

The User Story Life Cycle: Just Enough, Just in Time

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Preview

- Setting the Stage
- Quick User Story Review
- The User Story Life Cycle Levels(**Required in Bold**)
 - Request Level
 - Roadmap/Vision Level
 - Release Level
 - **Grooming Level**
 - **Ready! (Sprint)**
 - **WIP Level**
 - **Done!**
 - **Death and Legacy Level**
- Tips for Navigating the Levels



Setting the Stage

- Story Points and Velocity generally not covered
- Presentation Assumes Scrum
 - But same techniques can be translated for other approaches
 - Kanban, XP, “Roll Your Own” Agile, etc
- Presentation Covers Primarily User Stories
 - Scrum concepts are mentioned when necessary
 - But this isn’t a presentation about Scrum
 - Some of the mentioned “Resources” can help fill in the Scrum gaps for particular planning events.
- Reminder of Scrum Team Roles

Why Should I Care about the User Story Lifecycle?

- **Streamline by doing Just Enough, Just in Time**
- Know how to decompose Large Stories (Epics and Themes) into actionable, “Ready” ones
- Know how to incorporate User Stories into the Agile Planning levels (Roadmap, Release, Sprint/Iteration, etc)

Why Should I Care about the User Story Lifecycle? -2

- Know how to incorporate the User Story Lifecycle into your organization's planning efforts.
- Know who are the typical collaborators at each level
- Know the activities that are typical at each level
- Know which activities/levels are optional vs. required



Quick User Story Review

- Ron Jeffries 3 C's
(Ron is co-inventor of the User Stories practice)
 - Card/Title
 - token used for planning and reminder to have conversations
 - Conversations
 - Confirmations (Automated)
 - **aka Story Tests**
 - aka Acceptance Tests
 - aka Test Confirmations
 - aka Acceptance Criteria



Quick User Story Review -2

- Story
 - Can be completed in 1 Sprint
- Epic
 - Big Story, may not be completed in 1 Sprint
- Theme
 - Several Related Stories and/or Epics
 - Story can belong to more than one theme
 - Typical Themes
 - Functional – “Credit Card Payments”
 - Release – “Version 4.1, 3Q 2013”, “Feb 2011 Release”



User Story Worst Practice

- “As a <type of user>, I want <some functionality>, so that <the user or stakeholder achieves some value>”
 - The Technique is not a worst practice, but thinking this is a User Story **IS** a worst practice!
- ^^ This is not a User Story!
- ^^ This is 1/3 of a User Story
- ^^ **This is the least important 1/3 of the User Story!**
- **Story tests are the most important part, and they are achieved via Conversations**



User Stories Are Not...

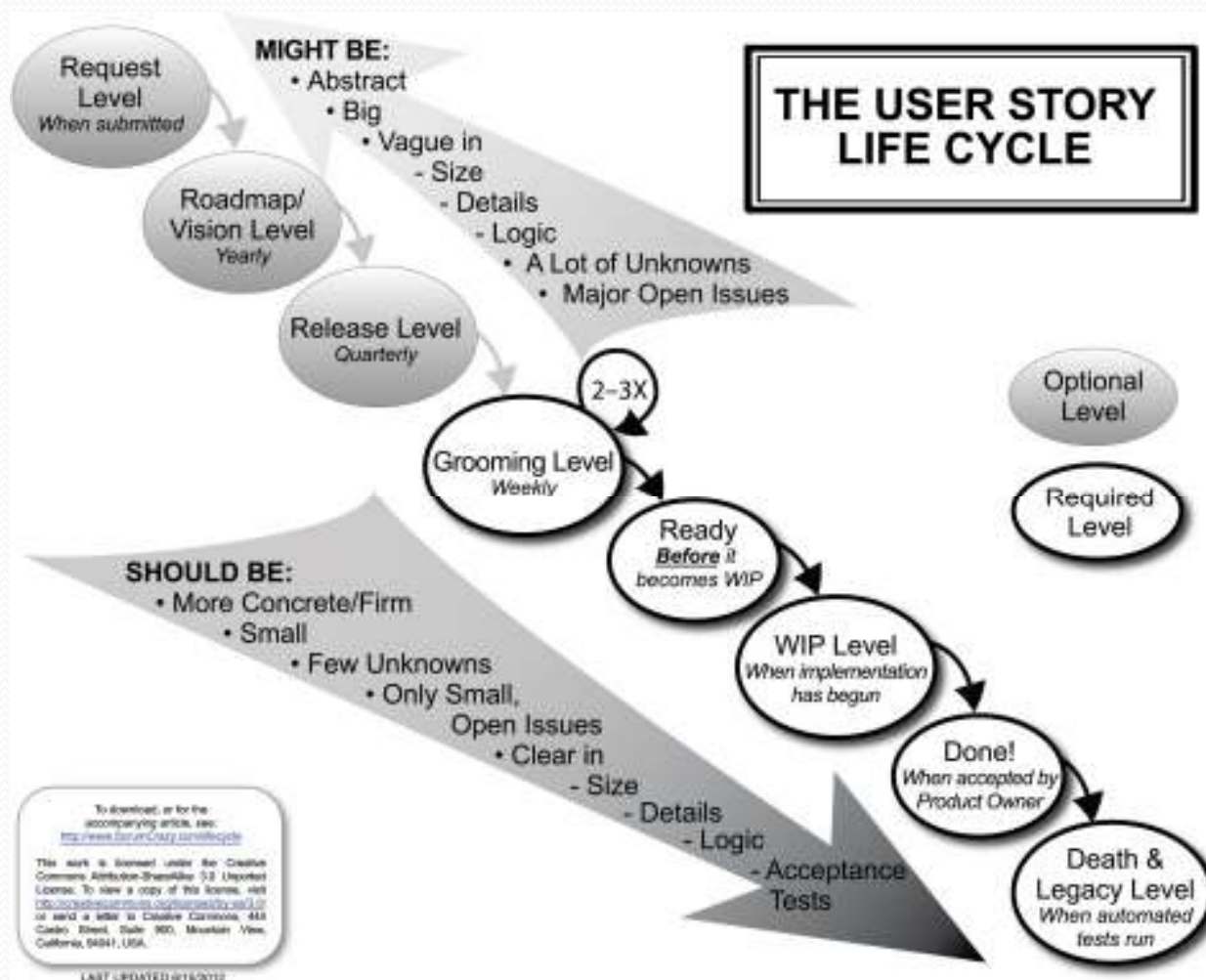
- A Documentation technique.
- Living documents that are maintained.
 - User Stories only convey *new* behavior of a system.
- Strict contracts.



User Stories *ARE*:

- A Communication and testing technique.
- Meant to **emphasize discussions over documentation.**
- A form of Acceptance Test Driven Development (ATDD)
- Documented lightly, only until the story is tested and delivered.
- A means for creating an executable Agile Specification.
- **A means to an end. The end is working software that delights customers.**
- More info:
 - <http://www.scrumcrazy.com/User+Story+Basics>
 - <http://www.scrumcrazy.com/User+Stories+Best+and+Worst+Practices>

The Life Cycle Levels





How we're going to proceed

- For each Level:
 - Entrance Criteria (for the Story)
 - Typical Collaborators(the people involved)
 - Typical Events/Collaborations
 - Other Notes
 - Exit Criteria (for the Story)



Request Level...

- Entrance Criteria
 - None – this is the starting point
- Typical Collaborators
 - Product Owner (or equivalent)
 - Any Stakeholder
- Typical Events/Collaborations
 - Verbal conversation, Change Management Meeting, PO-led Stakeholder Meeting, New ticket in ALM tool, New Product Backlog Item(or equivalent), Stakeholder goal
 - When? Whenever a request comes in.



Request Level -2

- Exit Criteria
 - The request has been communicated to the Product Owner
 - Initial Story Title assigned by the Product Owner and story is in the Product Backlog



Roadmap/Vision Level...

- Entrance Criteria
 - All Exit Criteria from Request Level
- Typical Collaborators
 - Scrum Team
 - ~Director/Manager Level Business Stakeholders
 - ~Director/Manager Level Development Stakeholders
 - End Users/Customers
 - if available, preferably at least one from each user role or functional area
- Typical Events/Collaborations
 - Visioning Meeting(New Product), OR
 - Roadmap Meeting(Existing Product)
 - When?
 - Visioning – When New Product is given the green light
 - Roadmap – Yearly, updated every quarter or so.



Roadmap/Vision Level -2

- Other Notes
 - “A product road map should state for each version the projected launch date, the target customers and their needs, and the top three to five features. Don’t worry about the details. These will emerge and be captured in the product backlog.” ¹
- Exit Criteria
 - The Story is scheduled for a release.
 - It may be part of a functional and/or Release Theme



Roadmap/Vision Level -3

- Resources

- ¹ [Agile Product Management with Scrum: Creating Products that Customers Love](#), Roman Pichler,
 - Chapter 2: Envisioning the Product
- <http://www.romanpichler.com/blog/product-vision/envisioning-your-product/>
- <http://www.romanpichler.com/blog/product-planning/agile-product-roadmap/>
- <http://www.pragmaticmarketing.com/publications/topics/o8/scaling-agile-processes-five-levels-of-planning>



Release Level...

- Entrance Criteria
 - Exit Criteria From Roadmap/Vision Level
 - Product Owner has done an initial shot at ordering enough stories in the Product Backlog to fill the release, plus 25-50% more.
 - High Level Story Tests(aka Conditions of Satisfaction) known by Product Owner
- Typical Collaborators
 - Scrum Team
 - ~Manager Level Business Stakeholders
 - ~Manager Level Development Stakeholders
 - End Users/Customers (optional)
- Typical Events/Collaborations
 - Release Planning Meeting
 - When? Typically Quarterly, updated every Sprint or two



Release Level -2

- Other Notes
 - Discuss High Level Story Tests
 - Ensure all Stories in the Release are estimated
 - Split Stories and assign Themes as necessary or as desired
 - Note: Release Planning is entirely optional in Scrum.



Release Level -3

- Exit Criteria
 - Story has been given an initial estimate
 - Estimate might already exist due to grooming
 - At the minimum, Story is small enough to be done by the time of the release in which it is scheduled
 - High Level Story Tests have been conveyed to full Scrum Team
 - There may be significant open issues/questions regarding logic, functionality, or external dependencies – that's ok at this point.
 - A forecast/plan of what Stories will be completed in what Sprint in the release has been created.
 - Release Plan is updated every Sprint or two



Release Level -4

- Resources

- [Agile Estimating and Planning](#), Mike Cohn
 - Chapter 13: Release Planning Essentials
- [Agile Product Management with Scrum: Creating Products that Customers Love](#), Roman Pichler,
 - Chapter 4: Planning the Release
- <http://scrumcoaching.wordpress.com/2010/05/30/release-planning-with-scrum/>



Grooming Level

- Entrance Criteria
 - All Exit Criteria From Previous Optional Levels (if any)
 - Otherwise, if this is your starting point:
 - The Product Owner has created the first draft of the Story, including a first shot at the Story Tests.
 - Obviously the Product Owner will have a few stories drafted, but in this presentation we're just looking at the lifecycle of a single user story.
- Typical Collaborators
 - Scrum Team
 - End Users/Customers
 - If they are even close to available, they are required at this level.



Grooming Level -2

- Typical Events/Collaborations
 - Weekly Team Backlog Grooming
 - aka “Story Grooming”, “Story Time”, “User Story Workshop”, “Sprint Preview”, etc
 - When? Typically weekly
 - How long? Typically 1-3 hours weekly.



Grooming Level - 3

- Other Notes
 - For Each Story:
 - Conversation: PO or User/Customer describes the story
 - Conversation: Story Tests are discussed
 - Conversation: Open issues/ambiguities discussed, action items assigned(to user, PO, developer, etc) to resolve.
 - Conversation: Should the Story be split?
 - Conversation: Estimate given (even if there are open issues)
 - If Story already has an estimate, re-estimate if there is significant new knowledge.
 - Rinse and Repeat for the next Story



Grooming Level - 4

- Begin grooming Stories 1-3 weeks before they will be worked into a Sprint (**Just In Time!**)
- Don't be afraid to re-groom a story 2-3 times, but only re-groom what is needed, don't re-hash (**Just Enough!**)



Grooming Level - 5

- Exit Criteria
 - Stories with major open issues will be re-discussed at a future grooming (which may mean the Story's implementation is delayed to a future Sprint)
 - Story Tests are detailed, firm, clear, and well understood by the entire team, though minor open issues may remain.
 - Story is small enough to fit into a single Sprint
 - Small enough to be completed in 2-5 days is ideal

Grooming Level - 6

- Resources

- <http://www.scrumcrazy.com/What+does+Product+Backlog+Grooming+Look+Like%3F>
- <http://www.scrumcrazy.com/Tips+for+Effective+Backlog+Grooming>
- <http://www.romanpichler.com/blog/product-backlog/grooming-the-product-backlog/>
- <http://www.romanpichler.com/blog/product-backlog/the-product-backlog-grooming-steps/>
- The Scrum Guide (See the “Product Backlog” section)
 - http://www.scrum.org/storage/scrumguides/Scrum_Guide.pdf



Ready!

- Entrance Criteria
 - All Exit Criteria from Grooming Level
- Typical Collaborators
 - n/a
- Typical Events/Collaborations
 - n/a
 - The “Ready!” lifecycle level is a state the story enters when sufficient grooming has been completed



Ready = Clear, Testable, Feasible

- “A story is *clear* if all Scrum team members have a shared understanding of what it means. Collaboratively writing user stories, and adding acceptance criteria to the high-priority ones facilitates clarity.”¹
- “An item is *testable* if there is an effective way to determine if the functionality works as expected. Acceptance criteria ensure that each story can be tested. As a rule of thumb, I like to employ three to five acceptance criteria per user story.”¹
- “A story is *feasible* if it can be completed in one sprint, according to the definition of done. This implies two things: The item must be small enough, and it must not be too complex. I prefer to work with stories that can be implemented and tested within a few days by the way, as this allows the product owner to provide feedback on the software during the sprint.”¹
- Putting Stories into the “Ready” state prior to a Sprint has been anecdotally shown to quadruple productivity.²

Ready! - 3

- Exit Criteria
 - Story is at a point where
 - Feasible: It is small (preferably 2-5 days)
 - Clear: Well understood by all, and only the tiniest of open issues remain
 - Testable: The Story Tests are very detailed, firm, and well understood by all.
- Resources
 - ¹ <http://www.romanpichler.com/blog/product-backlog/the-definition-of-ready/>
 - ² <http://www.systematic.com/files/IS%20files/Downloads/Articles/Articles%20in%20English/Scrum%20and%20CMMI%20-%20Going%20from%20Good%20to%20Great.pdf>
 - <http://blog.xebia.com/2009/06/19/the-definition-of-ready/>
 - <http://www.agilehelpline.com/2011/03/ready.html>



WIP Level...

- Entrance Criteria
 - All Exit Criteria from Ready!
- Typical Collaborators
 - Scrum Team
 - End Users/Customers (If they are easily available)
- Typical Events/Collaborations
 - Story becomes WIP
 - At beginning of Sprint during Sprint Planning, OR
 - Mid-Sprint, if new work is needed(or critical bug fix)



WIP Level-2

- Other Notes
 - Functionality and automated tests are implemented by Dev Team.
 - Frequent collaboration between PO and Development Team(Programmers, Testers, Designers, Help Documenters, etc)
 - Some minor clarification or re-negotiation of story tests is ok
 - Minor & immaterial changes should be implemented immediately and without resistance, except...
 - If all “changes” for a Story are $>\sim 10-15\%$ of estimated Story size, then create a new story for the “changes” instead and let PO decide whether to do immediately or put on Product Backlog.



WIP Level – 3

- Exit Criteria
 - Story is implemented as functionality in the system.
 - Story functionality has been tested and all Story Tests pass.
 - Story Tests have been automated.
 - Story meet's Scrum Team's "Definition of Done."
 - Product Owner is notified immediately that Dev Team thinks story is "Done!"
- Resources
 - <http://www.scrumcrazy.com/One+way+to+handle+Bug+s+and+Production+Support+in+Scrum>



Done! (aka Story Acceptance)

- Entrance Criteria
 - All Exit Criteria from WIP Level
- Typical Collaborators
 - PO – sole authority to decide if a Story is Done!
 - Dev Team
 - Users (only if PO wants them to join)
- Typical Events/Collaborations
 - Super short, super informal, quick demo for the Product Owner (and users, if PO so desires)
 - **As soon as Story has been implemented –Immediately!**
 - **Do not wait until the Sprint Review for deciding “Done!”**



Done! -2

- Exit Criteria
 - The Product Owner believes that the Story has been implemented in the system and that all Story Tests pass.
 - The Product Owner feels comfortable that sufficient testing, including regression testing, has been done.
- Special Note about PO's authority over "Done"
 - While only the PO can decide "Done," this authority should not turn into a "command and control license" to increase scope inappropriately, ask for unrelated changes, or to make a lot of last minute changes/decisions. Embracing change is good, abusing change is bad.



Death and Legacy Level

- Entrance Criteria
 - All Exit Criteria from “Done!”
- Typical Collaborators
 - Automated Story Tests for the Story
 - ~90%+ of all Story Tests should be covered by automated tests.
- Typical Events/Collaborations
 - Continuous Integration/Test build



Death and Legacy Level-2

- Other Notes
 - The User Story lives on, and its legacy is automated Story Tests that are highly readable and well documented.
- Exit Criteria
 - None, this is the end of the life cycle of a User Story!
 - Q. What if I'm not automating my tests?
 - A. **One, you should be! Get on the road to test automation quickly!**
Two, keep your User Story documentation around.
- Resources
 - <http://properosolutions.com/2011/10/the-secrets-of-successful-test-automation/>
 - <http://www.mountangoatsoftware.com/blog/the-forgotten-layer-of-the-test-automation-pyramid>
 - [The Art of Unit Testing](#), Roy Oshero



Tips for Navigating the Levels

- Some back and forth between the levels is ok.
- Most large or complex stories will go through all of these levels whether you consciously realize it or not.
- Only Re-groom/Re-estimate when necessary, usually due to new knowledge.
- Don't try to build a lot of formality into each level.
 - Be as informal and quick as possible, but don't skip the exit criteria.

Questions?

- For more info, see:
 - The Bradley User Story Maturity Model
 - <http://www.scrumcrazy.com/The+Bradley+User+Story+Maturity+Model>
 - <http://www.ScrumCrazy.com>
- To download presentation, see “Presentations” section at: <http://www.ScrumCrazy.com>