**Group Project Style Guideline.**

1. Set all numeric variable to 0 before using it because different compiler has different initial value.
2. Name const variables to be uppercase with underscore between words so that coders can recognize it quickly.
3. Pass function parameters which has no side effects by reference to const for protection and communication.
4. Make sure using same amount of delete as new.
5. Functions can be inline if they have one line.
6. Variables should make sense and explain what they are used for. Index is an exception, since it is just an index.
7. Curly braces will begin on the next line after the signature/definition of functions, not needed for inline functions and empty definitions (like destructors, constructors, etc.)
8. Comment block at the before the definition of function for precondition.
9. Use pragma once to make sure you declare the class once.
10. If there’s output file, output in binary mode.

**STL containers used**

1. vectors
2. deque

**C++11 features used**

1. C++11 curly brace initialization, Uniform initialization
2. C++11 initializer list for constructor
3. C++11 lambda function
4. C++11 using auto type, saving type time
5. C++11 disallow copy constructor for Area
6. C++11 disallow compiler generated overloaded assignment operator for Area
7. C++11 force compiler to create a default constructor for us even if we write a non-default one
8. C++11 Keyword override, to avoid inadvertently create new function in derived class