

CSS 341 Grading Rubric

Program is complete and correct

This aspect of grading looks for code that runs correctly and meets all of the program specifications. The highest grade is received if the program is complete and performs **all** operations correctly under all situations (all test cases). The grade is reduced a small amount when the program runs, but makes a minor error handling one case. The grade is increasingly reduced for

- Major errors produced during testing
- Failing to meet one or more specifications
- Implementations which are inefficient
- Implementations which include unnecessary or unnecessarily complicated code

Code that is easy to understand and uses good programming practices; directions are followed

This aspect of grading looks for code that is easy to understand, uses good programming practices, and is well documented. The following describes these practices.

- Describing the contents of each file at the beginning of the file. Describe the purpose of each class (or other code), the functionality, and any assumptions made. Give the author and a brief description of code use.
- Documenting the purpose including appropriate conditions for each function or subroutine. Document input and output as appropriate.
- Documenting each logical code block within each function or subroutine when performing non-obvious operations.
- Using indentation appropriately and consistently to delineate code blocks.
- Using meaningful identifier names, e.g., function, subroutine, and variables names.
- Using appropriate white space between logical code blocks. Using a line to delineate functions and subroutines.
- Using white space within lines of code. Operators such as = or + or * should have a space on either side.
- Writing lines of code with reasonable length (limit these to 80 characters, using a return and continuing the code on the next line when appropriate so lines do not wrap when printing on paper in portrait mode). Break long lines into shorter lines when possible.
- Using a non-proportional font, so indentation is meaningful (each character takes up same amount of space).
- Modular: Each function or subroutine should perform a single well-defined operation. If a function or subroutine performs two tasks, break it into two routines. If a routine performs a series of steps where each involves some work, then each step should be performed in another routine. Use either a function or a subroutine as appropriate.
- Miscellaneous: Use constants always instead of numbers in programs. Use pass by reference and pass by value correctly. Do not use global variables, but use parameter passing when routines need information. Always use "Option Explicit" in all programs.
- Following directions (e.g., naming files as specified, coding data files as specified, turn-in of only files desired, hardcopy of only files desired in the order specified).

* Courtesy of Professor Carol Zander, use with permission.