

# Advance Topics In Software Engineering

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```
If(everything_goes_fine)
```

```
System.out.println("Contribution to checkstyle project");
```

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# What is checkstyle project?

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- A development tool to help programmers write Java code that follows some coding standards.
  - It can check many aspects of the source code, like duplication, class design, javadoc comments, etc.
  - It is highly configurable by the user who gives a configuration (.xml) file including the checks he wants to make.
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# How can someone use it?

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- As an Ant tool.
- As a command-line tool.
- As a plug-in, written by third-parties, to developing platforms.

What you just have to do is write a (.xml) configuration file, give an input (.java) file and you get an (.xml or .txt) with the checking results.

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# “Checkstyle” Details

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- Mostly developed by Oliver Burn and a team of 4 more developers.
  - At the moment 4.1 version has already been released.
  - The project is in the mature stage.
  - Consisted of 268 .java files
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# What is done till now...

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- It has been compiled.
  - Ran through command-line and as netbeans' plug-in.
  - Contact with the project's administrator.
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# My intended Contribution to the Project(1)

- Fix the RedundantImport check, so that duplicated imports can be detected and avoided.  
e.g. `import java.io.*;`  
`import java.io.File.*;`
- Extend the UnusedImports check, in order to also check massive imports whose classes are not used.
- If just one class of a `.*` import is used, suggest the import of the specific class of the package.

# My intended Contribution to the Project(2)

-Depending on the time needed-

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- Insert a new check indicating the level of code clearness, counting how many blank lines there are every 100 lines of code.
  - Add some boolean properties to the StrictDuplicateCode check concerning the inclusion to the check of javadocs or whitespace lines between methods.
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# Thank you for your attention

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ANY QUESTIONS???

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