



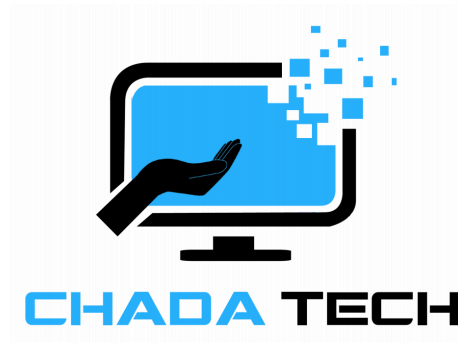
CS 250 Final Project Guidelines and Rubric

Competency

In this project, you will demonstrate your mastery of the following competencies:

- Explain the different methodologies and stages involved in the software development life cycle
- Apply the stages of the software development life cycle within an agile development environment
- Evaluate various software development methodologies and tools

Scenario



You work for ChadaTech, a company that specializes in custom software design and development for both domestic and international clients. For many years, the company has been developing its software using a waterfall development model. ChadaTech is considering transitioning all of its development teams to an Agile methodology using the Scrum framework. This move is expected to improve its products and build a more cohesive corporate culture. However, ChadaTech has decided to pilot this process with your team before the entire organization makes the shift.

Your team has been tasked to develop an application for SNHU Travel, a travel agency seeking to use innovative tools to expand its client base. Your team will adopt a Scrum-Agile approach to developing the application. ChadaTech has also asked you to lead a final Sprint Review and Retrospective of the development with your team. This will help your team think through the work that they completed and how the new Scrum-Agile approach has helped in the development process. Finally, you have been asked to present the lessons learned to the broader company to help them decide about shifting all development teams to a Scrum-Agile approach.

Important Note: You will not be working with an actual team for this project. Instead, during each week of the course, you will take on a different role on the team and produce artifacts related to those roles as you progress through the phases of the software development life cycle (SDLC). You will reflect on the work you did throughout the course during your Sprint Review and Retrospective.

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:

- **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.
- **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.
- **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.
- **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.
- **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.
- **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.

Agile Presentation

Finally, you have been asked to put together a PowerPoint presentation for the leadership at your company. You will start by explaining the key facets of the Scrum-Agile approach. You will also contrast the waterfall and Agile development approaches to help your leadership make an informed decision. **You must use properly cited sources to support your points.** In your presentation, Address each of the following points:

- **Explaining Agile Roles:** Explain the various roles on a Scrum-Agile Team by identifying each role and describing its importance.
- **Explaining Agile Phases:** Explain how the various phases of the SDLC work in an Agile approach. Identify each phase and describe its importance.
- **Describing Waterfall Model:** Describe how the process would have been different in a waterfall development approach rather than the Agile approach you used. For instance, you might discuss how a particular problem in development would have proceeded differently.
- **Waterfall or Agile Approach:** Explain the factors to consider when choosing a waterfall or Agile approach, using your course experience to back up your explanation.

What to Submit

To complete this project, you must submit the following:

Sprint Review and Retrospective

Your retrospective should be a 3- to 4-page Microsoft Word document with double spacing, 12-point Times New Roman font, and APA formatting. Address all prompts. You are not required to use sources for the retrospective; however, any sources that you do use must be cited according to APA style.

Agile Presentation

Your Agile presentation should be a PowerPoint of at least 5 slides in length, including a references slide. Address all prompts. Support your work with a minimum of four academic or professional sources published within the last five years (peer-reviewed journals, books, technical reports, government publications, expert industry sites, and so on). All sources used should be cited according to APA style.

Final Project Rubric

Criteria	Exceeds Expectations (100%)	Meets Expectations (85%)	Partially Meets Expectations (55%)	Does Not Meet Expectations (0%)	Value
Review and Retrospective: Applying Roles	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Demonstrates how the various roles of a Scrum-Agile Team specifically contributed to the success of a project	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include describing all roles on a team or how they impacted project success	Does not attempt criterion	10
Review and Retrospective: Completing User Stories	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Describes how a Scrum-Agile approach to the software development life cycle (SDLC) helped user stories come to completion	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include description of Scrum-Agile approach to the SDLC or discussion of how user stories came to completion	Does not attempt criterion	5
Review and Retrospective: Handling Interruptions	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Describes how a Scrum-Agile approach supported project completion when the project was interrupted and changed direction	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include description of how the Scrum-Agile approach applied to the change in direction	Does not attempt criterion	5

Criteria	Exceeds Expectations (100%)	Meets Expectations (85%)	Partially Meets Expectations (55%)	Does Not Meet Expectations (0%)	Value
Review and Retrospective: Communication	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Demonstrates ability to communicate effectively with team by providing samples of communication	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include inclusion of relevant samples of communication	Does not attempt criterion	10
Review and Retrospective : Organizational Tools	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Evaluates the organizational tools and Scrum-Agile principles that helped the team be successful, referencing the Scrum events	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include evaluation of organizational tools and Scrum-Agile principles or references to Scrum events	Does not attempt criterion	10
Review and Retrospective: Evaluating Agile Process	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Assesses the effectiveness of the Scrum-Agile approach for a specific project	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include discussing pros and cons of the Scrum-Agile approach presented or determining whether or not the Scrum-Agile approach was the best for a specific project	Does not attempt criterion	10
Presentation: Explaining Agile Roles	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Explains the various roles on a Scrum-Agile Team by identifying each role and describing its importance	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include clear identifications of each role on a Scrum-Agile Team or descriptions of their importance	Does not attempt criterion	10

Criteria	Exceeds Expectations (100%)	Meets Expectations (85%)	Partially Meets Expectations (55%)	Does Not Meet Expectations (0%)	Value
Presentation: Explaining Agile Phases	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Explains how the various phases of the SDLC work in an Agile approach	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include explanation of how the phases of the SDLC work in an Agile approach	Does not attempt criterion	10
Presentation: Describing Waterfall Model	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Describes how the process would have been different in a waterfall development approach	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include description of how a waterfall development approach would have impacted the project	Does not attempt criterion	10
Presentation: Waterfall or Agile	Exceeds expectations in an exceptionally clear, insightful, sophisticated, or creative manner	Explains the factors to consider when choosing a waterfall or Agile approach	Shows progress toward meeting expectations, but with errors or omissions; areas for improvement may include explanation of factors to consider when choosing a waterfall or Agile approach	Does not attempt criterion	10
Clear Communication	Exceeds expectations with an intentional use of language that promotes a thorough understanding	Consistently and effectively communicates in an organized way to a specific audience	Shows progress toward meeting expectations, but communication is inconsistent or ineffective in a way that negatively impacts understanding	Shows no evidence of consistent, effective, or organized communication	5
Citations and Attributions	Uses citations for ideas requiring attribution, with few or no minor errors	Uses citations for ideas requiring attribution, with consistent minor errors	Uses citations for ideas requiring attribution, with major errors	Does not use citations for ideas requiring attribution	5
Total:					100%