COM3005J: Agile Processes
Artifacts
From User Stories to Burndown Charts

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User Story

XP Scrum

Defines an atom of functionality

See lecture on practices

Story Card

XP

From the original C3 project:

Task Card

From the original C3 project:

Use Case

Describes how to achieve single business goal or task through the interactions between external actors and system

One of the UML diagram types

Use Case Example

Online Shopping System

- View Products
- Purchase Products
- Manager Customer Information
- Create Product Review
- Manage Products
- Report Product Sales
- Fulfill Order
- Report Inventory
- Manage Inventory

Online Customer

Marketing Administrator

Payment Processing System

Warehouse Clerk

Warehouse Manager
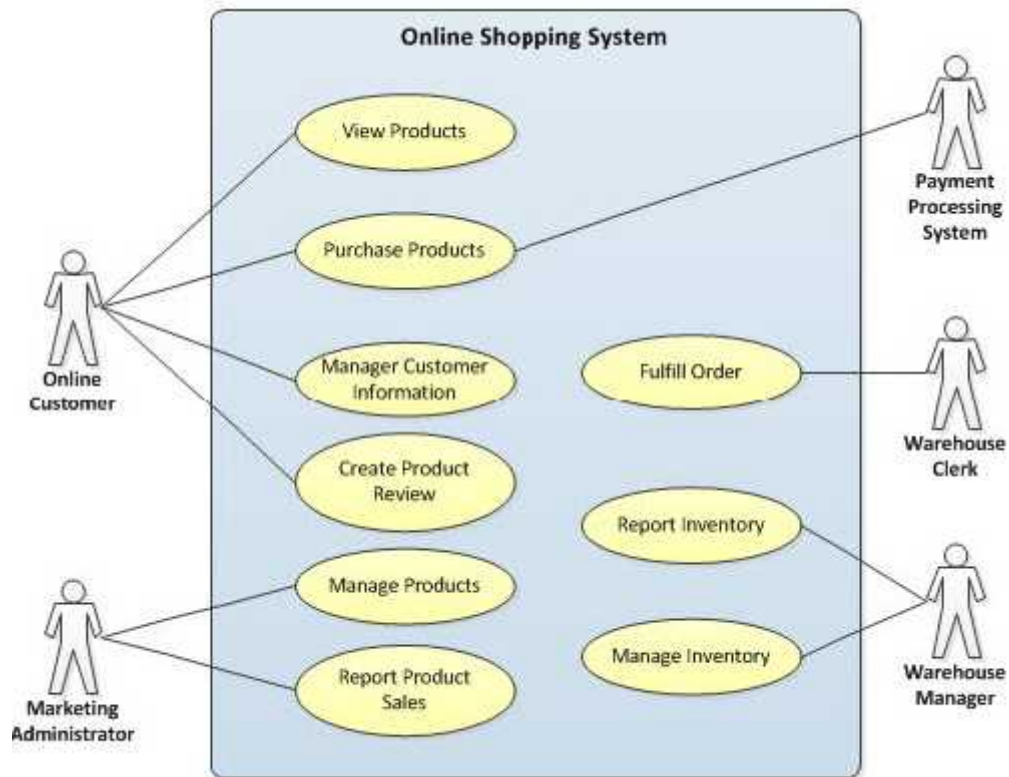
Diagram source: T. Lockman (Wikimedia Commons)

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Use Cases vs User Stories

"*Think of a user story as a use case at 2 bits of precision*"

User story:
- Very simple
- Written by customer
- Incomplete, possibly inaccurate
- Does not handle exceptional cases
- Starting point for additional discussions with customer

Use case:
- More complex
- Written by developer in cooperation with customer
- Attempts to be complete, accurate
- Should handle all possible cases
- Intended to answer any developer questions about customer requirements without further interaction with customer

Product Backlog

➢ Maintained throughout project

➢ Property of product owner

➢ Open and editable by anyone

➢ Contains backlog items: broad descriptions of all potential features, prioritized by business value

➢ Includes estimates of business value

➢ Includes estimates of development effort, set by team

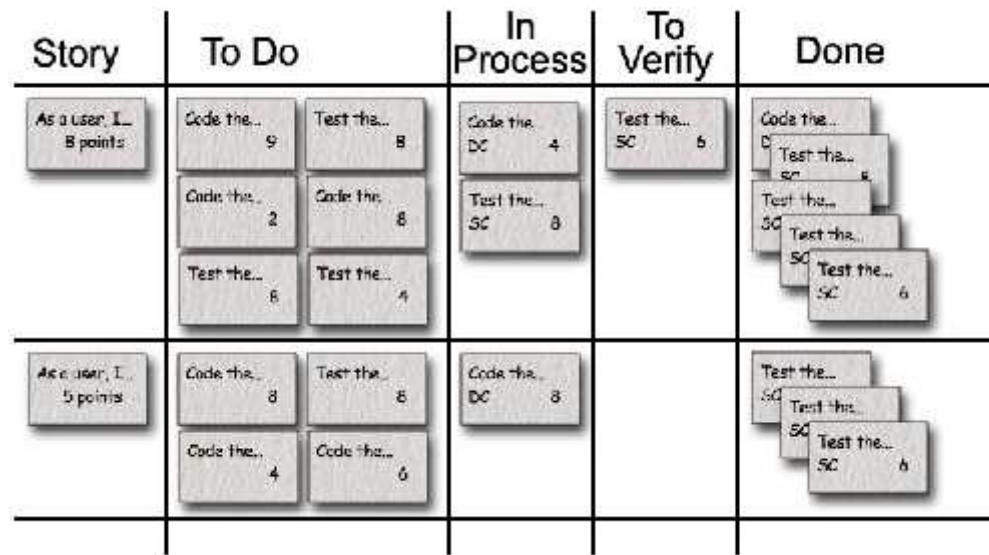Visualized in "task board" (see next)

Task Board, Story Board

Source: Cohn, Anand

Used to see and change the state of the tasks of the current sprint: "to do", "in progress", "done".
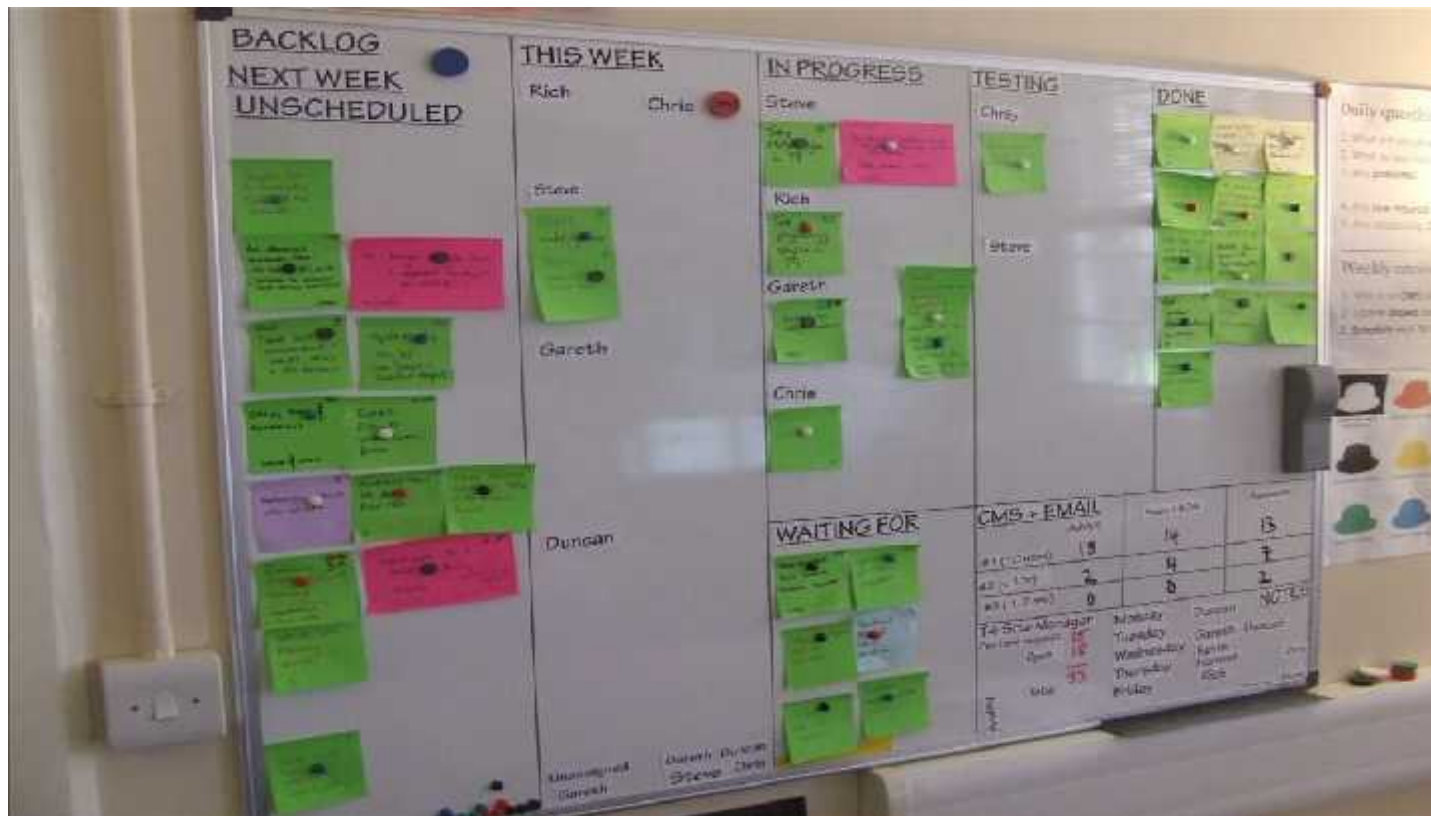
Benefits:

➢ Transparency

➢ Collaboration

➢ Prioritization

➢ Focus

➢ Self-organization

➢ Empiricism

➢ "Humility"

➢ Morale

Example source: Mountain Goat Software

Story Board

Velocity

Scrum

Measure of progress in a project:

Number of items delivered

➢ Measured in tasks, user stories, backlog items…

Burndown Chart
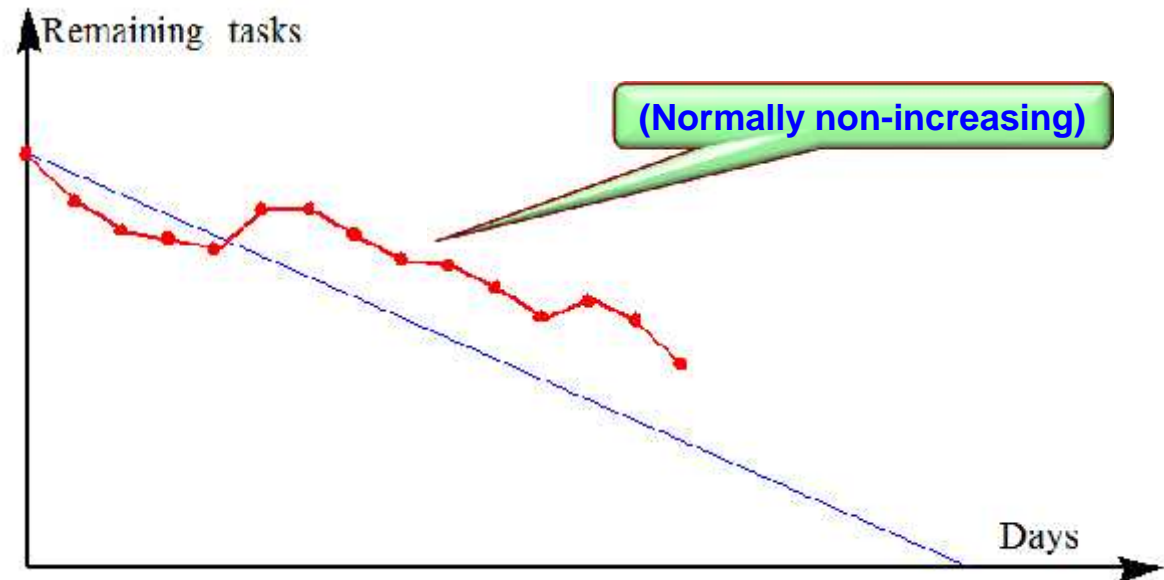
Publicly displayed chart, updated every day, showing, for the sprint backlog:

- ➤ Remaining work
- ➤ Progress

Remaining tasks

(Normally non-increasing)

Days

Bullpen **XP**

Single, open room
(See " Informative workspace" principle)

Artifacts

Part E: Artifacts

What we have seen:
Virtual and material tools
that directly support agile concepts