

JSP/Servlets - Lab Exercise Hello World JSP and Introduction to MyEclipse

Exercise 1: HelloWorld

File > New > Project > MyEclipse > J2EE > Web Project --Next
Change Project Name to "JSPLab" --Finish

Choose "yes" to the option "... do you want to switch to the MyEclipse perspective now".

Otherwise you can navigate one of the following ways...

To open the MyEclipse perspective select from the MyEclipse menubar

Window > Open Perspective > Other and select .

The Java Package Explorer is opened by selecting
Window > Show View > Java > Package Explorer.

Right click JSPLab, select New > JSP,

Change File Name: to "HelloWorld.jsp" --Finish

Note: this copies the default template to which you can add code.

From the MyEclipse perspective verify file is located in the Web Root folder.

Turn on "line #" display by: Window > Preferences (+) MyEclipse (+)
Editors > Common-editor-preferences > (tab) Appearance
(check) Show Line #s (OK)

Scroll to line 27 (after "This is my JSP page")
and enter "<% out.p" followed by ctrl-space. (or may just
popup)!!!
to invoke MyEclipse code completion suggestions.
MyEclipse JSP editor provides code completion for JSP
directives,
e.g., <%@ %>, custom JSP tags, e.g., <x:if>, and HTML tags.
The **ctrl+space** sequence is used to invoke all relevant forms
of code completion. Usually one gets a pop-up, but if the
popup
does not appear, try using **Ctrl-space**! ..
Play around with other completions:
Line 3 enter "<%@ "ctrl-space, choose page, do ctrl-space
again...
DELETE the <% page line we were playing with...
Scroll down to line 27 (after <body>) enter "<"ctrl-space...
you now will get HTML tag completion hints...

On line 28 replace the out.p with "foo %>".
Observe the squigly line that indicates a Java syntax error.

Some notes about validation:
The directory that contains javac.exe must be in system PATH
(c:\j2sdk1.4.2_08\bin).
I keep mentioning this because it stumped me for a few days. I
could not
figure out how the MyEclipse Quickstart (which we have been
following)
meant by "Launch MyEclipse with a full JDK JVM". I thought I
had!

Also verify that "Build Automatically" is checked under the Project menubar.

Set Validation preferences for all projects via
Windows > Preferences > MyEclipse > Validation.

The default validates everything except HTML.

Then: (+) Application Servers > Tomcat 5 > Click Browse button to find home directory "C:\Program Files\Apache... \ Tomcat 5.0" click the "enable" button and press (OK)

You can then override these selections for individual projects:

From the selected project context menu (right-click menu) select Properties > MyEclipse-Validation.

Now lets change the MyEclipse Editor defaults to show line numbers.

Windows > Preferences > MyEclipse > Editors > Common Editor...
Check "Show line numbers", and "Insert spaces for tab".

Now, change line 28 to read "<% out.println("Hello World") %>"
note we have deliberately omitted the required ";".

Now, do "File ->Save". (I will just click the save icon).

Note that line 28 is now marked on left and right.

Now correct the error (add the ";"). Then save to validate.

You can also validate by right clicking jsp, then choose "Validate JSP",

BUT, if you have not saved it the validator will still think there are errors.

To deploy using Exploded Archive Deployment:

Click "Deploy J2EE Project to Server" (4th button from left),

select Project from dropdown list, and click Add.

Select Server: Tomcat 5 (from dropdown list),
button Exploded Archive is default.

click Finish, then click OK.

To run: click "Run/Stop Servers" (arrow to right of little running man).

Choose Tomcat5 and Start...

Wait for "INFO: Server startup ..." in console window.

On Desktop, JavaLabs folder, click the "TomcatIE" icon. Since index.jsp does not yet exist, replace index.jsp in the end of the URL with HelloWorld.jsp.

Once you have gotten this far, continue with the rest of the exercises.

Exercise 2—Import, explore and run sample JSP code...

Now, let's import the "rest" of the JSPLab project from the Desktop: JavaLabs/Projects directory. The project includes the "solutions" to the following exercises. The index.jsp page lets you run each of the examples.

Create a new "Web Project" named "JSPLab":

File>New Project>(+)**MyEclipse**(+)**J2EE Projects**>Web Project
(Next) Project Name: JSPLab (Finish).

Right click JSPLab project > Import > File System > Next
Browse to Desktop: JavaLabs/Projects directory: select JSPLab
➤ Select All > Finish > Yes to All (or "Yes" except HelloWorld)
(+) JSPLab (+) Webroot to see imported jsp pages...

Run Start Servers > Tomcat 5 > Start

Wait for "INFO: Server startup" message in console window!

On Desktop, JavaLabs folder, click the "TomcatIE" icon.

You should see the following

Select one of the following...

JSP Tutorial

This is source of some of the lab examples.

HelloWorld.jsp

Read3Parms

ReadAllParms

SampleForm.jsp

ShowRequestHeaders.jsp

ShowCGIVariables.jsp

SessionVariables.jsp

Examine these by running the various pages then switching back to Eclipse and looking at the code.