**Sprint Review and Retrospective**

Carter Wooton

SNHU CS-250

Aug 14, 2022

For the SNHU Travel project, our Scrum-agile team consisted of the scrum master, product owner, developers, and testers. The scrum master was responsible for ensuring that the Scrum-agile framework was being followed during the project. One important aspect of agile project management is that it can be tailored to fit any project situation and is not restrictive in how it is implemented. For this project, the scrum master was responsible for conversing with the product owner about the backlog and which stories can be completed, as well as removing obstacles from the development team to help them focus on their work. In this situation, the scrum master was also responsible for assembling the rest of the agile team and was also included in the initial meeting with the client and product owner.

The product owner is responsible for the management of the product backlog and the development of the user stories: a critical part of the agile development process. The product owner is excluded from daily standups, so the team remains confident in sharing their progress and concerns. The product owner remains the primary communicator with the client, stakeholders, and software users; it is important for the product owner to effectively question users to develop useful stories that can be presented to the agile team. At one point during the SNHU Travel project, the product owner had to communicate to the team that the client wished for the software to focus on detox and wellness vacations, as well as ensuring them that their word needn’t be scratched to achieve the new goal.

In the Scrum-agile environment, the developers make up most of the team. The developers are self-managing and should be responsible for their own progress and success. The team is ideally small and well-rounded in their skillsets, so that work can be shared efficiently. An agile developer must be prepared for changing requirements and should be able to produce working software at the end of each sprint. In the SNHU Travel project, the developers had to work around the new client requirements about the vacation focus by communicating with the product owner and tester to ensure they were headed in the right direction.

The product tester holds and interesting position within the Scrum-agile development team. In many agile projects, the team performs test-driven development, which involves developing test cases before working with code. The tester must ensure that the test cases accurately relate to the user stories so code can be developed that reflects the needs of the stories. As seen in the SNHU Travel project, the tester sometimes must communicate directly with the product owner for elaborations on specific user stories and what is required. If those requirements change during development, the tester must also change the test cases as well. This makes the tester an integral part of the Scrum-agile team.

The Scrum-agile approach avoids the use of customer contracts that state how they wish the software to function. Instead, the product owner generates user stories based on interactions with the customer as well as the real-life users of the software. In this case, the product owner gathered information from the client, SNHU Travel, and interviewed three users of the software, who provided information on what functionality they would like to see in the software. The owner could then manage the product backlog to clearly convey what the users wanted from the software. This method then allows the development team to develop the software in small chunks, which could take between a day and a week to complete, depending on the scale of the story. Having digestible user stories allows the team to create deliverables after each sprint and is welcoming to change should that be necessary.

There was a moment in the SNHU Travel project where the product owner had an emergency meeting with the Scrum-agile team to discuss a drastic change in the customer requirements for the software. Some of the core features of the software had already been developed, and the team was worried about scrapping their work and starting again; however, the product owner assured them that they wouldn’t have to restart from scratch and the same timeline could be followed, perhaps with some editing to the product backlog. The Scrum-agile approach supports change midway through a project by allowing the direction to change without restarting the SDLC from scratch, like in a Waterfall project, where new documentation and a client contract would have to be developed before the project could resume. Had it been a Waterfall approach, the product owner may not have even met with the client before the product was finished, and SNHU Travel would be stuck with their generic vacation site, which would put them at a disadvantage in their respective business environment.

Our team was able to communicate effectively during the development of the SNHU Travel application. There were moments during development where clarification was required before work could continue; this included the tester having to email the product owner Christy for clarification on the user stories, and the developer having to email the tester and Christy when changes were made to the system requirements. The team cannot create meaningful software in a bubble, so direct communication must happen at all stages of development to ensure the client’s requirements are met.

The Scrum-agile framework provides multiple organizational tools and principles that are to be used to both accelerate the project and improve its quality. The user stories are the backbone of the Scrum process; these are essentially tasks that need to be complete but are in the form of a problem that a user needs the software to solve. These bite-sized tasks are useful for short-term planning and help the team deliver working software after each sprint. The product backlog is a list of user stories ranked by points and by priority and is managed by the product owner during the sprint review meeting and at other times throughout the project. The user stories and the backlog can be tracked using the scrum board, which can take on many forms like a whiteboard or through a digital medium. This scrum board allows the team to communicate and stay on the same page and is also good for showing progress and the state of the project. The board is also used during the daily standup meetings to help the team reference user stories that they are working on. These tools and principles reinforce the Scrum-agile ideology by providing open communication between all members of the team as well as the client at all stages of development.

There is always more than one way to approach any project, and there is also more than one agile process that can be used. The Scrum approach to the SNHU Travel project allowed for a small team to handle the requirements and develop the software efficiently and was certainly the best approach. There are certain drawbacks to the agile approach, such as difficulty with the initial estimation of how long the development will take and issues with less precise documentation and fragmented releases, but the advantages were also proved. For instance, midway through the project, the client wished for major requirements to be changed that would affect each department in the team. The functionality of the project was relatively unchanged, but the scope for the vacations was shifted from a general approach to wellness and detox destinations; the agile process allowed for the product owner to describe the new requirements to the team, and they were able to immediately begin work without having to go through multiple steps such as robust documentation and client contracts, which would have required the project to start from scratch in a traditional project management scenario. In this case, agile was the correct choice.