

Verify Checklist

Type	Description / Pointers
<input type="checkbox"/>	<p>Comments</p> <p>Comments in code may obscure bad naming, long methods, etc. Therefore comments in code are by default a code smell.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Extract method Rename Method / Field Introduce Assertion
<input type="checkbox"/>	<p>Duplicate Code</p> <p>Duplicated lines in different methods or duplicated methods in different classes, is what people call duplication, but duplicated object usages (see Feature Envy) is a form of duplication as well and may be less apparent.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Extract Method / Class, Pull Up Method, Form template
<input type="checkbox"/>	<p>Conditional Complexity</p> <p>Complex conditional statements often grow from a simple if. We should be critical about conditionals and boolean expressions, as they appear more difficult to read and maintain than you might expect.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Replace conditional with Strategy Move Embellishment to Decorator Decompose Conditional Replace State-Altering Conditionals with State Introduce Null Object
<input type="checkbox"/>	<p>Long Method</p> <p>A long method is hard to understand because of too much detail. They tend to become linger, introduce hard-to-detect duplication and often suffer from Primitive Obsession.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Extract Method, Decompose conditional, etc.
<input type="checkbox"/>	<p>Magic Number</p> <p>Magic numbers are literal values that appear in the code. The meaning of the values is unclear from the code.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Replace with Symbolic constant
<input type="checkbox"/>	<p>Uncommunicative name</p> <p>A name that doesn't communicate its intent well enough.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Rename method / class / field / variable
<input type="checkbox"/>	<p>Divergent change</p> <p>If a certain class is often changed for different reasons, the class may have too many responsibilities</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Extract class
<input type="checkbox"/>	<p>Shotgun Surgery</p> <p>Your code smells when changes affect many classes.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Move Method / Field. Inline class
<input type="checkbox"/>	<p>Feature Envy</p> <p>A piece of behavior seems more interested in data from another class than its own.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Move method / Extract method
<input type="checkbox"/>	<p>Inappropriate Intimacy</p> <p>Two or more classes that spend a lot of time together. Bidirectional dependencies and touch their private parts (data).</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Move method / Field, Change bidirectional behavior to Unidirectional
<input type="checkbox"/>	<p>Train Wrecks</p> <p><code>object.getThis().getThat().getSuch().doThis()</code></p> <p>Refactoring:</p> <ul style="list-style-type: none"> Extract Method / Move Method / Hide Delegation
<input type="checkbox"/>	<p>Switch statements</p> <p>Switch statements are almost never a good object oriented construct. (procedural)</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Replace Conditional with Polymorphism / Strategy / State / Explicit methods
<input type="checkbox"/>	<p>Indecent Exposure</p> <p>Code that is not important to clients should not be exposed.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Encapsulate Classes with Factory
<input type="checkbox"/>	<p>Primitive Obsession</p> <p>Using many primitive types in implementation obfuscates the intent of the implementation.</p> <p>Refactoring:</p> <ul style="list-style-type: none"> Replace data value with Object Replace Type code with Class / Subclasses / State / Strategy Extract Class