# Intro to JSF

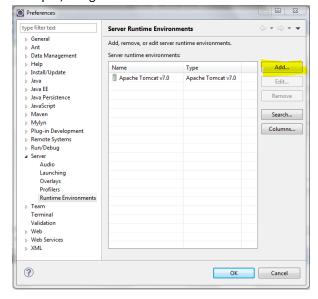
#### Sharlina Keshava

Resources		
Primefaces	Ui library (4.0 snapshot)	http://www.primefaces.org/showcase/ui/home.jsf
	Tag library (3.5)	http://www.primefaces.org/docs/vdl/3.4/alltags-noframe.html
	User Guide (3.5)	http://www.primefaces.org/documentation.html
	Relevant classes	http://www.primefaces.org/docs/api/3.4/org/primefaces/
	Component source code	http://code.google.com/p/primefaces/source/browse/primefaces/trunk/src/main/resources/
		META-INF/resources/primefaces/?r=9553
	Classes source code	http://code.google.com/p/primefaces/source/browse/primefaces/trunk/src/main/java/
_		#java%2Forg%2Fprimefaces
Balus C	In depth explanations	http://balusc.blogspot.com/2011/09/communication-in-jsf-20.html
Mkyong	Basic tutorials	http://www.mkyong.com/tutorials/jsf-2-0-tutorials/
DeveloperAM	Getting started	http://www.developer.am/primefaces/

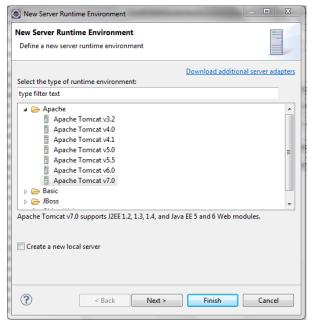
## Setting up JSF with Eclipse and Tomcat

http://balusc.blogspot.com/2008/01/jsf-tutorial-with-eclipse-and-tomcat.html http://www.mkyong.com/jsf2/how-to-make-eclipse-ide-supports-jsf-2-0/

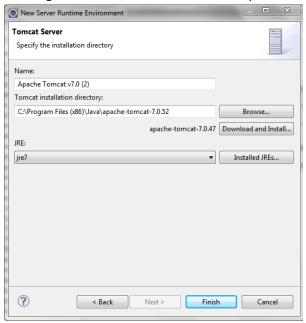
- o Must have Eclipse Java EE for Developers
- o Download <u>Tomcat server</u>
  - 1. Unzip to C:\Program Files (x86)\Java
  - 2. In Eclipse, navigate to Windows > Preferences > Servers > Runtime Environments and click the "Add" button



3. In "New Server Runtime Environment Window" select version you wish to use. Then click "Next."

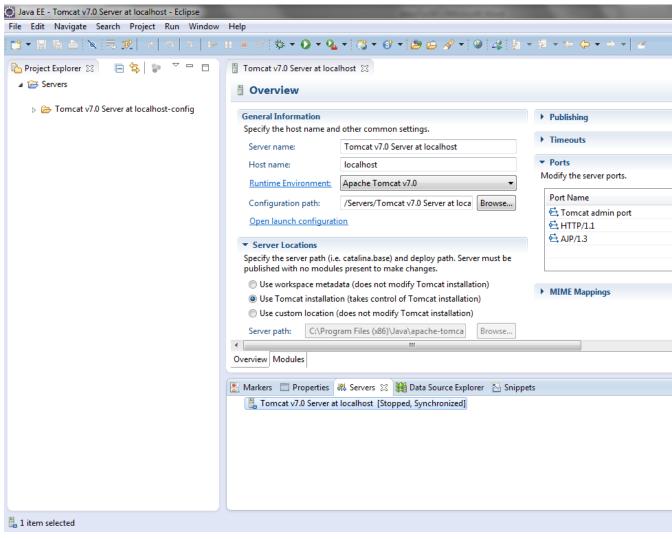


4. Click Browse to Tomcat server location. Click "Download and Install" and navigate to Tomcat server location. It should be located in your C:\Program Files (x86)\Java\ path if you followed the above instructions. Then select the matching Java runtime environment. You may have to update your JDK. Click finish.

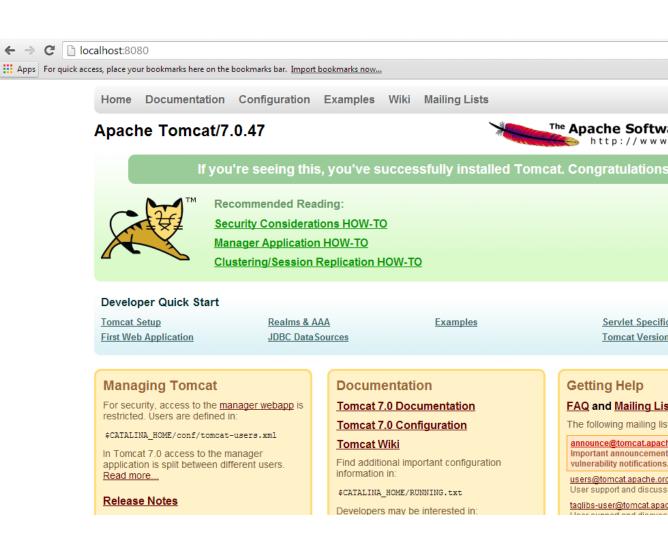


5. Right click in your "Servers" tab and create a new server. You must add your JSF project to the server in order for it to run. Double click the server and open up the configuration file (shown below). Under "Server Locations" select "Use Tomcat installation (takes control of Tomcat installation)." Save file. If you do not do this step, you will receive a 404 error.

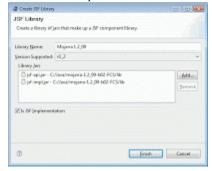
#### [Type text]



6. Click the play button on the right hand side of the server tab. Once the server is started and synchronized, go to your browser and type in <a href="https://localhost:8080">https://localhost:8080</a>. If everything has been done correctly, you should see the following screen. If you get a 404 error, this means that you either have not started the server, or you did not configure the server correctly. Try revisiting the previous step.

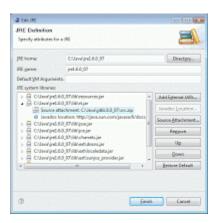


- Download the istl-1.2.jar and put it in your C:\Java\apache-tomcat-6.0.18\lib directory, which is the main classpath of Tomcat.
- o Download the binary of the <u>latest Mojarra release</u>. Extract the zip and move the child directory mojarra-1.2\_09-b02-FCS to C:\Java\mojarra-1.2\_09-b02-FCS
  - 1. In the Preferences dialogue, go to Java » Build Path » User Libraries and click New.
  - 2. Give the library an unique name, e.g. Mojarra 1.2\_09. Set *Version Supported* to v1\_2. Under *Library Jars*, click *Add*, navigate toC:\Java\mojarra-1.2\_09-b02-FCS\lib, select the both JAR's jsf-api.jar and jsf-impl.jar and add them.
  - 3. Check Is JSF Implementation and click Finish.



- Ensure that you have a version of JRE in your C:\Java folder.
  - 1. In the top menu, go to Window » Preferences » Java » Installed JREs.
  - 2. Select the current JRE (it should automatically be the same as you have installed) and click *Edit*. Select the C:\Java\jre1.6.0\_07\lib\rt.jar, click at *Source Attachment*, click at *External File*, navigate toC:\Java\jdk1.6.0\_07, select the src.zip file and add it. Now the source code of the Java SE API is available in Eclipse.

## [Type text]

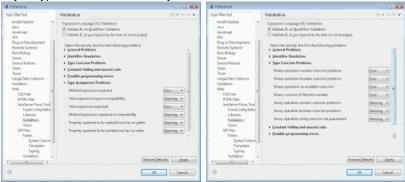


- Set up JSF template
  - 1. In the Preferences dialogue, go to Web » JSP Files » Editor » Templates and click New.
  - 2. Enter name New JavaServer Faces (JSF) Page (HTML5), select context *New JSP*, enter description JSF with HTML5 markup and default view setup, copy paste the following snippet in the pattern field and click *OK*:

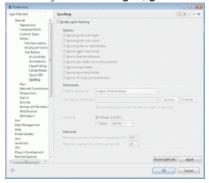


- Eliminate unnecessary errors
  - 1. In the Prefrences dialogue, go to Web » JavaServer Faces Tools » Validation
  - 2. under Type Assignment Problems setMethod expression signature incompatibility to Warning or Ignore if you want to allow JSF action methods returnvoid.
  - 3. set the *Unary operation number (and boolean) coercion problems* under *Type Coercion Problems* to *Warning* or *Ignore*, because it will unnecessarily give an error when you're using for example UIComponent#getValue() -which has

Object type outcome- in EL but you treated it as number or boolean.



- o Disable spelling errors
  - 1. In the Preferences dialogue, go to General » Editors » Text Editors » Spelling and disable it.



- Import project as a zip file. Do not try to unzip the file and then copy and paste it into your workspace, because the project will lose a lot of its properties.
- Once the zip file is imported, navigate to Web Content > WEB-INF and double click on the file titled "master.xhtml." This is the
  file that you will run to compile the project.
- Notes:
  - 1. Be sure to create a dynamic web project
  - 2. Be sure to add your project to the server
  - 3. Be sure that you have added all of your jars to your WEB-INF\lib folder.

```
Servers
JAX-WS Web Services
  Deployment Descriptor: smartHomeApp
  Java Resources
  JavaScript Resources
  build
  META-INF
     WEB-INF
       lib
            🜃 el-api-2.2.jar
            🜃 el-impl-2.2.jar
            🜃 jsf-api-2.0.3.jar
            🜃 jsf-impl-2.0.3.jar
            🜃 jstl-1.0.2.jar
            primefaces-4.0-javadoc.jar
            🜃 primefaces-4.0-sources.jar
            primefaces-4.0.jar
         함 faces-config.xml
          x web.xml
       index.xhtml
```

4. be sure that your web.xml file is mapped correctly

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
   xmlns="http://java.sun.com/xml/ns/javaee"
   xsi:schemaLocation="http://java.sun.com/xml/ns/javaee/web-app 3 0.
   version="3.0">
   <display-name>smartHomeApp2</display-name>
   <servlet>
       <servlet-name>Faces Servlet</servlet-name>
       <servlet-class>javax.faces.webapp.FacesServlet/servlet-class>
       <load-on-startup>1
   </servlet>
   <servlet-mapping>
       <servlet-name>Faces Servlet/servlet-name>
       <url-pattern>*.xhtml</url-pattern>
   </servlet-mapping>
   <context-param>
       <description>State saving method: 'client' or 'server' (=default). See JSF Specification 2.5.2
       <param-name>javax.faces.STATE SAVING METHOD</param-name>
       <param-value>client</param-value>
   </context-param>
   <context-param>
       <param-name>javax.servlet.jsp.jstl.fmt.localizationContext</param-name>
       <param-value>resources.application</param-value>
   </context-param>
   <listener>
       tener-class>com.sun.faces.config.ConfigureListener
   </listener>
<1--
       <context-param>
       <param-name>primefaces.THEME</param-name>
       <param-value>blitzer</param-value>
   </context-param> -->
</web-app>
```









