**Sprint Review and Retrospective**

We had the opportunity to experience several scrum team positions throughout this class. The Scrum Master, who is primarily in charge of managing the Scrum team, was among the jobs we adopted. They essentially oversee how knowledge travels and gets to everyone on the team. This is mostly accomplished through the daily scrum sessions when each team member has an opportunity to share their perspectives and problems. What was accomplished the previous day, what will be done right now, and what is preventing your growth are the three key topics of conversation. This aids in the team's comprehension of what each member is doing and has accomplished as well as the issues that still need to be resolved. These sessions are facilitated by the scrum master in a way that permits everyone to speak while maintaining the meeting on schedule. A sprint review and retrospective are always conducted by the team as a part of the entire process of creating the product. The objective is to maintain this pace by taking stock of what has gone effectively, considering how we might make improvements, and determining our next steps. My main responsibility as a Scrum Master was to encourage productive teamwork and steer the sprint in the right direction. Scrum masters remove barriers and keep teams responsible to ensure efficient teamwork. Every Scrum Item has its own set of significant requirements. A Product Owner, Scrum Master, and a development group made up of testers and developers should all be present at every Scrum Event.

Our attention next turned to the job of the product owner, and we concentrated on how valuable the project was while simultaneously handling the stakeholders. Making ensuring that the correct data was gathered from stakeholders and sent to the programmers, as well as demonstrating to the stakeholders how the project now appeared where it had been, and where it was headed, was one of the key objectives. It was crucial to strike a balance between the two and to ensure that everyone was speaking clearly and exchanging the data that was required. The agile method enables for things to be accomplished or altered on the spot in an acceptable fashion, therefore this is one of the essential tasks in keeping it viable. Another significant position we had was that of the tester, whose responsibility it was to design and carry out a range of tests to determine if the product succeeded or failed. The product owner and developers must collaborate effectively with this function since it is crucial to give insight into what's effective and what doesn't. Being a tester, we concentrated on the kind of tests that the product required and on giving comments on potential changes so that the developers would be aware of them. The tester is a huge benefit to maintaining an agile approach since they keep things evaluated as the product develops so we can determine if modifications have been beneficial or not. It enables prompt responses and fixes to be used.

The framework used to produce system is known as the SDLC, or Software Development Life Cycle. Project preparation, evaluation, creation, execution, and support are all parts of the SDLC. Setting a project's budget and timeline at the planning stage is helpful. The first step in the research is acquiring crucial data from the customer. A system's fundamental structure, which comprises the user experience and application construction, is designed during the development stage. The real-world coding procedure and tests are considered execution. Support is the process upkeep component, which helps get rid of problems. We have three key user stories for the SNHU travel project. These capabilities included the ability to categorize numerous vacation spots according to cost, kind, and customer experience. Support is the process management component, which helps get rid of problems. We have three key user stories for the SNHU travel project. These capabilities included the ability to categorize numerous vacation spots according to cost, type, and user history. These user stories assisted in giving the product owner a thorough explanation of the characteristics that consumers were most interested in. Later, the product owner had the ability to determine which features in the product backlog should have priority. The sprint method, daily scrum meetings, customer stories, group charter, test scenarios, and product backlog were some of the useful scrum-agile tools employed during the time. The majority of these technologies improve team communication and contribute to the final result. We finished a team charter in week two, which served as a tool for establishing the team's framework throughout the SDLC procedure. The purpose statement, crucial dates, primary project hazards, conduct regulations and communication requirements will all be outlined in the charter. I genuinely believed that this was a crucial document that establishes the crucial deadlines and criteria for a certain project.

Arguably our most crucial job on a scrum team, the developer, was the last one we practiced. In order to keep the product moving in the right direction, programmers on an agile team must regularly communicate with product owners and testers. Between corresponding with the product owners and testers to afterward creating the program in response to the data obtained, this process is going back and forth. An agile team demands frequent cooperation from developers, whereas a waterfall process might not require as much engagement or urgency. If the group is unable to collaborate along in a cordial, tranquil manner, it may be very difficult. Yet, if they can work together, they can form a fantastic team that can tackle practically any assignment quickly and effectively.

One of the best team activities was holding daily standups, where everyone could voice their worries about problems and barriers as well as discuss their advancement and successes. Initially, it wasn't simple to maintain the crew in communication. However, as the sprint moved closer to the finish line, people began speaking up more frequently about their thoughts, feelings, and ideas. Beyond of the standups, a collaborative Scrum board was utilized to maintain everybody informed. The team also employed technical tools to track the outcomes of other groups working on the exact same project remotely. The essentials to gathering client feedback on our product creation are frequent focus sessions and meetings between our product Owner and clients. The Product Owner addressed each feature's development with the remainder of the group, and we spoke about adjustments that were necessary and what worked well. Sometimes the features need to be changed because of current developments and shifting objectives. When the Product Owner engaged with developers, one such modification was switching from a conventional travel site to a health retreat and holiday website. The product owner offered the idea to potential consumers in order to make this adjustment, and they later came back with a list of features they thought should be included. Since the programmers and the product owner approved these changes before adding them to the queues, this enabled rapid completion and an end result that satisfied all criteria.

The Developer team worked hard to provide a top-notch product. They were able to meet all of the product owner's requirements at the end of the sprint by collaborating closely with the Testing team. As a result of the testers' insightful comments, the programmers were able to fix flaws in the program and improve the code. The development team modified the intended results of these functions when user stories changed in accordance with the updated rules for wellness vacations. It also helped the testers by producing test cases for each new feature. The development team delivered a usable product to the Product Owner at the end of the sprint.

The Product Owner was allowed to update the product by providing input to the team in the middle of the sprint. After the team had access to the user narratives, they began working on the most important tales. As a consequence, the team had a cushion set up throughout the sprint to guarantee that whatever the product owner determined to be the most important got completed. a few of the higher-priority activities took a little longer, but the group was able to finish both lower- and higher-priority activities under the allotted time thanks to the Agile approach to production.

Given this product's complexity, the scrum master thinks it is beneficial to build it using agile methods. The Agile technique excelled when the Product Owner returned with adjustments based on consumer input, despite being more complex and different from a straightforward waterfall process. Without losing momentum throughout the sprint, the team was able to rapidly and effectively make the required adjustments. In contrast to using the waterfall technique, the product backlog might also be changed depending on feedback rather than having to wait until fulfillment.

As a Scrum Master, communications are essential to maintaining the group on pace to deliver the end result. Emails were used to communicate information to all team members, delivering a constant stream of information that kept them aware of the creation processes. Everybody had an opportunity to speak up during the daily standups, and as the Scrum Master, I helped them to make sure everyone followed the plan. If necessary, new issues were discussed following the standups. During the standup, programmers might also organize into teams for more efficient programming. In addition to displaying sprint objectives and successes on "centralized" boards. To make sure that everyone, even remote employees, is treated equally, a tool is employed. I am in charge of updating each in my capacity as Scrum Master.

Agile methodologies in the creation of software offer benefits and drawbacks.

Agile approaches assist and create independent, autonomous teams better than waterfall methodologies. It allows employees to take ownership of their job and helps them become a more cohesive whole. Certain individuals, nevertheless, are hesitant to collaborate in a group without a recognized leader. Notwithstanding the guidance of the Scrum Master, the team functions well without them; it is left to them to mentor one another. The team must communicate critical information to one another as well as to the Scrum Master, who must constantly provide data to the team. If a team is capable, communication is more efficient. Agile seldom introduces needless barriers due to the high degree of team engagement and communication; when everyone has embraced the methodology, agile facilitates rapid and simple adjustments that enable greater adaptability.

The agile methodology proved to be the most effective strategy for the SNHU Travel web design project, as seen by the team's quick redesign of the project in response to the Product Manager's request for a change. Many extra features had to be created for the travel website, although not all of them were crucial. The programmer spent the whole sprint working on the stories that represented the features. Since we could receive immediate input on the components that functioned and those that did not, we were able to complete the project before the deadline with the features the customer requested. Whenever a modification was implemented, developers could swiftly add capabilities they hadn't considered because they received input well before the delivery date. A waterfall design would have required particular pieces to be updated, which would have extended the time it took to complete the project. Providing the team with the ability to start modifications right away allowed them to go forward with the work without wasting time on a subpar final result.

**Reference:**

1. The University. (1978). *What is ...* Amazon. Retrieved April 15, 2023, from https://aws.amazon.com/what-is/sdlc/