Agile Presentation

Creston Getz

Agile Roles

- Scrum Master – Acts as a coach and facilitator. They ensure the scrum frameworks is followed.

- Product Owner(PO) – Defines and communicates the product vision. They connect the stakeholders with the development team.

- Tester – Members of the development team that ensure the product meets pre-defined acceptance criteria. They ensure the product does what it's supposed to.

- Developer – A group of professionals that who build the project. They turn the PO's vision into a shippable product.

Agile Phases

1 – Planning and Requirements – The product vision, goals, and high-level requirements are defined. The PO creates the backlog.

2 – Design – The basic architecture is established. The product is refined as new requirements are added.

3 – Coding – Done in sprints the developers work on the user stories from the backlog. This is the phase where the bulk of the project is built.

4 – Testing – Usually done while the product is being built. This is to ensure bugs are found early. In this phase, the tester(s) ensure that the product does what it should.

5 – Deployment and Maintenance – At the end of each sprint, a product increment is shipped so it can be reviewed by stakeholders. By giving continuous feedback the product will better align with business goals.

6 – Retrospective – At the end of each sprint the team reflects on the process. They discuss what went well and what did not. This helps foster a culture of growth and improves efficiency over time.

Waterfall

- Unlike agile, the waterfall is sequential, and each phase must be finished before moving on to the next. This can cause many problems in software development.

- With Agile changes are much easier to add. And the continuous feedback loop from stakeholders allows the team to better align the product.

- However, in waterfall feedback is given when the product is almost done.

- With the SNHU travel project, the trip themes were changed, and the stakeholders wanted a slideshow. With waterfall much of the product would have been completed already making it hard to add these features. Adding delays and budget concerns.

Waterfall or Agile

- The choice to use waterfall or agile depends on a few things.

- The clarity of requirements. Building a bridge is very clear compared to making a software application.

- Need for feedback. Similarly building a bridge requires little to no feedback compared to software.

- Projects complexity. Can the project change like software? Or is it very predictable like building a building?

- The team's ability to adapt to change. Waterfall focuses on handing off work between specialists while agile emphases cross-functional professionals working together.

Waterfall or Agile 2

- With the SNHU travel project, Agile is the clear choice. Agile is more effective in software development due to its adaptability and iterative process.

- The waterfall is a great option for projects will very clear and well-defined requirements like building a bridge or building.

- SNHU travel was not a clearly defined. The team needed feedback and the requirements were subject to change, and they did. However, by using an agile approach the changes were handled well.

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