**Final Project**

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CS-250 Software Development Lifecycle

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1. **Scrum-Agile Roles**

There are three primary roles in a scrum team: the Product Owner, the Scrum Master, and Developers. The Product Owner is responsible for defining and prioritizing the product backlog, ensuring that the team works on the most valuable features first. They act as the voice of the customer and stakeholders, gathering feedback and making decisions on feature requirements. The Scrum Master acts as a facilitator, ensuring the team follows Scrum practices and removing any obstacles that may hinder progress. They help with sprint planning, daily stand-ups, and retrospectives, ensuring the team works efficiently and adheres to Scrum principles. The Development Team consists of cross-functional members who are responsible for delivering the product increment. They work collaboratively to design, develop, test, and deploy features, ensuring that the user stories are completed within each sprint. Altogether, the scrum team ensures that the product gets delivered on time and to specification.

1. **User Stories**

The Scrum approach helps user stories come to completion by breaking them into smaller, manageable tasks within each sprint. During sprint planning, the team selects high-priority user stories from the backlog and creates a plan for achieving them. Daily scrums allow for continuous progress updates and the identification of any obstacles. At the end of the sprint, a review is held to demonstrate completed user stories, ensuring they meet the acceptance criteria. The iterative process allows for regular feedback and adjustments, ensuring that user stories are completed efficiently, and that they are aligned with stakeholder expectations.

1. **Handling Interruptions**

During the sprint review at the end of a given sprint, stakeholders can communicate their new priorities to the scrum team. With that feedback in mind, the Product Owner then adjusts the backlog accordingly. While planning the next sprint, the team can reprioritize tasks in line with the new direction. Since scrum is iterative, even if the direction changes, incremental progress can continue to be made towards any given end goal.

1. **Communication**

Dear [Product Owner Name] and [Tester Name],

I hope this email finds you well. As we move forward with the new development plan, I wanted to outline a few key areas where I need your support to ensure we stay on track and meet our goals for this sprint.

**For the Product Owner:**

1. Could you please clarify the acceptance criteria for the user stories assigned to me in this sprint? Clear definitions will help ensure that the development aligns perfectly with your vision for the feature.
2. Could you confirm the prioritization of tasks in the backlog? This will allow me to allocate my time and resources efficiently.

**For the Tester:**

1. Could you provide the test cases for the stories assigned to me, based on the current acceptance criteria? This will help me test early, catch bugs, and ensure quality as we move forward.
2. It would be greatly appreciated if testing can begin alongside development to allow for early feedback.

Please let me know if you have any questions or need further information. I’d appreciate it if you could provide these details by [Insert Date], so we can continue without delays. I look forward to your prompt response.

Best regards,  
William  
Developer

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Recipient: Product Owner

Subject: User Survey Opt-Ins

Message: Hey {Product Owner’s name}, the user stories are coming along great so far. We’re getting plenty of ideas about what our customers need and want in our service. However, there is a small gap in our stories so far. Multiple of the prospective customers reference their profile but were never asked whether they would be willing to opt-in for up-front surveys regarding their preferences. It would be valuable for your next meeting with them to ask how they feel about the idea, while stressing that any personal information they provide will adhere to all existing data protection laws.

Thanks in advance,

Tester

1. **Organizational Tools**

Scrum organizational tools such as Jira, Trello, and Asana help teams manage the product backlog, track progress, and ensure accountability. These tools provide visual representations of work through boards, lists, and burndown charts, making it easy to track sprint goals and tasks. They enable seamless collaboration by allowing team members to update statuses, assign tasks, and highlight blockers. Scrum tools also facilitate transparency, as stakeholders can easily view progress. While they significantly enhance efficiency and coordination, their effectiveness depends on the team's ability to use them consistently and maintain accurate, up-to-date information.

1. **Evaluating the Agile Process**

For the SNHU Travel project, agile and scrum are acutely beneficial for its development as the scope of such a project is large. There are many facets to travel, many types of trips, vacations, educational retreats, job conferences, each of which must be considered and addressed in the form of user stories. Approaching such a project with the waterfall method would be far too rigid; the project would be unable to account for what users need in a timely manner, which directly threatens the profitability and viability of the service at its most fundamental level. As I previously mentioned, scrum is an iterative process; its direction can change from sprint to sprint, enabling new user stories to be charted and addressed without heavily impacting existing development. As such, it’s the perfect approach for modularizing each need for a large scale project, ensuring that a problem of any complexity can be distilled into simpler manageable chunks.