**Module3, Assignment 3(group part)**

**Woohyuk Yang**

[**yangwo@oregonstate.edu**](mailto:yangwo@oregonstate.edu)

•Which design document did your group decide on?

// I chose erin’s one. (this comment should be deleted of course later.)

•What advantages do you think that design document has over the others? (be detailed)

The document designed by Erin Alltop points out the right way the programmer has to write the code straight forward within a paragraph and it makes other people understand the core of the program efficiently with minimum time spent without any confusion.

She introduced the techniques needed to carry on the program step by step and it helps which ideas and concepts are needed to write the program correctly as she intended, which is also easily understandable and concrete. Introducing the numbers of chapters to refer any techniques which would be used in the program, anybody who would like to follow the design can refer the textbook easily.

The testing plan part is clear when it comes to addressing the general purpose of the test itself and the description of each tests are well organized and easy to understand and the reasons to be tested is well described. Even on expected results column, the reason for each expected results are well described so people can read through the results without any difficulties.

The design part is simply written in pseudocode which every body can easily who even do not know any C++ language comprehend perfectly. Indentations were done at the right place so readers can follow the flow without any loss. The programmer can easily write a code in C++ language also with a clear idea of the whole program.

•What improvements do you think could be made to that design document? (be detailed)

When it comes to understanding the program to write, the programmer needs to think about the users to use the program. If the designer had considered the user in Understanding part, the document could have been perfect. But in the test part, the writer tested typing “1 2 3 4 5” instead of “1[Enter] 2[Enter] 3[Enter] 4[Enter] 5[Enter]” on the perspective of the user and it is desirable.

The testing plan could have tested more various numbers like the biggest number and the smallest number the “int” data type could deal with. The testing plan tested only numbers which could make no differences. Testing float numbers is necessary when testing the programs in general but the requirement from the assignment narrowed down the kind of number to “integer”. Testing float is not that necessary here. Testing numbers in a different order and testing different kinds of numbers like negative integers, positive integers, and 0 could be done because it meets the requirements and the user could enter integers mixing 0 , negative integers, and positive integers.

In design part, after “while phrase”, the phrase; “Repeat until numIntegers has been reached, comparing each new integers to find the minimum and the maximum” can make the other people confused. The reader could think in different way like repeating the same action twice because “while phrase” itself makes the point of the writer clear. The latter phrase which is describing “While phrase” in a prose can be positioned before the pseudocode starts and make readers to see the overall algorithm of the program briefly.