

## Agile vs. Waterfall Questions & Answers:

1. What is the Waterfall methodology?
  - a. A linear process in which each phase, is completed before moving onto the next step.
2. What are the seven phases of Waterfall?
  - a. Planning
  - b. Analysis
  - c. Design
  - d. Construction/Build
  - e. Testing
  - f. Implementation/Deployment
  - g. Maintenance/Support
3. Within Agile, what is the optimal sprint duration?
  - a. 2-4 Weeks
4. What is a project scope?
  - a. The produced work needed to complete a project
5. What is scope creep?
  - a. As a projects scope [requirements] change, additional features may be added causing additional time to be added to the overall project.
6. When using Agile, do you continuously communicate with the client and/or team while producing deliverables?
  - a. Yes, each step [phase] produces deliverables and further work is done as you consult with your client and team.
7. What is Agile?
  - a. An iterative approach to software development; requirements evolve as the project takes shape.
8. Within Waterfall does testing occur at the beginning or end of a project?
  - a. Testing occurs at the end of a project, which can lead to an increased chance of failures occurring.
9. Between Agile and Waterfall, which of the two methodologies is more adaptive?
  - a. Agile is more adaptive as it is an iterative process which takes place over several sprints.
10. Who is a product owner? What methodology are they apart of?
  - a. Agile, and they tend to be the key stakeholder within a project
11. Can sprints exceed a month?
  - a. It is highly recommended that sprints do not exceed a month. This is especially important as Agile is meant to be iterative.

12. In regard to Waterfall, which stage is most likely to require you to revisit earlier phases?
  - a. The Maintenance/Support stage is most likely to require you to revisit the Construction/Build stage as you resolve any potential issues.
13. Identify the four core values within the Agile Manifesto:
  - a. Individuals and interactions over processes and tools
  - b. Working software over comprehensive documentation
  - c. Customer collaboration over contract negotiation
  - d. Responding to change over following a plan
14. In relation to Agile, what does the MoSCoW acronym represent?
  - a. Must have, should have, could have, won't have
15. If you are tasked with a project that requires frequent updates would you be better served with Agile or Waterfall?
  - a. Agile as it allows you to quickly change your priorities and goals on a project.
16. List a few of the obstacles associated with a team becoming 'Agile':
  - a. Significant organizational cooperation
  - b. Cross-functional teams may be difficult to scale for smaller organizations
  - c. PMO's may be forced to approach projects differently
17. What is the purpose of the Analysis phase?
  - a. Analyze the business requirements and goals of the project in order to build out your initial project phases.
18. What is technical debt?
  - a. When a team prioritizes an expedited delivery date over clean, bug free code.
19. What is Empiricism?
  - a. This is the thought that knowledge is acquired through experience and senses.
20. What is RAD?
  - a. Rapid Application Development