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Assignment 3-1

* **Define**: What is software requirements engineering?

The process of understanding and defining what services are required and identifying the constraints of such services.

* **Purpose**: Why is software requirements engineering an important part of the software development life cycle?

Well one of they keys to creating a good applications is understanding it’s weak points and your program is only as good as it’s weakest link. For example let’s say we are creating an application and we use GitHub as a login method. Our application is only as strong now as github’s weakest link. If someone breaks into GitHub they have also broken into our system theoretically.

* **Comparison**: How does the approach of software reverse engineering differ from the approach of software requirements engineering?

Well trying to put this as bluntly as possible but in forward engineering the goal is to make some system specification then design and implementation. In reverse engineering we have the application so we can view it the other way around to fix things or make things better. For example we can see how Brightspace works since we are the front end user, because of this we can take what we know and reverse it with the design and implementation to make things better.

* **Impact**: What are your thoughts on the proposed new integrated approach of round-trip engineering and its impact on the computer science field?

I believe that the new style of reverse engineering that is emerging in the computer science is very innovative but aside from that I also believe it is necessary. Looking back I’m not sure how it was ever done with this sort of approach. Odds are reverse engineering existed before just not called the same thing. In the same way SRE engineers didn’t exist 20 years ago but are not one of the most important roles. I believe reverse engineering to be the same way.