CS250 Sprint Review and Retrospective

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CS250 Sprint Review and Retrospective

# A. Demonstrate how the various roles on your Scrum-agile Team specifically contributed to the success of the SNHU Travel project.

The personnel in various roles on the Scrum-Agile Team for the SNHU Travel Project all contributed to the success of the the project. The Product Owner, Christy, initially spoke with the clients/stakeholders to find out some specifics for what the stakeholders Nick, Brent, Maria, and Amanda (per the team Charter, and SNHU Travel PowerPoint) would like to see in their product. After gathering their thoughts and opinions, Christy put together the agile team charter with the help of the other members of the team. Finally, Christy developed user stories for each stakeholder’s requests.

After Christy gathered the required information for the development team, the developers on the team (according to the team charter- namely Nicole) promptly began working on the product. Using the provided wireframe, Nicole utilized the user stories provided by Christy to make the appropriate changes to the software in order to meet the stakeholders’ (or “clients”) requirements. Furthermore, Nicole made changes to optimize the code in order to improve the readability and maintainability of the software, along with adding clickable hyperlinks to each of the results displayed. Moreover, Nicole ensured that the correct changes were made to the software to return wellness/detox travel when the demand was suddenly made by the stakeholders (via the Product Owner).

While the developers were doing their work, one of the testers on the team, Brian, developed test cases for the user stories. Brian discovered some possible discrepancies, or at least items needing clarification during the process, and promptly sent an inquiry to the Product Owner, Christy. Brian asked several clarifying questions in order to develop the best possible test cases that he could, in order to ensure quality control, and therefore customer satisfaction.

The Scrum Master, Ron, ensured that the team kept focused on the current sprint when a deviation came about, as directed by Christy, the Product Owner. The stakeholders suddenly decided that they wanted a specific type of vacation (wellness/detox) to appear in the search results, and the developers/testers had some questions. Ron and Christy ensured that the developer and tester involved stayed focused on the task at hand in order to complete the sprint by the pre-ordained deadline. All of the roles in the Agile team kept their focus on what the customer wanted during the entire process, and with that end in mind, they all performed their work. This key concept is what ultimately led to their success.

# B. Describe how a Scrum-agile approach to the SDLC helped each of the user stories come to completion.

The Scrum-Agile approach greatly contributed to the successful realization of each user-story. The user stories helped guide the entire team towards the ultimate goal of delivering the customer’s “dream” product throughout the development process. Each user story effectively gathered objective information from the stakeholders via the Product Owner, such as the customized parameters for each user for instance, and transformed that information into criteria for development. These criteria became acceptance criteria. In the case I just mentioned (customized user parameters), the acceptance criteria provided specific objectives for each user story. In this case it was *“When the user generates a top five list, the list must populate such that results are associated with previous travel parameters.”* This provides the developers and testers a basis for which they can develop software, and test cases. A waterfall approach very well may have failed at generating the same result, which I will discuss quite thoroughly in section C.

# C. Describe how a Scrum-agile approach supported project completion when the project was interrupted and changed direction.

The Scrum-Agile approach greatly enabled change implementation. The agile approach enabled the Product Owner to re-evaluate the stakeholder’s needs in the middle of a sprint, and communicate those needs directly to the development team. Specifically, the stakeholder in this example wanted to change the query result from a list to a slideshow, and change their vacation query results to display wellness/detox vacation packages. Because of the agile approach, the development team was allowed to quickly “shift gears”, and re-work the product in real time to respond to the stakeholder’s request. Furthermore, the tester was able to modify the test cases to fit the new demand placed on the product.

If we took the same scenario, and applied it to an agency using a waterfall approach, let’s say hypothetically the United States Air Force (simply because that’s what I know)- it would surely not have gone the same way. If the stakeholders wanted to make a change in their product, they would first likely have to re-negotiate a contract, unless the item they wanted changed was specifically addressed. After that, the change would have to be approved by a top tier member of the agency, likely a “SPO” (Special Project Officer). The change would then have to be communicated down the chain of command in an official format, perhaps an official memorandum, which would be drafted by the SPO. The memo would then reach the chain of command for the developers, not the developers themselves. Hopefully, at some point, the receiving member in that chain of command would disseminate the change request to the actual developers of the product (speaking in very abstract terms here, we could be speaking of a change to an avionics component for instance, instead of software). Should the change request not be clear, the developer would then have to send a request for clarification back up the chain of command (which would likely involve several more people on the way up than on the way down), and wait for that request to reach the SPO, and then finally the originator/stakeholder. By this point, several weeks have likely passed, simply trying to make a small change to a product that’s already been at least partially paid for, and work is at a stand-still, because the original change wasn’t clear enough, and open lines of communication are not prioritized. At this point, the stakeholder is frustrated, and the developers are frustrated. Perhaps even the SPO is frustrated. The internal workings of the agency, and the focus on the “process” or in this case on the chain of command, are bogging down the main focus- delivering the product the customer wants to the customer in a manner that promotes both expedience and quality.

# D. Demonstrate your ability to communicate effectively with your team by providing samples of your communication.

While the most effective form of communication is often face-to-face conversation, emails, or written communication can often be more useful if the nature of the conversation is such that emotion, or new concepts/ideas aren’t being communicated. Written communication can be very effective for accomplishing specific tasks. Let’s take a grocery list, for example. Let’s say a wife asks her husband to purchase 50 specific items from the grocery store. A face to face/verbal communication of a grocery list on its own will likely yield a very long grocery shopping experience, and will result in a disgruntled husband, frustrated wife, and a hungry family. If the same list is communicated via a written means, say a piece of paper, an email, or a text message, it’s likely that there will be a much better outcome, because there isn’t a significant amount of emotion, or new ideas being communicated. The same can be said generally speaking. Thus, when acting as a developer/tester during the curriculum, had to communicate with the Product Owner to clarify some items, and I needed objective/specific responses. Thus, I sent the following email: (See next two pages)

**Ms. Jane,**

I have reviewed the provided user stories, and I am in the process of developing test cases for each feature requested in the end product to ensure the product meets the customer’s needs. I’m hoping to obtain some clarification on some of the items presented in the user stories so I can make the best of use of the test cases, for the best possible product we can create. To that end- could you please provide some clarification on the following items at your earliest convenience?

**User Story #1:**

* I noticed that the wireframe seems to have a dark blue background with grey lettering, which I find extremely difficult to read. Would the customer prefer a specific color palette that we can aim for, while making the text visible? If so, which colors would they prefer?

**User Story #2:**

* Does the customer want the destinations to follow their travel patterns by including more trips to areas they have been to already, or by doing the opposite, and ensuring they’re traveling to places that they have not been to previously, to avoid repetition of trips? This is important, as some people desire to travel only to see and experience new places, while others tend to return to their favorite spots. Currently, I have set up the test cases such that the program will have the customer returning to places they have already been.
* Given the previous question, does the customer want the option to choose between these two patterns, or shall we always use one of the two I have just outlined?

**User Story #3:**

* If the user has cruises selected, do they wish to have the cruises display first, before other destinations, or do they prefer to have the cruises appear after the “traditional” destination options? I currently have the test cases configured such that cruises are displayed after traditional destinations.
* Does the user wish to see five cruises AND five traditional options, or simply list ONLY cruises? I currently have the test cases configured such that both are displayed, with 5 of each.

A prompt response is appreciated in order to proceed with development in an efficient manner. Thank you!

Respectfully,

-Brad Emerson

(Project continued on beginning of Page 10)

The manner in which the email was written attempts to reflect the Scrum values and Agile Manifesto Principles, such as “Customer collaboration over contract negotiation”, “Working Software over comprehensive documentation”, and “Individuals and interactions over processes and tools”, and “Meeting end users’ needs with early and continuous delivery of work” (Kirvan & Pratt, 2023).

# E. Evaluate the organizational tools and Scrum-agile principles that helped your team be successful.

Several organizational tools were used throughout the development process, along with Scrum-Agile principles. The scrum events can be considered tools for sure, such as sprints, the daily scrum, sprint retrospective, sprint planning, etc. I will be focusing on tools that are a bit more tangible for our purposes. The Agile Team Charter, to begin with, provided the team with a business plan/vision, a mission statement, a roster of team members, a list of possible risks for the project, a list of values/principles/behaviors for the team (basically abstract expectations), and I would argue most importantly criteria for success. Furthermore, the product backlog and user stories were created by the Product Owner, which assisted greatly in prioritizing the team’s goals in an objective manner, for maximum productivity. Moreover, our SNHU Travel testers on the team came up with test cases, listing objective inputs and outputs for each user story, or rather “acceptance criteria”. Finally, the Scrum Format provided the daily scrum meeting with questions that each member should answer daily to move their progress forward and address any roadblocks that they might encounter. All of these tools played a unique role in the development process, and stem from the principle of Agile. I will not simple reiterate all of the 12 Agile principles, but the tools all assist with the first and foremost principle of “Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.” (*Principles Behind the Agile Manifesto*, n.d.). That first principle on the manifesto really lords over the other 11, as it is the founding principle. What I mean by that is that the other 11 principles exist only to serve that end. The first principle is a “what” of sorts, and the others are “how”. All of the tools I have just mentioned in the previous paragraph objectify these principles and bring them to life. Moreover, the tools were designed around the 4 Agile values. “Individuals and interactions over processes and tools” is demonstrated by the importance/emphasis of the daily face-to-face scrum. “Working software over comprehensive documentation” and “Customer collaboration over contract negotiation” were both demonstrated when the project suddenly changed course not once, but twice in the middle of the sprint. The team adapted, however, and immediately adjusted to the new expectations from the stakeholders.

# F. Assess the effectiveness of the Scrum-agile approach for the SNHU Travel project.

## Describe the pros and cons that the Scrum-agile approach presented during the project.

The Scrum-Agile Approach presented several pros and cons during the project. Some of the pros were as follows:

* The entire project was able to come to life rather quickly, without the need for drawing out a specific contract for deliverables that bound the clients and Agile team into a specific set of restrictions. The first prototype/wireframe was developed within just the first few weeks.
* All team members were able to work concurrently. The Project Manager continuously adjusted the product backlog and refining the user stories, all while the developers took the existing user stories and product backlog to begin their work, while the testers did the same to develop test cases, and the scrum master focused on the current sprint deadline.
* The team was able to re-adjust in real time as the demand from the stakeholders changed (from list to slideshow format, and from exotic vacations (for lack of a better descriptor) to wellness/detox vacations without re-working any contracts or cutting through any “red tape”.

While there were pros, there were also cons to the scrum-agile approach while developing the SNHU Travel Project, such as:

* Scrum-Agile focuses on customer interaction, which is not always positive. In our case, the customer did not really have a good idea of what they wanted, and they changed their mind in the middle of a sprint about several aspects of the project. The interactions leading to that change may not have taken place with a traditional waterfall approach.
* There is a very high individual dependency, and thus little documentation was generated, some work was even missed. Our tester Brian for instance, never completed his test cases, or wrote any documentation in the program referring to any of his work.
* The transfer of technology to new team members was challenging due to lack of documentation. As an example, I had to rewrite a fair amount of code, and there were almost no comments throughout said code, which made it very challenging to generate/change. Thankfully a member of management made a helpful video.

## Determine whether or not a Scrum-agile approach was the best approach for the SNHU Travel development project.

I believe that a Scrum-agile approach was the best approach for the SNHU Travel Development project. My reasoning for this is the amount of change that constantly occurs in such an industry. I think of a waterfall approach when delivering a one-time product, such as an offline-able video game that you can simply develop from start to finish, then test it, then release it and be done (of course with some bug fixes and patches down the way). With something like a travel booking platform, I suspect there will always be competition for newer/faster/more efficient ways to search for travel options. Dependencies will often change (such as interfaces with other websites that will constantly be changing as well), creating the demand for maintenance, perhaps even in the middle of development. There are a large number of outside factors that could de-rail development of a travel booking system during development, and that’s not even taking into account the current market, which is extremely volatile, at best. Between rising oil prices (and therefore all petroleum fuel prices), and the retirement of 10 years-worth of pilots over the 2-year period from 2019-2021, airline travel has become much riskier, in more ways than one. That being the case, I believe that a scrum-agile approach provides the necessary flexibility to implement any necessary changes that need to come about rather quickly, without the need to consult a bureaucracy or re-adjust a contract several times, which in our case may result in the project becoming stagnant, and perhaps never even realized in the long run.

References

Kirvan, P., & Pratt, M. K. (2023). Agile manifesto. *CIO*. <https://www.techtarget.com/searchcio/definition/Agile-Manifesto#:~:text=4%20values%20of%20Agile&text=are%20as%20follows%3A-,Individuals%20and%20interactions%20over%20processes%20and%20tools.,over%20following%20a%20project%20plan>.

*Principles behind the Agile Manifesto*. (n.d.). https://agilemanifesto.org/principles.html