Chada Tech

SNHU Travel Project: Sprint Review and Retrospective

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CS-250: Software Development Lifecycle

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**Introduction**

In this project, we were in a business environment where we had to manage and adjust to a business transition from the traditional Waterfall model to an Agile methodology. Throughout the course of this project, every role contributed differently to its success. For the purposes of this course, I assumed the role of each of them: Scrum Master, Product Owner, Tester, and Developer in each week. The intent of this review is to analyze roles and the contributions they made, as well as to evaluate how effective the transition to Agile was in the success of this project.

**Applying Roles**

**Scrum Master:**

In this role, I owned the planning, execution, and daily management of the scrum team as the Scrum Master. As we began the transition from Waterfall to Agile, I created an Agile Team Charter that outlined our team’s makeup, goals, rules, and risks associated with the project. This document became the team’s “constitution” that outlined how the team would be comprised and the parameters outlining how the team would operate and with what purpose. In this role, I served as a liaison between the development team and the Product Owner. I also managed the sprint planning based on the guidance given by the Product Owner and once our plan was established, outlined a burn down chart to track our progress. I used this chart to keep the team apprised of the status of the sprint during the daily standup meetings held every morning at the beginning of the day. Additionally, as the Scrum Master, I served the role of mentor and guide to the development team.

**Product Owner:**

In this role, I acted as the liaison between the business and the client as well as the subject matter expert on the product and the customer’s needs. Based on guidance from the client, I developed user stories necessary to outline the goals of the scrum team’s sprint. These user stories were product necessities from the perspective of the customer or end user that helped guide the development of the product to ensure the end product met all of the needs of the customer and end user. In doing this, I outlined acceptance criteria for each user story intended to convey to the scrum team the functionality necessary for the successful implementation of this product. These user stories broke the product down into smaller, more manageable blocks that, when put together, can outline the complete product in a way that is simpler to understand than in a Waterfall model, where planning is not broken down in such a way.

**Tester:**

As a tester, I was a part of the development team, working closely with developers and the Product Owner to ensure functionality criteria were clearly established and met. I generated test cases based on the user stories with assistance from other members of the development team. In one situation, I sought clarification from the Product Owner on some of our test cases to ensure we were working in the right direction to meet the customers wants and needs.

**Developer:**

As the developer, my biggest contribution was developing the code necessary to meet the needs of the customer as outlined to the team by the Product Owner. During the sprint, the Product Owner brought a change that seemed like it might derail our plans late in the game, but I was able to adjust our code to meet the new needs of the customer to focus travel and vacations on detox and wellness. I also worked closely with the tester to ensure I was doing my best to ensure my code would pass any and all test cases they may come up with.

**Completing User Stories**

Using Scrum-Agile versus Waterfall helped to ensure that user stories came to fruition because the nature of the organization changed from one that was strictly hierarchical to one that is flatter that focuses on collaboration. During sprint planning, everyone came together and used tools like planning poker to come up with our best estimated time-to-completion for each user story brought to us by the Product Owner. In a hierarchical format, this planning would have been limited to higher management only and any directives given to the development team may have been less accurate resulting in failure to meet deadlines or downtime and boredom if stories get completed faster than expected.

**Handling Interruptions**

As mentioned in the developer notes, late into our sprint, our Product Owner brought us a change requested by the customer requiring us to modify the product to prioritize showing users wellness and detox vacations and destinations. In a Waterfall environment where the organization works as a large entity, reaction to this would have been slow, but because we worked as a smaller, more agile team, we were able to quickly adapt and flex our plans and execution by working together closely and accomplishing the goal without needing to work through any red tape that would hinder our ability to deliver.

**Communication**

As mentioned in the tester notes, often during our sprint members of our team needed guidance to continue to drive development in the correct direction to meet customer needs. Specifically, we needed to know how the customer wanted the filter tool to function as relating to price range and what filter applies by default when the end user hasn’t applied any changes of their own. During meetings with the team and the Product Owner, the Product Owner was always clear in communicating the needs of the customer as things changed throughout the sprint.

**Organizational Tools**

In our transition to Agile, we had to learn to use new tools to manage the sprint. We specifically used a few tools. Because our teams were small, we were easily able to use information radiators. Azure and Jira were the software we used to promote the sharing of information and ensure clarity by acting as a nexus for all project/sprint related items for the Scrum Team. Using these allowed anyone on the team to update their progress on user stories where anyone can see in real time and communicate with one another both in the office and remotely.

**Evaluating The Agile Process**

**Pros of Agile**

* Smaller Teams
* Simple Communication
* Flexibility /Adaptability
* Clearly Defined Roles

**Cons of Agile**

* Product Owner is single point of failure for communication with customer
* Limited capacity to drive large change
* Decentralized control of project across different Scrum Teams

The Scrum-Agile approach was ideal for this project because the scope of it was narrow enough to be completed by a small team in a short amount of time. Communication with the customer was simple and the end product had clear definitions. By working as a small, agile team, we were able to create plans and adjust to changes quickly to deliver a quality product to the client that met all their requirements.