Daniel Mironiuk
08/28/18
SWEN 101 Martinez
Week 1 HW “Software In Our World”

In the world of Software Engineering, the predominant agenda is the design, development and maintenance of quality as well as efficient software. This form of engineering is essential for modern society based on the rapidly expanding virtual realm, this in turn increases the need for software developers. One may assume that software engineers only write, or otherwise code the software. Yes, this is an aspect to the process, however, there are plenty more factors that consist in producing software than one may think. Software engineers operate similar to other computer-based engineering fields but the process could be conveyed through the 4D’s method. This method goes through the entire software development and goes chronologically from Define to Design to Develop to Deliver. Through the constant repetition of this method used by companies and private institutions, the improvement of software drastically changes within accumulating decades. Software keeps innovating and that’s due to the diligent work of software development teams. Not only is the software improving but the methodology to create software has been innovated as well. The methods aren’t a reflection in style of management or a specific technical approach but a way of organizing the data or work in the development. Traditionally, software engineers have been utilizing the Waterfall process which is a more linear way of following through the 4D’s while the more newer process is the Agile methodology which makes all tasks into “sprints” which allows software developers to produce software more effectively and quickly. This is also aided by K.I.S.S principle which reduces the complexity of the software itself making it easier to understand between team members. However, this shouldn’t be blindsided by the fact that quality is one of the most important fundamentals in creating software which makes sense. That’s also a basis to why the public adores Apple based software so much, it’s user friendly and pleasantly appealing.

Software engineers are fundamentally essential for most programs that one has on their phones, computers and even modern day vehicles. Speaking of which, many miscellaneous technology contains software which couldn’t have been fabricated without these types of engineers. Everyday household items contain software, from coffee machines to Samsung fridges to even the whole house in some cases! All of it has direct influence from software engineers. But also from computer scientists as well but those two career paths are distinctual. With computer science, one focuses on the math and logic to cover both theory and application to the programming while with Software Engineers, they are concerned with a more inclusive

engineering process to deal with the fabrication, design and maintenance of the software itself. They are distinctual but work hand and hand to create the best quality work that is utilized by a company. Software Engineers are directly responsible for creating companies, generating revenue for those companies and creating a new market that the economy is supported under. Software will exist long after we're gone and one should consider joining this career field if he or she wants to be a part of the computational world.

# Cited Sources


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