## Program Style Summary and Checklist

### Program Format, Style, and Readability

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<th>Never</th>
<th>Mostly</th>
<th>Sometimes</th>
<th>Always</th>
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#### Object-Oriented Design
- Solution divided into appropriate interfaces and classes
- Classes have coherence, with logical pieces grouped together
- Appropriate use of inheritance, polymorphism
- Class hierarchy supports minimal redundancy in logic and coding
- Methods generally simple and clean conceptually
- Individual methods organized logically into sections, as needed
- Solution organized for straightforward maintenance

#### Program Readability and Documentation
- Javadocs used for all interfaces, abstract classes, and classes
- Javadocs with pre/post-conditions, parameters, return values for each method
- Program easy to read and understand
- Program format clarifies structure

#### Input and Output Format
- User reminded what input is required
- Output appropriately printed and labeled

#### Selection of Types and Data Structures
- All class/object fields private or protected
- Intermediate storage declared locally, not at object level
- Data types model characteristics of problem
- Variables have appropriate types
- Appropriate data structure(s) used

#### Algorithm Design and Correctness
- Program meets specifications of problem
- Algorithms used correctly solve problem
- Algorithms used are appropriately efficient

#### Testing
- Test Plan identifies full range of circumstances that can arise in problem
- Listing of all test specific cases with values to be used and expected outcome(s)
- Runs conducted and identified for all identified cases
- Comments given regarding program correctness

### Overall Style and Format

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<th>Excellent</th>
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<td>Object-Oriented Design</td>
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