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CS 250: Software Development Lifecycle

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CS250 Final Project - Sprint Review and Retrospective

During the CS 250 Software Development Lifecycle course, I took on various roles within a Scrum-Agile team for the SNHU Travel project, an initiative by ChadaTech to develop an innovative travel application. This project was a pilot to help ChadaTech decide if the Agile methodology, specifically Scrum, could be more beneficial than their traditional Waterfall approach. Throughout the project, I had the opportunity to experience and understand the unique contributions each role makes within an Agile team. I also gained firsthand experience with the principles of Agile and the benefits it offers when dealing with changes and interruptions. Reflecting on this project, I will discuss my experiences in the roles of Product Owner, Scrum Master, Developer, and Tester. Additionally, I’ll highlight how Agile helped us complete user stories, manage changing requirements, and leverage effective communication. Lastly, I will evaluate the benefits and challenges of Agile and explain why it was the right approach for this project.

Throughout the project, I switched between the roles of Product Owner, Scrum Master, Developer, and Tester. Each of these roles required a unique approach and offered new insights into Agile practices.

As the Product Owner, my main responsibility was to create and prioritize the product backlog based on user stories. I needed to ensure that the team understood the overall vision and the key objectives of SNHU Travel. For example, one of our primary user stories involved allowing users to view the top travel destinations. I had to prioritize this feature and break it down into specific tasks that the team could tackle. Additionally, I acted as the primary point of contact between the team and the stakeholders, which involved clarifying requirements and managing expectations. This role underscored the importance of clear communication, as I needed to ensure that everyone on the team understood our goals and the stakeholders’ needs.

In the role of Scrum Master, I was responsible for facilitating our daily Scrum meetings. These meetings helped the team stay on track and allowed each member to share what they accomplished the previous day, their plan for the current day, and any obstacles they encountered. By focusing on these three questions, I was able to keep the team engaged and focused on our goals. For instance, when we encountered a roadblock with our code integration, I encouraged team members to discuss potential solutions during our daily meeting. I also assisted in organizing other Scrum events like sprint planning and sprint retrospectives. This role taught me how to guide the team through challenges and ensure that the Scrum framework was properly followed.

As a Developer, I was tasked with creating parts of the code for the SNHU Travel application. I focused on building features based on the requirements set out in our user stories. For example, I worked on implementing the travel destination list feature, where users could view the top five destinations in an interactive format. Working on the code gave me a hands-on perspective on how incremental progress is made within sprints. I also learned how important it is for developers to communicate with the testers to ensure a smooth workflow and timely feedback on the features being developed.

In the role of Tester, I was responsible for testing the various features and functionalities of the application. I created test cases for each feature based on the acceptance criteria in our user stories. For instance, for the travel destination list feature, I tested different elements such as the clickable links and the slideshow navigation. After conducting these tests, I reported any issues to the development team for quick fixes. Being a Tester made me appreciate the importance of quality assurance in Agile and helped me realize how much value testers bring to the overall success of the project.

Working within a Scrum-Agile framework allowed our team to break down the project into manageable user stories. These user stories were essential in guiding the development process and helping us maintain a clear focus on what the users would need from the SNHU Travel application. For instance, one of our primary user stories was “As a user, I want to see the top five travel destinations so that I can choose where to go.” We initially planned to implement this as a simple list, but after receiving feedback, we updated it to an interactive slideshow. This change was possible because Agile allowed us to adapt to new ideas and requirements without causing significant delays. By focusing on user stories, we were able to prioritize the most important features and deliver a product that aligned with the stakeholders’ expectations.

One of the key advantages of Agile is its flexibility in handling changes and interruptions. During the SNHU Travel project, we encountered several shifts in requirements. For instance, halfway through the project, the client requested a change in the format of the destination list. Originally, it was supposed to be a simple list, but they wanted it to be more interactive. Using Agile, we were able to adapt to this change seamlessly. We updated the user stories, adjusted our sprint goals, and reallocated resources to focus on this new priority. This adaptability showed me the benefits of Agile when dealing with evolving project needs. In a Waterfall environment, changes like this could have resulted in significant setbacks, but with Agile, we were able to stay on track and keep our stakeholders satisfied.

Communication played a crucial role in ensuring the project’s success. I made use of emails and our daily Scrum meetings to keep the team updated and aligned. For example, when I needed clarification on a new requirement, I sent a detailed email to the team outlining my questions and suggesting times for a follow-up meeting. By being proactive, I was able to prevent misunderstandings and ensure that everyone was on the same page. In addition, the Scrum meetings provided a platform for open dialogue, where team members could share their progress and discuss any challenges they faced. These meetings not only facilitated effective communication but also fostered a collaborative environment that made it easier to address issues as a team.

We used several organizational tools and Scrum-Agile techniques to streamline our workflow. The primary tool we relied on was JIRA, which allowed us to track our progress on tasks, manage the backlog, and visualize the sprint status. The transparency provided by JIRA helped the team stay organized and ensured that everyone was aware of what needed to be done. Additionally, the Scrum events, such as sprint planning, daily stand-ups, and sprint retrospectives, were instrumental in keeping the team focused and aligned. These events allowed us to continually assess our progress and adjust as needed, ensuring that we remained productive and goal oriented.

Overall, the Agile approach had several benefits for the SNHU Travel project. The flexibility of Agile allowed us to adapt to changes quickly, which was essential when dealing with shifting requirements. Agile also facilitated better communication and collaboration within the team, making it easier to address issues and provide feedback. However, there were some challenges as well. The iterative nature of Agile made it difficult to predict project timelines, and the constant changes sometimes created uncertainty. Despite these challenges, I believe that Agile was the best approach for this project. The benefits of flexibility, teamwork, and adaptability outweighed the drawbacks, and Agile allowed us to deliver a high-quality product that met the client’s needs.

The experience of working on the SNHU Travel project within a Scrum-Agile framework was incredibly valuable. By taking on various roles, I gained a deep understanding of how each role contributes to the overall success of a project. The Agile methodology not only helped us complete user stories effectively but also enabled us to adapt to changes and interruptions. Effective communication and the use of organizational tools like JIRA played a critical role in keeping the team aligned and productive. Reflecting on this project, I am convinced that Agile was the right choice for ChadaTech’s pilot, and I believe that it could offer significant benefits to the company as they consider transitioning from Waterfall to Agile for all development teams.