

# Eclipse

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HVL

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# Outline

- 1 Configuring Eclipse
- 2 More Eclipse setup
- 3 Eclipse project

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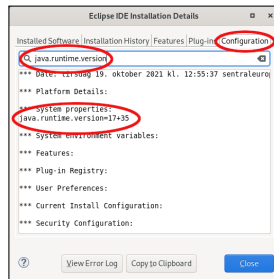
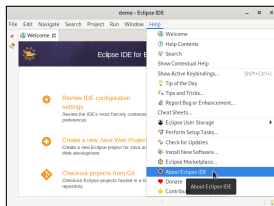
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# Eclipse and Java versions

- ▶ Multiple Java version involved with Eclipse.
  - Java running Eclipse.
  - Java running TomEE.
  - Java compiler version.
  - Java configured for each project.
- ▶ Compatible Java versions must be used for the last three.
  - Best to use the same version.
  - A newer version can be used to run Eclipse.

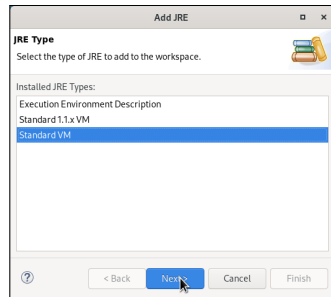
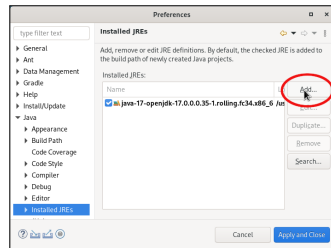
# Java running Eclipse

- ▶ “Help|About Eclipse IDE”, click *Installation Details*.
- ▶ Select pane *Configuration* and check *java.runtime.version*.
- ▶ If not Java 11 to Java 15, see next slides for installing other Java.
  - My Eclipse runs with Java 17, a version not compatible with TomEE.



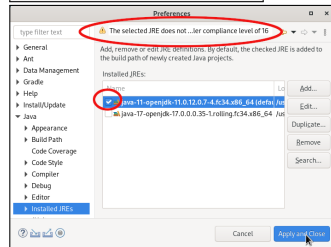
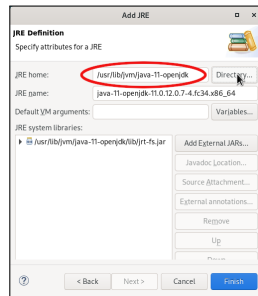
# Java for TomEE

- ▶ Download and install Java, 11 to 15 is OK.
- ▶ Menu “Window|Preferences”, choose *Java/Installed JREs*, button *Add*.
- ▶ Select *Standard VM* and click *Next*.



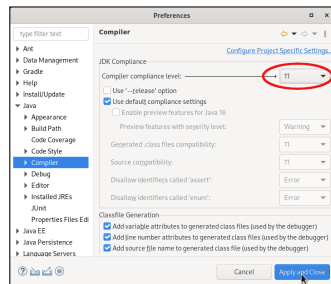
# Java for TomEE – continued

- ▶ Click *Directory* and select a Java installation, then *Finish*.
- ▶ Set new Java as default.
- ▶ Warning on compiler will be fixed next.



# Java compiler version

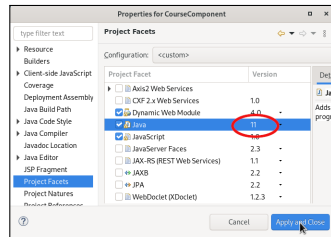
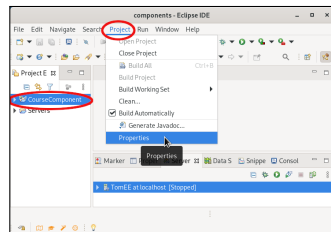
- ▶ Menu “Window|Preferences”, choose *Java/Compiler*.
- ▶ Select correct compiler compliance level.





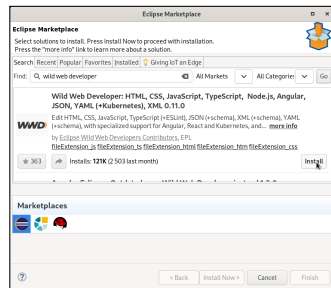
# Java for each project

- ▶ Select project, then menu “Project|Preferences”.
- ▶ Menu “Project Facets”, and choose correct Java version.



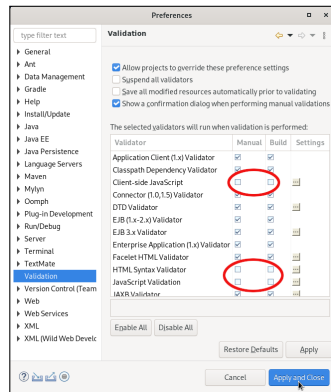
# Wild Web Developer plugin

- ▶ Use the **Wild Web Developer plugin**.
  - Built-in JavaScript validation will fail with new JavaScript features.
- ▶ Install the *Wild Web Developer* plugin.
  - Menu “Help| Eclipse Marketplace”, search for *Wild Web Developer*.



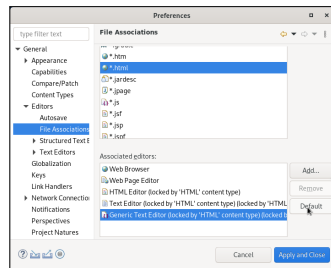
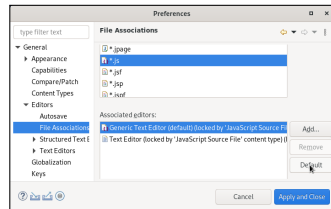
# Validation of JavaScript and HTML

- ▶ Turn off built-in validation.
  - Fail on new JavaScript features.
  - Validation to be done by plugin.
- ▶ Menu “Window|Preferences”, choose *Validation*.
- ▶ Below *The selected validators ...*, turn off for both *Manual* and *Build*:
  - Client-side JavaScript,
  - HTML Syntax Validator,
  - JavaScript Validation.



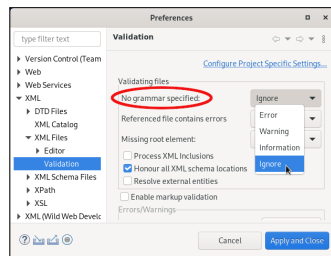
# Editor for JavaScript, HTML and CSS

- ▶ Use the *Generic Text Editor* for JavaScript, CSS and HTML files.
  - For code highlighting with plugin.
- ▶ Menu “Window|Preferences”, choose *General|Editors|File Association*.
- ▶ Below *File types*, choose **\*.js**.
  - If not found, add the entry.
- ▶ For *Associated editors*, select *Generic Text Editor* and click button *Default*.
- ▶ Repeat for entry **\*.html** and **\*.css**.



# XML validation

- ▶ Remove error if no `<!DOCTYPE>`.
  - Applies to e.g. **web.xml**, **persistence.xml**, **resources.xml**, **server.xml**.
- ▶ Menu “Window|Preferences”, choose *XML/XML Files/Validation*.
- ▶ For *No grammar specified*, select *Ignore*.



# Outline

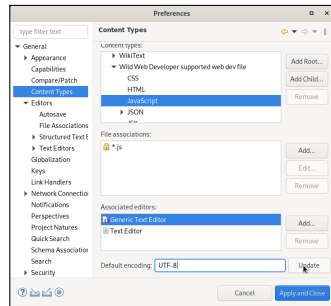
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# More Eclipse setup

- ▶ Setup on the remaining slides are not required, but can be useful.
  - Use as you like.
- ▶ Web character set should always be UTF-8.
  - See, [Declaring character encodings in HTML](#).
- ▶ Eclipse uses by default tabs for indentation.
  - [Most top language code on GitHub uses spaces, except Go and C.](#)
  - [Developers Who Use Spaces Make More Money Than Those Who Use Tabs.](#)
- ▶ On typing, Eclipse will by default automatically close brackets.
  - You still have to write the closing bracket, or
  - move out of the bracket using the mouse or arrow keys.
- ▶ By default, Eclipse uses an internal web browser.
  - Can lack support for some newer JavaScript features.

# Character set

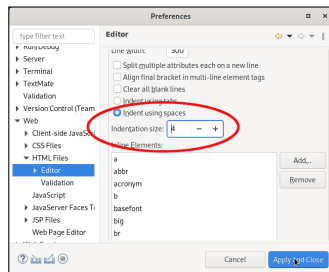
- ▶ Menu “Window|Preferences”, choose *General|Content types*.
- ▶ Under *Content types* locate *Text|Wild Web Developer supported web dev file*.
- ▶ For each of *HTML* and *JavaScript*, specify UTF-8 as *Default encoding*.





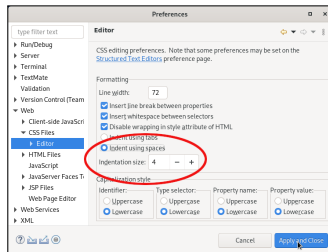
# Indentation of HTML

- ▶ Menu “Window|Preferences”
- ▶ Preferences “Web|HTML Files|Editor”.
- ▶ Choose *Indent using spaces*.
- ▶ Specify a value in the range 2 to 4 as *Indentation size*.



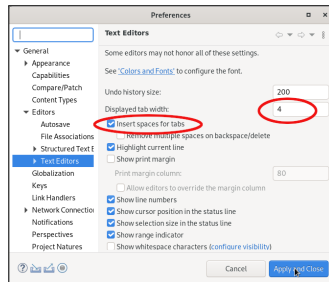
# Indentation of CSS

- ▶ Menu “Window|Preferences”
- ▶ Select “Web|CSS Files|Editor”.
- ▶ Choose *Indent using spaces*.
- ▶ Specify a value in the range 2 to 4 as *Indentation size*.



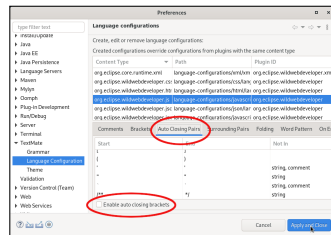
# Indentation of JavaScript code

- ▶ Menu “Window|Preferences”.
- ▶ Choose “General|Editors|Text Editors”.
- ▶ Select *Insert spaces for tabs*.
- ▶ Set *Displayed tab width* to 4.



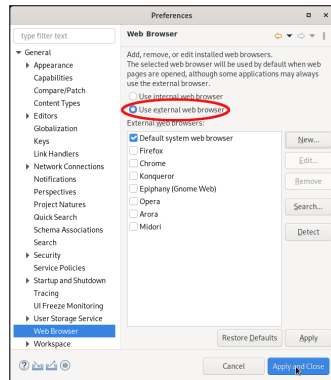
# Disable auto close of brackets in JavaScript code

- ▶ Menu “Window|Preferences”.
- ▶ Select “TextMate|Language Configuration”.
- ▶ For *Content Type*, select “org.eclipse.wildwebdeveloper.js”.
- ▶ Pane *Auto Closing Pairs*, uncheck *Enable auto closing brackets*.



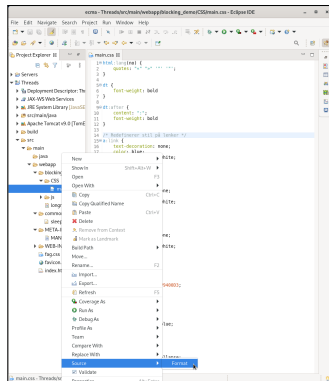
# External browser

- ▶ Menu “Window|Preferences”.
- ▶ Select “General|Web Browser”.
- ▶ Choose *Use external web browser* and make your choice.



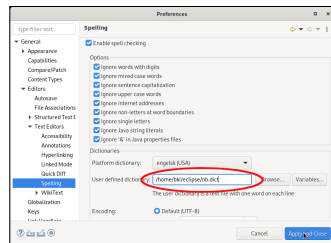
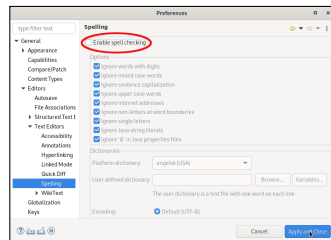
# (Re)formatting JavaScript, CSS and HTML

- ▶ Approach depend on content type and editor.
- ▶ **Ctrl+Shift+F** in editor window.
  - JavaScript and HTML files.
- ▶ Right click file in *Project Explorer*, then “Source|Format”.
  - CSS and HTML files.
- ▶ If formatting of HTML or CSS causes bad line breaks, adjust line width.
  - Slides on indentation, ▶ **HTML** and ▶ **CSS**.
- ▶ Formatting also removes trailing white spaces from lines.



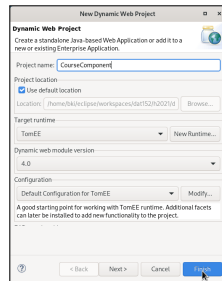
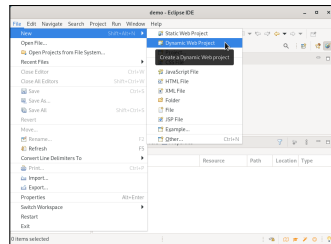
# Spell checking and dictionary

- ▶ Menu “Window|Preferences”.
- ▶ Use “General|Editors|Text Editors|Spelling”.
- ▶ If Non-English language, either
  - Turn off spell checking, or
  - install a new dictionary.
- ▶ UTF-8 dictionaries, **generated with aspell**.
  - Bokmål.
  - Nynorsk.



# Create new project

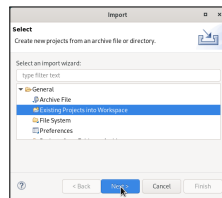
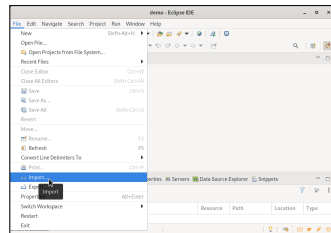
- ▶ First ▶ **Configure Eclipse**, then
- ▶ Menu “File|New|Dynamic Web Project”.
  - If no *Dynamic Web Project*, use *Other*, then “Web|Dynamic Web Project”.
- ▶ Give the project a name, then *Finish*.





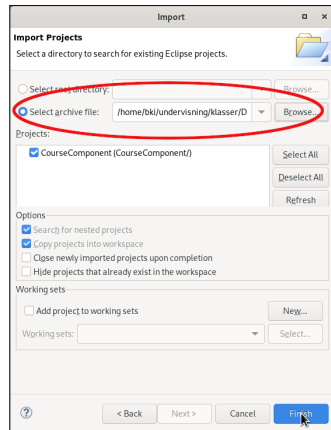
# Import of existing project to Eclipse

- ▶ First ▶ **Configure Eclipse**, then
- ▶ Menu “File|Import”.
- ▶ Choose “General|Existing Projects into Workspace” and *Next*.



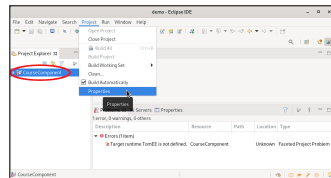
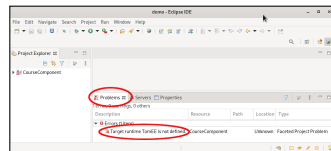
# Import of existing project to Eclipse – continued

- ▶ Choose *Select archive file*.
- ▶ Then *Browse* and locate archive.
- ▶ Then, click *Finish*.



# Solving mismatch on server name on import

- ▶ If mismatch on server name, project will fail to run.
- ▶ Select project, then menu “Project|Properties”.



# Solving mismatch on server name on import – continued

- ▶ Choose “Targeted Runtimes”.
- ▶ Select an existing server.
  - Window also list non-existing server names used by projects.

