



Agile

- ▶ Agile Manifesto:
 - ▶ Individuals and Interactions over Processes and Tools
 - Working Software over Comprehensive Documentation
 - ▶ Customer Collaboration over Contract Negotiation
 - ▶ Responding to Change over Following a Plan

- After seeing the results of waterfall and struggling through it, developers met to create what they called the Agile Manifesto
 - Individuals and Interactions over Processes and Tools
 - Working Software over Comprehensive Documentation
 - Customer Collaboration over Contract Negotiation
 - · Responding to Change over Following a Plan
- There are many different flavors of agile. Companies often end up implementing some variation of these.
- We are going to focus on Scrum.

Scrum

- ▶ User Stories
- ► Acceptance Criteria
- ▶ Sprints
- ▶ Sprint Planning
- ▶ Stand Ups
- ► Sprint Reviews
- ▶ Retrospectives

- ▶ Roles:
 - ▶ Product Owner
 - Scrum Master
 - ▶ Developer

- Scrum is a type of Agile development methodology.
- For user requirements, the team works together to write user stories.
- For each user story, there is acceptance criteria that defines what needs to happen for the stakeholder to be satisfied with development.
- The team works in sprints which are usually around 2 weeks.
- During a sprint planning meeting, the team decides what work will be done within the sprint. Once agreed, the team works to complete all items for that sprint.
- Stand ups occur each day and team members say what they did the previous day and what they plan to do that day. They also mention any road blocks.
- Sprint Reviews occur to review all work that was done during the sprint and if there is a release they decide if that work will be released.
- Retrospective meetings occur where the team discusses what went well, what didn't go
 well, and what improvements are needed.
- There are only 3 roles in Scrum:
 - Product Owner Works with stakeholders to prioritize work and ensure the team is working on and correctly defining work.
 - Scrum Master Ensures Scrum is being followed and ensures road blocks are removed.
 - Developer everyone else on the team is considered a developer. This includes programmers, BA's, and QA's. The idea is that the team self organizes and helps

each other out to complete work.

User Stories

- ▶ Generally follow the following format:
 - ▶ As a <Who>, I would like <What>, so that <Why>.
 - ▶ Ex. As a development lead, I would like a board, to be able to track user story progress.

- User stories follow the general format of: As a <Who>, I would like <What>, so that <Why>.
- An example is As a development lead, I would like a board, to be able to track user story progress.
- User stories should be broken down as far as they can, so that they are not representing too much scope.



- Agile was started from a document called what?
- Name the three roles in Scrum.
- The timeframe for one cycle of development is called what in Scrum?
- Write on the board the general format of a user story.

User Story Exercises

- ▶ Outsource your work. Think of 2 tasks that you do on a regular basis. If you were going to outsource these tasks for someone else to do, how would you explain the tasks and ensure they are doing it the way that you want them to. Write user stories.
 - ▶ Write the user stories in the "As a <Who>, I would like <What>, so that <Why>" format to explain the tasks.



Acceptance Criteria

- ▶ Only the What, not the How.
- ▶ Provide as many as needed.
- ► Ex.
 - ▶ AC1 The board should show all user stories to be completed in the sprint.
 - ▶ AC2 All states (To Do, In Progress, Done) should show on the board.
 - ▶ AC3 User Stories should show associated with the appropriate state.
 - AC4 User can move user stories to different states.
 - ▶ AC5 User Story title should be displayed.
- The acceptance criteria should only define what should occur. We want the development team to be able to work with the product owner and stakeholders to come up with the best solution (the how).
- There is not just one acceptance criteria. There are many and there should be as many as needed to completely define what is needed.
- Ex.
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- AC2 All states (To Do, In Progress, Done) should show on the board.
- AC3 User Stories should show associated with the appropriate state.
- AC4 User can move user stories to different states.
- AC5 User Story title should be displayed.



- What describes what needs to happen for the product owner to be happy with the user story?
- How many acceptance criteria should there be?
- Acceptance criteria define the who? The what? Or the how?

Acceptance Criteria Exercises

- ▶ Outsource your work. Think of 2 tasks that you do on a regular basis. If you were going to outsource these tasks for someone else to do, how would you explain the tasks and ensure they are doing it the way that you want them to. Write user stories.
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- Agile was started from a document called what?
- Name the three roles in Scrum.
- The timeframe for one cycle of development is called what in Scrum?
- Write on the board the general format of a user story.
- What describes what needs to happen for the product owner to be happy with the user story?
- How many acceptance criteria should there be?
- Acceptance criteria define the who? The what? Or the how?

Additional Resources

- ▶ Agile Manifesto
 - ▶ http://agilemanifesto.org/principles.html
- ▶ Scrum
 - ▶ https://www.scrumalliance.org/why-scrum
- ▶ User Stories
 - ▶ https://www.mountaingoatsoftware.com/agile/user-stories
- ► Acceptance Criteria
 - ▶ https://www.boost.co.nz/blog/2010/09/acceptance-criteria