# Code smells

1. Comments

* **Code snippet:** 
* **Location:** ganttproject/src/main/java/net/sourceforge/ganttproject/export/CommandLineExportApplication.java
* **Reasoning:** This is a reminder that something should be done (TODO). In the snippet we can also see that we have commented code.  
  These comments reduce readability and understandability.
* **Refactoring suggestion:** The proposal would be to first; remove the commented code and second remove the TODO comment or implement the functionality that is missing.  
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  Sidenote:** While investigating the code I noticed that most of the methods on classes/interfaces are not commented. Which makes it very difficult for whoever is maintaining the code or reading it to try to understand it. The lack of comments throughout this project it’s a major code smell.

1. Duplicated Code

* **Code snippet:** 
* **Location:** ganttproject/src/main/java/net/sourceforge/ganttproject/AbstractChartImplementation.java
* **Reasoning**: In this example we have a duplicated method. Both methods do the same thing only with a different name. It’s confusing and makes maintaining the code more difficult.
* **Refactoring suggestion:** Remove one of them and refactor the other methods that call the deleted one.

1. Dead Code

* **Code snippet:******
* **Location:** ganttproject/src/main/java/net/sourceforge/ganttproject/wizard/AbstractFileChooserPage.java
* **Reasoning**: In this example we have a case of dead code. The getSelectUrl() method calls the reportMalformedUrl(Exception e). We shouldn’t have a parameter that’s not used (Exception e), it’s misleading. Without the parameter the behavior would be the same.

Also the getSelectUrl() is calling a method that does nothing. Its confusing for whoever is maintaining the code.

* **Refactoring suggestion:** Remove the reportMalformedUrl() altogether or implement the method.