

# **Code Inspection**

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# Classes to be inspected

## 1.1 Assigned classes / methods

(abstract) class: *public abstract class WebCommonNode <T extends WebBundleDescriptorImpl > extends AbstractBundleNode <T >*,  
from: *package org.glassfish.web.deployment.node*

The specific methods to be analyzed are:

1. **public Node writeDescriptor(Node parent, T webBundleDesc):** This method receives a DOM node and a descriptor as arguments; it writes the descriptor to the node, and then returns it
2. **public void addDescriptor(Object newDescriptor):** This method receives a newDescriptor as argument, determines its class, and calls the appropriate method to add it to the current descriptor (the one belonging to WebCommonNode) Adds a new DOL descriptor instance to the descriptor instance associated with this XMLNode
3. **public boolean endElement(XMLElement element):** This method is called at the end of the parsing of an xml-node, and returns a boolean stating whether the parsing of the xml sub-tree is complete

## 1.2 Purpose of the assigned class

The general purpose of this class is to manipulate the data object representing the xml tree of a web application. Said data is contained within the aggregated class *WebBundleDescriptorImpl*

# Issues and problems found

## 2.1 Issues, sorted by numeric index

Please refer to the *Code inspection checklist*, included in the assignment document

- 8 : There are some indentations that doesn't follow the convention of 4 spaces ( lines: 140, 278, 284, 286, 295, 342, 352, 442)
- 9 : Tabs are used to indent from line 356 to line 362
- 14 : There are some lines that contains more than 120 characters, that is the upper bound suggested (Lines: 249, 408, 411, 414, 417)
- 15 : Some break lines doesn't follow the convention ( Lines 173, 200, 210, 217 and 426 break lines with a '('; line 319 follow the java convention, that is a little bit different from the convention described in the assignment 3 document;)
- 23 : Raised exceptions are not indicated, neither in the method signature, nor in the javadoc.
- 27 : The writeDescriptor methon is very long, and contains a lot of blocks with similar code; Group of similar blocks:
  - a : from 337 to 343, from 346 to 354, from 366 to 373 and from 383 to 390;
  - b : from 290 to 297 and from 299 to 305;
  - c : from 275 to 278, from 282 to 287 and from 330 to 334;
- 31 : Some attributes used but not initialize neither in the method nor in the constructor( descriptor in addDescription and endElement)
- 33 : Some objects are not created at the beginning of their block (filters, filterMappingNode, appListeners, servlets, mimeTypeNode, welcomeFiles, errorPages, jspConf, securityConstraints, lci, roles, lemlistDesc, those are in the writeDescriptor method)

43 : Several missing spaces in the logging messages (for example: line 143, 148, 173)

## Other problems

There is a repeated improper use of *for* loops with iterators, in the form:

```
for (Iterator patterns = aServlet.getUrlPatternsSet  
    ().iterator(); patterns.hasNext();)
```

From line 142 to line 182, the third level statement " if" doesn't follow the right standard indentation

However, it might just be following the project's internal coding style