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SNHU – CS 250

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**7-1 Final Project**

Directions

**Sprint Review and Retrospective**At the end of a sprint or incremental release, the Scrum Master arranges a Sprint Review and Retrospective. For this deliverable, you will take on the role of the Scrum Master and create a Sprint Review and Retrospective to summarize, analyze, and draw conclusions on the work you completed during the development. In your paper, address each of the following:

The transition from a traditional Waterfall development model to Scrum-Agile approach has been an important shift for ChadaTech. As part of this process, the team develop an application for SNHU Travel using The Scrum-Agile methodology. This Sprint Review and Retrospective will analyze our development process, highlight successes and challenges, and assess whether the Scrum-Agile approach was beneficial for this project.

* **Applying Roles**: Demonstrate how the various roles on your Scrum-Agile Team specifically contributed to the success of a project. Use specific examples from your experiences.

In transitioning to a Scrum-Agile methodology, the team adopted specific roles that were essential to ensuring smooth execution of the SNHU Travel application. Each role played a distinct function in guiding the project from initial conception delivery, with continuous feedback loops to refine and improve the product.

* I, Scrum Master, served as the team’s Agile coach, ensuring adherence to Scrum principles while removing obstacles that could impede progress. Key responsibilities included facilitating Scrum events, removing roadblocks, promoting Agile best practices, and fostering team communication.
* Product Owner played a crucial role in defining and prioritizing the product backlog based on business goals and user needs. Key responsibilities included defining User stories, prioritizing the backlog, gathering stakeholder feedback, and making critical decisions. For example, Stakeholder wanted to change the SNHU Top five destination to Top 5 detox and wellness destination.
* Development Team was responsible for the actual implementation of the SNHU Travel application, working in iterative cycles to deliver functional increments. This team included the Frontend Developers, they built the user interface, ensuring a smooth and engaging experience across web and mobile platforms. The Backend Developers developed and optimized server-side logic, including database management and API integration. Quality Assurance Engineers conducted testing throughout the sprint to identify and resolve bugs early in the process. UI/UX Designers designed wireframes and interactive prototypes to enhance usability based on user feedback. For example, changing the backlog from Top 5 destination and Top 5 detox and wellness. And including User request from Product Owner.

The well-defined roles within the Scrum-Agile team enabled efficient collaboration, adaptability, and incremental progress. I ensured smooth communication and removed obstacles, the Product Owner aligned the project with business needs, and the Development Team implanted features in an iterative, user-focused manner. This structured approach allowed SNHU Travel’s application to be developed efficiently while responding to real-time feedback, proving the value of transitioning to Scrum-Agile.

* **Completing User Stories**: Describe how a Scrum-Agile approach to the software development life cycle (SDLC) helped user stories come to completion. Use specific examples from your experiences.

In Scrum-Agile, user stories are central to the development process. They define small, actionable requirements from an end-user perspective and guide the development team in creating features that enhance the user experience. The Software Development Life Cycle is Agile breaks down into multiple iterative sprints, allowing for incremental progress and continuous feedback. I thought about using EPIC, since it “serves the purpose of associating related individual user stories with higher-level purpose that are collectively intended to fulfill” (Wiley, 2015).

For the SNHU Travel project, each user story followed a structured approach to ensure timely and efficient completion. During the Sprint Planning session, the Product Owner collaborated with stakeholders to define user stories based on business goals and customer needs. Each user story followed the standard Scrum format.

* Example: As a traveler, “I’d like to be able to set a price limit, see the top destinations, based on price, or have hot deals listed based on my profile (SNHU video)”

Acceptance criteria were also defined, ensuring that the development team understood the requirements for completion. Once sprints goals were set, developers selected user stories from the backlog and began working on them in the sprint. The team followed an incremental development approach, breaking larger stories into smaller tasks from the front end, backend, and database. I monitored progress in JIRA, ensuring that tasks moved smoothly. After updating the backlog, the tester validated each user’s stories before it was marked as completed. At the end of each sprint, completed user stories were demonstrated during Sprint Reviews, where stakeholders provided feedback.

The Scrum-Agile approach proved to be an effective method for managing and completing user stories in the SNHU Travel project. By breaking tasks into smaller increments, integrating testing into every sprint, and maintaining continuous communication, the team was able to deliver high-quality features that met user expectations.

Unlike the traditional Waterfall model, where testing and feedback occur late in development, Scrum-Agile allowed the team to iterate and improve user stories in real time, ensuring that the final product was both functional and user-friendly.

* **Handling Interruptions**: Describe how a Scrum-Agile approach supported project completion when the project was interrupted and changed direction. Use specific examples from your experiences.

The Scrum-Agile approach allowed the SNHU Travel team to effectively handle project interruptions by fostering adaptability, clear communication, and rapid decision-making. Unlike traditional models, where delays could halt progress, Scrum’s flexibility ensured that work continued in other areas while addressing challenges in real time.

In tradition Waterfall development , project interruptions or changes in direction can significantly delay progress, requiring extensive rework and approval processes. However, the Scrum-Agile approach allowed my team to efficiently adapt to interruptions without compromising project deadlines. This flexibility was crucial in keeping the SNHU Travel project on track despite unexpected challenges.

For example, one major interruption occurred when stakeholders requested changes from Top 5 destination to Top 5 detox and wellness destination within a short notice. Luckily, this feature was part of the initial backlog and was easy to make changes. Instead of halting development, as the Scrum Master, I facilitated an emergency backlog refinement meeting to assess the impact. The Product Owner reprioritized the backlog, temporarily deferring a lower-priority feature to accommodate the changes. The Development Team collaborated on a minimal viable product version on the slideshow, ensuring that a basic functional feature could be delivered for the next sprint and enhancements planned for future sprints.

By leveraging Agile principles, the team successfully managed to change requirements, technical roadblocks, stakeholder feedback, and team capacity fluctuations, all while maintaining an efficient development cycle. This experience demonstrated how Scrum-Agile is particularly well-suited for dynamic, fast-moving projects like SNHU travel.

* **Communication**: Demonstrate your ability to communicate effectively with your team by providing samples of your communication. Explain why your examples were effective in their context and how they encouraged collaboration among team members.

Clear and consistent communication is a cornerstone of the Scrum-Agile approach. Throughout the SNHU Travel project, our team employed multiple communication strategies to ensure alignment challenges efficiently. These strategies included structured meetings, real-time messaging, and documentation tools.

1. Daily Stand-Up Meetings

Example: Each morning, our team held a 15-minute stand-up meeting where every member provided a brief update using the three-question format.

* What did you accomplish yesterday?
* What are you working on today?
* Are there any blockers preventing progress?

Daily Stand-Up effectiveness ensured visibility of progress, helping the team stay aligned. It allowed early identification of obstacles so they could be addressed promptly. And it encouraged accountability, as each member shared their responsibilities and progress.

With great communication, it encouraged collaboration. Developers and testers were able to coordinate testing timelines more effectively. If a team member were struggling with a task, others could help immediately rather than waiting for formal reviews. It also created an environment where continuous improvement was prioritized.

1. Sprint Planning and Review Meeting

Example: During Sprint Planning sessions, the Product Owner outlined the priorities, and the Development Team broke down complex tasks into manageable user stories. Each task was assigned based on expertise and availability.

In Sprint Review meetings, we conducted live demonstrations of completed features, gathering feedback from stakeholders before moving to the next phase. This effectiveness allowed team members to align their efforts with business goals and user needs. It improved transparency, ensuring no one was working in isolation. And it provided real-time feedback, reducing rework later in the project.

Sprint Review helps encourage collaboration by having open discussions to allow the team to brainstorm solutions for potential technical challenges. Developers, designers, and testers worked together to refine features based on stakeholder input. This help Stakeholder feel more engaged in the process, which increase their trust in the Agile approach.

To obtain the missing details, I would directly communicate with the Product Owner by sending a clarification email, outlining specific questions regarding each User story. This ensures that I receive precise answers tailored to the test cases I am developing. Additionally, I could request a follow-up meeting to discuss any ambiguities further and ask for supporting documentation such as wireframes or workflow diagrams. If needed, collaborating with developers or business analysts could also help filling in any technical gaps.

**Sample:**

To: Christy

Subject: User Story Clarifications

Dear Christy,

I have reviewed the User stories and am in the process of developing test cases to ensure the functionality aligns with expectations. However, I need additional details to define the test scenarios more accurately. Could you clarify the following?

User Story One

* Should the “Top 10” trips be displayed all on one page, or should they appear separately in a slideshow format with images and descriptions?
* Should the list count down from 10 to 1, or start with #1 at the top?
* Will the “Top 10” list be specific to a type of vacation, or will it include all vacation packages ranked by popularity?

User Story Two

* What column header should be included for this option? (Trip name, location, price, description, etc.)
* Are Users going to input the price range, or are we going to have some type of adjustable price range bar for them to use?
* How detailed should the trip descriptions be?

User Story Three

* Regarding the mobile app functionality, do you envision it including all desktop features, or should certain functionality be limited?
* I need a sample wireframe for the Mobile App you envision.
* Can you have the Epic broken down into smaller components?

Your input will help ensure the test cases align with the intended functionality. Let me know if we should set up a meeting to discuss it further.

Thanks,

Vimon.

By implementing these communication strategies, the team was able to maintain agility, respond quickly to changes, and deliver a high-quality application that met stakeholder expectations. The lessons learned from this experience demonstrate the effective communication is at the core of any successful Scrum-Agile implementation.

* **Organizational Tools**: Evaluate the organizational tools and Scrum-Agile principles that helped your team be successful. Reference the Scrum events in relation to the effectiveness of the tools.

Effective use of organizational tools and Scrum-Agile principles was crucial in maintaining efficiency, tracking progress, and fostering collaboration throughout the SNHU travel project. These tools helped streamline the Scrum framework, ensuring that key agile events such as Sprint Planning, Daily Stand-ups, Sprint Reviews and Retrospectives were conducted efficiently.

One crucial tool we used was JIRA. It keeps tracks of user stories, sprint progress, and backlog management. It provides a structured way to organize work and prioritize tasks, making it easier for the team to stay focused on key deliverables. “Jira is used by a large number of clients and users globally for project, time, requirements, task, bug, change, code, test, release, sprint management (Wikipedia, 2025).”

How it was used:

* The Product Owner maintained the product backlog in JIRA, where user stories were prioritized.
* During Sprint Planning, the Scrum Master and the Development Team broke down tasks and assigned them based on priority and capacity.
* JIRA’s Kanban board tracked sprint progress, visually displaying the movement of tasks from To Do, to In Progress, to In Review, to Done.
* The team updated JIRA during Daily Stand-ups to reflect real-time task status and address blockers.

The effectiveness of JIRA increased transparency, improved accountability, and enhanced Sprint Reviews. Everyone had visibility into ongoing work, helping prevent bottlenecks. Developers owned tasks and provided updates, ensuring progress was continuously tracked. The Scrum Master used JIRA to present completed user stories during Sprint Reviews, making it easier to show progress to stakeholders. The tools effectively kept the team aligned and allowed seamless backlog refinement.

The success of the SNHU Travel project can be attributed to the strategic use of organizational tools aligned with Scrum events. These tools enhanced team collaboration, streamlined workflows, and provided visibility into project progress, proving essential in achieving Agile development goals.

By leveraging JIRA for sprint tracking, the team effectively navigated challenges and continuously improved. These tools ensured that Scrum-Agile principles were implemented effectively, making the development process both structured and flexible.

* **Evaluating Agile Process**: Assess the effectiveness of the Scrum-Agile approach for a specific project. Address each of the following:
  + Describe the pros and cons that the Scrum-Agile approach presented during the SNHU Travel project.
  + Determine whether or not a Scrum-Agile approach was the best approach for the SNHU Travel development project.

The Scrum-Agile approach was adopted for the SNHU Travel development project to enable incremental development, flexibility, and continuous feedback. This evaluation assesses the effectiveness of this methodology by analyzing its advantages and challenges and determining whether it was the best fit for the project.

Pros and Cons of the Scrum-Agile Approach:

Pros:

* Flexibility and Adaptability to changing requirements. Unlike the traditional Waterfall approach, Scrum-Agile allowed the team to pivot quickly based on stakeholder feedback.
* Incremental delivery and faster feedback loops. The team delivered working features at the end of each sprint, allowing stakeholders to test and provide feedback early.
* Improved team collaboration and communication. Daily Stand-Ups, Sprint Reviews, and Retrospectives helped the team stay aligned and address challenges early.
* Faster problem-solving and risk reduction. Issues such as API integration failures were identified early in development instead of causing major setbacks.
* Higher Stakeholder engagement. The Scrum Review Meeting provided stakeholders with regular updates, making them feel involved in shaping the final product.

Cons:

* Frequent changes required quick adaptation. While flexibility was an advantage, constant changes sometimes disrupted sprint goals.
* Learning curves for new team members. Some team members were new to Agile methodology, requiring additional onboarding and training.
* Time-intensive Scrum meeting. While meetings improved communication, they also consumed significant time during sprints.
* Resource constraints and role overlap. The team was small, meaning some members had to take on multiple roles.
* Difficulty in estimating task completion. Agile relies on estimating user stories using story points, which was challenging for less experienced team members.

I do believe Scrum-Agile was the best approach for this project, despite its challenges. The project required continuous User feedback. Since SNHU Travel aimed to create an intuitive, user-friendly application, early feedback was essential. Scrum-Agile enables frequent testing and adjustments based on real-world user interactions. Unlike fixed-scope projects, SNHU Travel’s development required adjustments to new market demands and user preferences. Waterfall’s rigid structure would not have accommodated such dynamic changes as efficiently.

Despite some challenges, Scrum-Agile provided the necessary structure, flexibility, and collaboration to develop the SNHU Travel application successfully. The pros outweighed the cons, and the methodology ensured that the final product was well-tested, user-friendly, and aligned with business goals.

While Scrum-Agile was effective, a few refinements could enhance efficiency in future projects. Keeping Sprint Planning and Reviews within set time limits would improve productivity. A pre-sprint Agile workshop could help new team members adapt faster. Ensuring enough testers per sprint would reduce bottlenecks in deployment. Using historical data from past sprints could help improve task estimations.

By implementing these refinements, future Scrum-Agile projects at ChadaTech could run more efficiently, maximizing the benefits of Agile development.

References:

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SHNU media, Module Three: Product Owner and User Focus Group, Software Development Lifecycle

<https://snhu-media.snhu.edu/files/course_repository/undergraduate/cs/cs250/storyline/mod3/story_html5.html>