CS250 Final Project: Sprint Review

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CS 250: Software Development Lifecycle

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# Applying Roles

Starting with the Scrum master role the meticulous planning to ensure that the planned user stories were effectively processed and there was clear team communication. The inclusion of a sprint planning meeting on the first day with priority with the product owner verifying the requirements aligned with the client product vision was crucial for effectively directing the team through the scrum ceremonies. “Creating collaboration is an important aspect if we need people to work together” (Rahate, 2024), which wouldn’t be possible without the communication fostered through the role of a scrum master.

The product owner role is “accountable for maximizing the value of the product” (Schwaber, K., & Sutherland, J, 2020), which was evident during the requirements shift during the project to place higher focus on the presentation of rest and relaxation-based vacations. This was a significant requirement change; however, it was effectively communicated to the team that it was necessary. The management of user stories would not be possible without being able to effectively capture the client requirements, which are often vague or ambiguous during initial delivery (*Scrumlity*, 2023, p. 89, para. 2). The product owner also managed expectations for the client for their requested changes.

Under the developer role, it was clear that being capable of questioning the user stories presented by the product owner and the requirements change proved invaluable for determining the direction of the product. Being able to consider different methodologies such as test-driven development offered a way to introduce requirement shifts with a lower risk for introducing regressions during the development cycle. Being able to set boundaries with the product owner was a crucial process to ensuring the sprint velocity wasn’t impacted, yet the project progressed. Providing open communication to the product owner during the requirements shift set clearly and professionally communicated expectations on what the team is expected to accomplish and focus on. “Scrum emphasizes iterative development, where testing is conducted continuously throughout the project lifecycle” (Kumar, Cholli, 2024), which showed that a focus on preventing regressions increased the team velocity.

Finally, the tester role being incrementally revised during the sprint enabled the team to focus on the incremental nature of the Agile development methodology. The dedication to “iterative requirements engineering, where requirements are gathered and refined in small increments throughout the development process” (Barraood, Mohd, Baharom, 2021). Open communication indicated concise changes that needed to be made to meet the new acceptance criteria. Being able to quickly adapt to these changes was pivotal as opposed to the waterfall process of waiting until the code had been complete for the entirety of the project.

# Completing User Stories

User stories provide a clear and concise way for developers to understand the requirements set forth by the clients and product owner. It provides team members an easily interpreted piece of information which includes who wants the function from the system, what is the business logic associated with the system, and why this functionality is needed (Dalpiaz and Brinkkemper, 2021, para. 3). “The user stories benefit the scrum team by reducing the complexity for implementation plans” (Eichenour, 2025a, para. 3), which overall provides simplified requirements specification, development, and testing process. User stories break down the project into isolated and manageable components. The isolation of these components heavily contributes to the adaptability for the Agile framework since the developers and testers can work alongside each other. These stories also provide the benefit of providing a common way for technical and non-technical audiences to grasp the requirements of a project.

# Handling Interruptions

Interruptions in the middle of a sprint, such as a requirement shift as outlined in the scenario presented in CS 250, module 5, provides crucial insight into the flexibility of the Agile framework. With the product owner indicating there is a change the client would like to make, with accompanying contextual information, open communication led to a timely resolution which sets expectations for the parties involved. The product owner makes decisions about what is necessary for the sprint iteration and what can be put off in favor of the higher priority, developers and testers provide feedback on realistic expectations of what can be accomplished, and the scrum master sets the expectation that something will change in priorities to ensure the team continues progression toward the iteration.

# Communication

Communication of varying forms during the sprint aided in effectively progressing the team toward maturity and Agile centric practices. The product owner helped communicate the requirements in their prioritized order by the clients and communicate the priorities of the client in a timely manner. Developers and testers brought items of concern to the attention of the product owner or sought clarifications in a timely manner. Finally, the scrum master effectively facilitated the changes in responsibilities for the team and led meetings as appropriate to address issues of concern. Presented by Eichenour in 2025b and 2025c:

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# Organizational Tools

Utilization of JIRA to create user stories, with planning poker to estimate the stories with story points provided a clear set of guidelines that were easy to order and arrange during the project. Determination of the acceptance criteria provided testers with a method to handle making sure stories were thoroughly tested. The product demo and interview process by the product owner and scrum master enabled effective requirements gathering from end users of the system, as opposed to the client alone.

# Evaluating Agile Process

The utilization of the Agile approach showed the benefits of the approach in the requirements change presented by the client alone; however, team communication overall encouraged through the scrum ceremonies were equally crucial. The willingness of team members to communicate, even if another member may not have wanted to hear it, ensured the features were done to the acceptance criteria. Utilization of the daily stand-up meetings and sprint planning provided some predictability for the changes. The tradeoff of the Agile approach was the overhead introduced by the Scrum ceremonies. For developers and testers specifically the set time interruption may not align with being in a reasonable state to pause, adding additional overhead outside the timeslot of the meeting alone.

In the context of the SNHU Travel project, Agile was the appropriate approach due to the client and end users’ requirements being loosely defined and presenting themselves as volatile in nature. Additionally, the desire for a quick market was best served through the lax requirement of documentation during the development process and constant testing to ensure requirements are being met quickly.

# References

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