Before doing this assignment please note this is not a copy and paste exercise. Doing so will result in a failing grade and you will be reported for plagiarism. This is an assignment that involves research and writing, in your own words. Spelling, grammar and punctuation mistakes will impact your grade.

Part A:

Watch these agile You-Tube videos

1. Seven Reasons for Agile: Reason No. 3

Big, upfront planning (BRUF) is not practical in software development. When the requirements are not fully known in the beginning of the project, the effects of that will reflect on the planning.

Agile does Just In Time planning, based on the right details.

The planning also evolves with the project in agile

https://www.youtube.com/watch?v=kXpOPWWKbWM&list=PL9MIlke8ddNt_bE4p hBFuncI5BibC9S0_&index=5

2. Seven Reasons for Agile: Reason No: 4

Reviewing the working software is more important than reviewing a bunch of requirements specification documents.

When the requirements are not fully known in the beginning of the project, it is not practical to expect the customers to review and approve the specifications in the beginning.

https://www.youtube.com/watch?v=GAr-tvN7QBQ&list=PL9MIlke8ddNt bE4phBFuncI5BibC9S0 &index=6

Part B:

Based on the agile videos and reading material, work as a team to answer the following questions:

1. In a waterfall project, what exactly are the perceived problems with asking the client to provide all the requirements up front at the beginning and then freezing the requirements for the duration of the project?

In a waterfall project, the team members expect the customer to have all of the requirements for the project from the very beginning and expect them to not change the requirements throughout the development phase. In reality, the customers do not know exactly what they want for their project and they could come up with more ideas even up to the final phase of the project. If the customer is rushed to make a final decision of the project, they could not think through the requirements in the given time and just rely on the work of

the team members. The customer could think of better ways to improve the project and should be able to change the requirements through the entire development.

2. Compare and contrast the differences in how Agile and waterfall gather requirements differently?

In a waterfall project, the client is expected to give every requirement of the project at the beginning of the project and to not make any changes to the requirements at any other point of the project. In both Agile and Waterfall, the client will give requirements in the beginning. Only in Agile does the client get the opportunity to change the requirements throughout the entire process to ensure a final product they will be satisfied with. In Waterfall, the requirements have to be finalized.

- 3. Does Agile attempt to minimize or eliminate unnecessary features being added to a project during development? If so, how is this done?

 The Agile methodology is an iterative process. It consists of breaking down an application or project into smaller pieces. This eliminates the development of unnecessary features that the stakeholders may not want or need. This helps eliminate errors in the process. Stakeholder is responsible for the features.
- 4. Agile is known as a process that never freezes the requirements. However, during the sprint, while the team works to complete the work, the Product Backlog is locked and cannot be changed.

 Why do you think this is done?

By locking the Product Backlog, what are we trying to prevent from happening?

By locking the product backlog, a team decides the scope of the sprint and sets that scope in stone. This prevents a team from getting sidetracked, which can make a project go in a direction unrelated to the original goal.

- 5. After the sprint review, the team meets with the stakeholder and they review the Product Backlog. During this "Backlog Grooming" event, the stakeholder can add new features to the backlog or cancel features, or re-ranks them. Give at least three reasons why Agile insist that the stakeholders (product owners) continuously review and prioritize the feature requirements in the product backlog?
 - 1: Stakeholders can change their minds about what they want. 2: Team members can misunderstand what stakeholders want. 3: The interaction between stakeholders and team members can keep the team from wasting time adding unnecessary features.

- 6. Compare and contrast the similarities and differences between agile and waterfall team members? In both the traditional Waterfall plan and the modern agile approach, teams consists of different roles and methods utilized. Agile teams consists of strong customer involvement and a flexible requirement change during the SDLC which is why it's so flexible. Waterfall Teams have a strict structure and lots of roles consisted such as testers, analysts, managers, developers, etc.. Waterfall teams are a lot larger than an agile team in which team members are interchangeable and their are no formal leaders in an agile team versus a waterfall team whom has a manager who is the real leader and responsible for the results.
- 7. Which does your team think is easier to do (a) replace an agile team member who leaves the project or (b) replace a waterfall team member who leaves the project? Do you think it makes a difference on the agile project, if the team member leaves in the middle of a sprint or before a sprint starts? Please support your answer with several sentences.
 - Replacing a team member is easier to do when working with an Agile framework because of its use of sprints. With Waterfall, every team member is specialized with their role, making it harder to find and train a replacement. When a team member leaves, a variety of problems can arise aside from finding a new member. The new member must pick up where the leaving member left off and integrate with the team after certain processes have already occurred such as planning. It does make a difference if a team member leaves in the middle of a sprint because it means whatever project the member was working on gets dropped due to the time constraints of sprint sessions. The best time to get a new team member is in-between sprints so if a member drops before a sprint starts the flow of the project does not get disrupted as much.
- 8. Does your team think a product backlog grows or shrinks in size as an agile project moves forward? Please support your answer with several sentences.
 - I think the backlog would grow as the project moves forward because in an agile project the client/stakeholders don't usually tell you everything they want on the spot but instead have the advantage of making changes and adding more features or ideas to the project later in the development process.
- 9. Does your team think that features should be removed from the product backlog if the feature is no longer part of the project or should it remain on the backlog and have it's status set to depreciated or canceled with a reason why? What is the danger of removing features from the backlog? Please support your answer with several sentences.

Features should not be removed from the product backlog in an Agile project. Dangers for removing features from a product backlog would be implementing a feature that you previously removed and not realizing it until after you tried that feature. It is also important to keep the features you removed on your list but cross them off so you can learn from those failed features.

Part C:

Based on assigned readings, work as a group to answer the following question:

Discuss as a team the author's statement in chapter 2 that we should go out and fail. Why should we fail, and why is failing an important part of learning? Failing is an important part of learning because it lets one notice their mistakes. Only by learning from failures can one improve their skills. You can't expect to start something and be perfect at it, failure should be expected and welcomed.

Part D:

Have the following discussion about improving team communication:

Was everyone prepared for class?
Was everyone engaged in the discussion?
Did everyone contribute equally this class?
Was there one person who monopolized the discussion?

What will you do as individuals and as a team to address these issues and improve team communication?

Everyone came prepared and engaged in the discussion for this class. We all contributed equally, and no person monopolized the discussion. We have set up a group chat to allow us to address issues and improve communication while outside of class.