Scrum Artifacts

Objectives

- List and define various Scrum artifacts
- Describe how each artifact is used to describe a product that is being developed.
- Identify the right artifact and its place in the development process.

Topics we will cover in this section

- Definition of Done
- Product Backlog
- Sprint Backlog
- Task Board
- Burn-Down Chart
- User Stories
- Story Points
- Planning Poker
- Fibonacci Sequence

Definition of Done

Done should include everything we need to do for all items of this increment release, including user acceptance testing.

The definition of ‘done’ is a well-understood and clearly documented definition of items that must be established to mark a story (or iteration or project) to be complete. Getting a story to a completed state per the definition of done should be the goal of a team and should be used as the basis for planning.

Definition of Done

- Assessment/Checklist allows work to be defined as “Done.”
- Defined by the development team.
- Varies per team: Understandable for the team.
- Helps to define how many items can be selected for Sprint.
- More mature teams: More stringent criteria.

Work

The work a development team does is based upon the fact that the business will ask for “stuff.”

- Make themselves more efficient.
- Deliver better customer service.
- Increase sales and profitability.
- Take advantage of a market opportunity.
- Spur growth.
- Become more competitive.

Product Backlog

The Product Backlog is used to document the wants and needs for “stuff,” which is prioritized by how much value it is to the business.

- Different people in the business will ask for different “stuff.”
- Not everything that is asked for has value to the business.
- Some things may be valuable only to the person asking rather than to the business.
- By prioritizing value to the business, non-value add, or less-value add items are eliminated or moved to the bottom of the list.
- The list is worked based on what is the highest priority or value to the business.

Product Backlog (continued)

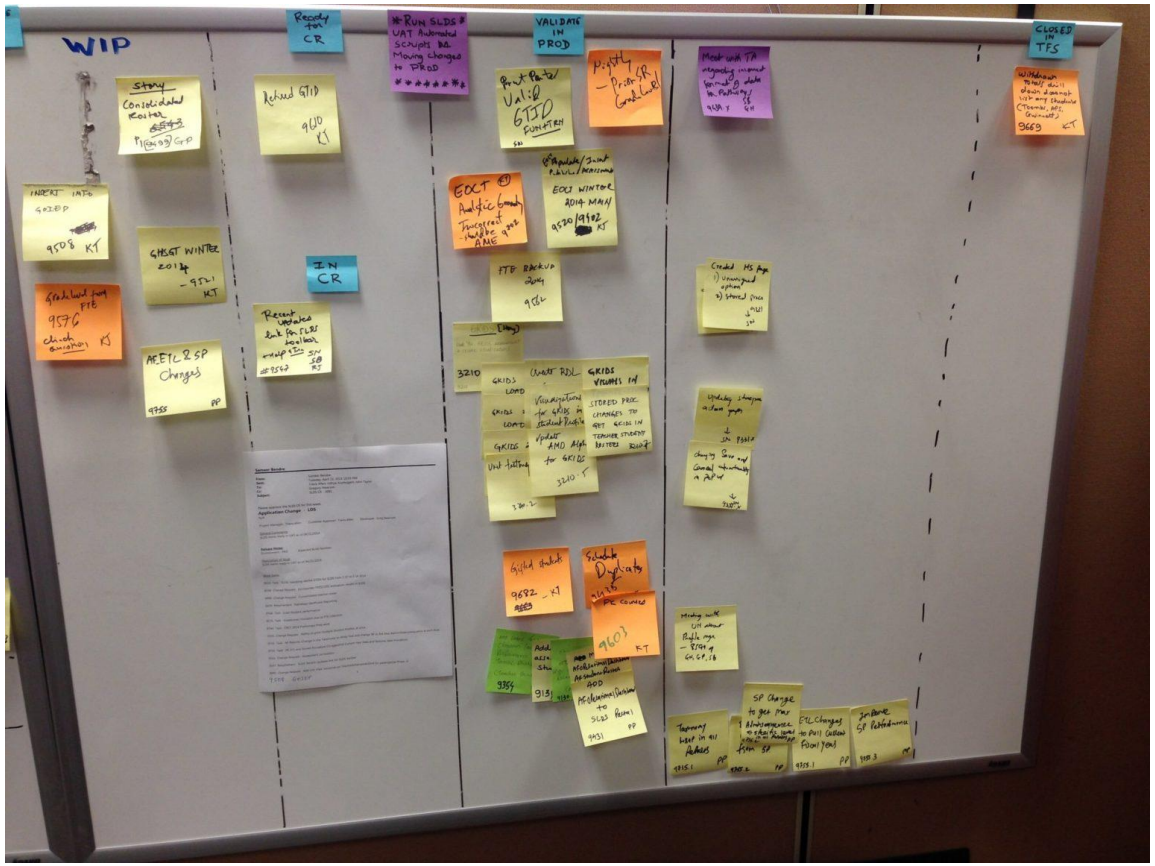
- Contains any/all requests from the business for new items/changes to existing items.
- Ordered list of all user requests/requirements.
- Each entry is called: Product Backlog Item (PBI).
- Items are arranged based on value to the business.
- Each item takes the form of user stories.
- Very large PBIs are called Epics.
    - Epics are broken down into smaller digestible chunks before being considered for work being done.
- Product Backlog is constantly re-evaluated and re-ordered, and items added or removed in a process are called Product Backlog Grooming.

Sprint Backlog Items

- Sprint Backlog Items (SBI).
  - Ordered list of requirements.

- Considerations:
  - Risk.
  - Dependencies.
  - Deadline.

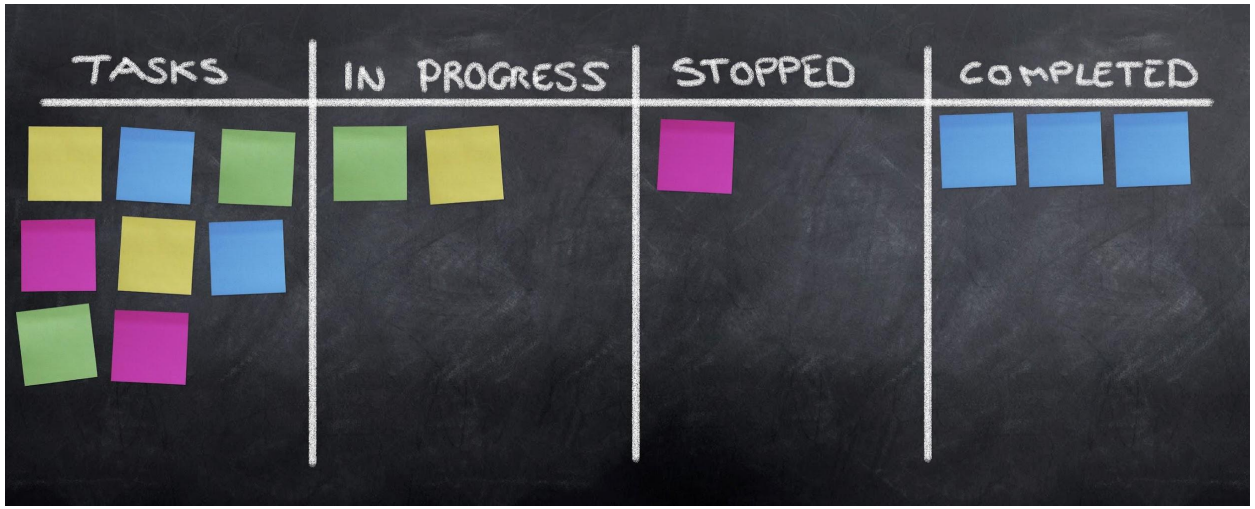
- Business Value:
  - Value-orientation vs. Result-orientation.



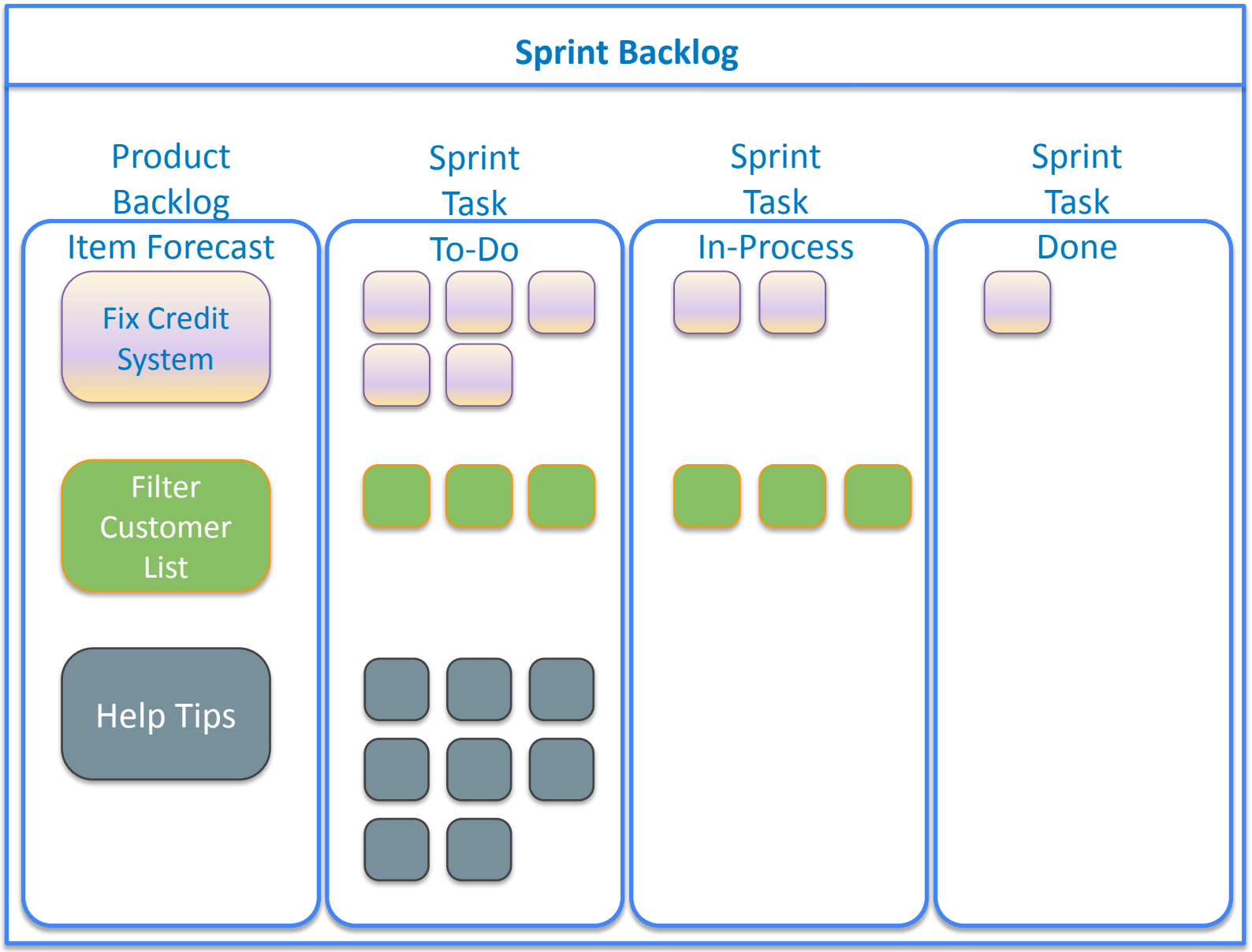
Sprint Backlog

- Chosen based on the estimated amount of work required to complete.
- List of work for immediate execution.
- Pulled from Product Backlog.
- Chosen by the development team.
- Choose from the highest priority value.
- Only pull into sprint backlog the amount of work that the team believes they can reasonably accomplish successfully.
- Once chosen, the Sprint Backlog list is frozen—“nothing can be added” until this list is completed in the next time-box.

Sprint Backlog



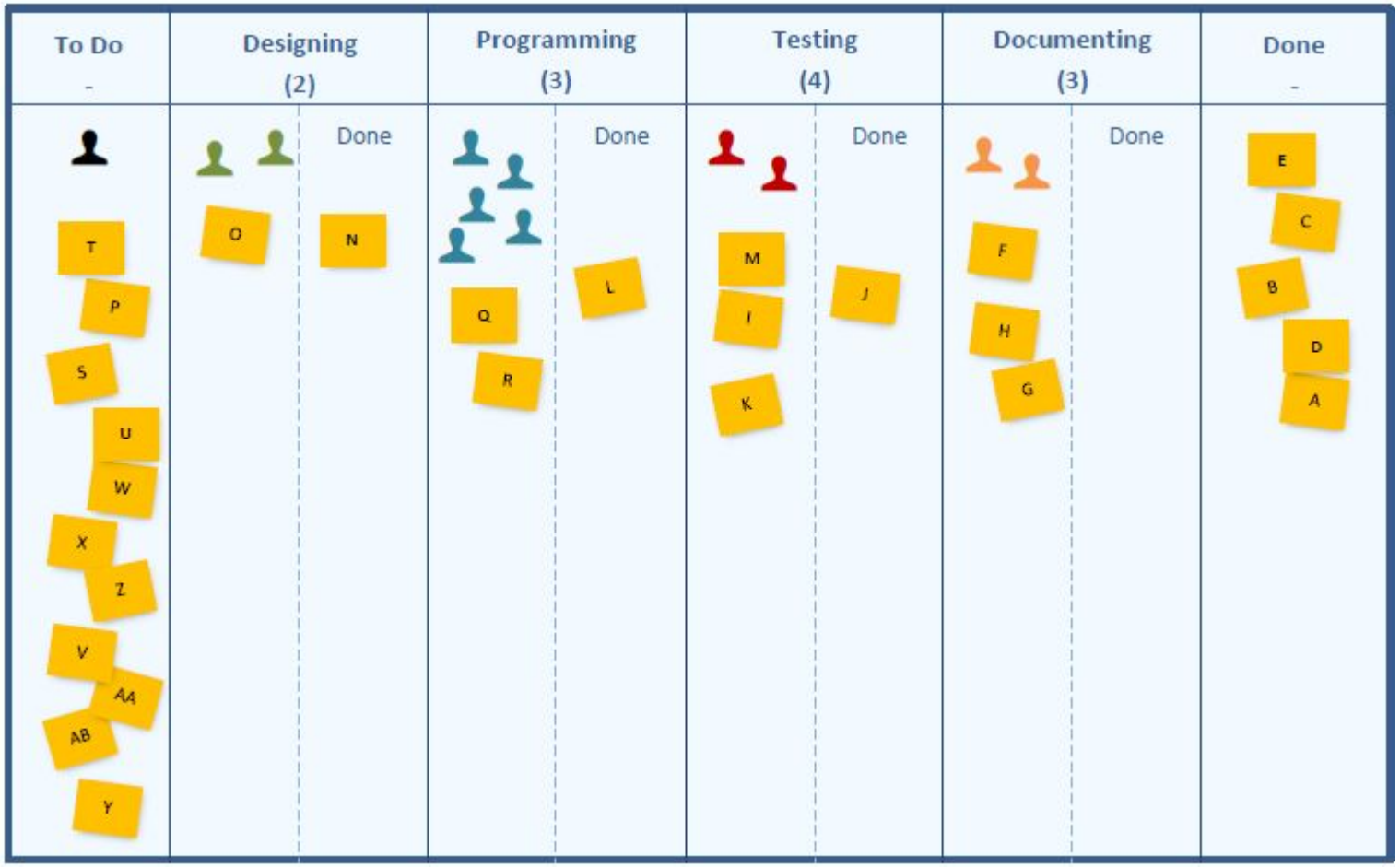
- List of work to be performed during this Sprint.
- Created for the current sprint by selecting items from the product backlog during the sprint planning session.
- Prioritized with a plan for accomplishment
- Sprint Backlog items are broken down into tasks with each task having a planned maximum duration of two days.
- Sprint Backlog is listed on the Task Board.



- Tasks are tracked progressively to completion.
- Task Board is re-evaluated every day during the daily standup.

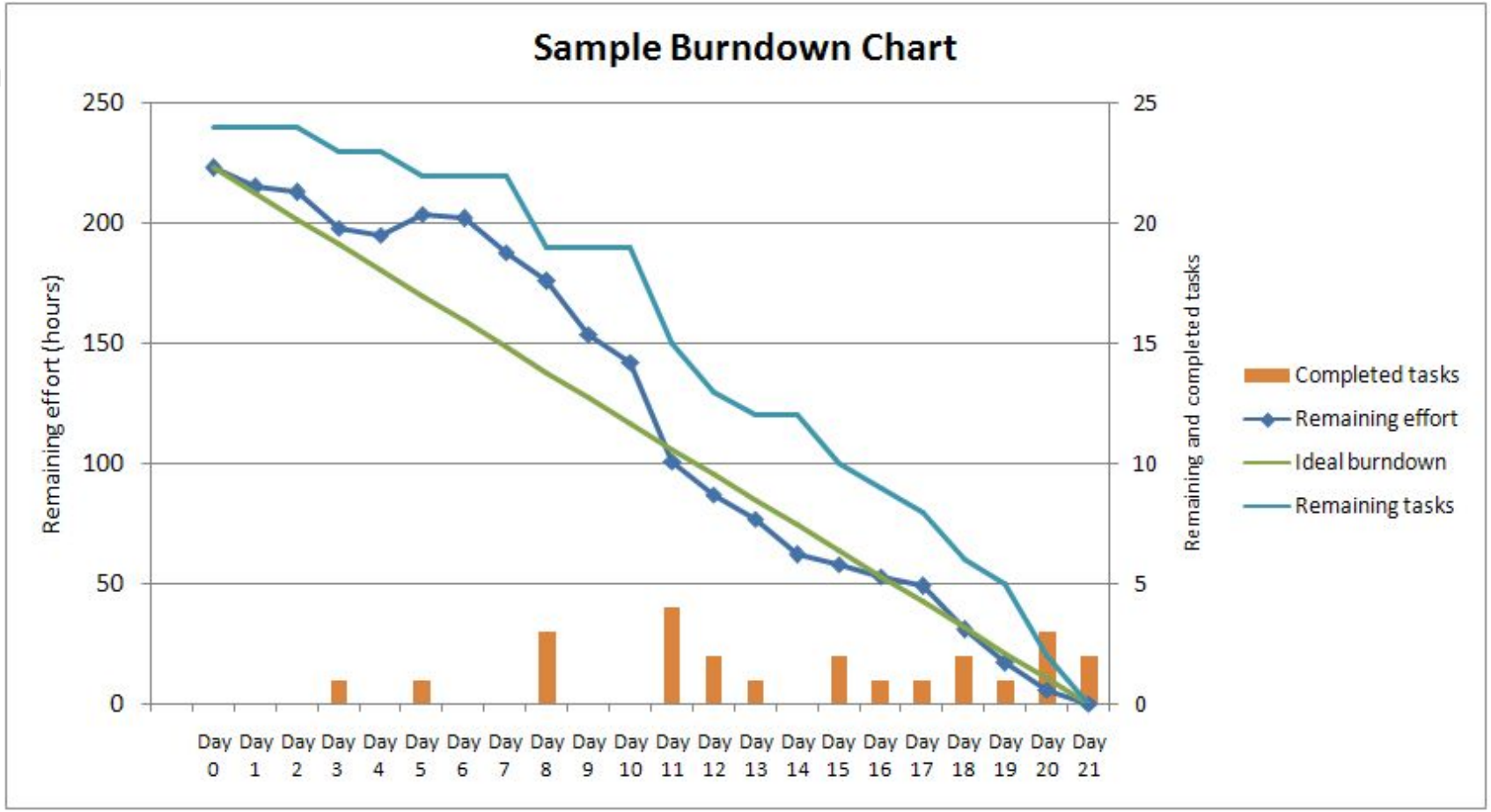
Task Board / Sprint Board / Kanban Board

- Interactive listing of work to be/being performed during Sprint.
- Used daily to identify workflow.
- Displayed in a common work area.



Burn-Down Chart

- Shows remaining work in Sprint Backlog.
- Simple view of Sprint progress (daily).
- Assessed daily.
- Displayed in the common work area.



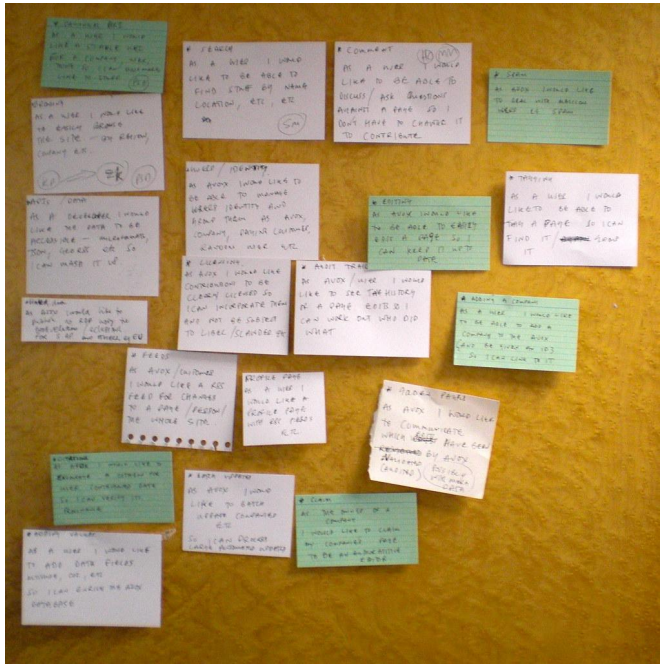
User Stories

- Describes what the user needs to do in the job function.
- Used as the basis for defining the function of the business system.
- Used as a basis for requirements gathering.
- Explain, the “who,” “what,” and “why” of a requirement.
- Often written on small note cards.
- User’s primary way of influencing the functionality of the system to be built.
- One or more sentences are written in everyday business language.
- Becomes the representation of a Product Backlog Item (PBI).

User Stories (continued)

To be complete, user stories should contain:

- name
- brief narrative
- acceptance criteria
- any defined conditions



Story: "As a <user type>, I want to <do some action> so that <desired result>."

Gathering User/Business Needs

User Stories

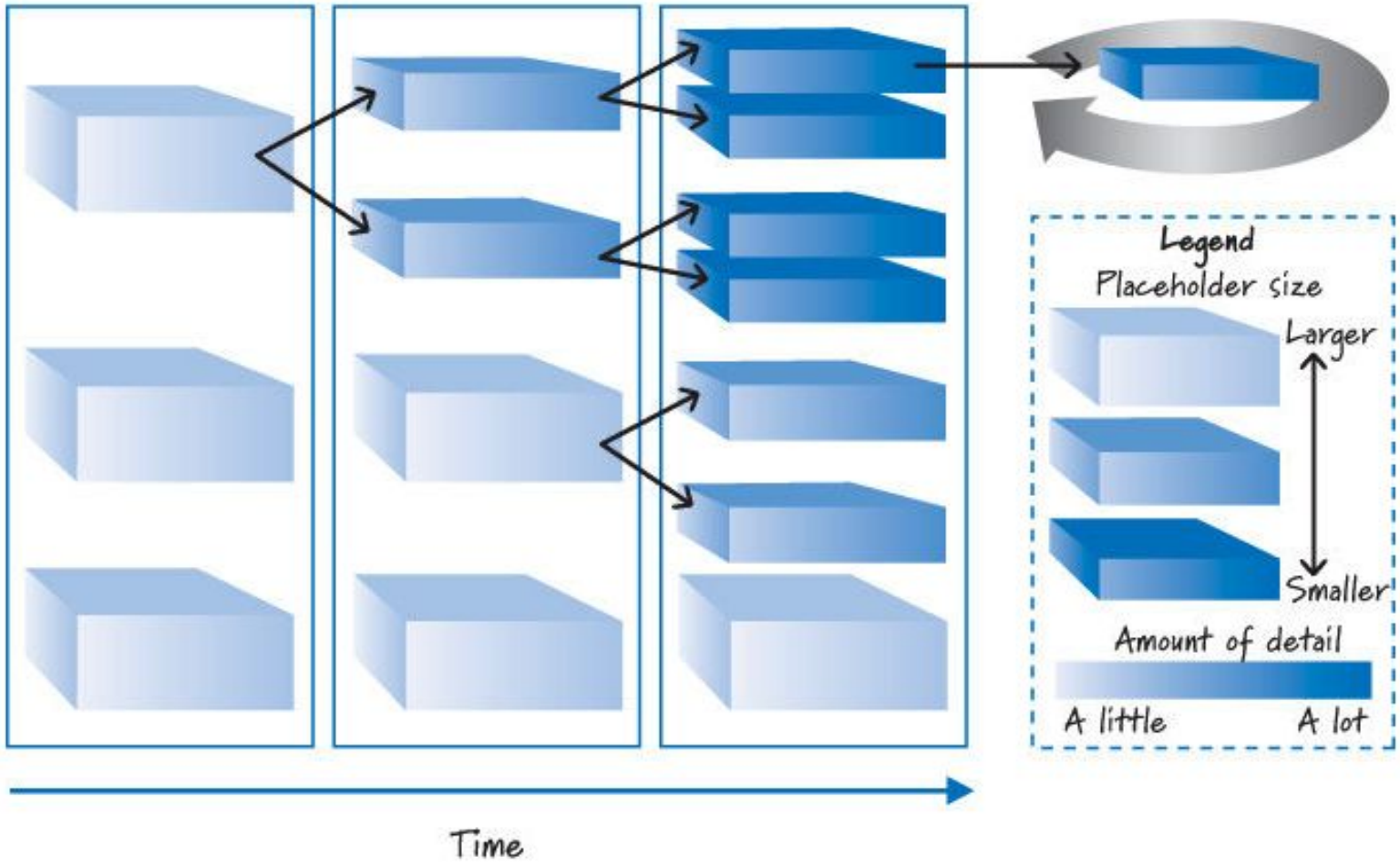
User Story Title
As a <user role> I want to <goal> so that <benefit>.

Template

Find Reviews Near Address
As a typical user I want to see unbiased reviews of a restaurant near an address so that I can decide where to go for dinner.

User Story - Priority and Digestibility

Epics are broken down into smaller stories, and then broken down further into tasks.



Story Points

Choosing enough work to fill up a full sprint:

- Based on relative effort.
- Show only the relative size of the item - not the time to complete.
- Teams pick a simple, agreed-upon basis.

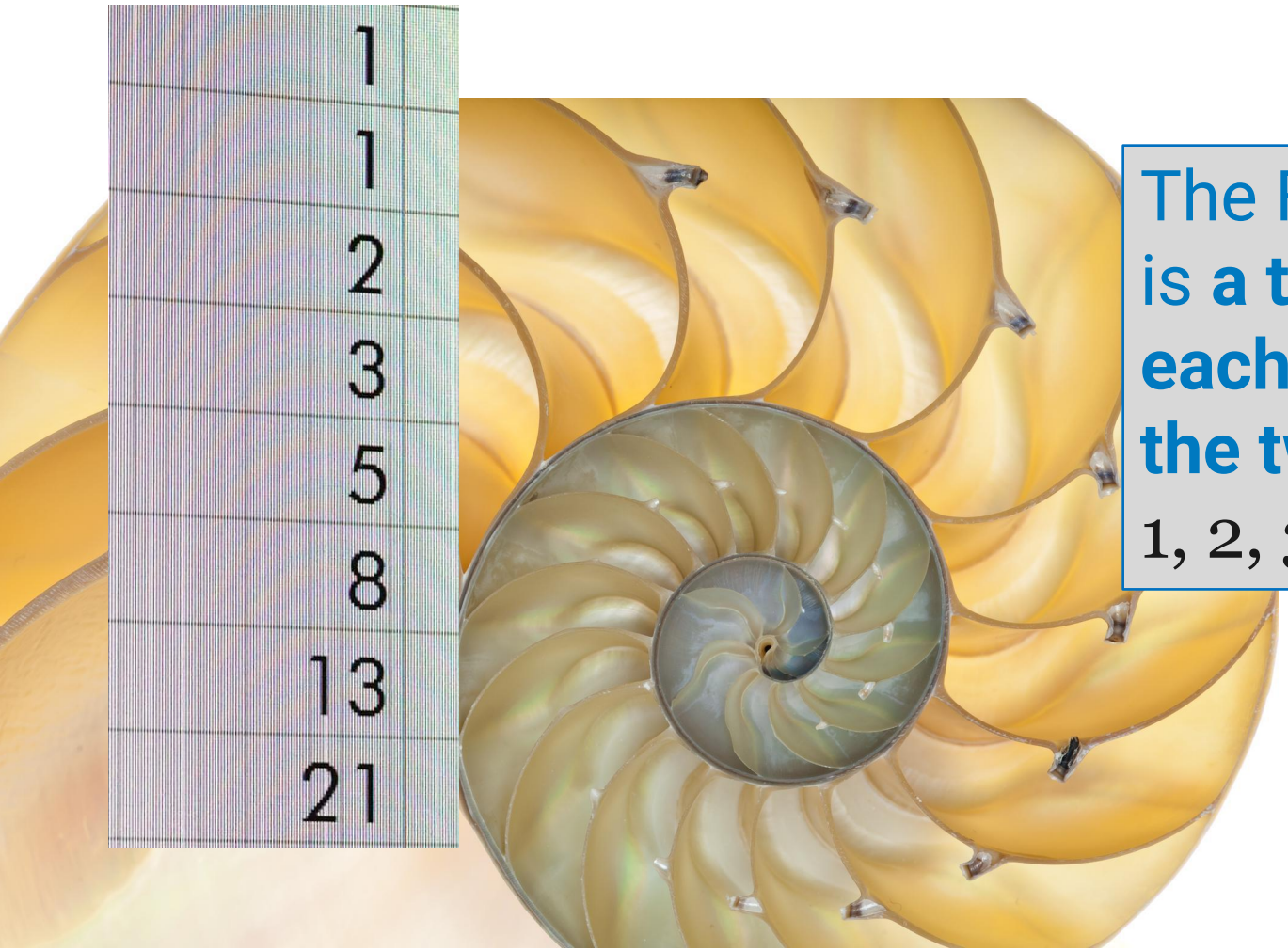
Used for Estimation Activities.

Planning Poker

<u>Determining the amount of work each PBI entails.</u>

- Based on the Fibonacci Sequence.
- Each numbered card represents the amount of work the team member believes this item represents.
- Each development team member is issued one set of cards.
- If when hands are shown, there is not a clear agreement on the amount of work involved, then high and low bidders will explain why they chose that bid.
- The team will re-vote until they reach a consensus.

Fibonacci Sequence



The Fibonacci sequence is **a type series where each number is the sum of the two that precede it.** 1, 1, 2, 3, 5, 8, 13, 21, 34, 55

Summary

In this lesson, we defined and discussed various Scrum artifacts and how the development team uses them to detail the product being developed and the actions performed during the development process. The topics we covered were:

- Definition of Done
- Product Backlog
- Sprint Backlog
- Task Board
- Burn-Down Chart
- User Stories
- User Story - Priority and Digestibility
- Planning Poker
- Fibonacci Sequence