CS-250

Retrospective - Week 7

Daniel Loranger

The agile-scrum team has now completed 5 weeks of sprints, and each team member has contributed within their individual roles under the umbrella of the Agile and Scrum core practices. While this has been an adaptation for everyone involved, the results show the Agile-Scrum workflow will enable the SNHU-Travel team to better react to changing needs and deliver successful products quickly in the future.

The code developers have assimilated the user stories while also being responsive to updated criteria (Scope change) from the product manager mid development effort based on evolving market research. This came in the form of producing an initial prototype based on the initial inputs of added features without a specific type of trip and without a specific type of presentation requirement. This prototype was produced quickly with the bare-minimum amount of functionality to demonstrate the direction the product would take given the current understandings from the user stories and general directions given.

From this early prototype the testers developed individual test scenarios that would facilitate automated regression testing and enhanced use case testing based on the user stories. These automated regression tests allowed the developers to see in real-time if their code was functional initially for all implemented use cases and also if their updates would cause any regressions in existing functionality as development progresses. These tests are also used to demonstrate the completion of the individual sprint development tasks ensuring the minimum functionality was met, and that a task could be considered completed with deliverable working code.

In the beginning, the product manager took the user interviews and turned them into distilled down user stories that were unique features that would help to buildout the entire customer facing use cases that the developers and testers could use to understand what the customer ultimately desired in simple easy to understand language without requiring extensive traditional requirements to be developed and then translated back into functional code blocks.

With the user stories completed and the working prototype in-hand, the project owner took the sprint output and did further market feedback efforts, and taking those findings, presented a different presentation method (went from roller frame to a slide-show), and also took new information from market research and focused the efforts to be wellness vacations instead of a broader market offering for the initial launch to target a high value niche. All this change still aligning with the overall user stories of being able to quickly show the top 5 options within a single quick search option. Through these quick efforts, the team produced a functional prototype within 2 weeks, which is weeks or months sooner than a traditionally developed waterfall based development efforts where all details and requirements are well defined in advance.

This modified framework caused a disruption in the workings of the development and testing teams’ efforts. Under waterfall workflows, this content and formatting churn would be a very late change that would cause significant throw-away work (extensive development and testing) and replanning would be required to understand what could be kept and what would need retooled. This replanning and redevelopment ultimately would have led to the failure to deliver the right product at the right time leading to a semi-failed project that would be over-budget, over-due, and potentially ineffective to the marketing team as the travel season got underway leading to lost revenue.

By having used the Agile-Scrum model, the changes were however found quickly before significant time and effort were spent, allowing the development team to pivot early and make the necessary adaptations within the schedule allowed time, and ultimately produced a superior product that met the customers’ needs. This aligns with the agile principle of “embrace change” which overall helps to eliminate rework and improves efficiency.

As Scrum Master, I organized daily stand-ups where each team member was able to give a quick daily status, ask for or volunteer help, offer insights on challenges, and engage with some general comradery helping build overall collaboration and trust between all team members. This daily engagement also enabled me to better understand specific challenges at each interval and helped me to manage deliverables as well as organize and support information/support requests from outside the team without disrupting the velocity of the team.

Information presented in the daily stand-ups also provide details I used for information radiators, including the JIRA workflow tools to manage the sprint work assignments, and backlogs, as well as produce real-time burn-down charts and prepare weekly team velocity charts to help summarize the weekly sprint retrospectives successes and challenges in advance to facilitate a more efficient review.

From each week’s sprint, I held a sprint review with prepared summaries to show how the team estimated their workloads and planning to see what they under and over estimated so they could better select appropriately sized tasks in the following sprint sessions. These also allowed detailed updates to the product owner on a regular cadence about where the project was as a whole.

Overall, I believe the Agile/Scrum project was highly successful for a trial development project and demonstrated the face-to-face communication, frequent and timely feedback and delivery cycles, improved risk management, enhanced agility to changing requirements, and overall customer satisfaction.

With the traditional waterfall workflow, all work would be well defined in advance, typically through weeks or months worth of planning every detail in advance, doing detailed work estimates, and assigning fixed resources to each task and load balancing them based on projected velocity where any slip in velocity could ultimately hinder or even stop dependencies from being worked on.

The main challenge encountered in the work-flow is when leadership requested detailed schedules and budgets that could not be well provided as the stories were available and estimated efforts were produced, but the team overall had not deep-dived all the work, had not understood all the risks, and had not determined all the interdependencies that would be required to provide an enhanced schedule and budget traditionally produced early in the waterfall project efforts.

Whether the project is large or small, the use of micro development sprints provide a more adaptable and efficient method of producing small work packages that work to at least a basic framework level. These micro packages encourage a much tighter feedback cycle which ultimately leads to earlier change detection which leads to reduced wasted effort and allows closing specific user stories in each development sprint. This can give immediate value to specific users earlier than having to wait for finished products with all user stories closed before large releases.

Considering all the Pro’s and Con’s, the use of the Agile workflow was an appropriate choice for this SNHU-Travel project as the final deliverables were not well understood in the inception, the schedule was tight not allowing time to start-over for late changes, and would have produced an inferior (incomplete?) product had the waterfall development model have been used.