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CS 250 Software Development Lifecycle

7-1 Final Project Retrospective

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Final Project Retrospective

There are various roles in the scrum-agile team that have contributed to the success of the SNHU Travel project. Starting from the "Top" of the team, the product owner works closely with the client in creating the product vision. I feel one of the most important qualities the Product Owner should have in good communication skills. As he/she will be responsible for communicating between client, customer and their team in order to ensure the customers needs in the product are met. Constant communication is essential for making sure all requirements for the SNHU Travel product are achieved. It was also important for the Product Owner to prioritize backlog and to develop user stories to best suit customers' need in the final product. Below is an example of a user story the product owner submitted during the SNHU Travel project. First the product owner creates and prioritizes each user story, then creates a catalog for each one that is accessible to the whole team.

SNHU Travel User Story

User Story Number:	2
User Story Name:	Display top 5 destinations
User Story Size:	Medium
User Story Value Statement	Display users top 5 travel destinations based on user perferences and past travel

Acceptance Criteria:	• Ability to click link that takes user to a page displaying top destinations
	• Ordered list of destinations from top destinations according to users preferences and past travel
	• Each destination on the list will have the following attributes shown:
	  • Destination name
	  • Destination short description (one sentence)
	  • Destination picture
	  • Text with embedded link to take user to top-selling travel package for that location

The product Tester takes the information and user stories given to them by the Product Owner and develops pass/fail tests according to that the user stories demand, while keeping the requirements simple the Tester ensures that unwanted functionality. An important aspect in the tester's role in an agile-scrum team is to be involved in the project early on. They develop tests according to user stories and the features that they feel important instead of focusing on testing

according to the project requirements. This is important so no unwanted functionality that the

users do not need make it into the program, this method makes updating any features that need

be later down the road. It's an important detail to remember when comparing agile to waterfall

methods, in waterfall testing is held off until the end of production. In an agile style project,

testing is used from beginning to after the project is over. The tests used to develop the project

can be used to update and develop new features for the program in the future. Below is an

example of one test case from the SNHU Travel project.

SNHU Travel test case

ID:	User Story #2	
Name:	Display top 5 destinations	
Owner:	Tester	
Date:	3/26/2022	
Work Product:	User Story #2 - Display top 5 destinations	
Priority:	Medium	
Pre-Conditions	User on SHNU Travel site	
Test Steps	Inputs	Expected Results
	1. Click link titled "Top 5 Destinations".	Browser opens webpage with the title "Top 5 Destinations".
	2. Scroll up and down webpage to view each of the top 5 destinations.	There are 5 total listings for the top destinations.
	3. Verify the destinations are in an ordered list from 1 to 5.	The order should show the top destination in spot #1 and accordingly through spot #5.
	4. Verify that each destination listing has the required components.	Each listing contains a picture, a short description, and a link to the top travel-package-deal booking.

As we found out during our project, much of the time details change in the process of

development. The above test case needed to be changed soon after it was made, the product

owner notified the team the customer wanted to focus their clients to more Detox/Wellness

vacations. Additional changes were needed on the development side and new test cases were

written, below is an example of the revised SNHU Travel test cases.

SNHU Travel updated test case

ID:	User Story #2	
Name:	Display top 5 destinations	
Owner:	Tester	
Date:	3/26/2022	
Work Product:	User Story #2 - Display top 5 destinations	
Priority:	Medium	
Pre-Conditions	User on SHNU Travel site	
Test Steps	Inputs	Expected Results
	1. Click link titled "Top 5 Destinations".	Browser opens webpage with the title "Top 5 Destinations".
	2. Scroll up and down webpage to view each of the top 5 destinations.	There are 5 total listings for the top destinations.
	3. Verify the destinations are in an ordered list from 1 to 5.	The order should show the top destination in spot #1 and accordingly through spot #5.
	4. Verify that each destination listing has the required components.	Each listing contains a picture, a short one line description and price of vacation package
	5. Verify every slide is working correctly displaying images, title etc.	Displays all images, links and input menus correctly
	6. Click on Price Ranage	Input menu is displayed to set price max/min

I learned during this course that communication is huge agile, the only real way to be productive is to be in constant contact and updated. During the SNHU Travel project emails were used heavily to communicate between team members, specifically product owner and tester to ensure these cases were correct.

The first role we learned about early in the course was the role of scrum master. And when compared to the traditional role of team management the scrum master can be compared in a sense of where they stand in the team, but the scrum master takes on a very different role. The team leader in a waterfall environment checks to make sure the team is working and on their assigned tasks. In agile, the scrum master's role is to essentially be a mentor to his team, and to make sure they have everything they need to be successful. So instead of a scrum master making sure the team is there and on task, in agile the scrum master is there to make sure the team has everything they need to accomplish and provide insight when the situation arises. Another important role of the scrum master is facilitating the various team meeting associated with the scrum framework. One tool I've learned about during this project was the use of a daily stand

up. It's a simple and I think super effective thing that can make all our workdays much better.

Once a day the entire team stands up for a 15 min meeting and all address the following.

- What did I do yesterday

- What do I plan to do today

- What impends me

It's important during these meetings that the scrum master is there to facilitate the meeting. This way all team members have time to address their issues, and extra time can be given later to conversations not pertaining to the entire team. During the daily stand-up meeting is a good time to utilize another great tool used in agile-scrum the use of the kaban board is a great visual tool to keep the team on task and on track with each other. It's important to note that neither the daily stand-up or kaban board are used as regular tools in the waterfall methodology.

The scrum master works closely with the development team making sure sprints are effective and on time and with the product owner with the planning on upcoming backlog and due dates, making sure the customers needs are being met. The last role of developer is part of the team doing the actual development and implementation of everything the project is supposed to be. I think it's important when developing in a project like this to keep all code neat and readable, the best way to go back and update code is for the code to be organized to begin with. This also makes it easier for small features of programs to be updated easily during the project as we saw earlier in the project when the customer wanted to focus on Detox/Wellness vacations. The person in the developer role along with all other roles of an agile based project, need to have excellent communication skills and make themselves available to others when the time arises. Since the best way to develop is through the use of face-to-face user stories it's important for

there to be clear line of communication between the developer an product owner since he/she has constant direct face to face interactions with the customer and users.

Another method that was touch on in the course was the Pizza practice, how your team should be limited to an amount of people capable of eating so much pizza. Limiting team size and breaking projects into smaller chunks as amazon does it another agile tool. The pizza practice enables amazon to keep a more maintainable user interface that has the capability of updating major feature quickly.

When considering the waterfall methodology to agile methodology it's important to keep in mind what project it will be applied to. For the SNHU Travel project it was the perfect option because of its flexibility. The waterfall method is not bad by not being the better choice either, waterfall follows a much more rigid framework. Where change anywhere down the line of production can cause major changes in the entire production process. Waterfall is a good method for an industry where producing the fastest is profitable, like factories and the food industry. Agile is a far superior method when the project will need to overcome change and will need to be updated in the future to accommodate new user need and trends. But in keeping with an agile mindset, it's important that even though you may be using agile but it's ok to adopt some waterfall concepts that can benefit your project.

References

Cobb, C. G. (2015). The Project Manager's Guide to Mastering Agile: Principles and practices for an adaptive approach. John Wiley & Sons.