[CS-250-R1991 Software Development Lifecycle 21EW1](https://learn.snhu.edu/d2l/home/848927)

Mod 7 Final

Sprint Review and Retrospective

SNHU

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The various roles of the cross-functional Scrum-agile team in the SNHU Travel Project were the Product Owner, the Scrum Master, the developers, one of which is known as the tester. All of the roles contributed to the success of the project by following Agile Framework SDLC practices and participating in Scrum events. The Product Owner engaged with the users and stakeholders of the project to gather information and project requirements. The Product Owner then created User Stories that clearly defined the expectations for the story, while adding transparency and value to the stories. The Product Owner participated in the Scrum events and set the priority of the user stories for the Sprint Planning.

The Scrum Master orchestrated and participated in the Scrum events such as the Daily Scrum meeting, Sprint Planning, Backlog Refinement, Sprint Review, and the Sprint Retrospective. The Scrum Master was responsible for removing impediments found by the development team and assisting the Product Owner with writing user stories and creating the Backlog.

The developers participated in the Scrum events as well as assisted in creating the Team Charter and were crucial to the Backlog Refinement process by providing the level of effort necessary to complete the User Stories. By assigning story points to a story, the developers convey how much time it will take to complete a story, which will determine the stories that are set as a priority by the Product Owner as well as the velocity of the team.

The tester participated in the Scrum events and was responsible for creating test cases for the User Stories that were groomed in backlog refinement. The tester ensured that the test cases were written from the standpoint of a user and that the test cases contained relevant acceptance criteria. The tester worked in sync with the team, aligning to the team’s definition of done for a user story, and participated in removing defects as early in the project as possible.

The Scrum-agile approach to the SDLC is a “combination of iterative and incremental process models that focus on adaptability and customer satisfaction by rapid delivery of working software product (SDLC Agile Model, 2021).” The team utilized weekly iterations while working with the phases of Planning, Requirements Analysis, Design, Coding, Unit Testing and Acceptance Testing.

The SNHU team used the planning phase in order to seek out project requirements from stakeholders, as well as to use this information to create user stories. The requirements analysis would have been done by the team to set up the initial architecture requirements, such as the tech stack, as well as additional analysis for the requirements during the backlog refinement sessions.

The SNHU team demonstrated the design phase by incorporating mock ups of the slide show in order for the developers to understand the look and feel of the website. During the coding phase, the developers completed the code for the website to insure that the requirements were met based on the groomed user stories.

Although not evident in the SHNU team project, the unit testing is completed by the team by breaking the code into reusable chunks of testable parts, and is often completed by test driven development, which will require the developer to write a failing unit test first and pass the test with written code. Acceptance testing was shown by the SNHU team by the tester creating tests with acceptance criteria that was specific to the user story. In each iteration, the tester has tests that will validate whether the stories completed for the spring are meeting the definition of done as set by the team.

When the SNHU project changed direction by requiring the health and wellness theme, the Scrum-agile approach was helpful to the team as the Product Owner could re-prioritize the backlog items for the Sprint and focus on the stories that bring the most value and remove the stories that would not have as much value in order to focus on the requirement change. Since the main shell of the website was completed, the developers worked on getting the image and description updates and the tester was able to quickly update the acceptance tests. This sudden change in requirements would not have been possible in a Waterfall project.

The ability to communication effectively during the SNHU project was shown in many ways, including the daily standup that was led by the Scrum Master and included participation from all team members. While assuming the developer role, I found that it was a good example of communication to include the Scrum Master and other interested parties in emails to the Product Owner in order to ensure that all received the same timely message about the new requirements:

To: Christy ,Product Owner; Brian, Product Tester;

CC: Valerie, Scrum Master

From: Nicole ,Product Developer

Hello, Christy and Brian-

I have reviewed the new changes to the requirements for the project. The first user story will also require a change from an ordered list to a slide show container for the images, as well as the new Health and Wellness requirements. I have also updated my tasks to reflect the changes to the images, captions, and description text to be for Health and Wellness vacations.

Christy, can you please approve the images, the updated wording for the image titles, and the description text that were done to reflect the Health and Wellness theme? In addition to the Health and Wellness change requirements, I have also noticed that the Slide Show is resizing images, which will tend to increase web site load time. A solution to this problem would be to optimize the images for the website and eliminate the resizing feature of the slide show viewer. I also have a suggestion to change the background color of the description box to a lighter color to improve website readability.

Brian, as you are adjusting the tests to reflect the Health and Wellness changes, do you also have a style guide available for the theme of the website? I also wanted to ask if you would be able to run website performance testing for load times that should reflect the image resizing issue that could potentially cause slowness on the website. I also would like to ask you if you have any examples of the colors and font types that are best for website readability.

Christy, I have also noticed that the new requirements do not include image credits for the images that we will use. Is there a plan to add the image credits to the website? Brian, do you still have the tests that incorporate the image credit that could be reused to add the image credits for the new requirements?

I will need to have the answers to these questions to complete the development and will follow up with you both at tomorrow’s daily stand-up call.

Thank you,

Nicole, Product Developer

The first organizational tool that helped the SNHU scrum team be successful was the formation of the team charter at the start of the project. It outlined the members of the team, their contact information, the length of the project, the goals of the project, and established basic housekeeping rules and Scrum event times and days of the week when they were to occur.

The team also used a dedicated meeting room along with a whiteboard that contained the user stories for the Sprint that was used to show the progress of the stories. Due to the short term nature of the project, the team charter and the Sprint board allowed the team to participate in the Scrum events quickly and efficiently.

The effectiveness of the Scrum-agile approach for the SNHU team worked well for them as a change in requirements could be introduced and handled in an effective manner. The team was organized with the team charter and there was a clear definition of duties among the members. The Sprint events were clearly defined, and the Product Owner was engaged with the users and stakeholders throughout the project. If a Waterfall method was used instead, the project could not have changed requirements so quickly and would have cost SNHU a lot more time and money.

The disadvantage of Scrum-agile for this project is that the project had a very brief timeline that was more suited for a project that did not have a change in requirements, or was a project that was being recreated from another successful project with only slightly different requirements. It was also unclear during this project whether backlog grooming was taking place, and whether the user requirements from the first Product Owner interaction ever made their way into the Project. It seems that the project did not get to explore all that there is in the world of Agile due to the short timeframe.

Reference:

*SDLC Agile Model.* (2021). Retrieved from tutorialspoint.com: https://www.tutorialspoint.com/sdlc/sdlc\_agile\_model.htm