

	Exceeds Standards 10	Meets Standard 8	Partially Meets Standards 6	Not Evident 4
Design (50%)	The code is <b>well-organized</b> and <b>well-documented</b> . There are at most a few minor errors. Everything is clear and understandable without asking the student.	The program is <b>mostly clear and understandable</b> but the program may lack organization or have gaps in detail that hinder the reader's understanding.  The student's understanding of the material is demonstrated in the creation of the design.	The program shows serious flaws in <b>organization or detail</b> .  Discussion reveals that the student understands most of the relevant course content, but has not demonstrated this understanding in the final artifacts.	Significant portions of the program <b>are not obvious</b> to the reader, even with the supplied documentation. Many required deliverables missing, incomplete, or wrong.  The program indicates lack of understanding of the relevant course materials.
Presentation (20%)	The student <b>understands</b> his/her program and <b>can explain it clearly</b> . The student <b>speaks clearly</b> and <b>with adequate volume</b> to be understood by the audience (not just the grader).  The student understands questions as they are asked, and answers them precisely and promptly, with little need for followup questions.	The student <b>understands his/her program</b> , and <b>can explain it</b> . The student <b>speaks clearly</b> and <b>with adequate volume</b> to be understood by the audience (not just the grader).  Follow up questions may be necessary in order to get to a precise answer.	The student has a <b>general understanding</b> of the program, but may be confused or is unable to explain some of the details. The student may <b>not speak sufficiently clearly or with adequate volume</b> to be understood by the audience (not just the grader).	The student's answers <b>indicate lack of understanding</b> of the program and of the relevant course materials.  The student may require multiple rephrasings or followup questions in order to answer the question; some answers may remain unsatisfactory.  The student may need to be asked repeatedly to speak more clearly or loudly.
Correctness (30%)	____/10 = ____			
Total	Design: ____ * 0.5 + Presentation: ____ * 0.2 + Correctness: ____ * .3 = ____			

## Overall Design:

Feature	Rating (5=excellent, 1=poor)
Abstraction	
Modularity	
Encapsulation	
Information hiding	
Separation of concerns	

Comments:

## Contract and Design Strategy:

Feature	Rating (5=excellent, 1=poor)
Contracts specified for all methods	
Classes documented	
Interfaces documented	
One class, one responsibility	
Separation of concerns	
Discuss pros and cons of design Describe possible alternatives	
discuss the algorithmic complexity of their solution?	

Comments:

## Code Quality

Feature	Rating (5=excellent, 1=poor)
Method simplicity (< 50 LoC)	
method/variable/constant/ parameters naming convention	
consistent use of named constants	
Immutable classes (where approp)	
Minimized mutable static state	
Class constructors	
variables documented	
appropriate tests (>90% coverage)	
check preconditions	
appropriate exception handling	
no duplicate code	
one task, one method	
Overall code readability	

Comments:

**Notes:**