Over the past two months, we've delved into the Agile approach to software development, exploring its philosophy, roles, timeline, and components. Agile has rapidly gained popularity; according to a 2013 Project Management Institute (PMI) survey, over 88% of organizations were practicing Agile (Cobb, 2015). Given it's now 2024, this adoption rate has likely increased.

This course has deepened our understanding of how various roles contribute to project success within the Agile framework, which consists of four key players. The Product Owner, with a larger role than in traditional waterfall approaches, defines the project's vision and goals, communicates with stakeholders, and prioritizes the product backlog. These duties ensure the team is focused and end-users receive a product that meets their needs. Our experience as Product Owners involved consolidating SNHU customer feedback into user stories and prioritizing them, such as requests for tailored travel results based on preferences and budget.

The Scrum Master facilitates Scrum events like daily stand-ups, sprint planning, reviews, and retrospectives. They protect the Agile process and developers' time, acting as coaches and guides while knowing when to let the team self-organize (Overeem, 2016). By emphasizing Agile principles, they enhance efficiency and continuous improvement. In the SNHU Travel project, I created the team charter, setting expectations for collaboration, adaptation to change, and communication guidelines for sprint planning and backlog refinement.

The Tester in Agile designs product tests to ensure high-quality programming. On the SNHU Travel project, I broke user stories into testable features and used test-driven development to promote robust programming. This involved writing tests that initially failed, then designing code to pass the tests, and refactoring. I also communicated clearly with the Product Owner and developers to refine the product's design and goals.

Developers are indispensable in Agile teams, responsible for coding and building products according to the product backlog. Agile developers are cohesive, collaborative, and self-governing, participating in user story sizing and task ownership during each sprint. They are innovative, motivated, and sustain productivity. Developers contribute by writing high-quality, efficient code, adhering to the Agile principle of "Continuous attention to technical excellence and good design" (Foley, 2024). In the SNHU Travel project, I adapted to changing requirements and collaborated with the Product Owner and Tester to ensure new development was on track.

Throughout the SNHU Travel project, the Agile approach facilitated the completion of user stories through structured, iterative processes. Initially, we created and organized user stories in the product backlog. As Product Owners, we compiled user feedback into a clear document outlining necessary features. During Sprint Planning, we prioritized user stories for the upcoming sprint and, as Testers, broke them down into manageable tasks. We used techniques like Planning Poker for accurate estimations. The iterative sprints encouraged timely completion of user stories and avoided common pitfalls. Sprint reviews and retrospectives allowed early feedback and re-prioritization. Specifically, we adapted to new requirements, such as a user story on Detox/Health travel, ensuring timely and accurate product adjustments.

Agile is designed to handle evolving project goals and interruptions. Developed to address the changing nature of complex projects, Agile emphasizes flexibility and adaptability through short sprints, frequent reviews, and open communication. Daily Scrums and stakeholder feedback are key components. In the SNHU Travel project, when new priorities like Detox/Health travel emerged, I coordinated with the Product Owner and Tester to reassess backlog priorities and adjust our focus accordingly. Specifically we dealt with interruption and changed directions during our SNHU Travel project when the new information was brought by the Product Owner that Detox/Health travel would be a booming sector of travel. As a developer I had to reach out to the Product Owner and tester for additional information about the new priorities. I asked questions like “where does this new requirement fit in our backlog? How much of a priority is it? Are we opting to remove another story to prioritize this one or simply adding it in?”

My ability to communicate with the team was critical for the success of the SNHU Travel project. I collaborated over email with the product owner on several occasions to ask for clarification about user stories and their priorities. At one point the user story conflicted with the information presented in a wireframe. So I was able to clearly ask the product owner, “The previous wireframe omitted the price on the slideshow presentation of travel options–Is this still something we’d like to include in the future or do we prefer to exclude price?” These communications helped to create a product that truly reflected the users’ needs and ultimately built a better product with less rework. Communication in this project also looked like providing deliverables quickly which the stakeholders could provide feedback on. We also communicated effectively as a team during our discussions of what Agile strategies to adopt. In these communications I embodied several of the key characteristics of effective communication like sharing experiences, criticizing ideas, not people and trusting. In general my communications were providing positive feedback about what my team members had done well, such as “you made a great point that the daily scrum really is vital to the success of Agile because there is so much change that the team really needs to be up-front about communication every day.” These communications encouraged collaboration because when we approach others with open-minded and positive communication we build trust in the team.

Our team was ultimately successful with the help of many organizational tools and Agile principles. During the sprint planning, the creation and then maintenance of the product backlog helped organize thoughts about the product into workable pieces. The use of Kanban boards during daily sprints helps create an information radiator which can quickly provide so much important information about the progress of the project. We also used organization tools like Affinity Grouping which helped visually organize information about sizes of tasks.

The Agile framework has revolutionized software development due to its many advantages. It fosters close cooperation with stakeholders, ensuring the final product meets customer needs and achieves high satisfaction. However, it requires a knowledgeable, committed Product Owner. Agile is also sustainable for employees, motivating them through ownership and preventing burnout. While Agile excels in flexibility, it can struggle with long-term planning and forecasting, making it less suitable for projects with fixed requirements. Transitioning to Agile in simpler processes might require extensive training and could reduce productivity. The SNHU Travel team benefits from Agile’s adaptability to changing travel trends and rapid deliverable development, giving them a competitive edge in the market.

References

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