SNHU Travel Sprint Retrospective

Austin J. Palmer

Chada Tech

Abstract

In this paper, I will analyze and show the software development cycle for the development of the SNHU Travel application. Throughout the development of this product our team took an Agile approach and practiced Scrum unlike the typical waterfall procedure of Chada Tech. This Agile approach was categorized by the following phases: Planning, Analysis, Design, Implementation, and Maintenance. This process was chosen to better serve the changing needs of the client, SNHU Travel, by allowing for flexibility, organization, and a higher quality product. Scrum consists of roles, artifacts, and ceremonies which drive the organization and process of Scrum development.

SNHU Travel Sprint Retrospective

# Scrum Roles

Each member part of the Scrum process has a “role” or what they will be responsible for. These roles usually have a concise list of procedures or methods to follow but they also leave a lot of flexibility to adapt as the development cycle continues. The four main roles of Agile Scrum are Scrum Master, Product Owner, Developer, and Quality Assurance Tester. Starting with the Scrum Master, they are responsible for making sure everyone on the Scrum team understands their role and the process of Agile development, enforcing open communication, and improving the efficiency of the Scrum process. The Product Owner is responsible for the management of the product and communicating the needs of the customer with the Scrum team to increase product quality. The developers are responsible for the software development of the product and understanding the technical needs of the software. The QA Tester is responsible for checking the software for any issues and ensuring that it is meeting business requirements. During our development of SNHU Travel, our Scrum Master helped increase efficiency by implementing Scrum events such as daily scrum meetings and sprint planning and by driving the conversation during these meetings. Our Product Owner communicated effectively with SNHU Travel by reviewing new business requirements and stories and adding them to the backlog to be prioritized. Our developers wrote the software involved and used GUI Java tools to develop an effective user interface for listing features. Our QA Testers reviewed the code sent by the developers and ensured that it met the business needs by setting up daily meetings between developers and testers. Overall, each role did a great job at streamlining the development process and following Agile methods to increase efficiency.

## User Stories

User stories are the backbone of the product backlog and must be collected to better understand the workflow of the business. After collecting user stories, the backlog is used to prioritize the stories and categorize them by what must/should be completed during a specific sprint. For the SNHU Travel application, we collected stories from what users wanted to see out of the application. One user suggested that they would like to see more options of cruises. After collecting the story, we developed a value statement to condense the user’s want into one statement. From there, we set a specific acceptance criterion for what the finished function should look like. Agile is useful when gathering a lot of information and filtering so the Scrum team understands what needs to be done.

### Project Completion

Another reason that Agile is so useful when it comes to project management is its adaptability. In waterfall methodology once a phase was completed, you moved to the next step. The problem with this is it does not allow for changes in planning or functionality. When SNHU Travel came to us for their application there was a general schedule made up to keep the project on track, however since in Agile there are multiple sprints anything that wasn’t done in the current sprint could be prioritized for later. This is where prioritization becomes essential as it breaks down the needs of the business by a “high, medium, low” rating. As mentioned in the user stories section, when we collected the requirements from the user wanting a vacation type setting we marked this as low since it was not necessary and there may be a broader feature that could incorporate this, such as a vacation type filter which was also being built as a price filter. By combining these stories, we saved ourselves time and adjusted the project to the new completion.

#### Communication and Tools

Our team’s product owner, Diana, introduced herself and brought some ideas to our scrum team on having frequent meetings that are still short and to the point. I suggested to the group that a messaging application such as Microsoft Teams could help increase our productivity by allowing for easier communication between all roles. This way you didn’t have to wait until the next day about a question you had for the rest of the team. This feature was incorporated as part of our process. Although Agile has a specific set of standard, it allows for a high-level of flexibility to adapt to your teams wants and needs as shown in the above example. Another example of this is with our developer Martin. I suggested that we should implement daily sessions between him and I (the QA Tester) to keep track of our changes and ensure that we are on the right track. We decided that Github would be the tool of choice as it keeps track of all changes and allows for multiple users to work on the same repository.

**Overall Effectiveness**

Our SNHU Travel application was a success and by using an Agile approach we could meet our client’s needs and communicate these needs effectively. Problems still arise in an Agile methodology but overall it is a much better approach unless your team knows exactly what they want and need out of application from the beginning. This only includes a handful of projects so in general Agile is the choice for most companies. Since we needed adaptive features based on user feedback Agile was the right approach for this project.