**Final Project – Sprint Review and Retrospective**

Liel Simon

Southern New Hampshire University

CS 250

Nathan Braun

08/18/2024

SNHU Travel Sprint Review and Retrospective

Just a short five weeks ago we began our transition to an Agile methodology as we started work on the SNHU Travel booking software. Today, with the stakeholders present we will discuss the Sprint Review with the goal of presenting our work and gathering feedback. With Agile being a new dynamic to this project let us first discuss the roles of a Scrum-Agile Team and how each role contributed to the success of the project.

First, we have the Product Owner. The Product Owner plays a key role in keeping the team focused on the overall goal of the project and ensuring priority features are being worked on first. The Product Owner achieves this in several ways. By the Product Owner acting as a bridge to the Stakeholders they are able to determine which features are the most important when it comes to deploying a working model that will satisfy stakeholder requests. The Product Owner does this by defining business needs and customer requirements into the form of user stories that are passed onto the development team to ensure requirements are understood and met. By staying in communication with stakeholders, businesses, and customers’ requirements the Product Owner is able to determine the scope of the project and keep the project focused on the most important aspects and features of the project.

Next, there is the Scrum Master. The Scrum Master plays a vital role as a facilitator, coach, and mentor to the team. A Scrum Master seeks to ensure the rest of the team has everything they need to fulfil their duties. A Scrum Master does this by identifying any needs that team might have that could help them in their roles. They should also remove any impediments that are slowing down the team’s progress or halting progress all together. Another important aspect of the Scrum Master is facilitating scrum events such as this Sprint Review and Retrospective. Other scrum events include the Daily Stand-up where team members will discuss what they worked on yesterday, what they plan to work on today, and what might impede them today or in the future. Team members will also coordinate the product backlog as well as other relevant topics, though the Scrum Master will ensure all discussions stay on topic as the Daily Standup should be short and concise.

The Development Team or Developers are responsible for turning ideas and requests into functional software. In a Scrum-Agile Team, Developers are self-organizing. This means they are given autonomy and freedom when it comes to making decisions on how they will complete their work. They will divide tasks among themselves and collaborate as necessary. This includes increased accountability for their own work and outcomes. The Development Team is cross-functional, meaning that they all must possess the necessary skills to complete individual items on the product backlog. Though some Developers may specialize in certain areas, good and consistent teamwork is the priority.

While Developers must ship working and functional software it is up to the Testers to ensure that attention to any bugs or errors is placed. Testers will work closely with Developers to ensure that testing can begin as soon as possible. Testers will keep a detailed log of any bugs or errors that the Development Team should fix. Depending on the dynamic, Testers often create test cases before the software is written. This process is known as Test Driven Development. The Product Owner and Tester will discuss the acceptance criteria of the project and ensure it behaves as expected.

Lastly, we have the Client or Stakeholders. Though not part of the Scrum team, Clients and Stakeholders play an important role in providing feedback throughout the development process. Clear expectations should be given to the team for how they envision their project. Stakeholders should collaborate often with the Product Owner to ensure that the project is completed as expected.

In the software development lifecycle or SDLC, user stories play an important role in ensuring features, software quality, and the user experience are all completed to the highest degree. With detailed user stories complex features and requests can be broken down and distilled into actionable items. User stories allow important features that might otherwise be missing to be brought to the attention of the team to be added to the backlog or worked on immediately if necessary. This also has the benefit of allowing early intervention of critical features that could have been missed during development. In our experience user stories provided important clarification of some of our most requested features.

During Development of SNHU Travels booking website project goals were shifted. This meant much of what had been previously worked on and completed needed to be revised. While this may have turned into a failure to meet the deadline in a Waterfall environment, in an Agile Methodology environment changes were able to be made accordingly and quickly. Software code and test cases necessitated revision, as well as a reorganization of ideas to fulfil the new requirements.

Through effective communication the deadline was able to be met with working and completed software along with the updated requirements requiring the repurposing of the software for Detox and Wellness vacation packages. Utilizing various Scrum-Agile practices our team was able to stay in constant communication to make this work. Sprint Planning at the beginning of the project is where our scope of the project was defined. Daily Stand-ups kept the team updated on how their fellow team members were doing. User Stories kept us in touch with how users would experience the software. And now our Sprint Review and Retrospective will prepare us for future projects through Stakeholder feedback.

Various organizational tools exist to further increase team efficiency and performance. Project management tools such as Jira allow teams to collaborate, develop, organize, adapt, and remain transparent throughout a project. Visualizing a product backlog has never been easier with Jira or other project management tools. Teams can quickly identify what is being worked on, what has been finished, and what needs to be started. With use of a project management tool the Daily Stand-ups benefit from the increased organization and transparency, making the Daily Stand-up more succinct and effective due to reduced need on the reliance of “The three questions”.

Let us conclude with an evaluation of the Agile process and its application on the SNHU Travel project. The use of the Scrum-Agile process proved highly effective for this project. Team members were kept in constant communication throughout the project. Feedback was able to be provided to the team throughout development along with time to implement the changes. Even large changes to the scope of the project with new requirements were able to be accommodated and achieved thanks to the inherent flexibility of the Scrum-Agile process. While large sweeping changes can often be accommodated in an Agile methodology this does apply added pressure and stress to team members that can lead to burnout and is therefore best to be avoided for the teams overall well being as well as wasting time and resources developing, testing, gathering feedback, and scrapping of features. The Scrum-Agile process also requires a significant amount of time spent in mandatory meetings. While these meetings are essential for overall productivity, efficiency, and project accuracy they are time-consuming and therefore meetings should only be arranged when necessary.