# **Sprint Review and Retrospective**

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ChadaTech has historically used a waterfall development model throughout its software development practices. This most recent sprint has been a pilot test of shifting the development team to a Scrum-agile methodology, with the hope that this will result in a more efficient development cycle and an improved end product. The main project for this team was the development of an application for SNHU Travel which targeted expanding their client base in addition to providing their customers with new tools. The focus of this paper will be conducting a Sprint Review and Retrospective of the SNHU Travel project, and the Scrum Master’s role in facilitating the Scrum-agile approach. Also, we will analyze the effectiveness of the Scrum-agile approach in supporting the project's completion.

As the Scrum Master for the SNHU Travel project, my primary role was to support the implementation of the agile methodology within the Scrum Team, primarily by facilitating open communication, eliminating slowdowns, and pushing for adoption of agile principles in all facets of the development life cycle. The Product Owner was primarily responsible for assembling user stories and prioritizing those user stories into a product backlog that would serve as a task list for the development team. Also, the Product Owner was a communication liaison with SNHU Travel management. When the project’s requirements changed, the Product Owner fulfilled the role of passing this information to the Scrum Team, and ensuring the product backlog was managed accordingly. Finally, the development team for this project consisted of a developer (who did the work of implementing requested features) and a tester (who created and conducted test cases for the features that the developer implemented). Using the previous example, when the project requirements had changed halfway through its completion, the developer worked to make the requested changes in the application, while working together with the tester to ensure that the test cases covered all the required features.

The Scrum-agile approach was also an effective way to implement SNHU Travel’s user stories in a timely manner. After the Product Owner broke down each of the user stories into the product backlog and broke down their priority, the development team was able to make realistic estimations of what could be reasonably completed within the timeline of a single sprint. As an example, the main feature set that was developed during this sprint was a top destination list for SNHU Travel, to be displayed to the user. This was classified by the Product Owner as a large story which would require more time and work than other features. By ensuring the Scrum Team is not overloading itself with too much work during a sprint, we were able to ensure adherence to agile principles by providing a functional product at the end of the sprint that could be iterated on in the future.

Halfway through the sprint, the Product Owner informed the Scrum Team that after a meeting with SNHU Travel management, they wanted the new booking tool that was being developed to focus on detox and wellness vacations. While the development team was at first afraid of having to throw away all the work they had completed so far, they were assured by the Product Owner that this would not be a complete overhaul. Keeping in line with agile principles, deadlines were to remain the same. To ensure the team was still able to provide a tangible product by the end of the sprint, the Product Owner deprioritized other user stories in the product backlog.

As the Scrum Master, a major priority for ensuring this sprint's success was facilitating open communication between all team members. Once the change in product requirements was made aware to the team, it was clear that given their new workload, the developer and tester would have to work together closely to make the requested changes. While face-to-face communication is the generally preferred method, e-mail provided a fast alternative. The developer first clarified expectations with the product owner, where they requested to know if there were any major features in the product backlog that they could expect to be deprioritized in the immediate future, for the sake of planning for the immediate future. This would allow the Scrum Team to get in the best mindset for completing the current sprint’s goals and knowing what to expect further in the project. Additionally, the developer also corresponded with the tester via e-mail to ensure the specific code that was changed for the newest feature request would meet expectations for planned test cases.

One of the largest contributors to the team’s success during this sprint was the use of an information radiator in tandem with daily stand-up meetings for the Scrum Team. The daily stand-up provided a platform for every member of the team to provide an update with what they were working on and any impediments they were facing, and this provided an opportunity for myself as the Scrum Master or any other member of the team to assist or provide alternative solutions to prevent any hold up. This ties in directly with the use of a Kanban board to keep track of tasks. Not only does the use of this kind of information radiator provide a central location for every team member to view upcoming tasks, but it also provides transparency into the team’s progress, allowing for any bottlenecks or slowdowns to be identified and addressed immediately.

A primary advantage of the Scrum-agile approach was its iterative approach to development. This allowed the team to focus on delivering a functional product for the end of each sprint without being overwhelmed, while still providing constant progress updates to SNHU Travel. Additionally, this incremental approach allows the team enough time to pivot in the event of changing requirements, such as what occurred during this sprint. Despite having to make a major change with multiple team members involved, we could sustain our pace without modifying deadlines. However, the Scrum-agile approach is not without its negatives. Agile can realistically only succeed if every team member buys into the methodology, and more introverted individuals may be hesitant to participate in face-to-face scrum events such as a daily stand-up or may hold the belief that e-mail would be preferred to holding several meetings.

Despite these challenges, I still believe that the Scrum-agile approach was best for the SNHU Travel project. We were still able to end the sprint while providing a functional product to the client that can be further iterated on in future sprints, and this trial run of adopting agile methodologies helped build a sense of camaraderie within the team. The lessons learned during this sprint provide an effective argument for ChadaTech’s adoption of Scrum-agile principles across all of their development teams.