CS 250 Final Project

Brittney Miller

SNHU

While going through this course, we identified numerous roles in a Scrum-agile team. There are technically three prominent roles that we talked about and learned about during this course.

The first role I’m going to go over is the Scrum Master. The Scrum Master is the in-between role and the glue that holds everything together. They are typically involved in all roles by communicating and ensuring things are running smoothly between all teams. Scrum masters help the product owner find the most value in aspects of the product they are building and help negate useless or time-wasting aspects of a build. They help the development team stay on track and ensure that what they put out is valuable, useful products. The scrum master is known as a servant leader, which means they support and help serve all teams daily. During the SNHU travel project, the Scrum master held daily meetings and set up schedules to help the team stay on schedule. They also ensured clear communication between the team and the product owner. They communicated with the product owner when there was a lack of detail and how to better that communication with the rest of the team.

We have the product owner who works closely with the customer to find out what they need and want and how to accomplish this. Product owners will review precisely what they want with the customer. Still, their business requirements are for the final product, so they can create and manage the product backlog based on the customers' needs and wants for their business. The product owner will help ensure the agile team is set to deliver the most value in the time frame provided. The product owner will be the business’ voice when communicating with the agile team, ensuring they know the details of the business requirements in a manageable timeframe. The product owner will have to understand the customer fully and have a well-put-together vision for the scrum team to ensure the highest value is being output to be delivered to the customer. The product owner will also take the business requirements and prioritize this work for the agile team so they know which features are high priority and what the customer wants the result to be. A product owner has to be a master of communication and detail since, without this, the agile team can misinterpret high-value items and create a waste of time on a lower-priority feature. During the SNHU Travel project, the product owner communicated with the business and found high-value and low-value priorities, then passed that information to the rest of the team to ensure we were on the same page. They also communicated any changes that needed to be adapted to fit the business requirements more. They confirmed we were creating a product the team would be proud of that functioned appropriately.

We then have the development team. The development team is different depending on the product being created. The development team can have programmers, writers, designers, and anything needed for the final product from communication from the product owner. The development team will have to hold themselves responsible as they are a self-organizing team and must make decisions to stay on task and get work done. They will make decisions independently to help fix or add value to a problem. They will deliver work throughout the sprint and ensure transparency and clear communication during daily scrum to hold everyone accountable. They will also create a space where the team can ask for help, celebrate success, and communicate any issues. The team then tested the product's function, used story points to stay on task, and ensured we completed the required tasks in a productive time.

Using the Scrum-agile approach helped user stories finish because it enabled an approach where different pieces are created simultaneously, tested, and changed to adapt to the entire project. There is no defined timeline, so there is less chance for the development team to go over schedule since user stories are built based on the amount of work done and the effectiveness, not necessarily this work done by this time, so there is less time for calculating errors.

The scrum-agile approach also helped when there was a shift in the outcome of the product because this approach allows for smaller sections to be worked on at a time and tested to ensure accuracy. So when there is a shift in the product itself or something that isn’t liked by the customer or isn’t received well, it’s easier to go in and make more minor changes to get the outcome than changing the entire project and having to change multiple steps after like the waterfall approach, this means there's a more comprehensive birth for changes and adaptations, not setting the schedule backward since the entire project doesn’t need to be rewritten, just like when there was a change in the SNHU travel project to change it to wellness places instead of just top vacation packages. Since we were still showing packages and top places, we had to pull out some code for the pictures and descriptions instead of rewriting the entire program.

To communicate effectively with the team, we had an open line of communication. We sent emails back and forth from the scrum master to the product owner on how the lack of detail needed improvement to ensure we were not wasting time on minuscule, unneeded tasks. We also had daily scrum meetings and whiteboards to ensure we were all on the same page where we went over issues, hurdles, successes, and communication changes that needed to be made to make sure we were all on the same page and moving in the correct direction for the final product.

Hundreds of tools can be used to ensure teams are thriving in a product build. When looking at a project, there are different software we can use to help keep ourselves organized and on an excellent schedule. Since there are other software, the one that fits each build is another based on the needs and requirements of the product owner. There are software tools that will move with the project for its entire lifecycle and can communicate between all teams. At the same time, other software will only follow with one team and keep the team on schedule.

For the SNHU travel project, the Scrum-agile approach was the most beneficial approach to promptly produce a fully functional program that met all business requirements. The waterfall approach has a higher chance of errors in the outcome since you work in a waterfall sense. You work on one part of the project, then move on to the next and the next, and then you test it at the end. So, if you need to change, you must change everything after the section where you need the changes. Since you don’t test until the end, if there is a misfunction somewhere early on, you are now behind in changing numerous things. In the agile approach, little pieces are built, tested individually, and then put together. This means you can create multiple parts simultaneously, test them individually to ensure they function correctly, and then assemble them. This also means when there is a change or adaptation throughout the project, it's more straightforward to fix or translate that into the program and test for functionality in that small section without changing the rest of the program.