<part id="mess" class="label"></part>

**<part id="changePasswordForm" class="DBForm" success\_method="submitForm()">**

**<element id="changePasswordFieldSet" class="fieldset" />**

**<element id="UserId" class="formlabel" for="UserIddata" />**

**<element id="UserIddata" class="formtext" size="20" type="entered"**

**selectindex="1" />**

**<element id="OldPassword" class="formlabel" for="OldPassworddata" />**

**<element id="OldPassworddata" class="formtext" size="20"**

**tabindex="1" type="entered" selectindex="2" required="true"**

**requiredmess="Old Password is required!!" />**

**<element id="NewPassword" class="formlabel" for="NewPassworddata" />**

**<element id="NewPassworddata" class="formpassword" size="20"**

**tabindex="2" type="entered" modifyindex="1" required="true"**

**minlength="6" requiredmess="New Password is required!!"**

**minlengthmess="New Password should be 6 charecter long!!"**

**selectindex="4" />**

**<element id="RetypePassword" class="formlabel" for="RetypePassworddata" />**

**<element id="RetypePassworddata" class="formpassword" size="20"**

**tabindex="3" type="entered" required="true" requiredmess="Please retype Password!!"**

**equalto="NewPassworddata" equaltomess="Retyped password does not match!!"**

**selectindex="5" />**

**<element id="emaillabel" class="formlabel" for="emaill"></element>**

**<element id="emaill" class="formemail" size="20" tabindex="4"**

**type="entered" selectindex="3" required="true" requiredmess="Email is required!!"></element>**

**<element id="subbutton" class="submitbutton" size="20"**

**tabindex="5" />**

**<select>**

**<query id="1"**

**sql="select sp.student\_id,sp.password,sd.email\_id,'''','''' from student\_password sp,student\_details sd where sp.student\_id=sd.student\_id and sp.student\_id=%UserIddata%"**

**parameter="UserIddata" />**

**</select>**

**<modify>**

**<query id="1"**

**sql="update student\_password set password=%NewPassworddata% where student\_id=%UserIddata%"**

**parameter="NewPassworddata,UserIddata" />**

**</modify>**

**</part>**

<part id="Passajaxcomp" class="ajaxcomponent"></part>

</structure>

<layout id="ChangePasswordLay">

<part id="mainpage" height="100%" width="100%" left="0px" top="0px"

position="absolute"></part>

<part id="mainDiv" width="395px" left="25%" top="90px" position="absolute"

parent\_id="mainpage"></part>

<part id="mess" height="50px" width="475px" left="20%" top="1px"

position="absolute" parent\_id="mainpage"></part>

**<part id="changePasswordForm" left="10px" top="22px" position="absolute"**

**parent\_id="mainDiv"></part>**

**<part id="changePasswordFieldSet" parent\_id="changePasswordForm"></part>**

**<part id="UserId" parent\_id="changePasswordFieldSet"></part>**

**<part id="UserIddata" parent\_id="changePasswordFieldSet"></part>**

**<part id="OldPassword" parent\_id="changePasswordFieldSet"></part>**

**<part id="OldPassworddata" parent\_id="changePasswordFieldSet"></part>**

**<part id="NewPassword" parent\_id="changePasswordFieldSet"></part>**

**<part id="NewPassworddata" parent\_id="changePasswordFieldSet"></part>**

**<part id="RetypePassword" parent\_id="changePasswordFieldSet"></part>**

**<part id="RetypePassworddata" parent\_id="changePasswordFieldSet"></part>**

**<part id="emaillabel" parent\_id="changePasswordFieldSet"></part>**

**<part id="emaill" parent\_id="changePasswordFieldSet"></part>**

**<part id="subbutton" parent\_id="changePasswordFieldSet"></part>**

<part id="Passajaxcomp" parent\_id="mainpage"></part>

</layout>

<content id="ChangePasswordCont">

<part id="mess" value="Change Password" valuetype="inline"></part>

<part id="UserId" value="User Id : " valuetype="inline"></part>

<part id="OldPassword" value="Old Password : " valuetype="inline"></part>

<part id="NewPassword" value="New Password : " valuetype="inline"></part>

<part id="RetypePassword" value="Retype Password : " valuetype="inline"></part>

<part id="emaillabel" value="Email : " valuetype="inline"></part>

<part id="subbutton" value="SAVE" valuetype="inline"></part>

</content>

<style id="ChangePasswordstyle">

<part id="mainpage" value="[CDATA[background-color: #E4EBF2;]]"

valuetype="inline"></part>

<part id="mainDiv"

value="[CDATA[background-color: #868890;border:5px ridge white;color:white;]]"

valuetype="inline"></part>

<part id="mess"

value="[CDATA[font-family:Verdan;cellpadding=2;font-size:14px;font-weight:bold;color:gray;font-size:25px;text-align:center;text-decoration:underline;]]"

valuetype="inline"></part>

<part id="UserId"

value="[CDATA[font-family:Verdan;cellpadding=2;font-size:14px;font-weight:bold]]"

valuetype="inline"></part>

<part id="OldPassword"

value="[CDATA[font-family:Verdan;cellpadding=2;font-size:14px;font-weight:bold]]"

valuetype="inline"></part>

<part id="NewPassword"

value="[CDATA[font-family:Verdan;cellpadding=2;font-size:14px;font-weight:bold]]"

valuetype="inline"></part>

<part id="RetypePassword"

value="[CDATA[font-family:Verdan;cellpadding=2;font-size:14px;font-weight:bold]]"

valuetype="inline"></part>

</style>

<behaviour id="ChangePasswordBeha">

<part id="root">

<event name="onload" type="simple" function="onload\_click"

valuetype="jsevent" resourceid="ChangePasswordjs"></event>

</part>

<part id="Passajaxcomp">

<event name="ajax" type="simple" function="dummy" javaclass="Portal"></event>

</part>

</behaviour>

<resource>

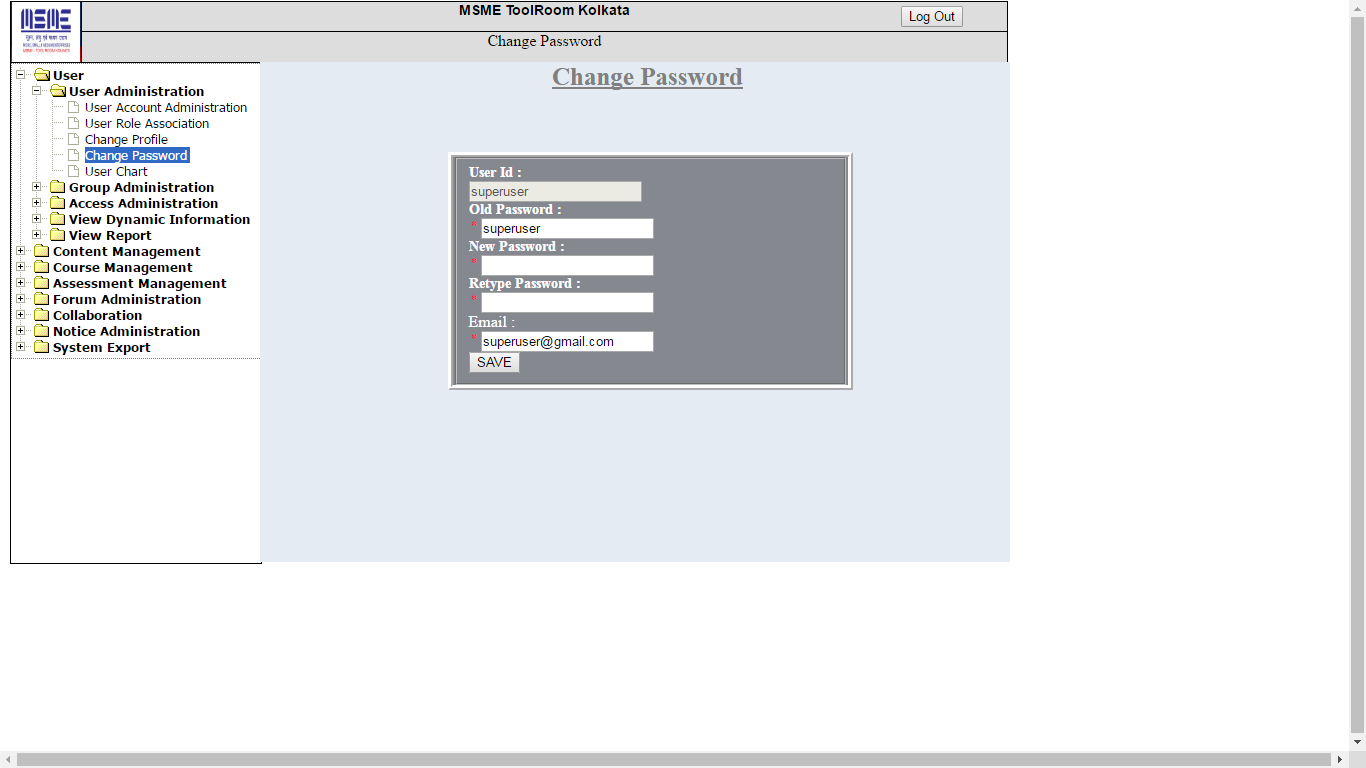
<resourceitem id="ChangePasswordjs" href="ChangePassword.js"

valuetype="js"></resourceitem>

</resource>

</interface>

The corresponding screen –



* 1. DBGrid – DBGrid creates tables with the commonly required functionalities like pagination, sorting, fixed header, search, add, edit, delete rows etc.

The part having class as “DBGrid” may have different attributes like –

* caption – this attribute contains the header of the table.
* sortname – this contains the name of the column depending on which the table will be primaryly sorted.
* sortorder - default sorting order. The value can be “asc” or “desc”
* searchOnEnter – This is for filter search. If filter search is made as true then this attribute tells if the search will start on key press or it will wait for an enter key. The value can be “true” or “false”. Default is false.
* Gridnavbar – To switch on or off the table nav bar.The value can be “true” or “false”. Default is true.
* Multiselect – To allow multi select rows. The value can be “true” or “false”. Default is false.
* Rownum – The number of rows to show on a page.
* Rowlist - To allow the user to select how many rows he/she wants to see per page.
* Resetsearchonclose – After search is made from the pop up, if the user wants to reset when the pop up closes then the value would be true otherwise false.
* Multiplesearch - To allow multiple searching from the search pop up.
* Customeditbutton – To add custom edit button. By default add/edit/delete buttons are present in the navigation bar.
* altRows – To colur alternate rows.
* altclass – To add different classes in alteranate rows.
* autowidth – To adjust the width of the columns automatically.
* rownumbers – To add sequential number for each row.
* filterToolbar – To on the filter search.
* autoencode – Value “true” or “false”. When set to true encodes (html encode) the incoming (from server) and posted data (from editing modules). For example < will be converted to &lt;.
* generateExcel – Value “true” or “false”. When set to true “Excel” button will be displayed in the grid navbar to export grid data in excel formal.
* onSelectRow – It is the javascript function name tha is to be called on select grid row.
* resetSearchOnClose – Value “true” or “false”. When set to false grid is not reset automatically after search box is close. When set to true grid is reset automatically after search box is close. Default value is true if it is empty.
* multipleSearch - Value “true” or “false”. When set to true multiple condition can be entered in the search box. Default value is false if it is empty.
* toolbarSearch - Value “true” or “false”. When set to true search box will be appeared at the top of each column. Default value is false.
* searchOperators - Value “true” or “false”. This attribute s required if toolbarSearch attribute is true. If set to true the list of operations (equal, contains, begin with, ends with, greater than, less than etc.) will be appeared before the search box in the toolbar. This list of operations can be different for different columns. The list can be declared in the grid columns searchoperations attribute.

The part having class as “DBGrid” contains one or more “column” elements. “column” element is for each column. It may have different attributes like –

* head – The header of the column.
* Name – name of the column
* index – index of the column
* width – with of the column
* editable – If the column is editable or not.
* hidden – If the column will be shown to the user or not.
* key – If the column is the key for the row or not
* required – If the column is required when editing or adding a row.
* Searchoptions – If searchOperators of grid attribute is true then list of operation cann be set in the column level like searchoptions="\'eq\',\'bw\',\'bn\',\'cn\',\'nc\',\'ew\',\'en\' "

Class “DBGrid” is used to generate simple grid that access the data from database using the query defined inside the <loadquery></loadquery> tag.

“Add”, “Modify” and “Delete” actions can be done in this grid by the queries defined inside <add></add>, <modify></modify> and <delete></delete> tags respectively. Inside the above tags queries are defined in the following way –

<queries>

<query id="1"sql="[CDATA[delete from student\_creation\_details where student\_id=%student\_id%]]"parameter="student\_id"></query>

</queries>

The “id” will be changed depending upon the number of queries. One can add validation query before insert, edit or delete data to check whether the data is valid to insert, edit or delete respectively or not. Validation is of two types – “query” and “custom”. For query type, the validation query is defined in the following way -

<validations>

<validation type="query">

<validationquery id="1"sql="[CDATA[select student\_id from student\_details where student\_id=%student\_id% and student\_id=%current\_login\_user\_id%]]"parameter="student\_id,current\_login\_user\_id" message="You cannot delete your own account."></validationquery>

</validation>

<validation type="query">

<validationquery id="2"sql="[CDATA[select sd.student\_id from student\_details sd,user\_role ur where sd.student\_id=ur.user\_id and ur.role\_id=\'2\' and sd.student\_id=%student\_id% and %current\_login\_user\_id%!=\'superuser\']]"parameter="student\_id,current\_login\_user\_id" message="You cannot delete other Administrator accounts."></validationquery>

</validation>

</validations>

If the data is not valid, then message is returned to the user.Custom validations are given in the following way

<validations>

<validation type="custom">

<validationquery id="1" classname="learnitycms.CmsDateValidator" message="Start Date is Less than End Date"></validationquery>

</validation>

</validations>

In this type of validations one should write java file. In the above example the CmsDateValidator class file is called from learnitycms package. This custom validation class alwaysimplements of “ValidatorFunction”. “validateadd” is for custom validation for add, “validateedit” is for modify and “validatedelete” is for delete.

There is another tag named <action></action> for add, modify or delete. If there is some other conditions for adding, editing or deleting then a java file is required. Action is written in the following way.

<action sequence="after" actionname="learnitycms.customGroupCourseReg"></action>

Here customGroupCourseReg class is called from learnitycms package. In action action type the sequence attribute is of three types – before, after and replace. If sequence is before then the action class is called before the query. If sequence isafter then the action class is called after the query. If replace, then action class is called replacing the query, i.e., query is not executed.

This action class is always a subclass of CustomEditAction. “AddAction” is for custom validation for add, “EditAction” is for modify and “DeleteAction” is for delete.

In all query there is some name is in % % and the names are written in the parameter attribute. This is for the values written in the corresponding field (textbox, textarea etc.) The name should be similar to the column name and exactly this name should be written in the parameter attribute.

There are few sepecial events which are supported by the DBGrid. These events can be used in the “behavior” section for that particular part id whose class is “DBGrid” –

* ondblClickRow – This event is fired on double clicking any row
* gridComplete – This event is fired after grid is completely loaded
* loadComplete – This event is fired after the data is loaded in the grid

The example of DBGrid in an interface-

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="UserCreation" title="LMS User Creation" type="Interface">

<configuration TemplateID="GridTreeNew"></configuration>

<structure>

<part id="main" class="label"></part>

<part id="userimage" class="inputfile"></part>

<part id="image\_button\_container" class="label"></part>

<part id="ShowProfileButton\_Container" class="label"></part>

<part id="ShowProfileButton" class="button"></part>

<part id="batchusermsg" class="label"></part>

<part id="UploadButton" class="button"></part>

<part id="excelimage\_container" class="label"></part>

<part id="excelimage" class="image"></part>

<part id="batchuser\_container" class="label"></part>

<part id="batchuserlabel" class="label"></part>

<part id="batchuser\_file\_container" class="label"></part>

<part id="batchuser" class="inputfile"></part>

<part id="UploadButton\_container" class="label"></part>

<part id="UserCreationAjaxComp" class="ajaxcomponent"></part>

**<part id="usercreationgrid" class="DBgrid" caption=" Currently Defined User(s)"**

**sortname="student\_id" sortorder="desc" searchOnEnter="false">**

**<column head="User Id" name="student\_id" index="1" width="105"**

**editable="true" hidden="false" key="true" required="true">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="First Name" name="a.first\_name" index="2" width="125"**

**editable="true" hidden="false" key="false" required="true">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Middle Name" name="a.middle\_name" index="3"**

**width="125" editable="true" hidden="false" key="false" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Last Name" name="a.sname" index="4" width="125"**

**editable="true" hidden="false" key="false" required="true">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Age" name="a.age" index="5" width="55" editable="true"**

**hidden="false" key="false" required="false">**

**<edit type="text" size="10"></edit>**

**</column>**

**<column head="Experience" name="a.experience" index="6" width="120"**

**editable="true" hidden="false" key="false" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Educational Qualification" name="a.edu\_status"**

**index="7" width="150" editable="true" hidden="false" key="false"**

**required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Gender" name="a.gender" index="8" width="105"**

**editable="true" hidden="false" key="false" required="true">**

**<edit type="select" editdomaintype="fixed" value="M:Male;F:Female"></edit>**

**</column>**

**<column head="Email Id" name="a.email\_id" index="9" width="105"**

**editable="true" hidden="false" key="false" required="false" custom="true"**

**custom\_func="CheckEmail">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Department" name="a.department" index="10"**

**width="105" editable="true" hidden="false" key="false" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Question Preferred" name="a.question\_preffered"**

**index="11" width="50" editable="true" hidden="false" key="false"**

**required="false">**

**<edit type="select" editdomaintype="fixed" value="Yes:Yes;No:No"></edit>**

**</column>**

**<column head="Media Preferred" name="a.media\_preffered" index="12"**

**width="150" editable="true" hidden="false" key="false" required="false">**

**<edit type="select" editdomaintype="fixed"**

**value="Video:Video;Audio:Audio;Text:Text"></edit>**

**</column>**

**<column head="Created By" name="b.student\_created\_by" index="13"**

**width="150" editable="false" hidden="false" key="false" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Date of Creation" name="b.date\_student\_created"**

**index="14" width="155" editable="false" hidden="false" key="false"**

**required="false">**

**<edit type="date" size="30"></edit>**

**</column>**

**<column head="Password" name="c.password" index="15" width="105"**

**editable="true" hidden="false" key="false" required="true">**

**<edit type="password" size="30"></edit>**

**</column>**

**<column head="Account Status" name="a.account\_stat" index="16"**

**width="155" editable="true" hidden="false" key="false" required="true">**

**<edit type="select" size="30" editdomaintype="fixed"**

**value="Active:Active;Inactive:Inactive"></edit>**

**</column>**

**<column head="Self Registration" name="a.strself" index="17"**

**width="155" editable="true" hidden="false" key="false" required="false">**

**<edit type="select" editdomaintype="fixed" value="T:True;F:False"></edit>**

**</column>**

**<column head="Qualifier" name="qualifiertext" index="18"**

**width="155" editable="false" hidden="false" edithidden="false" key="false"**

**required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="User Qualifier" name="qualifiercombo" index="19"**

**width="155" editable="true" hidden="true" edithidden="true" key="false"**

**required="false">**

**<edit type="select" size="30" editdomaintype="query"**

**value="select lqualifier,lqualifier from learning\_qualifier"></edit>**

**</column>**

**<loadquery**

**value="select a.student\_id,a.first\_name,a.middle\_name,a.sname,a.age,a.experience,a.edu\_status,a.gender,a.email\_id,a.department,a.question\_preffered,a.media\_preffered,b.student\_created\_by,b.date\_student\_created,c.password,a.account\_status,a.strself,a.learning\_style,d.lqualifier from student\_details a left join learning\_qualifier d on a.learning\_style=d.lqualifier,student\_creation\_details b,student\_password c where a.student\_id=b.student\_id and b.student\_id=c.student\_id and a.student\_id !=\'superuser\' "></loadquery>**

**<delete>**

**<validations>**

**<validation type="query">**

**<validationquery id="1"**

**sql="[CDATA[select student\_id from student\_details where student\_id=%student\_id% and student\_id=%current\_login\_user\_id%]]"**

**parameter="student\_id,current\_login\_user\_id" message="You cannot delete your own account."></validationquery>**

**</validation>**

**<validation type="query">**

**<validationquery id="2"**

**sql="[CDATA[select sd.student\_id from student\_details sd,user\_role ur where sd.student\_id=ur.user\_id and ur.role\_id=\'2\' and sd.student\_id=%student\_id% and %current\_login\_user\_id%!=\'superuser\']]"**

**parameter="student\_id,current\_login\_user\_id" message="You cannot delete other Administrator accounts."></validationquery>**

**</validation>**

**</validations>**

**<queries>**

**<query id="1"**

**sql="[CDATA[delete from student\_creation\_details where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="2"**

**sql="[CDATA[delete from student\_password where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="3"**

**sql="[CDATA[delete from student\_group\_association where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="4"**

**sql="[CDATA[delete from student\_details where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="5"**

**sql="[CDATA[delete from usergroup\_course\_registration where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="6"**

**sql="[CDATA[delete from user\_course\_registration where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="7"**

**sql="[CDATA[delete from user\_forum\_association where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="8"**

**sql="[CDATA[delete from sc\_user\_association where user\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="9"**

**sql="[CDATA[delete from user\_role where user\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**</delete>**

**<add>**

**<validations>**

**<validation type="query">**

**<validationquery id="1"**

**sql="[CDATA[select student\_id from student\_details where student\_id=%student\_id%]]"**

**parameter="student\_id" message="This User already Exists."></validationquery>**

**</validation>**

**</validations>**

**<queries>**

**<query id="1"**

**sql="[CDATA[insert into student\_details(student\_id,first\_name,middle\_name,sname,account\_status,email\_id,department,age,gender,strself,experience,edu\_status,question\_preffered,media\_preffered,learning\_style) values(%student\_id%,%a.first\_name%,%a.middle\_name%,%a.sname%,%a.account\_stat%,%a.email\_id%,%a.department%,%a.age%,%a.gender%,%a.strself%,%a.experience%,%a.edu\_status%,%a.question\_preffered%,%a.media\_preffered%,%qualifiercombo%)]]"**

**parameter="student\_id,a.first\_name,a.middle\_name,a.sname,a.account\_stat,a.email\_id,a.department,a.age,a.gender,a.strself,a.experience,a.edu\_status,a.question\_preffered,a.media\_preffered,qualifiercombo"></query>**

**</queries>**

**<queries>**

**<query id="2"**

**sql="[CDATA[insert into student\_creation\_details(student\_id,date\_student\_created,last\_modification\_date,student\_created\_by) values(%student\_id%,sysdate(),sysdate(),%current\_login\_user\_id%)]]"**

**parameter="student\_id,current\_login\_user\_id"></query>**

**</queries>**

**<queries>**

**<query id="3"**

**sql="[CDATA[insert into student\_password(student\_id,password) values(%student\_id%,%c.password%)]]"**

**parameter="student\_id,c.password"></query>**

**</queries>**

**</add>**

**<modify>**

**<queries>**

**<query id="1"**

**sql="[CDATA[update student\_details set first\_name=%a.first\_name%,middle\_name=%a.middle\_name%,sname=%a.sname%,account\_status=%a.account\_stat%,email\_id=%a.email\_id%,department=%a.department%,age=%a.age%,gender=%a.gender%,strself=%a.strself%,experience=%a.experience%,edu\_status=%a.edu\_status%,question\_preffered=%a.question\_preffered%,media\_preffered=%a.media\_preffered%,learning\_style=%qualifiercombo% where student\_id=%student\_id%]]"**

**parameter="a.first\_name,a.middle\_name,a.sname,student\_id,a.account\_stat,a.email\_id,a.department,a.age,a.gender,a.strself,a.experience,a.edu\_status,a.question\_preffered,a.media\_preffered,qualifiercombo"></query>**

**</queries>**

**<queries>**

**<query id="2"**

**sql="[CDATA[update student\_creation\_details set last\_modification\_date=sysdate() where student\_id=%student\_id%]]"**

**parameter="student\_id"></query>**

**</queries>**

**<queries>**

**<query id="3"**

**sql="[CDATA[update student\_password set password=%c.password% where student\_id=%student\_id%]]"**

**parameter="c.password,student\_id"></query>**

**</queries>**

**</modify>**

**</part>**

</structure>

<layout id="usercreationlay">

<part id="main"></part>

<part id="usercreationgrid" height="200" width="745" parent\_id="main"></part>

<part id="image\_button\_container" parent\_id="main"></part>

<part id="ShowProfileButton\_Container" parent\_id="image\_button\_container"></part>

<part id="excelimage\_Container" parent\_id="image\_button\_container"></part>

<part id="ShowProfileButton" parent\_id="ShowProfileButton\_Container"></part>

<part id="excelimage" height="30px" width="30px" parent\_id="excelimage\_Container"></part>

<part id="batchusermsg" parent\_id="main"></part>

<part id="batchuser\_container" parent\_id="main"></part>

<part id="batchuserlabel" parent\_id="batchuser\_container"></part>

<part id="batchuser\_file\_container" parent\_id="batchuser\_container"></part>

<part id="batchuser" parent\_id="batchuser\_file\_container"></part>

<part id="UploadButton\_container" parent\_id="batchuser\_container"></part>

<part id="UploadButton" parent\_id="UploadButton\_container"></part>

<part id="UserCreationAjaxComp" parent\_id="main"></part>

</layout>

<content id="usercreationcontent">

<part id="ImageUploadButton" valuetype="inline" value="Upload Image"></part>

<part id="ShowProfileButton" valuetype="inline" value="Show Profile"></part>

<part id="batchusermsg" valuetype="inline"

value="Upload Excel to create users in batch. Click on excel image to get the Excel Format"></part>

<part id="batchuserlabel" valuetype="inline" value="Batch User Creation : "></part>

<part id="UploadButton" valuetype="inline" value="Upload"></part>

<part id="excelimage" valuetype="reference" value="xlimage"></part>

</content>

<style id="UserCreationStyle">

<part id="batchusermsg" value="[CDATA[color: #0000FF;]]"

valuetype="inline"></part>

<part id="excelimage" value="[CDATA[cursor: pointer;]]"

valuetype="inline"></part>

<part id="image\_button\_container" value="row row-padding"

valuetype="reference"></part>

<part id="ShowProfileButton\_Container" value="col-md-8 col-xs-8"

valuetype="reference"></part>

<part id="excelimage\_Container" value="col-md-4 col-xs-4"

valuetype="reference"></part>

<part id="batchusermsg" value="col-md-12 col-xs-12 row row-padding" valuetype="reference"></part>

<part id="batchuser\_container" value="row row-padding" valuetype="reference"></part>

<part id="batchuserlabel" value="col-md-4 col-xs-4" valuetype="reference"></part>

<part id="batchuser\_file\_container" value="col-md-4 col-xs-4"

valuetype="reference"></part>

<part id="UploadButton\_container" value="col-md-4 col-xs-4"

valuetype="reference"></part>

</style>

<behaviour id="usercreationbehaviour">

<part id="UploadButton">

<event name="onclick" type="simple" function="upload\_onclick"

valuetype="jsevent" resourceid="usercreationjs"></event>

</part>

<part id="ImageUploadButton">

<event name="onclick" type="simple" function="imageupload\_onclick"

valuetype="jsevent" resourceid="usercreationjs"></event>

</part>

<part id="ShowProfileButton">

<event name="onclick" type="simple" function="showprofile\_onclick"

valuetype="jsevent" resourceid="usercreationjs"></event>

</part>

<part id="excelimage">

<event name="onclick" type="simple" function="excelimage\_onclick"

valuetype="jsevent" resourceid="usercreationjs"></event>

</part>

<part id="UserCreationAjaxComp">

<event name="ajax" type="simple" function="dummy" javaclass="ladminTree"></event>

</part>

</behaviour>

<resource>

<resourceitem id="usercreationjs" href="usercreation.js"

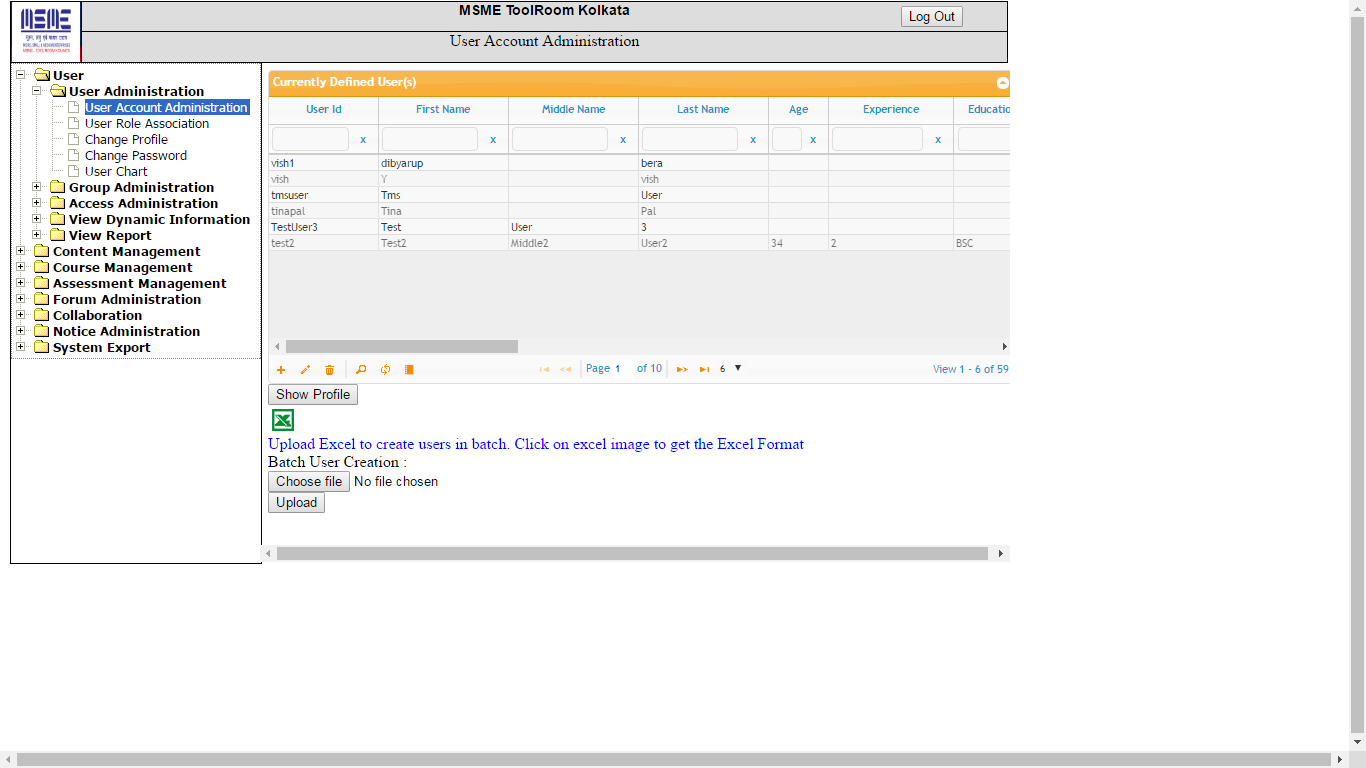
valuetype="js"></resourceitem>

<resourceitem id="xlimage" href="Excel.gif" valuetype="image" />

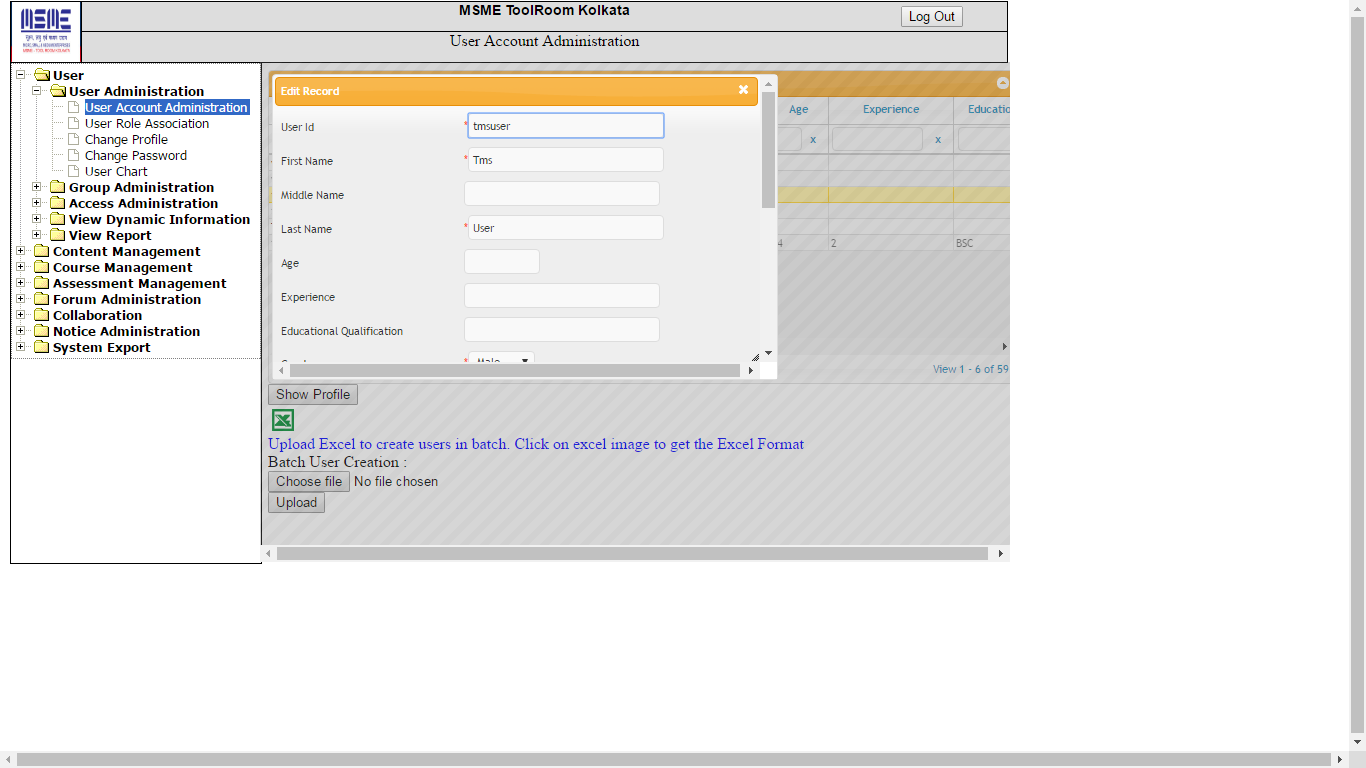
</resource>

</interface>

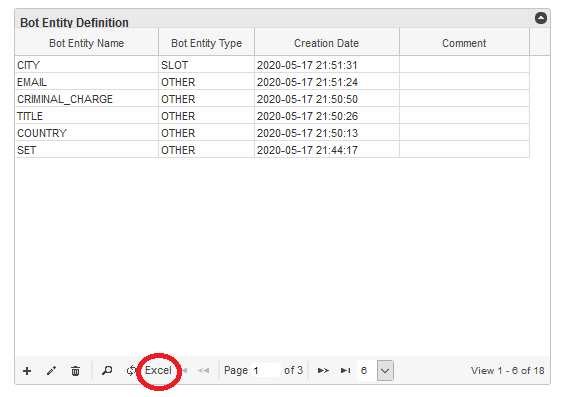
The snapshot of the screen –



The snapshot with edit pop up –



If generateExcel attribute of grid is true the grid looks like as follows



**Search the Grid -**

<part id="SearchDocumentsGrid" class="Conditionalgrid" caption="Search Results of Corpus Files" sortname="DSK.document\_search\_keyword\_title asc,DSRD.relevance desc" autoencode="true" generateExcel="true" resetSearchOnClose="false" multipleSearch="true" toolbarSearch="true" searchOperators="true">

<selector id="corpus\_id" class="combo" contentid="SearchDocumentsContent" behaviourid="SearchDocumentsBehaviour"

domaintype="query" value="select C.corpus\_id,C.corpus\_title from CORPUS C,USER\_CORPUS\_ASSOCIATION UCA,ADMIN\_USER AU where C.corpus\_id=UCA.corpus\_id and UCA.admin\_user\_id=AU.admin\_user\_id and AU.admin\_login\_id=%current\_login\_user\_id%" gridrefresh="true" influence="corpus\_file\_id">

</selector>

<selector id="corpus\_file\_id" class="combo" contentid="SearchDocumentsContent" behaviourid="SearchDocumentsBehaviour"

domaintype="query"

value="select corpus\_file\_id,corpus\_file\_name from CORPUS\_FILE where corpus\_id = %corpus\_id%"

gridrefresh="true" choose\_one\_label="ALL" choose\_one\_value="0" show\_choose\_one="true">

</selector>

<selector id="document\_search\_keyword\_collection\_id" class="combo" contentid="SearchDocumentsContent" behaviourid="SearchDocumentsBehaviour"

domaintype="query" value="select document\_search\_keyword\_collection\_id,document\_search\_keyword\_collection\_title from DOCUMENT\_SEARCH\_KEYWORD\_COLLECTION" gridrefresh="true">

</selector>

<column head="Document Search Result Display Id" name="document\_search\_result\_data\_id" index="1" width="0" editable="true" hidden="true" key="true" >

<edit type="text" size="30" ></edit>

</column>

<column head="Search Keyword" name="document\_search\_keyword\_title" index="2" width="100" editable="true" hidden="false" key="false" required="true" influence="corpus\_file\_id" formatter="getKeywordTitleFormatter" searchoptions="\'eq\',\'bw\',\'bn\',\'cn\',\'nc\',\'ew\',\'en\'">

<edit type="text" size="30" ></edit>

</column>

<column head="Page Number" name="page\_number" index="3" width="80" editable="true" hidden="false" key="false" required="false" influence="corpus\_file\_id" searchoptions="\'eq\',\'ne\',\'le\',\'lt\',\'gt\',\'ge\'">

<edit type="text" size="30" ></edit>

</column>

<column head="Paragraph Number" name="given\_paragraph\_number" index="4" width="100" editable="true" hidden="false" key="false" required="false" influence="corpus\_file\_id" searchoptions="\'eq\',\'bw\',\'bn\',\'cn\',\'nc\',\'ew\',\'en\'">

<edit type="text" size="30" ></edit>

</column>

<column head="Sentence Text" name="corpus\_file\_component\_text\_content" index="5" width="300" editable="true" hidden="false" key="false" required="false" formatter="formatSentenceText" searchoptions="\'eq\',\'bw\',\'bn\',\'cn\',\'nc\',\'ew\',\'en\'">

<edit type="text" size="30" ></edit>

</column>

<column head="Relevance" name="relevance" index="6" width="100" editable="true" hidden="false" key="false" required="false" searchoptions="\'eq\',\'ne\',\'le\',\'lt\',\'gt\',\'ge\'">

<edit type="text" size="30" ></edit>

</column>

<loadquery value="select DSRD.document\_search\_result\_data\_id, DSK.document\_search\_keyword\_title, DSRD.page\_number,

CFP.given\_paragraph\_number, CFC.corpus\_file\_component\_text\_content, DSRD.relevance

from DOCUMENT\_SEARCH\_RESULT\_DATA DSRD, DOCUMENT\_SEARCH\_RESULT DSR, DOCUMENT\_SEARCH\_KEYWORD DSK,

CORPUS\_FILE\_COMPONENT CFC,CORPUS\_FILE\_SENTENCE\_COMPONENT CFSC,CORPUS\_FILE\_SENTENCE CFS, CORPUS\_FILE\_PARAGRAPH CFP

where DSRD.document\_search\_result\_id=DSR.document\_search\_result\_id and DSR.document\_search\_keyword\_id=DSK.document\_search\_keyword\_id

and DSRD.corpus\_file\_component\_id=CFC.corpus\_file\_component\_id

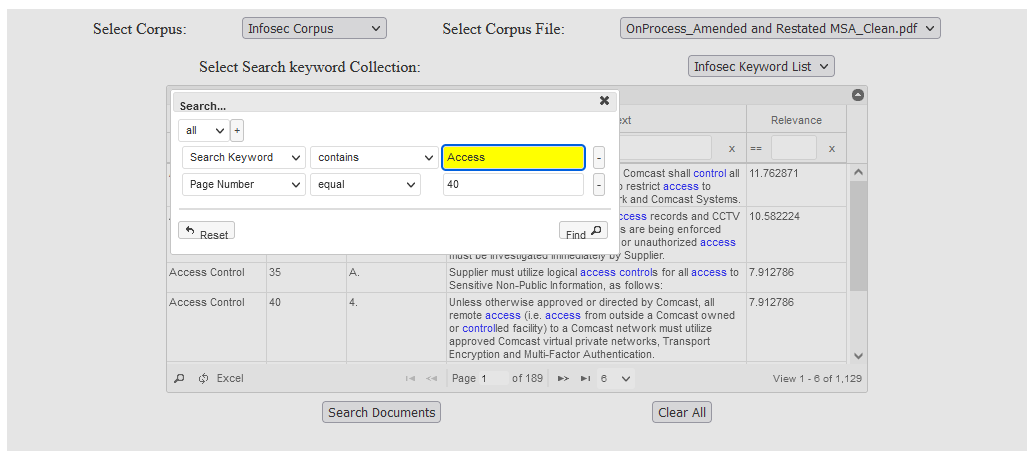
and CFC.corpus\_file\_component\_id=CFSC.corpus\_file\_component\_id and CFSC.corpus\_file\_sentence\_id=CFS.corpus\_file\_sentence\_id

and CFS.corpus\_file\_paragraph\_id=CFP.corpus\_file\_paragraph\_id

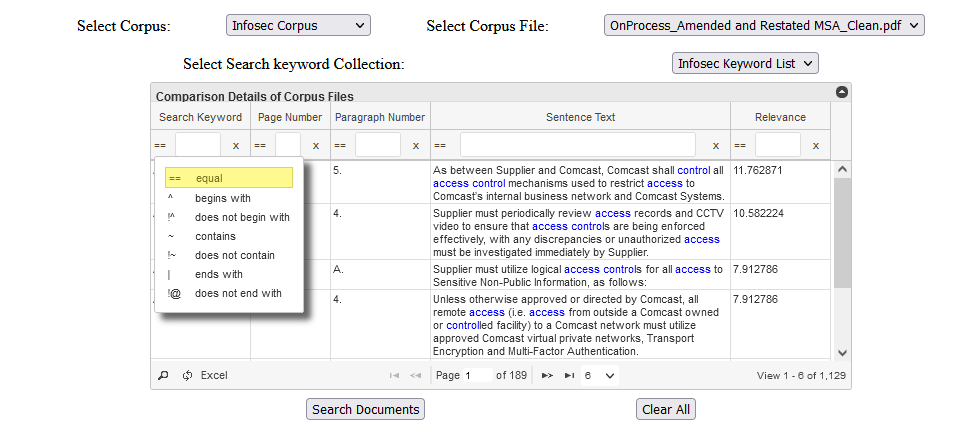
and DSRD.corpus\_file\_id = %corpus\_file\_id% and DSK.document\_search\_keyword\_collection\_id=%document\_search\_keyword\_collection\_id%"></loadquery>

</part>

In the above example multiple search, toolbar search both is implemented. The search box is looks like below



**Multiple Search**



**Toolbar Search**

* 1. Conditional Db Grid – This class is similar with “DBGrid”. The only difference is that it creates a drop down depending on which the data of the table is populated. The drop down is defined by “selector”. It is defined in the following way –

<selector id="group\_id" class="combo" contentid="GroupUserRegContent"

behaviourid="GroupUserRegBehaviour" domaintype="query"

value="select a.group\_id, a.group\_name from student\_group a"

gridrefresh="true"></selector>

The domaintype of selector is either “query” or “fixed”. If the domaintype is query then the query is written in the value attribute, Otherwise the options are defined in the following way -

<selectoroption name="student\_id" value="User Id"></selectoroption>

<selectoroption name="name" value="User Name"></selectoroption>

<selectoroption name="marks" value="Marks Obtained"></selectoroption>

To change the value of first option of a selector (“Choose One”) use show\_choose\_one, choose\_one\_label and choose\_one\_value attributes. Default value of show\_choose\_one attribute is true.

<selector id="corpus\_id" class="combo" contentid="ExtractInformationContent" behaviourid="ExtractInformationBehaviour"

domaintype="query" value="select C.corpus\_id,C.corpus\_title from CORPUS C,USER\_CORPUS\_ASSOCIATION UCA,ADMIN\_USER AU where C.corpus\_id=UCA.corpus\_id and UCA.admin\_user\_id=AU.admin\_user\_id and AU.admin\_login\_id=%current\_login\_user\_id%" gridrefresh="true"

influence="corpus\_file\_id">

</selector>

<selector id="corpus\_file\_id" class="combo" contentid="ExtractInformationContent" behaviourid="ExtractInformationBehaviour"

domaintype="query"

value="select corpus\_file\_id ,corpus\_file\_name from CORPUS\_FILE where corpus\_id = %corpus\_id%"

gridrefresh="true" choose\_one\_label="ALL" choose\_one\_value="0" show\_choose\_one="true">

</selector>

contententid and behaviourid is the id attribute of <content> and <behaviour> respectively. If the value of one selector affects the another selector, then affected selector id is given to the influence attribute of the first selector. Selector id should be added to the layout.

The example of Conditional DB Grid -

<interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xmlns="http://learnityframework.org/"

xsi:schemaLocation="http://learnityframework.org/ http://localhost:8080/learnitymsme/xsd/Interface.xsd"

id="GroupUserReg" title="LMS Group User Registration" type="Interface">

<configuration checkrole="true" TemplateID="Bootstrap"></configuration>

<structure>

<part id="BodyDiv" class="label"></part>

<part id="GroupNameLabel" class="label"></part>

**<part id="GroupUserRegGrid" class="Conditionalgrid"**

**caption="Currently Registered Users For the Above Group" sortname="student\_id"**

**sortorder="desc" gridnavbar="true" autoencode="true" generateExcel="true" onSelectRow="SelectRow\_onclick">**

**<selector id="group\_id" class="combo" contentid="GroupUserRegContent"**

**behaviourid="GroupUserRegBehaviour" domaintype="query"**

**value="select a.group\_id, a.group\_name from student\_group a"**

**gridrefresh="true"></selector>**

**<column head="Group Id" name="group" index="1" width="150"**

**editable="true" hidden="true" key="true" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<column head="Student Id" name="student\_id" index="2" width="150"**

**editable="true" hidden="false" key="true" required="false">**

**<edit type="select" size="30" multiple="true" editdomaintype="query"**

**value="select sd.student\_id,concat(sd.first\_name,\' \',sd.middle\_name,\' \',sd.sname) from student\_details sd,user\_role ur where ur.user\_id=sd.student\_id and ur.role\_id!=2"></edit>**

**</column>**

**<column head="User Name" name="first\_name" index="3" width="500"**

**editable="false" hidden="false" key="false" required="false">**

**<edit type="text" size="30"></edit>**

**</column>**

**<loadquery**

**value="select a.group\_id,a.student\_id,concat(b.first\_name,\' \',b.middle\_name,\' \',b.sname) from student\_group\_association a, student\_details b where a.group\_id=%group\_id% and a.student\_id=b.student\_id"></loadquery>**

**<delete>**

**<queries>**

**<query id="1"**

**sql="[CDATA[delete from user\_forum\_association where forum\_id In (select forum\_id from group\_forum\_association where group\_id=%group%) and student\_id=%student\_id%]]"**

**parameter="student,group"></query>**

**</queries>**

**<queries>**

**<query id="2"**

**sql="[CDATA[delete from usergroup\_course\_registration where student\_id=%student\_id% and course\_id In (select course\_id from group\_course\_registration where group\_id=%group%)]]"**

**parameter="student,group"></query>**

**</queries>**

**<queries>**

**<query id="3"**

**sql="[CDATA[delete from course\_learner\_login\_info where course\_id In (select course\_id from group\_course\_registration where group\_id=%group%) and student\_id=%student\_id%]]"**

**parameter="student,group"></query>**

**</queries>**

**<queries>**

**<query id="4"**

**sql="[CDATA[delete from calendar\_authorization where calendar\_id In (select calendar\_id from calendar\_group\_association where group\_id=%group%) and student\_id=%student\_id%]]"**

**parameter="student,group"></query>**

**</queries>**

**<queries>**

**<query id="5"**

**sql="[CDATA[delete from student\_group\_association where group\_id=%group% and student\_id=%student\_id%]]"**

**parameter="group,student"></query>**

**</queries>**

**<queries>**

**<query id="6"**

**sql="[CDATA[delete from userscoinfo where unit\_id in (select unit\_id from unit\_group\_association where group\_id=%group\_id) and user\_id=%student\_id%]]"**

**parameter="group,student"></query>**

**</queries>**

**</delete>**

**<add>**

**<queries>**

**<query id="1"**

**sql="[CDATA[insert into student\_group\_association values(%group\_id%,%student\_id%)]]"**

**parameter="group\_id,student\_id"></query>**

**</queries>**

**<queries>**

**<query id="2"**

**sql="[CDATA[insert into userscoinfo(user\_id,unit\_id,sco\_id,launch,prerequisites,sequence,type,lessonstatus) values(%student\_id%,(select a.CourseID from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),(select a.Identifier from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),(select a.Launch from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),(select a.Prerequisites from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),(select a.Sequence from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),(select a.Type from ItemInfo a,course\_group\_association b where a.CourseID=b.course\_id and b.group\_id=%group\_id%),\'Not Submitted\')]]"**

**parameter="group\_id,student\_id"></query>**

**</queries>**

**<queries>**

**<query id="3"**

**sql="[CDATA[Insert into usergroup\_course\_registration(course\_id, student\_id, registration\_by,registration\_date,access\_allowed\_till,total\_access\_time) values ((select course\_id from group\_course\_registration where group\_id=%group\_id%),%student\_id%,(select access\_allowed\_till from group\_course\_registration where group\_id=%group\_id%),(select total\_access\_time from group\_course\_registration where group\_id=%group\_id%))]]"**

**parameter="group\_id,student\_id"></query>**

**</queries>**

**<queries>**

**<query id="4"**

**sql="[CDATA[Insert into user\_forum\_association(forum\_id, student\_id, registered\_by) values ((select forum\_id from group\_forum\_association where group\_id=%group\_id%),%student\_id%,(select registered\_by from group\_forum\_association where group\_id=%group\_id%))]]"**

**parameter="group\_id,student\_id"></query>**

**</queries>**

**<queries>**

**<query id="5"**

**sql="[CDATA[Insert into calendar\_authorization(calendar\_id, student\_id) values ((select calendar\_id from calendar\_group\_association where group\_id=%group\_id%),%student\_id%)]]"**

**parameter="group\_id,student\_id"></query>**

**</queries>**

**</add>**

**</part>**

</structure>

<layout id="GroupUserRegLayout">

<part id="BodyDiv"></part>

<part id="GroupNameLabel" left="0px" top="10px" position="absolute"

parent\_id="BodyDiv"></part>

<part id="group\_id" left="115px" top="8px" position="absolute"

parent\_id="BodyDiv"></part>

<part id="GroupUserRegGrid" left="0px" top="50px" position="absolute"

parent\_id="BodyDiv"></part>

</layout>

<content id="GroupUserRegContent">

<part id="GroupNameLabel" value="Group Name:" valuetype="inline"></part>

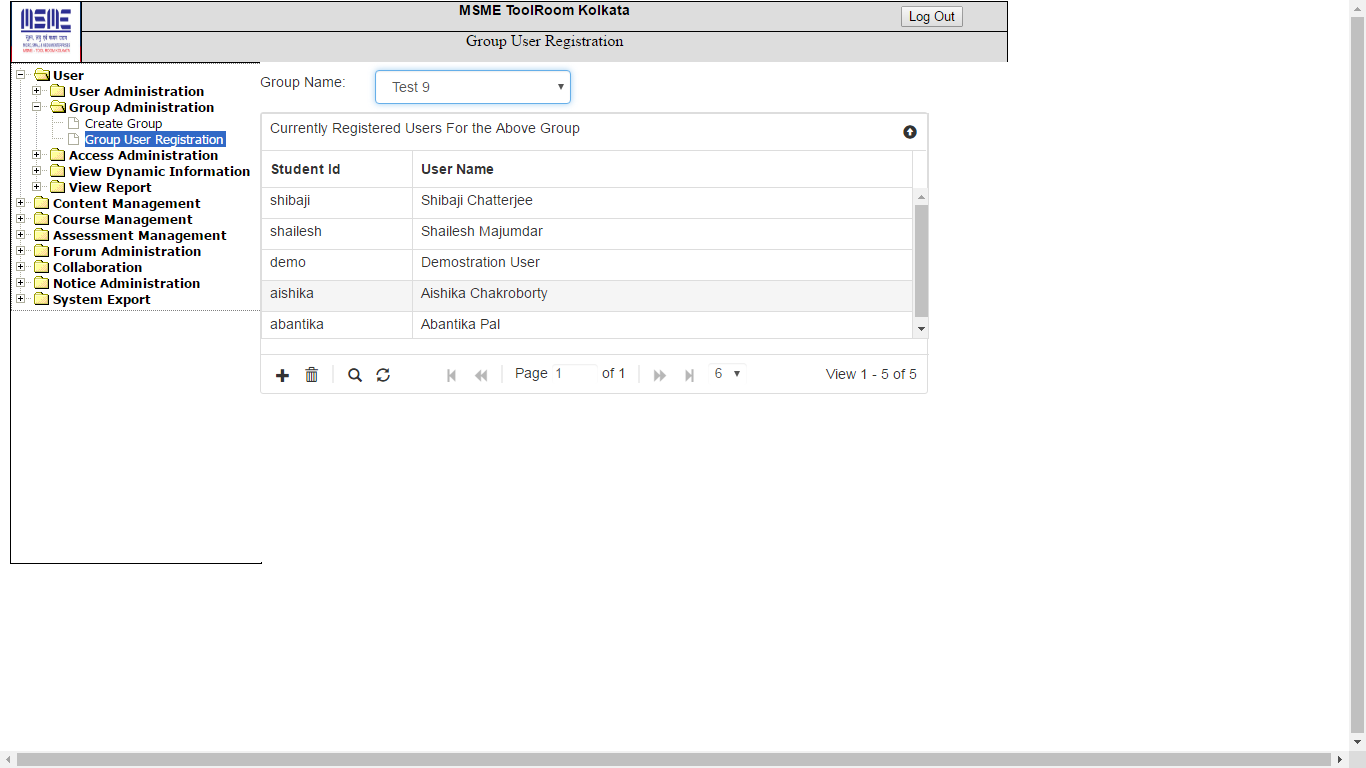
</content>

<behaviour id="GroupUserRegBehaviour">

</behaviour>

</interface>

The outpout of the above xml is –



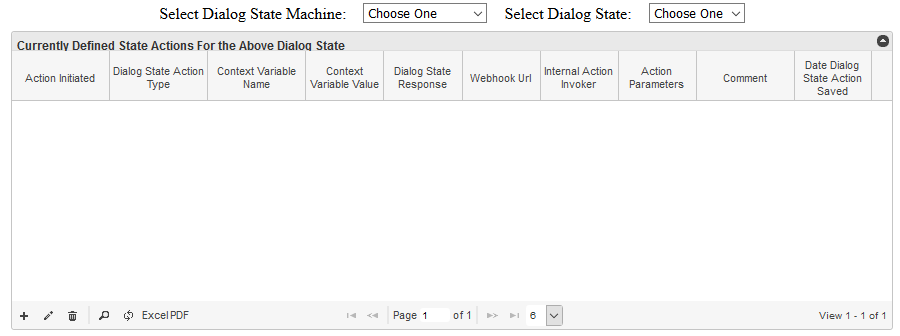
**Selector Influence Dropdown** – A selector can influence one or more other selector or part of class combo. There is an attribute influence in the selector tag. In case of more than one influence use comma separated value. For single influence it is defined in the following way –

<selector id="dialog\_state\_machine\_id" class="combo" contentid="DialogStateActionContent" behaviourid="DialogStateActionBehaviour"

domaintype="query" value="select dialog\_state\_machine\_id,dialog\_state\_machine\_name from DIALOG\_STATE\_MACHINE" gridrefresh="true" influence="dialog\_state\_id">

</selector>

Screenshot is given below



Here Dialog State Machine selector influence dialog state selector.

For multiple influence it is defined in the following way –

<structure>

<part id="BodyDiv" class="label"></part>

<part id="DialogStateSelectorRowContainer" class="label"></part>

<part id="DialogStateMachineTitleLabel" class="label"></part>

<part id="DialogStateTitleLabel" class="label"></part>

<part id="DialogStateTransitionGrid" class="Conditionalgrid" caption="Currently Defined State Transitions For the Above Dialog State"

sortname="DST.dialog\_state\_transition\_id" sortorder="asc" onSelectRow="SelectRow\_onclick">

**<selector id="dialog\_state\_machine\_id" class="combo" contentid="DialogStateTransitionContent" behaviourid="DialogStateTransitionBehaviour"**

**domaintype="query" value="select dialog\_state\_machine\_id,dialog\_state\_machine\_name from DIALOG\_STATE\_MACHINE" gridrefresh="true" influence="dialog\_state\_id,TargetDialogState">**

**</selector>**

<selector id="dialog\_state\_id" class="combo" contentid="DialogStateTransitionContent" behaviourid="DialogStateTransitionBehaviour"

domaintype="query" value="select dialog\_state\_id,dialog\_state\_name from DIALOG\_STATE where dialog\_state\_machine\_id = %dialog\_state\_machine\_id%" gridrefresh="true">

</selector>

<column head="Dialog State Transition Id" name="dialog\_state\_transition\_id" index="1" width="0" editable="true" hidden="true" key="true" >

<edit type="text" size="30" ></edit>

</column>

<column head="Event Type" name="event\_type" index="2" width="80" editable="true" hidden="true" key="false" required="true">

<edit type="text" size="30" ></edit>

</column>

<column head="Event Type" name="event\_type\_val" index="3" width="200" editable="false" hidden="false" key="false" required="true">

<edit type="text" size="30" ></edit>

</column>

<column head="Event" name="event" index="4" width="80" editable="false" hidden="true" key="false" required="true">

<edit type="text" size="30" ></edit>

</column>

<column head="Condition Type" name="condition\_type" index="5" width="80" editable="true" hidden="true" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Condition Type" name="condition\_type\_val" index="6" width="120" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Condition Type Value" name="condition\_type\_value" index="7" width="120" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Condition" name="condition" index="8" width="80" editable="true" hidden="true" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Target Dialog State Id" name="dialog\_state\_name" index="9" width="100" editable="true" hidden="true" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Target Dialog State" name="target\_dialog\_state\_id" index="10" width="100" editable="true" hidden="false" key="false" required="true">

<edit type="select" editdomaintype="query" value="select DS.dialog\_state\_id,concat(DSM.dialog\_state\_machine\_name,\' - \',DS.dialog\_state\_name) from DIALOG\_STATE DS, DIALOG\_STATE\_MACHINE DSM where DSM.dialog\_state\_machine\_id=DS.dialog\_state\_machine\_id" ></edit>

</column>

<column head="Comment" name="comment" index="11" width="100" editable="true" hidden="false" key="false" required="false">

<edit type="textarea" cols="28" rows="5"></edit>

</column>

<column head="Date Dialog State Transition Saved" name="date\_dialog\_state\_transition\_saved" index="12" width="100" editable="false" hidden="false" key="false" required="false">

<edit type="text" size="30"></edit>

</column>

<column head="Transition Json" name="transition\_json\_text" index="13" width="80" editable="false" hidden="true" key="false" required="false">

<edit type="text" size="30"></edit>

</column>

<loadquery value="select DST.dialog\_state\_transition\_id, DST.event\_type, if(DST.event\_type=\'WAIT\_FOR\_USER\_INPUT\_BEFORE\_TRANSITION\',\'Wait for user input before transition\',if(DST.event\_type=\'CONTINUE\_TO\_TARGET\_WITHOUT\_WAITING\_FOR\_USER\_INPUT\',\'Continue to target without waiting for user input\',\'Custom Event\')), DST.event, DST.condition\_type, if(DST.condition\_type=\'MATCH\_INTENT\',\'Match Intent\',if(DST.condition\_type=\'MATCH\_ENTITY\',\'Match Entity\',if(DST.condition\_type=\'MATCH\_RESPONSE\_SELECT\_OPTION\',\'Match Response Select Option\',if(DST.condition\_type=\'MANUAL\',\'Manual\',\'None\')))),if(DST.condition\_type=\'MATCH\_INTENT\',concat(\'Intent :\',substring\_index(`condition`,\'eq\', -1)),if(DST.condition\_type=\'MATCH\_ENTITY\',concat(\'Entity :\',substring\_index(`condition`,\'==\', -1)),if(DST.condition\_type=\'MATCH\_RESPONSE\_SELECT\_OPTION\',concat(\'Response Select Option :\',substring\_index(`condition`,\'eq\', -1)),if(DST.condition\_type=\'MANUAL\',concat(\'Manual : \',`condition`),\'\')))), DST.condition, DST.target\_dialog\_state\_id, DS1.dialog\_state\_name, DST.comment, DST.date\_dialog\_state\_transition\_saved, DST.transition\_json\_text from DIALOG\_STATE\_TRANSITION DST, DIALOG\_STATE DS, DIALOG\_STATE DS1 where DS.dialog\_state\_id = %dialog\_state\_id% and DS.dialog\_state\_id = DST.dialog\_state\_id and DST.target\_dialog\_state\_id = DS1.dialog\_state\_id"></loadquery>

<delete>

<queries>

<query id="1" sql="[CDATA[delete FROM DIALOG\_STATE\_TRANSITION where dialog\_state\_transition\_id=%dialog\_state\_transition\_id%]]" parameter="dialog\_state\_transition\_id"></query>

</queries>

</delete>

</part>

<part id="AddEditForm" class="form"></part>

<part id="AddEditFormFieldset" class="fieldset"></part>

<part id="AddEditFormLegend" class="legend"></part>

<part id="DialogStateTransitionId" class="hidden"></part>

<part id="EventTypeRowContainer" class="label"></part>

<part id="EventTypeTitleLabel" class="label"></part>

<part id="EventTypeRadio" class="radio">

<option id="EventTypeRadio1" name="Wait for user input before transition" value="WAIT\_FOR\_USER\_INPUT\_BEFORE\_TRANSITION" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio2" name="Continue to target without waiting for user input" value="CONTINUE\_TO\_TARGET\_WITHOUT\_WAITING\_FOR\_USER\_INPUT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

<option id="EventTypeRadio3" name="Custom Event" value="CUSTOM\_EVENT" eventname="onclick" eventvalue="EventType\_onclick()"></option>

</part>

<part id="EventTextRowContainer" class="label"></part>

<part id="EventTextLabel" class="label"></part>

<part id="EventText" class="inputtext"></part>

<part id="ConditionTypeRowContainer" class="label"></part>

<part id="ConditionTypeTitleLabel" class="label"></part>

<part id="ConditionTypeRadio" class="radio">

<option id="ConditionTypeRadio1" name="Match Intent" value="MATCH\_INTENT" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio2" name="Match Entity" value="MATCH\_ENTITY" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio3" name="Match Response Select Option" value="MATCH\_RESPONSE\_SELECT\_OPTION" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio4" name="Manual" value="MANUAL" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

<option id="ConditionTypeRadio5" name="None" value="NONE" eventname="onclick" eventvalue="ConditionType\_onclick()"></option>

</part>

<part id="ConditionTextRowContainer" class="label"></part>

<part id="BotIntentNameLabel" class="label"></part>

<part id="BotIntentName" class="combo"></part>

<part id="BotEntityNameLabel" class="label"></part>

<part id="BotEntityName" class="combo"></part>

<part id="OperatorValueLabel" class="label"></part>

<part id="OperatorValue" class="combo"></part>

<part id="ExpressionValueLabel" class="label"></part>

<part id="ExpressionValue" class="inputtext"></part>

<part id="ResponseTemplateComponentValueLabel" class="label"></part>

<part id="ResponseTemplateComponentValue" class="combo"></part>

<part id="ConditionValueLabel" class="label"></part>

<part id="ConditionValue" class="inputtext"></part>

<part id="TargetDialogStateRowContainer" class="label"></part>

<part id="TargetDialogStateLabel" class="label"></part>

<part id="TargetDialogState" class="combo"></part>

<part id="CommentLabel" class="label"></part>

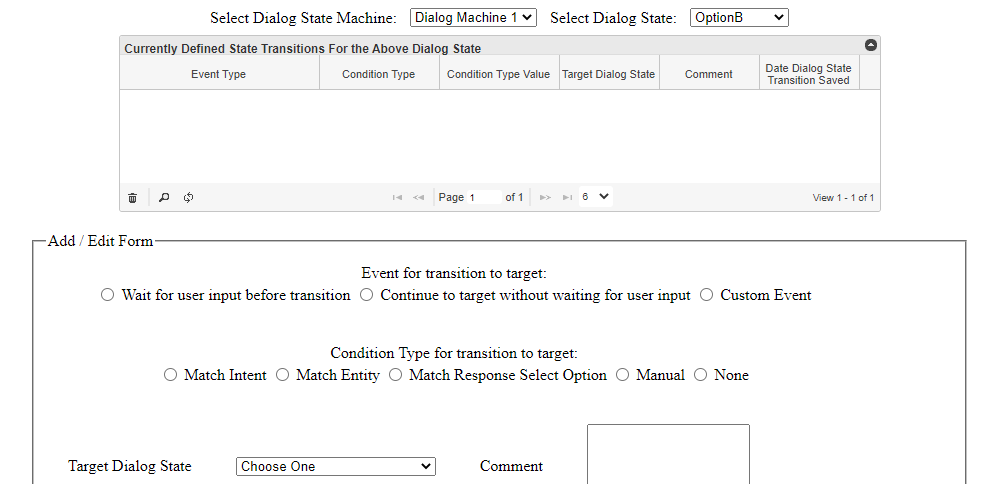
<part id="CommentValue" class="textarea" rows="5" cols="20"></part>

<part id="SaveButtonRowContainer" class="label"></part>

<part id="SaveButton" class="button"></part>

<part id="DialogStateTransitionAjaxComp" class="ajaxcomponent"></part>

</structure>



In the above diagram Dialog State Machine selector influence Dialog State selector as well as Target Dialog State combo.

**Selector Influence Grid Column** – A selector can influence one or more other grid column with type select. There is an attribute “influencegridcolumn” in the selector tag. In case of more than one grid column influence use comma separated value. It is defined in the following way –

<structure>

<part id="BodyDiv" class="label"></part>

<part id="DialogStateSelectorRowContainer" class="label"></part>

<part id="DialogStateMachineTitleLabel" class="label"></part>

<part id="DialogStateTitleLabel" class="label"></part>

<part id="DialogStateActionGrid" class="Conditionalgrid" caption="Currently Defined State Actions For the Above Dialog State"

sortname="DSA.dialog\_state\_action\_id" sortorder="asc">

<selector id="dialog\_state\_machine\_id" class="combo" contentid="DialogStateActionContent" behaviourid="DialogStateActionBehaviour"

domaintype="query" value="select dialog\_state\_machine\_id,dialog\_state\_machine\_name from DIALOG\_STATE\_MACHINE" gridrefresh="true" influence="dialog\_state\_id">

</selector>

**<selector id="dialog\_state\_id" class="combo" contentid="DialogStateActionContent" behaviourid="DialogStateActionBehaviour"**

**domaintype="query" value="select dialog\_state\_id,dialog\_state\_name from DIALOG\_STATE where dialog\_state\_machine\_id = %dialog\_state\_machine\_id%" gridrefresh="true" influencegridcolumn="dialog\_state\_response\_id">**

**</selector>**

<column head="Dialog State Action Id" name="dialog\_state\_action\_id" index="1" width="0" editable="true" hidden="true" key="true" >

<edit type="text" size="30" ></edit>

</column>

<column head="Action Initiated" name="action\_initiated" index="2" width="100" editable="true" hidden="false" key="false" required="true">

<edit type="select" editdomaintype="fixed" value="ONENTRY:ONENTRY;ONEXIT:ONEXIT" ></edit>

</column>

<column head="Dialog State Action Type" name="action\_type" index="3" width="100" editable="true" hidden="false" key="false" required="true">

<edit type="select" editdomaintype="fixed" value="CONTEXT\_UPDATION:CONTEXT\_UPDATION;WEBHOOK:WEBHOOK;INTERNAL:INTERNAL" ></edit>

</column>

<column head="Context Variable Name" name="context\_variable\_id" index="4" width="100" editable="true" hidden="false" key="false" required="true">

<edit type="select" editdomaintype="query" value="select context\_variable\_id,context\_variable\_name from CONTEXT\_VARIABLE" ></edit>

</column>

<column head="Context Variable Value" name="context\_variable\_value" index="5" width="80" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

**<column head="Dialog State Response" name="dialog\_state\_response\_id" index="6" width="80" editable="true" hidden="false" key="false" required="false">**

**<edit type="select" editdomaintype="query" value="select DST.dialog\_state\_response\_id,concat(RT.response\_template\_name,\' - \',RTC.response\_template\_component\_name) from RESPONSE\_TEMPLATE\_COMPONENT RTC, RESPONSE\_TEMPLATE RT, DIALOG\_STATE\_RESPONSE DST where RTC.response\_template\_id=RT.response\_template\_id and DST.response\_template\_component\_id = RTC.response\_template\_component\_id and DST.dialog\_state\_id=%dialog\_state\_id%" ></edit>**

**</column>**

<column head="Webhook Url" name="webhook\_url" index="7" width="80" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Internal Action Invoker" name="internal\_action\_invoker" index="8" width="80" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Action Parameters" name="action\_parameters" index="9" width="80" editable="true" hidden="false" key="false" required="false">

<edit type="text" size="30" ></edit>

</column>

<column head="Comment" name="comment" index="10" width="100" editable="true" hidden="false" key="false" required="false">

<edit type="textarea" cols="28" rows="5"></edit>

</column>

<column head="Date Dialog State Action Saved" name="date\_dialog\_state\_action\_saved" index="11" width="80" editable="false" hidden="false" key="false" required="false">

<edit type="text" size="30"></edit>

</column>

<loadquery value="select DSA.dialog\_state\_action\_id, DSA.action\_initiated, DSA.action\_type, CV.context\_variable\_name, DSA.context\_variable\_value, concat(RT.response\_template\_name,\' - \',RTC.response\_template\_component\_name), DSA.webhook\_url, DSA.internal\_action\_invoker, DSA.action\_parameters, DSA.comment, DSA.date\_dialog\_state\_action\_saved from DIALOG\_STATE\_ACTION DSA LEFT JOIN DIALOG\_STATE\_RESPONSE DSR ON(DSA.dialog\_state\_response\_id=DSR.dialog\_state\_response\_id) LEFT JOIN RESPONSE\_TEMPLATE\_COMPONENT RTC ON(DSR.response\_template\_component\_id = RTC.response\_template\_component\_id) LEFT JOIN RESPONSE\_TEMPLATE RT ON(RTC.response\_template\_id=RT.response\_template\_id), DIALOG\_STATE DS, CONTEXT\_VARIABLE CV where DSA.context\_variable\_id = CV.context\_variable\_id and DS.dialog\_state\_id = %dialog\_state\_id% and DS.dialog\_state\_id = DSA.dialog\_state\_id"></loadquery>

<delete>

<queries>

<query id="1" sql="[CDATA[delete FROM DIALOG\_STATE\_ACTION where dialog\_state\_action\_id=%dialog\_state\_action\_id%]]" parameter="dialog\_state\_action\_id"></query>

</queries>

</delete>

<add>

<queries>

<query id="1" sql="[CDATA[insert into DIALOG\_STATE\_ACTION (action\_initiated, action\_type, context\_variable\_id, context\_variable\_value, dialog\_state\_response\_id, webhook\_url, internal\_action\_invoker, action\_parameters, comment, date\_dialog\_state\_action\_saved, dialog\_state\_id) values (%action\_initiated%,%action\_type%,%context\_variable\_id%,%context\_variable\_value%,%dialog\_state\_response\_id%,%webhook\_url%,%internal\_action\_invoker%,%action\_parameters%,%comment%,sysdate(),%dialog\_state\_id%)]]" parameter="action\_initiated,action\_type,context\_variable\_id,context\_variable\_value,dialog\_state\_response\_id,webhook\_url,internal\_action\_invoker,action\_parameters,comment,dialog\_state\_id"></query>

</queries>

</add>

<modify>

<queries>

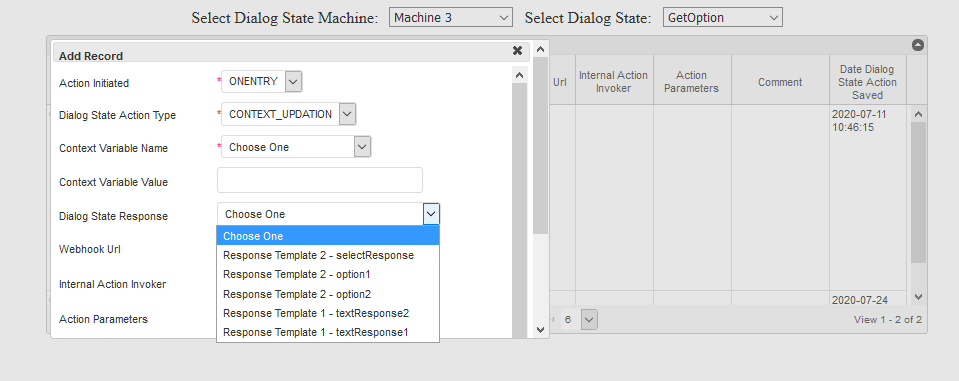
<query id="1" sql="[CDATA[update DIALOG\_STATE\_ACTION set action\_initiated = %action\_initiated%, action\_type = %action\_type%, context\_variable\_id = %context\_variable\_id%, context\_variable\_value = %context\_variable\_value%, dialog\_state\_response\_id = %dialog\_state\_response\_id%, webhook\_url = %webhook\_url%, internal\_action\_invoker = %internal\_action\_invoker%, action\_parameters = %action\_parameters%, comment = %comment% where dialog\_state\_action\_id = %dialog\_state\_action\_id%]]" parameter="dialog\_state\_action\_id,action\_initiated,action\_type,context\_variable\_id,context\_variable\_value,dialog\_state\_response\_id,webhook\_url,internal\_action\_invoker,action\_parameters,comment"></query>

</queries>

</modify>

</part>

</structure>



In the above diagram Dialog State selector influence Dialog State Response grid column.

**Combo in Grid Column influence another grid column combo –** A drop down menu (combo) of a grid column may influence another drop down menu (combo) of that grid during Add or Modify. To do this, include **influence** property in the grid column drop down. Influence property value is the name of the column that is influenced by the grid column.

For example

<part id="DocumentComparisonCorpusPopulationGrid" class="Conditionalgrid" caption="Currently Defined Corpus Files for Document Comparison Corpus"

sortname="DCCF.document\_comparison\_corpus\_file\_id" sortorder="asc" autoencode="true">

<selector id="document\_comparison\_corpus\_id" class="combo" contentid="DocumentComparisonCorpusPopulationContent" behaviourid="DocumentComparisonCorpusPopulationBehaviour"

domaintype="query" value="select document\_comparison\_corpus\_id,document\_comparison\_corpus\_title from DOCUMENT\_COMPARISON\_CORPUS" gridrefresh="true">

</selector>

<column head="Document Comparison Corpus File Id" name="document\_comparison\_corpus\_file\_id" index="1" width="0" editable="true" hidden="true" key="true" >

<edit type="text" size="30" ></edit>

</column>

<column head="Corpus" name="corpus\_id" index="2" width="150" editable="true" hidden="false" key="false" required="false" influence="corpus\_file\_id">

<edit type="select" editdomaintype="query" value="select corpus\_id,corpus\_title from CORPUS" ></edit>

</column>

<column head="Corpus File" name="corpus\_file\_id" index="3" width="150" editable="true" hidden="false" key="false" required="true" custom="true" custom\_func="corpusfilecheck">

<edit type="select" editdomaintype="query" value="select corpus\_file\_id,corpus\_file\_name from CORPUS\_FILE where corpus\_id=%corpus\_id%" ></edit>

</column>

<column head="Document Comparison Corpus File Type" name="reference\_or\_test" index="4" width="150" editable="true" hidden="false" key="false" required="false">

<edit type="select" editdomaintype="fixed" value="REFERENCE:REFERENCE;TEST:TEST"></edit>

</column>

<column head="Comment" name="comment" index="5" width="150" editable="true" hidden="false" key="false" required="false">

<edit type="textarea" cols="28" rows="5"></edit>

</column>

<column head="Date Saved" name="date\_document\_comparison\_corpus\_file\_saved" index="6" width="100" editable="false" hidden="false" key="false" required="false">

<edit type="text" size="30"></edit>

</column>

<loadquery value="select DCCF.document\_comparison\_corpus\_file\_id, C.corpus\_title, CF.corpus\_file\_name, DCCF.reference\_or\_test, DCCF.comment, DCCF.date\_document\_comparison\_corpus\_file\_saved from DOCUMENT\_COMPARISON\_CORPUS\_FILE DCCF, CORPUS\_FILE CF, CORPUS C where DCCF.document\_comparison\_corpus\_id = %document\_comparison\_corpus\_id% and DCCF.corpus\_file\_id = CF.corpus\_file\_id and CF.corpus\_id=C.corpus\_id"></loadquery>

<add>

<validations>

<validation type="custom">

<validationquery id="1"

classname="documentcomparison.DocumentComparisonCorpusPopulationAddValidation"

message="A reference corpus file already exists for this document comparison corpus."></validationquery>

</validation>

</validations>

<queries>

<query id="1" sql="[CDATA[insert into DOCUMENT\_COMPARISON\_CORPUS\_FILE (corpus\_file\_id, reference\_or\_test, comment, date\_document\_comparison\_corpus\_file\_saved, document\_comparison\_corpus\_id) values (%corpus\_file\_id%,%reference\_or\_test%,%comment%,sysdate(),%document\_comparison\_corpus\_id%)]]" parameter="corpus\_file\_id,reference\_or\_test,comment,document\_comparison\_corpus\_id"></query>

</queries>

</add>

</part>

In the above example the column corpus\_file\_id is influenced by the grid column corpus\_file.