Chada Tech: Final Sprint Retrospective and Review

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Throughout this course, I learned about Scrum, Agile, and Waterfall, and how each methodology is implemented into a software development project. I will take on the role of Scrum Master in this final project to create a sprint review and deliverable. Throughout this paper, I aim to discuss how the Scrum-Agile approach has assisted in the development process through the application of roles, communication, completing user stories, handling interruptions, and organizational tools. I will also discuss the Agile process as a whole, assessing its effectiveness within the SNHU travel project.

**Applying Roles**

As the SNHU travel project began, the team would be introduced to Scrum and Agile, and we would begin the transition from waterfall, to Scrum/Agile. Throughout the course, I would assume various roles that would include: product owner, Scrum Master, and the development team including testers and developers. Each of these roles played a specific part in ensuring the success of our incremental release.

**Product Owner**

It is the job of the product owner to ensure the value of the product the team is developing has maximized value. This is typically done through managing the product backlog and developing a proper relationship with stakeholders and sponsors of the product. Within the SNHU travel project, the product owner would act on this. In week 2 of the SNHU travel project, the product owner and the scrum team met with the stakeholders to get user stories and requirements. As a result, the product owner was able to refine the product backlog and work closely with the development team to develop user test cases. In week 5 of the SNHU travel project, the stakeholders requested changes to the product, prioritizing detox and wellness destinations over other travel destinations. The product owner had to reprioritize the product backlog so the team could continue to meet deadlines for the stakeholders. The product owner held a meeting with the team, announcing the changes to the project, as well as the changes to the product backlog, and how it would impact the team, and this would ultimately lead to the changes being successfully made within the project.

**Scrum Master**

The Scrum Master is responsible for ensuring Scrum is incorporated within a project, properly, and in a way that is understood by all the team. The scrum master is directly responsible for ensuring the team is adhering to Scrum theory and practices. The Scrum Master might also assist the product owner by holding scrum events and finding techniques to improve product backlog management. Within the SNHU travel team, a scrum meeting was facilitated to better understand the issues the team was facing. As a result, the team was able to get a better understanding of where the team stood in terms of the SNHU travel project in progress.

**Development team**

The development team, consisting of developers and testers, is tasked with the responsibility of developing a product that meets the needs of the client, stakeholders, and business sponsors. When I assumed the role of a tester, I was tasked with creating test cases for the user stories created by the client. I was required to take the user story, and create pass/fail measures for it. Furthermore, when there was more clarification needed for a user story, it was my job as a tester to communicate with the product owner to gain that clarification and apply it to the test cases for the SNHU travel project. When I assumed the role of a developer, in week 3, I developed code to implement the requests of the SNHU travel project clients. However, in week five there were changes made to the requirements for the project, and I would refine this code to reflect the detox and wellness destinations the client requested.

Completing User Stories

User stories are crucial to the success of a project within Agile/Scrum. They allow a way of describing and defining requirements for a project and allow communication to be held during the planning process to ensure the team, and the client are on the same page. During the SNHU travel project, user stories were used to create a description of the functionality the clients and users requested, such as detox/wellness destinations, the ability to filter destinations based on price, and recent travel history, and the ability to filter destinations based on the most popular destinations. This allowed the team to create a product that reflected the client's desires easily. When the client held another meeting and changed some of the user requests, such as focusing on detox/wellness vacations going forward, updating the user stories allowed for quick, simple changes to be made to the project, and ultimately allowed the project to maintain the normal deadline for the product.

Handling Interruptions

During the SNHU travel project, the team handled a change to the requirements of the project, changing the focus from all destinations to detox and wellness vacations. Agile/Scrum projects are expected to run with some level of uncertainty, as seen with the SNHU travel project. Making use of Scrum meetings, the team was able to re-estimate the project and refactor the code to ensure the new constraints were added. Furthermore, using these Scrum meetings allowed the team to replan their sprints to ensure we could complete the project without going over the deadline.

Communication

Effective communication is an extremely important aspect of Agile. Without communication, there isn’t the transparency and openness that is expected within an Agile environment. Communication during the SNHU travel project would come in the form of meetings, emails, and even collaborative meetings with members of my Scrum team as we embraced the changes from waterfall to Agile. During the face-to-face communications, I first participated in a meeting that would allow me to understand user stories and convert them to test cases. I have communicated directly with the product owner, and other testers to gain more clarification on requirements for a particular user story. During our switch from waterfall to Scrum/Agile, I participated in a collaborative discussion surrounding what Agile practices and methodologies would be good to implement in our team going forward. As a result, the team and I concluded that practices such as continuous integration, extreme programming, and concurrent testing would be beneficial to implement for the team. Furthermore, we were able to discuss whether pair programming would have more benefits or constraints to the team, and come to a resolution.

Organizational Tools

During the SNHU travel project, the team and I utilized several tools and principles that ensured the team could deliver a product that was valuable and within the time allotted. These included collaboration and adaptation, user story mapping, and Jira. Collaboration and adaptation allowed the team to quickly and easily make changes to the project to meet the requirements and the deadline for the project. The ability to keep a transparent and open environment about the project allowed us to embrace changes as needed. Furthermore, the use of daily standups allowed the team to quickly catch, and make changes to the product as required by the client. User story mapping also assisted in this process, allowing the team to better prioritize the work needed to bring the SNHU travel project to completion. As a result, the team was able to easily create user test cases, and create a product within a sprint. Jira assisted in agile support, and workflow management, ensuring the team fostered a collaborative environment in line with Agile principles. Furthermore, Jira allowed the team to quickly manage our workload during changes made to the requirements for the project, create a workflow that worked for the team, and allow us to continue to meet deadlines on time.

Evaluating Agile Process

Overall, the Agile/Scrum methodology brought many benefits during the SNHU travel project, but it also had a few constraints. Implementing the Scrum/Agile process allowed us to easily apply changes made to the project with little issue. Furthermore, embracing agile allowed the team to embrace a more collaborative and inclusive approach to completing the project. This environment further allowed us to catch a crucial change that would have impacted the end product if missed. In another process such as Agile, this change would have caused massive errors and more than likely resulted in the project needing to be restarted.

While Agile had many benefits during the SNHU travel project, it also had drawbacks. Agile prioritizes people over processes, and this comes with limited initial requirements, that are ultimately aren’t sufficient enough to develop a product without further collaboration and communication. This was noted during the SNHU travel project, as the team would ultimately have to send out more emails to gain the best understanding of the user stories to create test cases. This caused wasted time and effort, as the constraints and requirements would ultimately change. Furthermore, with Agile, the lack of predictability is another issue. During the SNHU travel project, there was worry that we wouldn’t meet the deadline due to a change made late in the project. This can make it hard to give an accurate estimate of completion, or budget, which can ultimately result in delays due to budget and time constraints. Despite these drawbacks, Agile was a very effective methodology to use during this project. In another project, however, requirements should be understood before fully committing to an agile approach—as an agile process can ultimately yield negative results if used wrong, by wrongly estimating the project on the limited requirements.

References

Charles G. Cobb. (2015). *The Project Manager’s Guide to Mastering Agile : Principles and Practices for an Adaptive Approach*. Wiley.