**Sprint Review and Retrospective**

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**Applying Roles**

In a Scrum-Agile team, the roles of the Scrum Master, Product Owner, Developers, and Tester each play a vital part in the success of a project. Each role brings unique responsibilities that help ensure the project progresses smoothly.

* **Scrum Master:** As the Scrum Master, you would facilitate key Scrum ceremonies such as Daily Stand-ups, Sprint Planning, and Retrospectives. These types of meetings help keep the team aligned and focused on the sprint goals, while also allowing them to address any blockers early on. For example, if one of the developers encountered a technical problem with integrating a feature for personalized vacation recommendations, we would address the issue in stand-up and adjust the team’s workload to balance it accordingly.
* **Product Owner:** The Product Owner is responsible for representing the client and ensuring that the development team is working on the highest-priority tasks. They prioritize user stories and provide feedback on the completed work. For instance, during the SNHU Travel project, the Product Owner prioritized features such as the price limit filter for vacation packages and the personalized destination lists. By clearly communicating these priorities, the Product Owner helped ensure the team was focused on delivering the features that mattered most to the client.
* **Developers:** The developers on the Scrum team are responsible for implementing the features described in the user stories. They collaborate to break down tasks and share progress during Daily Stand-ups. For example, in the SNHU Travel project, the developers worked together on both the front-end design of the user profile preferences and the back-end logic for generating personalized vacation lists. This collaboration allowed the team to stay on track and complete these features efficiently.
* **Tester:** The Tester plays a crucial role in ensuring that the developed features meet the acceptance criteria and function as expected. Throughout each sprint, the Tester validates the functionality of the application, catching bugs and issues early on. For example, the Tester found that the JAR file was not displaying things correctly. By catching bugs during the sprint, the team was able to fix them before review. The Tester also runs tests to make sure new changes do not break any existing functionality.

**Completing User Stories**

One of the main benefits of using a Scrum-Agile approach is the ability to break down the development process into smaller, manageable increments using user stories. This method ensures that the team can deliver functional parts of the application regularly, allowing for feedback and adjustments throughout the project.

For the SNHU Travel project, one important user story involved creating a top five destination list based on user preferences. By following Agile principles, I was able to create a basic list. After receiving more info from the Product Owner, I refined this feature to allow users to filter destinations based on certain criteria. This incremental development approach helps you continuously improve the product while ensuring it aligns with the client’s needs.

**Handling Interruptions**

Scrum’s flexibility makes it easier to handle project interruptions or changes in direction. During the development of the SNHU Travel project, there were a few situations where adjustments had to be made mid-sprint.

For example, the client decided they wanted to add a wellness and detox travel package feature to the application, which was not part of the initial backlog. By using Scrum principles, I was able to assess the new requirements and adjust the backlog accordingly. This feature was prioritized for next time, which allowed me to complete the current sprint’s goal while planning to address the new feature later. This is a good example of how Agile’s flexibility supports project completion even when unexpected changes arise.

**Communication**

Effective communication is key to the success of any Scrum-Agile project. Scrum ceremonies such as Daily Stand-ups and Sprint Reviews make communication a regular part of the process, ensuring that all team members stay informed and aligned at all times.

Communication within the team plays a key role in making sure that progress remains steady. A specific example comes from a group discussion in which I recommended implementing **“continuous testing throughout the sprints, rather than leaving testing as a separate phase at the end. This practice would allow us to catch bugs early and provide faster feedback, which is crucial in an Agile environment.”**

This suggestion aligned with the Agile focus on iterative improvement and regular feedback.

**Organizational Tools**

The Scrum framework uses specific organizational tools and events to help keep the project on track and improve efficiency. In the SNHU Travel project, these tools helped the team stay organized and aligned with the sprint goals.

Sprint Planning meetings were crucial in defining what tasks would be completed during each sprint. Tools like Jira were used to organize the backlog, assign tasks, and track progress. The burndown chart in Jira allows teams to monitor progress in real-time, which can make it easier to see if the sprint is on track or if more adjustments are needed.

Retrospective meetings provide an opportunity to reflect on what works well and what does not work well during each sprint. For example, during a Retrospective, a team could realize that there had been some miscommunication, which resulted in some duplicate work on a feature. By addressing this in the Retrospective, they would be able to improve communication and ensure that team members collaborated more effectively during the next sprint.

**Evaluating Agile Process**

The Scrum-Agile approach brought several benefits to the SNHU Travel project, but it also presented some challenges.

The main benefit of the Agile process was its flexibility. The iterative nature of Scrum allows you to continuously refine the product based on feedback from the Product Owner, ensuring that the final application meets the client’s needs. The frequent communication and feedback loops help you to stay on track and quickly address any changes or issues.

However, one challenge with Scrum is the need to frequently re-prioritize features based on the Product Owner’s feedback. While Agile is designed to handle changes, this sometimes means that lower-priority features can become delayed, which can be frustrating for a team.

Overall, Agile was the best approach for the SNHU Travel project. The evolving nature of the client’s requirements and the need for rapid feedback made Agile’s flexibility a perfect fit. If instead the waterfall approach had been used, the project would have been way more rigid, and accommodating mid-project changes would have been a nightmare, likely leading to delays.