CS 250 Software Development Lifecycle

Final Project: Retrospective

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The Scrum-agile method is centered around a few key ideas and roles. During the length of this course, we filled or interacted with each role and were challenged to use and understand the various ideas/methodologies. The product owner serves as a manager of sorts, they must maintain a constant line of communication with the stakeholders of the project and ensure the ideas and plans of the project get carried out by the development team. The plan they create based on the requirements set by the stakeholders is known as the product backlog, this allows for the product owner to change and manage the priorities of the development at any given moment. The prioritization of work is one of the major responsibilities of the product leader, ensuring timely updates and progress within the project without quality suffering. The product owner was key in the SNHU travel plan because they were able to provide me (the development team) with the requirements from the stakeholders and the feedback from testing and reviews. The scrum master has a hand in all the pots, he helps the product owner determine where the priorities should lie and how to organize the timeline the developers should follow. The scrum master depending on the company can be very hands on or supervise from the shadows. During the SNHU travel plan project the scrum master oversaw planning and executing scrum meetings, sprint timelines and goals and lastly the retrospective. The scrum meetings were useful because they gathered the important members of the project and provided a time and place to speak freely on the topics at hand. The sprint timelines are important to prevent the development team from overcommitting and managing the workflow of the team. The scrum team consists of a variety of individuals, from the product testers to the developers to the analyst and so on. The scrum team is the core of the project, they are the individuals who are responsible for the development of the product. They take the information presented by the product owner and the scrum master and turn it into a completed and functioning project. During the SNHU travel project the scrum team was responsible for creating the code that would run the website and mobile app. Their contribution was vital to the completion of the travel project, without their work and development there is no project. During the scrum meetings in which we conveyed the intentions of the stakeholders and the requirements set, the scrum team was able to voice their questions and concerns to ensure they delivered the highest quality work.

The purpose of SDLC is to be as cost and time efficient as possible, without sacrificing work quality. There are several staple steps in any good SDLC model, planning, design, implementation, testing, deployment, and maintenance. Each step is vital to the completion of a project and to ensuring the project is completed in a timely manner at the highest level of quality. During the SNHU travel project we implemented the software development life cycle in conjunction with the agile-scrum methodology. The two ideas together enforce one another and when blended properly can amplify the positive nature of each respective methodology. The agile-scrum method allowed us to streamline communication between the various project teams. It helped create a clear path to completion of the project, with small teams that are flexible in their work order and well informed enough to determine where the priorities should lie. The SDLC focuses on the code itself and ensuring it is written efficiently and cohesively. The planning stage was used to map out the overall goals of the SNHU travel plan and to determine where to start and aid in the timeline creation. The design stage was completed once the requirement were ironed out between the product owner and the stakeholders, this gave the developers clear orders to follow and guidelines to meet. As part of the development team, I partook in the implementation section. Where we began to write code and create the project we were tasked with. The testing was completed and returned to the product owner and development teams with improvements and changes that were to be made. We then continued to the deployment stage with the new and improved code. This is a key point where the agile-scrum method and SDLC overlap. The agile method provided the testers and stakeholders to clearly communicate their findings and hopeful changes. The developers were then able to voice their questions and concerns and leave the scrum meeting with a clear path towards the deployment stage with code they know will meet the quality inspections and the requirements set by the stakeholders. The next step is maintenance, where the code is continuously tested and probed for bugs and faults, to make sure the users are always presented with the best possible product.

One of the best attributes of an agile approach to project completion is the ability to stop and change the direction of the project at short notice. The agile method focuses on small, organized groups that complete small to medium sized tasks often rather than a single individual tasked to complete one large project over a long period of time. This small group tactic accomplishes a couple things, it makes quick work of projects, which allows for work to always be completed. With the constant completion of work, it creates flexibility to change directions or priorities if the need arises. It also saves the company time and money to fund a small team over a shorter period rather than individuals over long periods. When the testers brought their issues with the program to the developers the small team was able to quickly transition from one project, complete the revisions and then move back onto their original product.

When creating the test cases, we had to communicate with our scrum team to ensure all the new requirements were met and the issues were fixed. The test cases were our form of communication with the product owner and the stakeholders. They allowed me to write out my plans and document the changes I would make clearly for the other team members to see.

In my opinion the user stories were the most effective tool we used in conjunction with the agile-scrum methodology. The user stories were very effective when it came to building the project, they allowed for easy communication between roles such as testers, product owners, and developers. The sprint backlog was also extremely useful. It provides a clear path forward that minimizes rework and cuts out wasted time. The backlogs in association with the project plan and requirements created a smooth well-oiled machine that only needs to focus on coding.

To me the agile-scrum method was extremely successful. It created a great working experience within the project and reduced wasted time, reworking and miscommunications. I believe the ability to communicate transparently with all the major players of the project is such a positive. The small groups create an effective team that can quickly knock out projects which makes everyone feel good to constantly have work completed. The planning and design that comes from the SDLC brings peace of mind, knowing the work you have completed will 9/10 times do not need to be reworked. I think this was the best approach for the SNHU travel project and I can’t think of an instance where this method does not work, I learned so many useful ideas and methods that I will make apart of my work style from here on out.