**Sprint Review and Retrospective**

Kylle Waldie

Department of Computer Science, Southern New Hampshire University

CS 250: Software Development Lifecycle

Professor John Russell

June 18, 2023

After learning Scrum over the last couple of months I can see how useful it can be. Just based on the communication between the teams alone already shows its benefit over other methods that are not Agile such as the waterfall method. Teams get work done faster and at a higher quality than other methodologies. One role of the Scrum method is the product owner they helped bridge the gap between the customer and the rest of the team. They play an extremely important role in communicating what the customer wants as well as organizing and prioritizing the workload. During the SNHU Travel project the product owner made sure everything was going to plan with the Agile team and communicating how it was going with the customer. They also let the Agile team know when something had changed with the customers plan.

The next role that was visited shortly during this class was the scrum master. This role plays as the glue to the whole system by keeping everything running smoothly and making sure that the scrum is working cohesively. The scrum master also organized the most important part of scrum, which is the morning scrum meetings, while also working as the link between the development team and the product owner. Final the development team was broken up into two different parts the developers and the testers. The testers worked to test the code that the developers were writing to make sure everything was working as it was supposed to. The developers worked on the bulk of the code making sure that the whole team was happy with the way the product looked.

When working on the project it was interrupted and changed in a drastic way. Agile helped alleviate the stress of it by allowing us to change focus on what was needed. Instead of being locked into a specific part of the development process like we would have been if we were using another method such as waterfall. We were able to flow easily into the new thing the customer wanted because we were working with scrum and following a sprint format instead. If we were working with the waterfall method, we would have had to scrap a large portion of the code and it may have set back the completion date because of that. But instead with the scrum method we were able to change the code to better fit the customers wants and needs while also keeping the same due date that we promised.

The main software that I looked at while learning scrum was Jira. Jira was a software that we can use to create and settle priorities in the code while also keeping in touch with everyone on the team. You can make your project open so that everyone can set it private so that only your team can see it which is an amazing feature if you are working on a secret project that you do not want a lot of people being able to look at. The scrum meetings were also a great organizational tool since they allowed everyone to decide what they needed to work on that day and let everyone know what they were working on the day before. This just keeps the cohesion between the team so that you are not wondering if you are working on the same part of the code base as another team member.

I feel that the scrum method was extremely effective. I feel that scrum and any other agile method is extremely effective if you have a smaller team. If you start to get a larger team, other methods such as the waterfall method might work better. Scrum is extremely useful if you do not have a well-developed user story and you need to make changes consistently in your code base. Scrum allows you to make those changes without affecting the deployment date as hard as it would if you were using other methods such as waterfall. Scrum is also super useful if you have a small developing team that manages themselves well and does not need to be watched over and managed by the management team.

That does not mean that scrum or an agile method is the go-to for every project though. Waterfall also has its benefits as well. Waterfall is better than an agile method if you are working on a larger team that you can not split into smaller teams. Waterfall is also extremely effective if you have a very fleshed out user story and you can focus on the code base without having to make a lot of changes to it. That does not mean you can’t make changes to it because you can still make small changes to the code base without really affecting the productivity of the team. Finally, waterfall is also effective if the management team wants to keep a closer eye on the developing team and wants to have a more in-depth role with the project.

Agile is an extremely powerful tool to use when developing and it is not surprising that a lot of larger companies are trying to migrate to using an agile system. But it is not an end all be all system. It takes a lot of work to migrate into an agile system. With this project I believe that scrum was the way to go. We had a lot of changes to the code base and constant hiccups during the SNHU Travel project that would have taken a lot longer to fix and change with the waterfall method. In my opinion an agile system is far superior to a non-agile system but that doesn’t mean that it will always be the best option.