CS-250 Final Project

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**Background**

The SNHU Travel project was selected as the first development effort at Chada Tech to use the Agile Design Methodology using the Scrum Framework. Many of the people assigned to the project were new to this environment; they were more familiar with the traditional Waterfall Development Model. Setting aggressive and unrealistic goals was therefore not in everyone’s best interest so the team decided to play it safe and commit to something that could be delivered on time even if there were unforeseen issues. This proved to be a good strategy.

Although people sometimes equate the Scrum/Agile Method with some form of organized chaos, that is most certainly not true. An Agile project is planned, just not at the same level of detail that a project that uses the Waterfall method is. Where the Waterfall Method tries to define every aspect of the project up front, with a high level of detail, the Agile method takes an entirely different approach. Rather than trying to plan each and every task, an agile project plan only considers the high-level elements. This is what allows the project to evolve over time rather than being constrained to what was initially thought to be the best solution.

In a project that is managed using the Waterfall Method, drastic changes to the project plan or requirements can cause major problems and result in significant delays. The agile method actually welcomes and encourages changes while a project is in progress. The most formal element of the Agile project plan is the Product Backlog. This is essentially a “to do list” that identifies the project’s requirements, but it is not cast in stone. It evolves over time. This is because unlike the Waterfall Method, which essentially has only one person who is responsible for planning all of the development tasks, every Agile team member contributes to the project plan in some way.

**Sprint Review**

The first Sprint goal for the SNHU Travel Project was to deliver working software that fulfilled the requirements of one of the user stories that were defined at the initial Sprint Planning Meeting. Although three stories were created at the beginning of the project, only one was chosen as a reasonable goal for the first Sprint by consulting with the developers. This information was relayed to the Product Owner who then updated the Product Backlog accordingly. While the work was in progress, on two occasions, the client made requests for what appeared to be a major change in the direction of the project. After careful consideration however, the developers realized that most of the existing code base was still useable so only minor changes were required to satisfy the client. The Product Owner and Tester were then informed of the new plan via email. The team was then able to re-align their goals and deliver working software that met the new requirements without incurring any additional delays.

When the development team for the SNHU Travel Project met for the first time, the Product Owner explained the client’s vision to them. Everyone then engaged in the planning process from defining coding and test requirements to assigning delivery dates and Sprint goals. From the beginning, the plan was to be able to deliver working software as soon as possible. It was not to fulfill every single requirement (User story) that the Client and the Product Owner identified during their initial consultation. This proved to be a good strategy since the Client re-defined some of the project’s requirements after work was in progress.

In the SNHU travel project, the client made two significant changes. First, they changed from using a list format to a slide-show presentation. Then, they decided to change their content entirely: instead of “popular” travel destinations, they wanted to focus on “Detox/wellness” travel locations. This did not cause major delays or extensive duplication of work because the team was prepared to make changes at any time.

To address the first project change, the client actually provided some code. It wasn’t finished but it gave the developers a nice head-start on implementing the changes. The content (pictures) that were used in the exiting code were simply integrated with the new code-base and the Product Tester was able to verify that everything worked properly. Had the client not provided the code, it might have taken a lot longer. This is a good example of cooperation between all of the project stakeholders.

The second change in the project was actually not as difficult to implement as it first appeared to be. Initially, one of the developers thought that all of the code had to be “scrapped” but that proved to be unfounded. A simple solution was discovered by one of the other developers which was explained to the Product Owner and Tester in an email:

“At first it seemed like we would need to re-write a lot of code but I believe I have a solution that won’t require a lot of coding and will only require a minimal amount of time for verification testing. By simply replacing the existing destination pictures and descriptions with new ones that show locations that cater to the new theme we should be able to re-use most of the existing code.”

This was truly an agile response and it put the project back on track and on schedule. If this project was managed using the Waterfall Method, several meetings and changes in documentation would have been required before any coding could resume. This would certainly have caused delays in delivery dates. Clearly the Agile Method was the best choice for the SNHU Travel Project. This is due to the fact that the client didn’t have a well-defined set of requirements when the project began. Using the Agile Method allowed them to define the project dynamically as work progressed.

**Retrospective**

The agile method makes sense for projects like the SNHU Travel Project where the initial goals are not clearly defined or they will change as the product nears completion. It is also well suited to projects that must accommodate changes in technology or target audiences. For example, a long-term development project that interfaces with social media must evolve over time. New social media platforms will become more popular than others as time progresses so catering to only one would not be a good strategy.

Projects that involve new technology that is in a constant state of improvement also need to be able to accommodate changes. It is nearly impossible to predict what will happen over an extended period of time. Catering to or focusing on a single technology may prove to be devastating if it is replaced by something better. For example, focusing on PDAs may have seemed like a good idea in the nineties but PDAs eventually gave way to cell-phones! Although the devices evolved, the interface software had to survive and remain functional.