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CS 250 - Module 7 Assignment

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**Applying Roles**

The Product Owner (PO) was necessary for defining the vision and goals for the SNHU travel website. By working with stakeholders to gather requirements, prioritizing features based on user value, and facilitating sessions to receive direct feedback from customers, the PO accurately gleaned the client’s needs. This led to the identification of features such as sorting travel destinations by price, a personalized deals list, and a top five destinations list.

The development team was responsible for designing and coding the website's features. Collaborating closely as a team and working with the product owner to understand the application requirements allowed the team was able to deliver a functional, high-quality software solution that addressed the client’s needs with minimal bugs. By continuously testing and deploying incremental changes, the team was able to maintain a small amount of lead time.

The Quality Assurance (QA) engineer was responsible for ensuring the quality of the product by testing the developer’s application for bugs and verifying the website functionality aligned with the acceptance criteria. The QA engineer worked with the product owner and developers to create comprehensive test cases covering various scenarios, including unlikely edge cases. Through the testing process, the QA engineer successfully identified critical issues early in the development cycle, allowing developers to address them before they impacted users. This proactive approach helped to deliver a functional software product that addressed the client’s needs.

**Completing User Stories**

For completing the SNHU Travel website, a Scrum-agile approach to the Software Development Lifecyle was used to bring the project to fruition. By receiving clear, direct feedback from clients and stakeholders throughout the process, clear acceptance criteria was created and attached to work items which were continuously assessed to ensure they were properly prioritized. The ongoing process of deploying small to medium-sized changes allowed developers to remain flexible and quickly respond to scope increases, bugs, and reprioritization of work. Scrum events, such as daily stand-ups, helped the product owners, quality assurance engineers and developers remain updated with in-progress work and share any dependencies or roadblocks they were facing.

**Handling Interruptions**

While developing the SNHU travel website, the Scrum-Agile approach proved invaluable when facing interruptions or pivots in priority. Initially focused on creating a “Top five destinations list”, we switched gears to include a “personalized” version of the list as part of our development work based on direct client feedback. The Product Owner re-prioritized the backlog, the development team refined tasks during sprint planning, and the quality assurance team refined the test cases to align with the newly defined acceptance criteria. The Scrum Master focused on communicating the necessity for a pivot to the relevant stakeholders and ensured the team focused on delivering value in an iterative manner within a timely fashion.

**Communication**

Communicating clearly with the product owner helped the development team clearly understand the requirements for various stories and design software solutions centered around the acceptance criteria. Here is a snippet from an email the development team sent the Product Owner asking for clarification regarding a few key features:

*I hope this message finds you well. As we prepare for the upcoming development phase, I am reaching out to request detailed information regarding the new requirements for the SNHU travel project:*

***Product Owner Questions:***

1. *Do we need to re-prioritize our stories for the new requirements or will the current order work?*
2. *Is there a concise, detailed list of what’s expected from a function perspective under the new requirements? If readily available, would you please provide our team with the list?*
3. *With the change in requirements, will there be a change in the expected delivery date of this project?*

**Organizational Tools**

The use of organizational tools coupled with Scrum-Agile principles were crucial for success. Jira facilitated task prioritization and sprint tracking which was extremely helpful during daily stand-ups and sprint reviews. Confluence served as a knowledge base for user stories, bugs, and meeting notes, which proved invaluable during sprint retrospectives. The use of these tools helped provide a visual aid during discussions and facilitate seamless collaboration.

**Evaluating Agile Process**

Use of the Scrum-Agile approach provided several benefits whilst working on the SNHU travel website. Its inherent flexibility allowed seamless adaptation to changing requirements, such as the personalized deals list. Collaboration was improved through daily stand-ups and retrospectives while regular sprint reviews helped quickly address issues and gather stakeholder/client feedback. Iterative delivery of valuable features allowed for easy pivoting and quick updates while retrospectives facilitated continuous process improvement. However, this approach has drawbacks, potential scope creep, time spent on excessive meetings, managing dependencies, and sudden pivots making it difficult to provide precise time and cost estimates for development.

The Scrum-Agile method was a well-suited approach for developing the SNHU Travel website. Its inherent flexibility and emphasis on continuous feedback ensured the team delivered a functional software product which accurately addressed client needs and business goals. The benefits of improved communication, stakeholder involvement, and iterative delivery outweighed the drawbacks, making it the best approach for delivering a high-quality, user-centric website.