## **Criteria for Selection of Story Points (Planning Poker Estimation)**

Source URLs:

https://www.tothenew.com/blog/how-to-estimate-story-points-in-agile/, https://en.wikipedia.org/wiki/Planning\_poker

#### What is a Story Point?

A story point is an <u>abstract measure</u> of effort required to implement a user story.

In simple terms, it is a number that <u>tells</u> the team about the difficulty level of the story.

#### In most cases a story point uses one of the following scales for sizing:

- Fibonacci sequence including a zero: 0, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89;
- Several commercially available decks use the sequence: 0, ½, 1, 2, 3, 5, 8, 13, 20, 40, 100, and optionally a ? (unsure), an infinity symbol (this task cannot be completed) and a coffee cup (I need a break, and I will make the rest of the team coffee).
- Some organizations use standard playing cards of Ace, 2, 3, 5, 8 and king. Where king
  means: "this item is too big or too complicated to estimate". "Throwing a king" ends
  discussion of the item for the current sprint.
- Some Organization use T-shirt sizes where XS = 1, S = 2, M = 5, L = 13, XL = 20, XXL = 40

However, it is tough to identify a story from the scales assigned to them.

In order to do that each team would have to:

- <u>Find a baseline story</u>. It does not necessarily to be the smallest one, but the one that everyone within the team can resonate with.
- Once determined, sizing of all the user stories should be initiated by comparing them against the baseline.

While estimating story points, we assign a point value to each story.

<u>Relative values are more important than the raw values.</u> A story that is assigned 2 story points should be twice as much as a story that is assigned 1 story point. It should also be two-thirds of a story that is estimated 3 story points.

### Now let us understand sizing in detail:

#### First, let us start with the importance of sizing. Sizing is beneficial as it:

- Gives us an overview of the scope of work
- Uses multiple perspectives to determine the size of work
- Clears out that we can't be exact
- Rectifies false assumptions

#### Sizing is done considering:

- The amount of work to do
- The complexity of the work
- Risk or uncertainty in doing the work
- Time / Duration

An <u>estimate of effort/duration isn't possible in Agile</u>, unlike traditional projects. This is because the duration is dependent upon:

- Technology / Tools
- Domain Knowledge
- Skill-set [technical expertise] of developers doing the work

#### **Outlined below is the relative sizing process:**

- 1. List all the stories to be sized
- 2. Put them in order from smallest to largest
- Take the first user story
- Then take the second user story
- Decide which is bigger and put the bigger one above
- Then take the next one and decide where it fits relatively to the other two
- Then take the next one and do the same
- Repeat the process until all the stories are now in the list (in a sequence from smallest to largest)

#### 3. Size the stories

- Start from the bottom and give that story a number 2 story points. Giving '2' provides you the room to give a smaller story '1' if discovered at a later stage.
- Look at the next story and decide how big is that story as compared to the first one
- Continue until you have a size on each story
- Use these set of numbers [influenced by Fibonacci] while sizing: 1, 2, 3, 5, 8, 13, 21

Note:- we can use T-shirt sizes XS = 1, S = 2, M = 5, L = 13, XL = 20, XXL = 40

# Story points vs hours

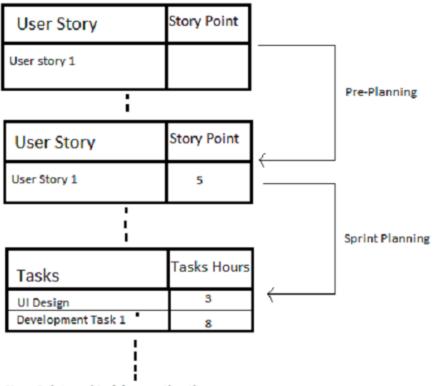
A story point is a <u>high-level estimation of complexity</u> involved in the user stories, usually done <u>before sprint planning</u>, during release planning or at a pre-planning phase.

Story points along with sprint velocity provide a guideline about the stories to be completed in the coming sprints.

The hour based estimation, on the other hand, is a low-level estimation used to represent the <u>actual effort in person hours needed</u> to complete all the tasks involved in a user story. Hour based estimation should be used when the task estimations are provided in hours.

In fact, story points and task hours serve different purposes at different times and we should avoid relating them to one another for better execution of the sprint and the release.

As the diagram below illustrates, we would recommend not emphasizing on the story points during sprint planning and focus more on estimating the time needed to complete all the tasks involved in the user story.



Story Points and task hour estimation process

### **Additional Learning on SCRUM**

"11 Steps of SCRUM" [https://luminousmen.com/post/11-steps-of-scrum]

