Manoj Vasa

Jan. 21, 2017

CS 390R-001 Software Engineering Fundamentals

Beginning Software Engineering – Contextualization

1. One of the most important concepts when developing a program is to keep fixing bugs when you find them before moving on to implement further parts of the program. These bugs and errors tend to lead to other errors. This dependency could cause many problems as one bug may hinder the functionality of other functions in the code. Furthermore, moving on even after discovering the bug will just make it harder to fix the bug later. As you keep progressing, there may be many separate parts of the program that rely on this piece of code. So, now we’d have to deal with all the other parts of the program along with the previously discovered bug. This unnecessary process only creates more work. As the book stated, the longer you ignore a bug the harder it will be to fix it. Furthermore, I’d have to fix the bug when I find it rather than waiting and progressing through the development.
2. One thing I found surprising is the amount of change that can occur through the process of a project. This change with the given amount of time and the constantly increasing number of bugs yields even more problems to developers. This constant assessment of the customer’s needs and wants keeps increasing the amount of work needed to be done by the developers. These changes aren’t just software requirements either, but can also be hardware changes. These drastic alterations can prove to be so stressful. The amount of changes that are possible in high level and low level design can really complicate things along the way.

Reflection:

This was a really insightful reading. It has informed me of the difficulties that are present in the professional field. The designing of the lower and higher level details of a project is essential before actual implementation. I understand now why so many products are put out there and turn out to be filled with bugs. The time restrictions, bugs, and customer specifications can only be satisfied so much. I never considered just how many errors build on each other through the whole process of developing a program. The interdependency throughout the code makes it so that one error directly affects another part of the code and results in more bugs. This fact really helps me to understand that I have to deal with bugs as soon as I can rather than delaying it for a further time.