**Brendon Samson**

**CLEAN CODE**

**Summary**

# Chapter 3: Functions

In programming we will be using functions to group a piece of code that works to achieve a certain goal. Your functions also affect the readability of your code. There are also rules that you could or should follow to maintain the readability and simplicity of your functions. A good function should have the following characteristics: short or small in terms of lines of code being used, uses descriptive naming sense, and should only aim to do one task to keep it simple.

Keep your functions small. Your function should be concise and not unnecessarily long. You should also use appropriate code formatting like blocks and indent to further make your code easy to read at a glance. It is better to have multiple functions that does only one work than one big function that does multiple work as it will only cause confusion. When creating your functions make sure that you are not repeating already existing function that do exactly what you want for your new function to avoid redundancy. You should also section your function with *declarations, initializations,* and *sieve* to make it easier to find where to locate if you ever encounter an error.

Similar to your other objects the name of your function should also be descriptive. The ideal number of arguments for your function is zero and the maximum is 4 which needs justification as to why a single function requires that many arguments. Also your function should only do things that it is intended to do with no hidden extra work.

# Chapter 4: Comments

Writing comments alongside your code could become a great help in conveying messages that you could not explain with your code but not all comments are good some becomes the complete opposite of what you intend it to become. Comments can be classified as good or bad. Good if the comments are helpful to the person reading it or Bad if it is not.

Comments done the right way becomes beneficial and is considered good if it has helped the reader understand the message it is trying to convey. There are things that you could consider to make your comments a good comment. A good comment are comments that are necessary like legal comments for copyright. Comments should be informative and explains its intentions straight to the point. It should help in clarifying things instead of making it worse. Using comments for warning future developer when using your code is considered a good comment. You can also use comments to list out the things that you need to do (TODO List) but you have to make sure that you remove it after you have completed your list.

Bad comments are those comments that does not help at all or does more bad than good. Mumbling is considered a bad comment. If you decide to write a comment you should make sure to write it cohesively. Your comments should not be redundant as it will only lengthen the number of lines of your code. Comments should be precise to avoid misunderstanding. Make sure that your comments are useful that does not become a noise. Do not explain in your comments things that could already be understood with your code. Always remove commented out code as it is not integral to your code and only becomes a noise instead.

There are a lot to consider when writing a comment. The only thing you have to make sure of is that your comments should be helpful in conveying the process of your code instead of making it more confusing.