

STYLE SHEET

CS 162: Introduction to Computer Science

Submit programs only in electronic forms. The comments at the beginning of your program must have your name, email address, program # being submitted (e.g., Program #1), and the date.

DISCUSSION OF YOUR ALGORITHM

It is expected that you will write a step-by-step algorithm for the major tasks in your programming project this term. **It should be written in outline form for the first 3 assignments. Alternatively, you may submit data flow diagrams, flow charts, or other visual representations of your algorithm. It may be submitted as a separate document in the D2L dropbox for each assignment. Prefer word, pdf or plain text.**

- Your algorithm should be written in English using complete sentences. Each major task should be described (in one sentence); pseudo code may be used to describe the detail of each of these tasks.

- Please note that algorithms should not look like C++ code; words such as "cin", "cout", "++", "--" should not be part of your algorithm. Instead, they should describe what each major task in your program accomplishes.

- NOTE: AN ALGORITHM IS NOT CONSIDERED TO BE THE SAME AS YOUR PROGRAM! Any algorithms submitted which look identical to C++ code will not be accepted.

STYLE of SOURCE CODE

Requirements for internal documentation in the form of comments are listed below.

1. A heading explaining what the program does and listing the name of the program author, date, class number and program number. A heading must be supplied indicating the purpose of the entire program; in addition, **each separate function** should have a heading describing its purpose and arguments.
2. A comment following each variable declaration telling what it will be used for.
3. Comments to explain any program action whose purpose is not obvious.
4. Use mnemonic names for identifiers that relate to their purpose.
5. When we use separate files, each file must have a comment that includes your name, date, class number, program number, and the purpose of the functions that exist in the file.

The following are source code format requirements.

1. A consistent pattern of indentation. See the C++ style requirement for examples.
2. White space (blank lines) to separate program sections. At least three lines of white space must separate functions.
3. If functions are used, make sure to include a header comment for each function; this should explain the purpose of the function as well as describe the INPUT and OUTPUT parameters. In fact, every function must have a header comment.
4. NEVER use global variables in these programs!
5. Avoid the use of exit, continue, or break to alter the flow of control of loops
6. Avoid using while(1) type of loop control
7. Avoid using the string class – instead use arrays of characters

ORDER OF FILES for Programs with multiple source files

1. Algorithm
2. Header files (.h files)
 - comment the beginning of this file with:
 - a) your name, class number, project number, name of the file
 - b) a description of what this file contains (purpose of the header file)
 - c) structures, classes, prototypes definitions
3. Implementation files of your classes (.cpp files)
 - comment the beginning of this file with:
 - a) your name, class number, project number, name of the file
 - b) a description of what this file contains (purpose of the header file)
 - place the code in the following order (for a class' implementation):
 - a) constructors -- default, ones with arguments
 - b) destructor (if you have one)
 - c) remaining member functions
 - if you destructor calls another function -- then place that function immediately after the destructor
4. Implementation of the client/application program (i.e., the main), (other .cpp files)

IMPORTANT NOTES:

1. Submit your program to the D2L Dropbox for the appropriate

assignment.

2. If you submit your program to the wrong dropbox, it will **not** be graded correctly
3. It is best to wait to submit your program to the D2L dropbox until you are satisfied. Only one version of your program will be graded.
4. If you submit a program to the D2L dropbox after the late due date, the grader is under no obligation to grade the assignment unless you have instructor approval.
5. With D2L, you must first upload the file(s) and then select the "Submit" button. Forgetting to do so will cause the uploaded files to be lost
6. As a precaution, **ALSO** email your programs to: karlafgr@cs.pdx.edu
The grader will be using the D2L dropbox, but if there is a problem with D2L, emailing your programs to karlafgr will ensure that you get full credit, as appropriate.

Always keep a backup of your programs!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

REMINDERS: Every program (and file) must have a comment at the beginning with your first and last name, the class (CS162), and the assignment number. This is essential!