



UNIVERSITAT DE
BARCELONA

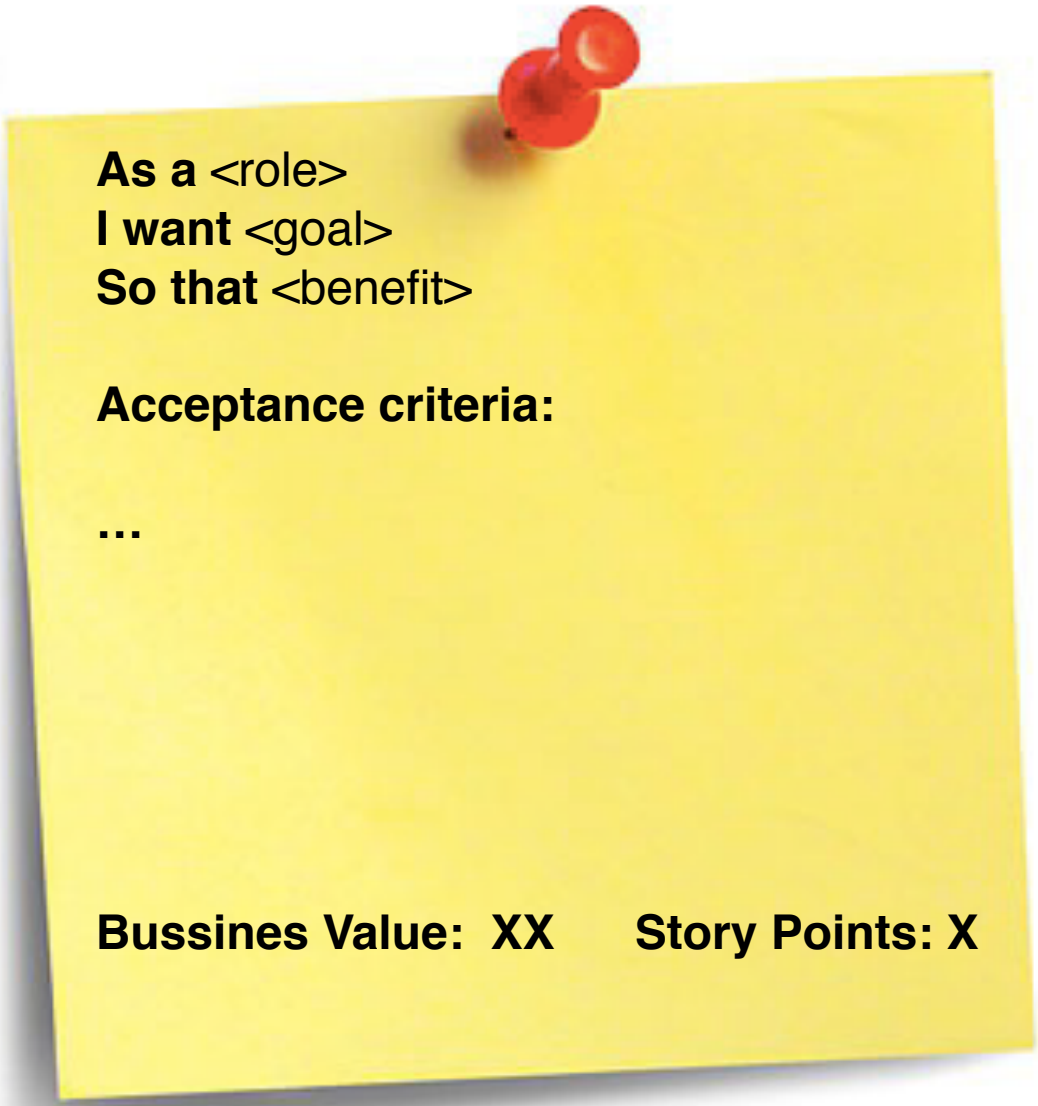
Estimating & Planing



by Eloi Puertas

based on Oriol Pujol Software Engineering slides.

User Stories



As a <role>
I want <goal>
So that <benefit>

Acceptance criteria:

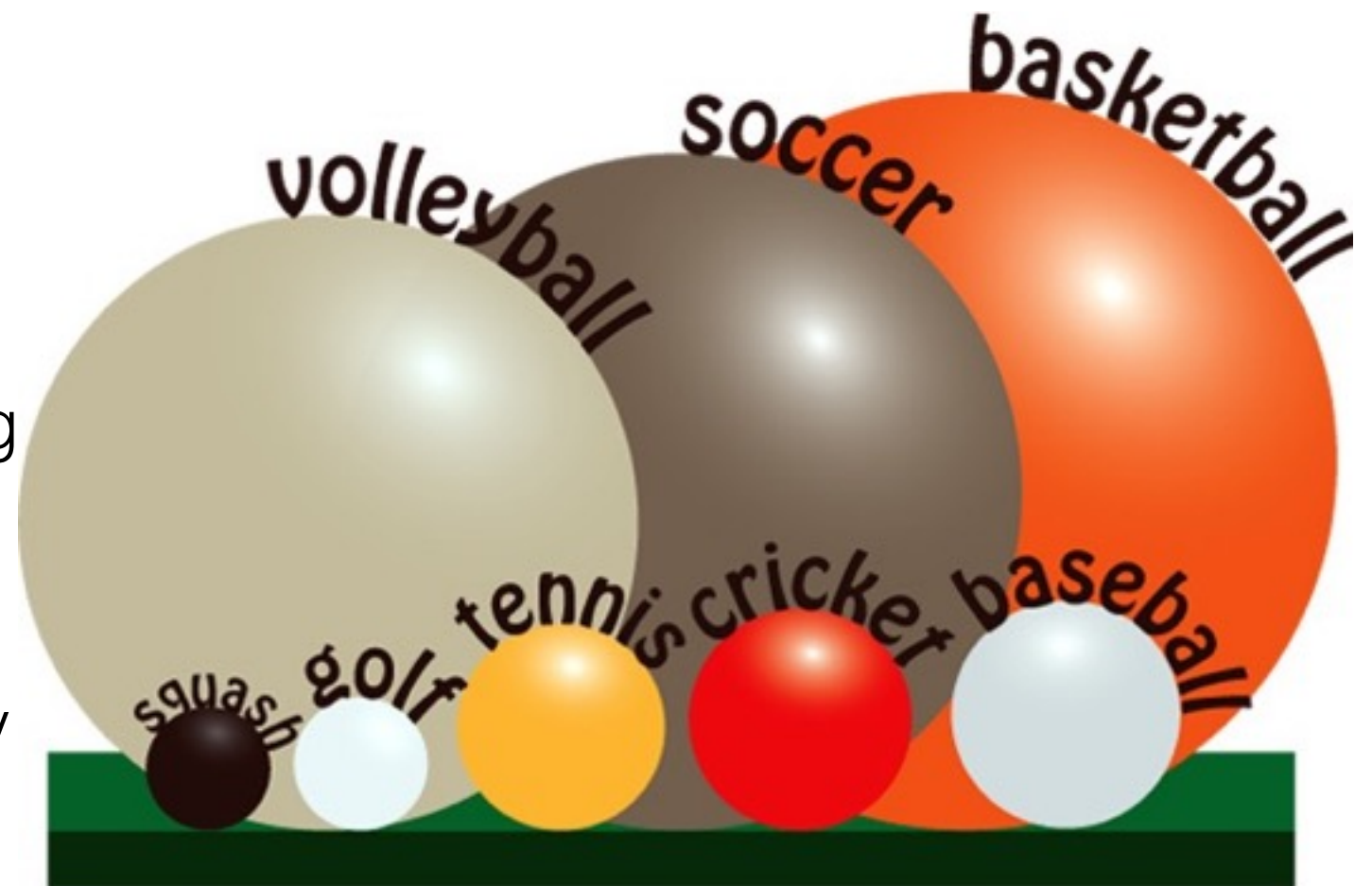
...

Bussines Value: XX Story Points: X

Estimate User Stories

ACTORS: Team, PO.

- We are not good in measuring absolute values.
- We are good in comparing things.
- Story points are additive; time-based estimates may not be.
- Story points help avoid problems with unit confusion.



Story **Points**

- They reflect the **bigness** of a user story.
 - How hard it is?
 - How risky it is?
 - How much of it there is?
- Relative values matters.
- Unitless
- Point values includes uncertainty

Estimation **Techniques**

Estimation techniques:

- Expert opinion
- Analogy
- Planning Poker

Planning poker

- Each person gets a deck of cards:
 - From 1 to 20 follows a Fibonacci series.
 - ? (unsure), ∞ (it can not be done), cafe break



Steps

1. The item to be estimated is read to all.
2. Attendants ask clarifications for the item.
3. Each person selects a card and puts it on the table facing down
4. When everyone is done, cards are exposed.
5. **If** (the estimations don't match) **then** a short discussion is done and **goto** 3.
6. Handle next item.

Why Planning poker **works**?

- The reason to use planning poker is to avoid the influence of the other participants. If a number is spoken, it can sound like a suggestion and influence the other participants' sizing.
- Planning poker should force people to think independently and propose their numbers simultaneously. This is accomplished by requiring that all participants show their card at the same time.

Why Planning poker **works**?

- Those who do the work estimate it.
- Emphasizes relative estimation
- Everyone's opinion is heard
- Modeled for open discussion
- Forces thinking
- It's fun!

Let's play **poker!**



Business Value

1. What you can implement successfully and sustainably
2. What your customers want and will buy (even if they don't know it yet)
3. What your team is excited about creating

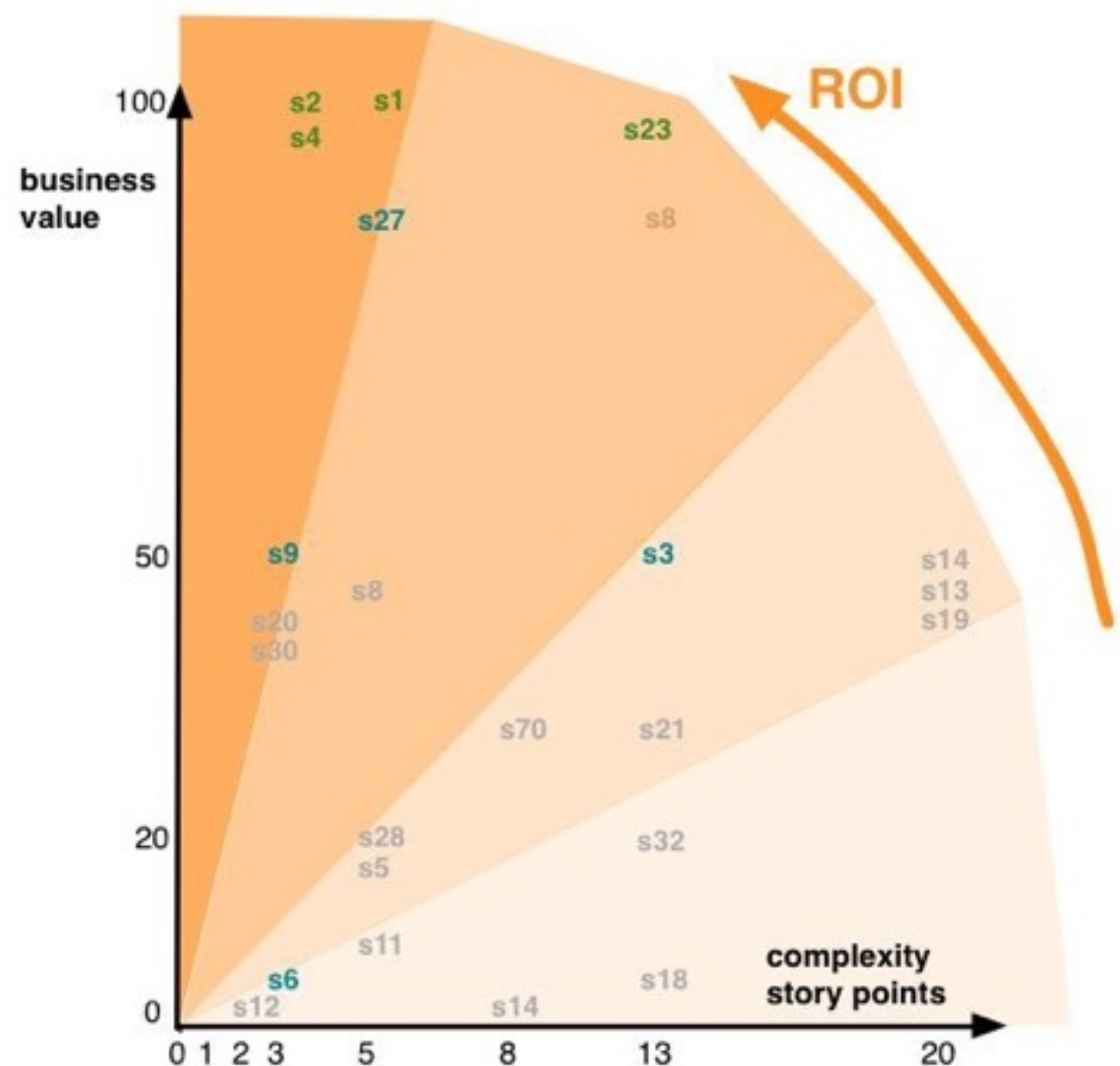
Estimating Business Value

Actors: Stake Holders & Product owner

- Is the added value that the story brings to the business.
- Business value estimation should be the same as story points:
 - ♦ To estimate the value of a story relatively to the others, and resume this value in a single number.

ROI (Return of investment)

- **ROI** is the ratio between the business value and the complexity of a user story.(aka. $\text{BusinessValue} / \text{StoryPoints}$).



Tips for estimating business value

- Estimate at Epic rather than User Story level
 - What is the source of value that will be created?
- Coordinate with your Finance Department
 - They already have a view of production function and ROI metrics
 - Engage them as an ally - they will love that you are speaking with them

Show me the **money**!



Planning

Why **traditional** planning fails ?

- Plan is not adaptive.
- Focus on activities - Not on features
 - Never finish early
 - Dependencies
- Plan is not priority driven
- Belief that costumers will not change
- Estimates become commitments

Agile Planning

- Planning is continuous, not a standalone phase.
- Focus on business priorities
- Deliver something each iteration
- Changes are expected.
- Plans are easily correctable
- Plan by feature not by activity
- Clear definition of progress (50% means 50% of features complete)



Sprint Backlog

1. Do the Product backlog ☒
2. Add value ☒
3. Estimate ☒
4. Asses Risk ☒ **ROI**
5. Prioritize by ROI (most value with the least effort)

Sprint Backlog

Story	Value	Estimate	Risk	ROI	Order
As a ...	10	40	1 Low	0.25	4
As a ...	20	30	2 Medium	0.33	3
As a ...	30	20	2 Medium	0.75	2
As a ...	40	10	3 High	1.33	1

$$\text{ROI} = \text{Value} / \text{Estimate} * 1 / \text{Risk}$$

Sprint Backlog

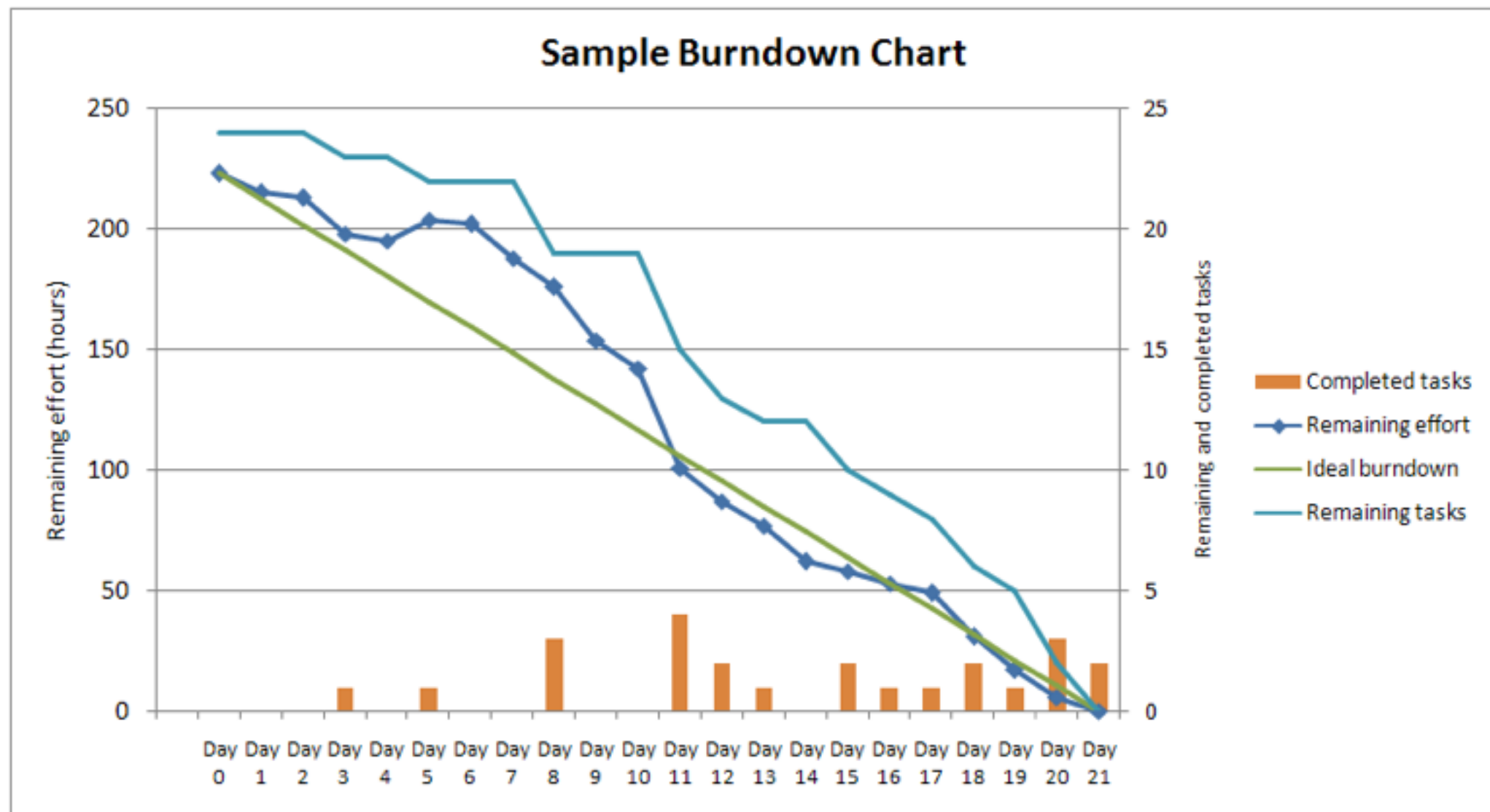
1. Do the Product backlog ☒
 2. Add value ☒
 3. Estimate ☒
 4. Asses Risk ☒
-
5. Prioritize by ROI (most value with the least effort)
 6. Select as much stories as **team velocity** for the next sprint.

ROI

Velocity

- How many points the team completes in one iteration.
- Easy to measure, after first iteration
 - **First iteration:** 1/3 of available time (team members x days)
- Fixes estimations errors
- Easily reflects the project status
- Primary parameter in planning

Burndown charts



- Increase visibility
- Easy to understand
- Updated immediately

Task Planing

Decomposing selected user stories into tasks.



As a <role>
I want <goal>
So that <benefit>

Acceptance criteria:
...

Bussines Value: XX
Story Points: X



Task -> Issue

Task 1: Create a method... 8h

Task 2: Create a table 2h

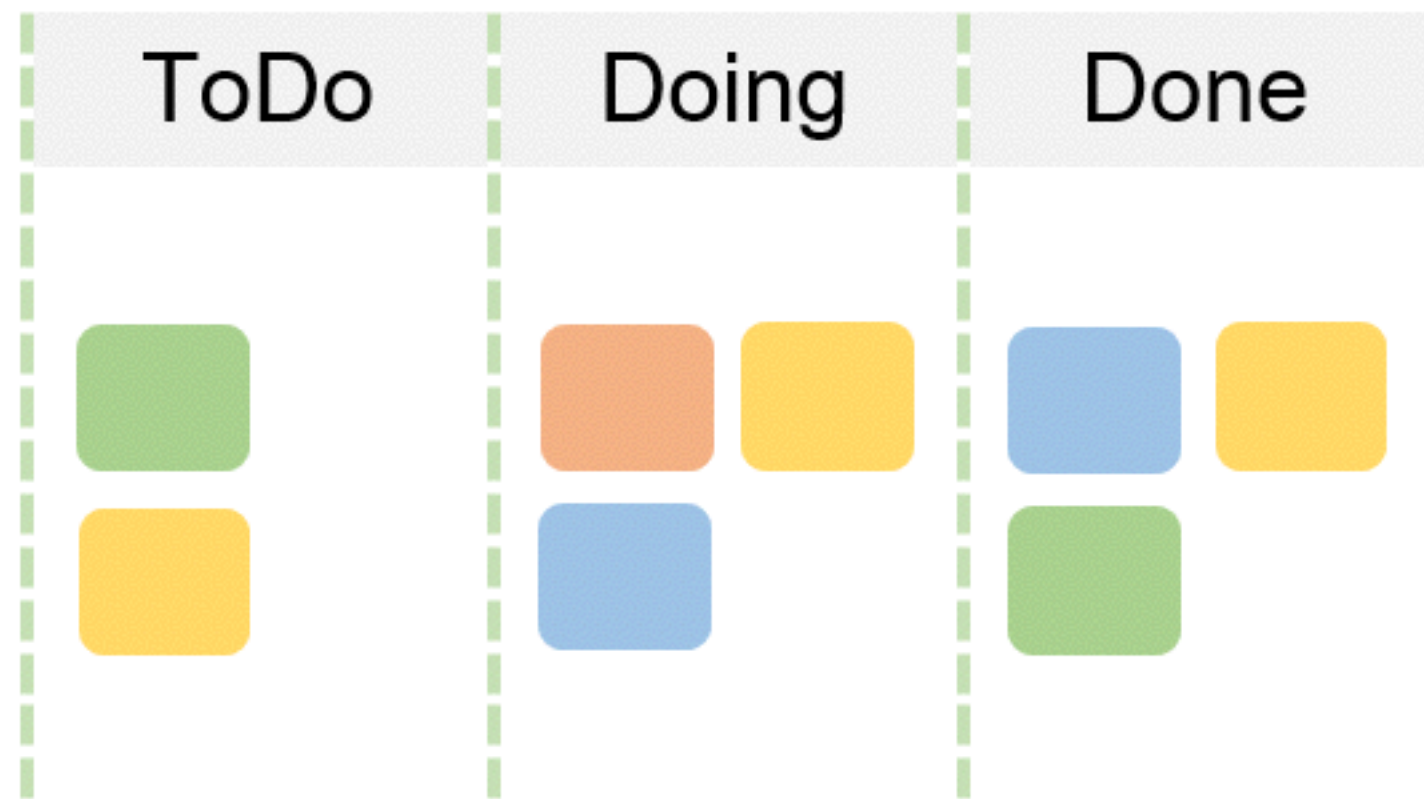
Task 3: Create a UnitTest suit 4h

Let's create
Sprint 1 Tasks

github:issues

Ready for Sprint 1?

- Something is missing, how to tracking process?



SCRUM + KANBAN = SRUMBAN