

**User Story Estimation Standard**

**Version 5.0**

**Document Version History**

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# **1. Introduction**

# **2. User Story Estimation Definition**

## **2.1 Method to Estimate User Stories**

### **2.1.1 Sizing by Complexity**

Complexity is estimated using story point from the Fibonacci sequence: ½, 1, 2, 3, 5, 8, 13, 21, 34, 55, and ?. One story point equals a lower level of complexity compared to a higher level complexity of 13 story points. Estimates are created during *planning poker*.

### **2.1.2 Planning Poker**

At the estimation meeting, each estimator is given one deck of the cards. All decks have identical sets of cards in them.

The meeting proceeds as follows:

* A Moderator who will not play chairs the meeting.
* If possible, a User Story with a known size is identified as the basis of comparison for the estimate.
* The Product Manager provides a short overview of each user story being estimated. The team is given an opportunity to ask questions and discuss to clarify assumptions and risks. A summary of the discussion is recorded by the Project Manager.
* Each individual designates a number representing their estimate. During the discussion, numbers must not be mentioned at all in relation to feature size to avoid anchoring.
* Everyone calls their number simultaneously by the method used for the planning poker (e.g., cards, app, etc).
* People with high estimates and low estimates are given a chance to explain their justification to the team (aka soapbox) for their estimate and then discussion continues.
* Repeat the estimation process until a consensus is reached. The developer who was likely to own the deliverable has a large portion of the "consensus vote," although the Moderator can negotiate the consensus.
* To ensure that discussion is structured, the Moderator or the Project Manager may call time and the discussion must cease for another round of poker to be played. The structure in the conversation is re-introduced by the soapboxes.
* The cards are numbered as they are to account for the fact that the longer an estimate is, the more uncertainty it contains. Thus, if a developer wants to play a 6, he or she is forced to reconsider and either work through with the mindset that some of the perceived uncertainty does not exist and play a 5 or accept a conservative estimate accounting for the uncertainty and play an 8. A question mark (?) denotes that uncertainty.

### **2.1.3 Scope**

In addition to development, the following should be considered as part of the estimate to make sure nothing important is missed:

* **Development** — a coding or architecture task involving a technical resource (developer/architect), any testing task resulting from a development task
* **Designer** — UX/UI, which is a visual, graphical, or information delivery style-related task involving a front-end designer
* **Tester** — an automated or manual testing task or feature validation involving a tester or developer
* **System Admin** — an infrastructure design or deployment task involving servers, environments, or release process with a system administrator
* **Project** — a catch-all for project-related tasks (including documentation, communication, and meetings with clients/team) and ad hoc tasks that do not fit into one of the aforementioned classifications; may involved a project manager or any other team member

### **2.1.4 Target Velocity**

Team members should target an ideal velocity based on the average of story points completed over a minimum of three development and/or O&M cycles.

### **2.1.5 R&D Spikes**

Research spikes are necessary when the number of unknowns makes a User Story Definition Standard compliant story impossible. They are comprised of the following elements:

* An agreed-upon capped complexity estimate
* Input: An agreed-to approach reached by involving other team members and consisting of a focused scope for the research
* Output: Results of research and recommendation(s) for moving forward

## **2.2 Testing Overhead**

When estimating stories, a fixed overhead of 1 story point should be added to each story to account for testing and validation. This overhead will provide baseline coverage for the test team during the development and/or O&M cycle. For stories that have explicit testing requirements, a more formal estimation can be used or a specific testing story can be created and estimated.