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CS-250

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Auguest 17, 2024

In this project, we shifted from a traditional waterfall methodology to a Scrum-Agile approach to develop an application for SNHU Travel. This transition aimed to improve the development process's efficiency, flexibility, and teamwork. This retrospective will assess how we performed in key areas, such as team roles, user story completion, handling interruptions, communication effectiveness, organizational tools, and the overall success of the Scrum-Agile approach for this project.

One of the main strengths of Scrum-Agile is its clear role definitions within the team. Each role is vital for the project's success. As the Scrum Master, I guided the team in following Scrum practices and keeping the project on track. For example, during daily stand-ups, I helped identify and address obstacles, allowing the team to focus on delivering user stories. The Product Owner prioritized the backlog and ensured we first developed the most valuable features. Their close work with stakeholders helped align our efforts with the client’s needs. The Development Team, responsible for turning user stories into functional increments, worked together to solve problems and adapt to changing requirements, demonstrating the benefits of cross-functional teams in Agile environments.

Scrum-Agile greatly facilitated the completion of user stories by breaking down the development process into manageable chunks. For instance, integrating a new payment gateway was initially complex due to its technical requirements and potential impact on other system components. By addressing this story within a sprint, the team was able to focus intensively, collaborate closely, and ensure successful implementation. The iterative nature of Scrum allowed us to refine the feature based on ongoing feedback, meeting the client’s expectations without delaying the project’s overall progress.

Handling interruptions and changes is a common part of software development. During the SNHU Travel application project, we encountered an unexpected requirement change when the client requested an additional feature for last-minute travel deals. The Scrum-Agile approach allowed us to quickly reassess priorities and add new features to the backlog without disrupting the project's flow. Sprint planning sessions provided a structured way to integrate this change, ensuring the project could adapt swiftly while still meeting deadlines.

Effective communication was crucial throughout this project, and the Scrum-Agile approach facilitated it well. We maintained clear and open communication throughout the development process, which was crucial for keeping the team aligned and focused. For example, when integrating a third-party API posed unexpected challenges, the team used daily stand-ups and real-time messaging to collaborate on solutions. This ongoing dialogue ensured that everyone was informed of the issues and could contribute to resolving them. The transparency fostered by these communication practices helped overcome technical challenges and strengthened team cohesion.

The use of organizational tools, in conjunction with Scrum-Agile principles, was key to the project's success. Tools like Jira were used to manage the backlog, track progress, and visualize our workflow through sprint boards. These tools helped the team stay organized, prioritize tasks effectively, and spot bottlenecks early. Scrum events, such as sprint planning, daily stand-ups, sprint reviews, and retrospectives, provided a structured yet flexible framework that helped us stay focused and continuously improve. For example, the sprint retrospective was valuable in reflecting on successes and areas for improvement, leading to actionable insights for future sprints.

While the Scrum-Agile approach offered many benefits, such as adaptability and incremental value delivery, it also had challenges, especially during the transition from waterfall. Some team members initially struggled with the shift to a more dynamic and collaborative working style, which required additional coaching and support. Despite these challenges, the Scrum-Agile approach proved to be well-suited for the SNHU Travel project. The ability to adapt quickly to changes and deliver value incrementally were key factors in the project’s success. The positive outcomes suggest that wider adoption of Scrum-Agile at ChadaTech could enhance software development processes across the company.

In Conclusion, the transition to Scrum-Agile for the SNHU Travel application project demonstrated the strengths and adaptability of this approach. The team successfully delivered a product that met the client's needs by clearly defining roles, focusing on user story completion, managing interruptions, fostering communication, and effectively using organizational tools. Although there were challenges in moving from waterfall to Agile, the overall effectiveness of Scrum-Agile in this project indicates it could be a valuable methodology for ChadaTech’s future software development efforts.

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