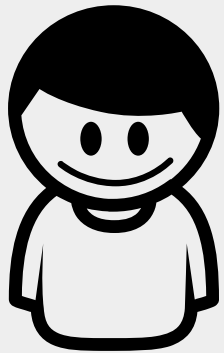# CPSC 310 – Software Engineering

Lecture 4
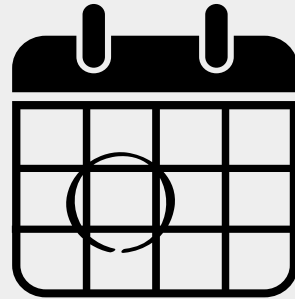
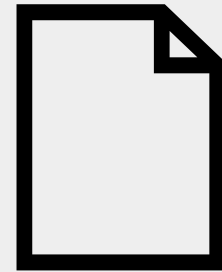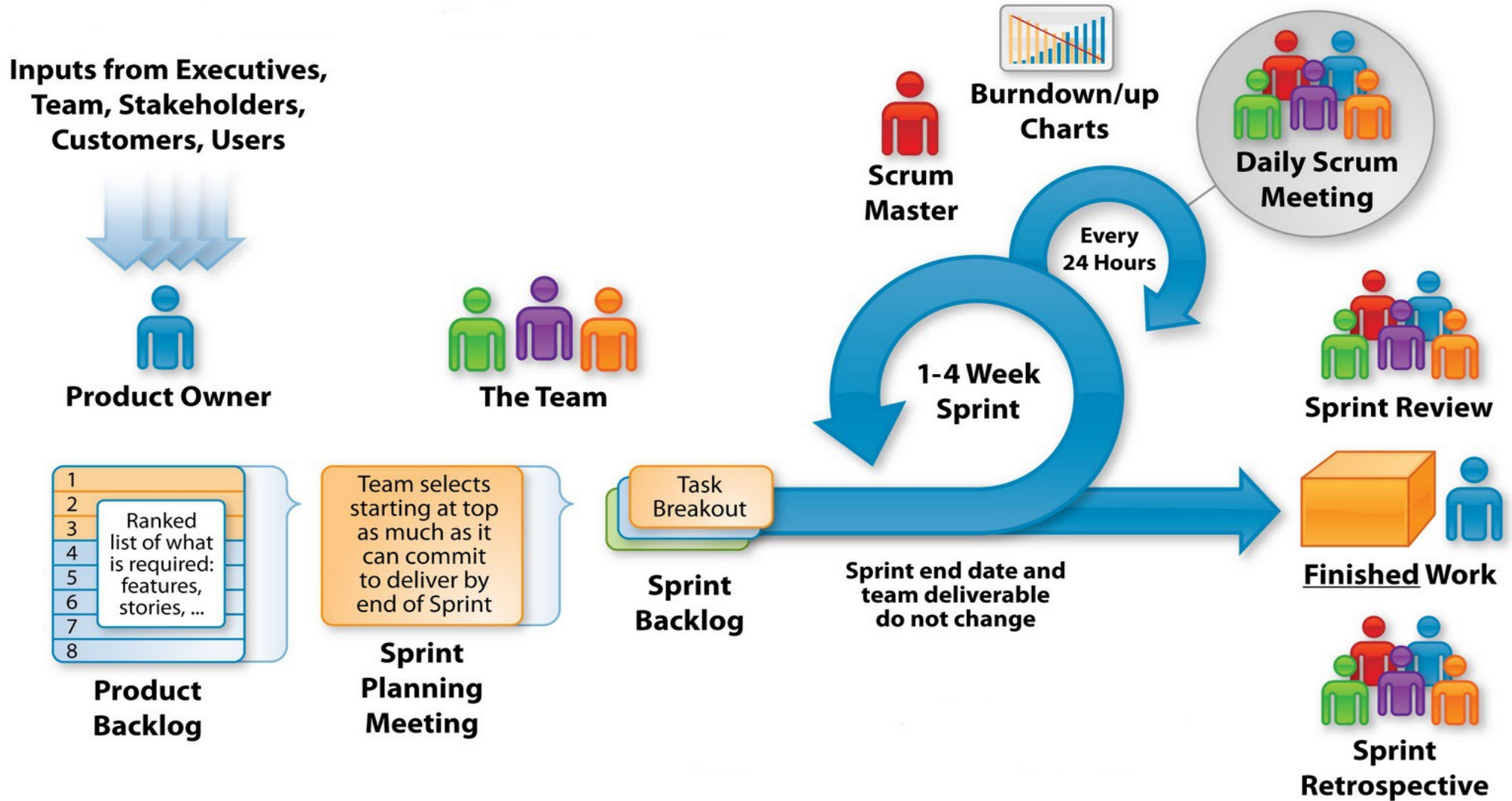# Scrum

Scrum framework

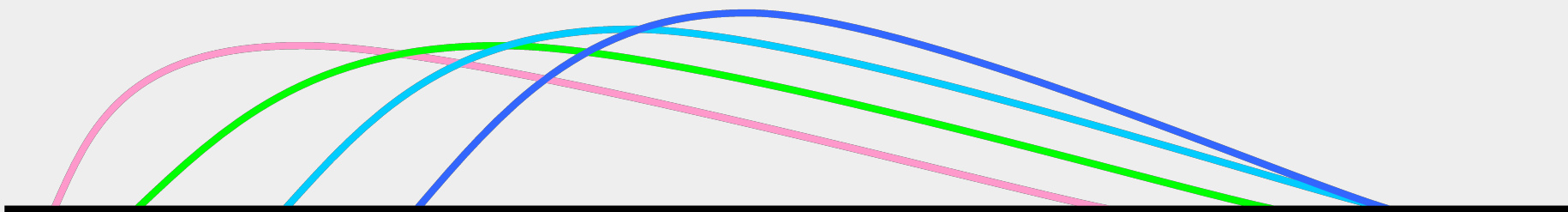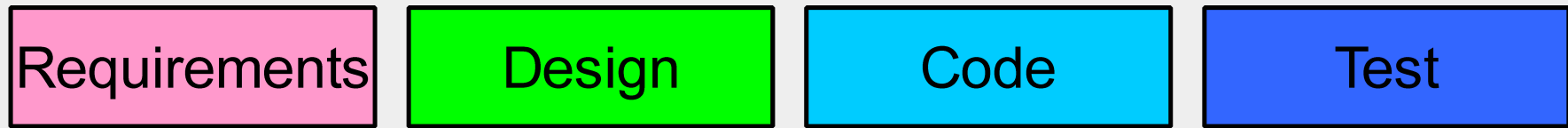## Roles

Product Owner
Scrum Master
Team

Ceremonies

Sprint Planning
Daily Scrum Meet
Sprint Review
Sprint Retrospective

Artifacts

Product Backlog
Sprint Backlog
Burndown Charts

Scrum Process

image from neon rain interactive

Sequential vs. Overlapping Dev

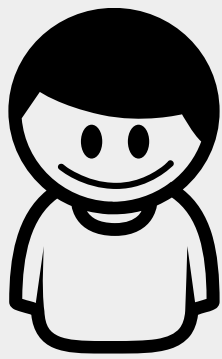| Requirements	Design	Code	Test
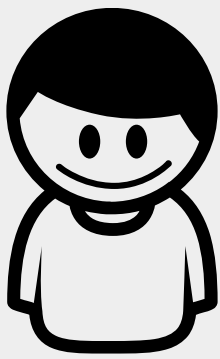
Product Owner

Define the features of the product

Prioritize features according to market value

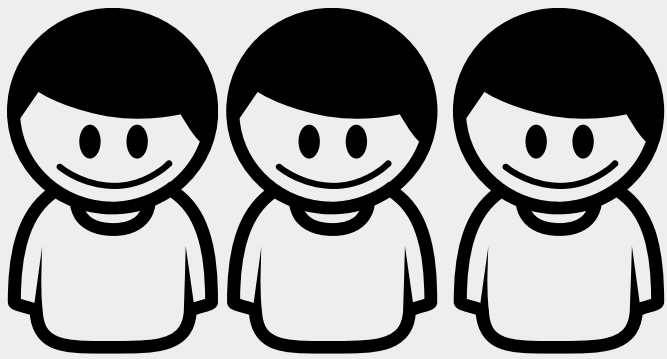Adjust features and priority every iteration, as needed

Scrum Master
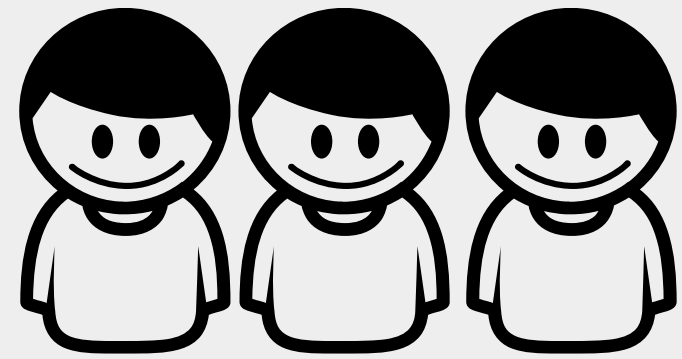
Facilitates Scrum process

Helps resolve impediments

Shields team from external interferences
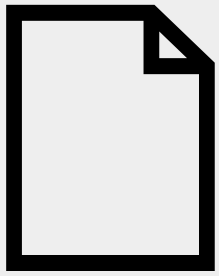
Not a "real manager", he serves the team

The Team
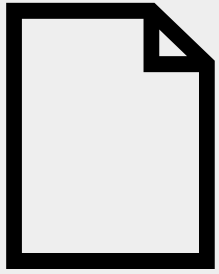
Typically 5-9 people

Cross-functional

Teams are self-organizing

Product Backlog

The REQUIREMENTS

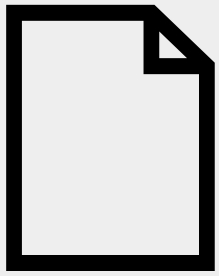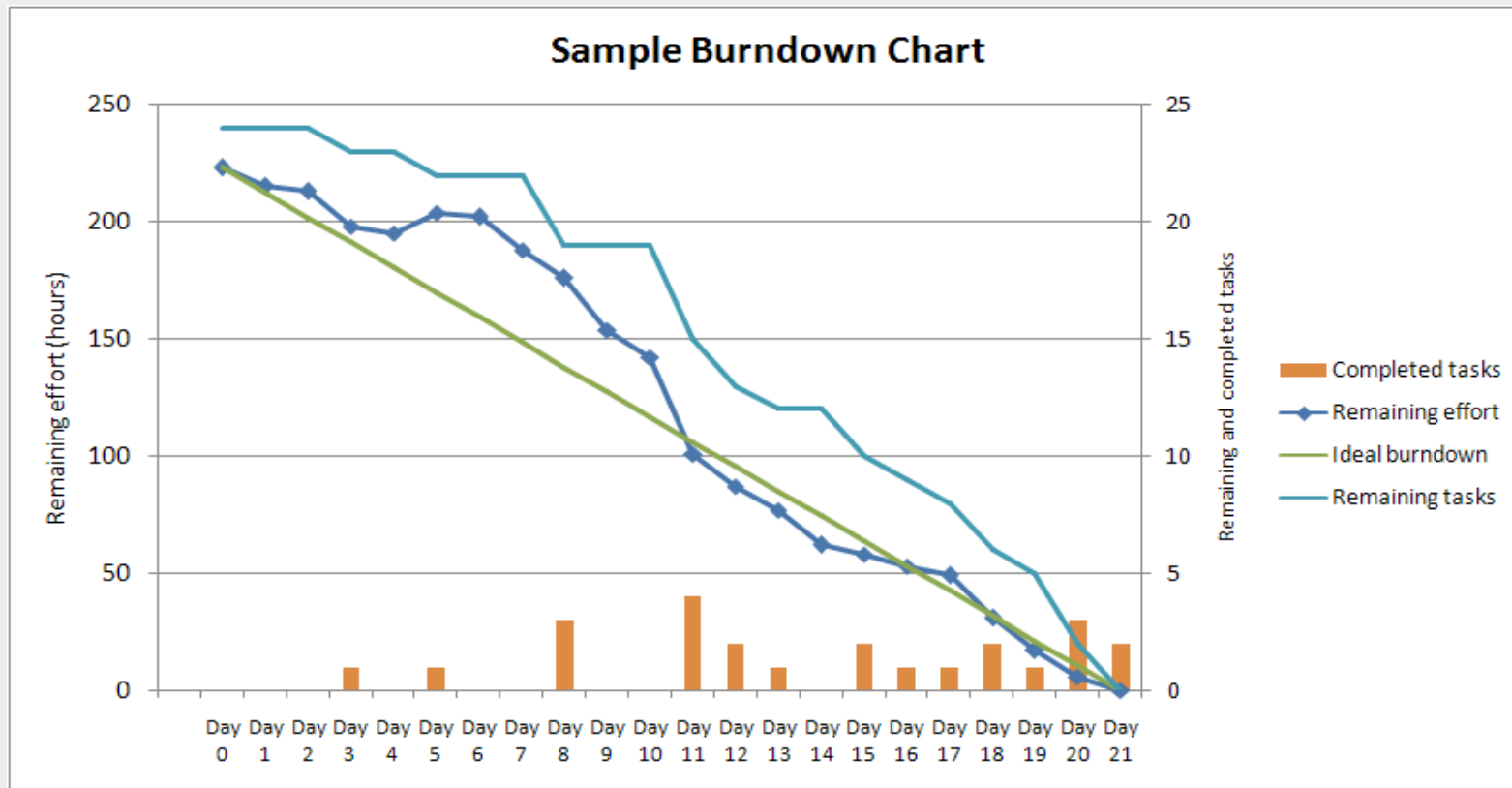| Backlog item	Estimate
Allow a guest to make a reservation	3
As a guest, I want to cancel a reservation.	5
As a guest, I want to change the dates of a reservation.	3
As a hotel employee, I can run RevPAR reports (revenue-per-available-room)	8
Improve exception handling	8
…	30
…	50

Sprint Backlog

PBI for a sprint broken down in tasks
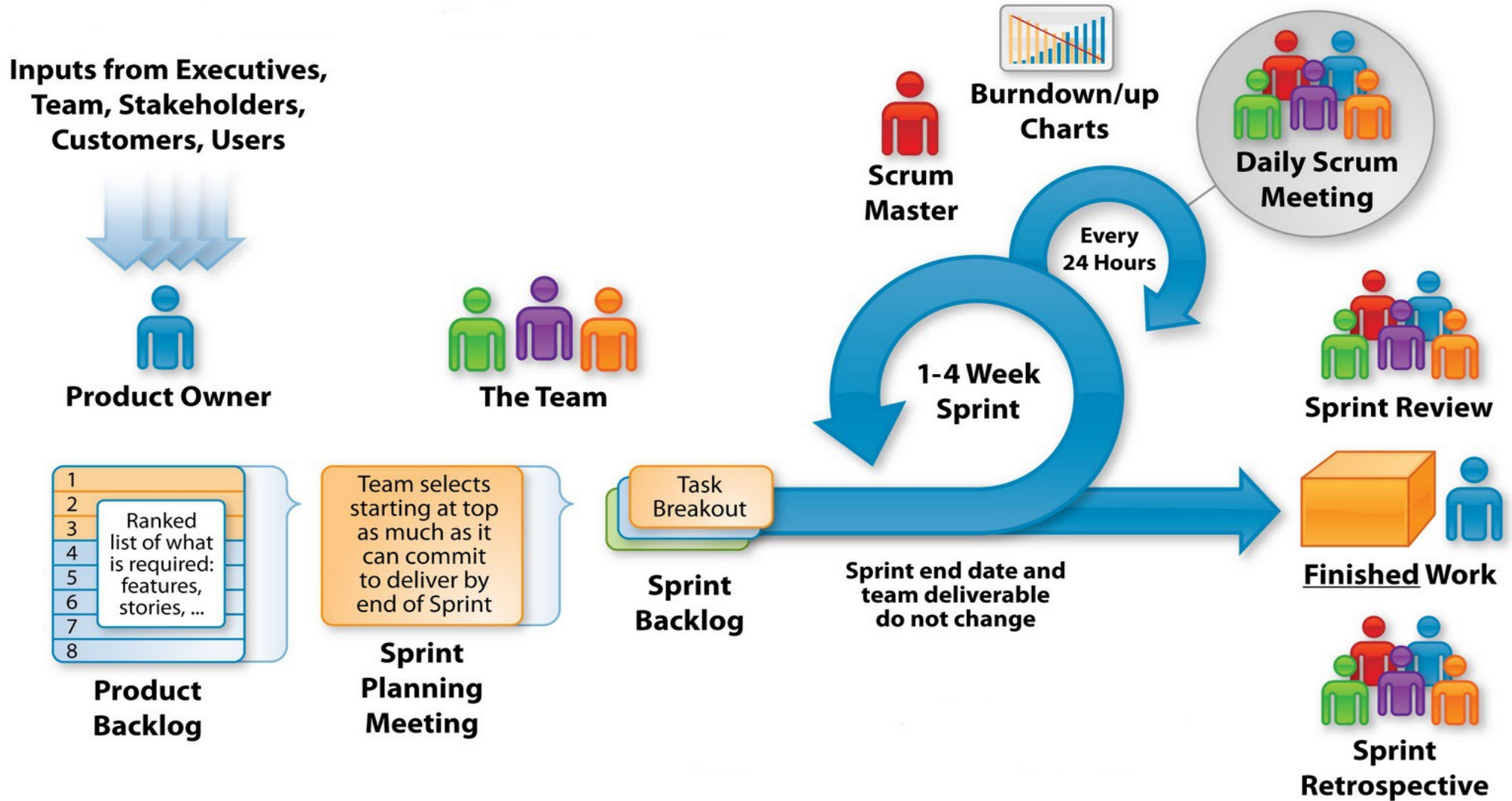
Example for a Weather App:

- PBI: As a subscriber, I want to see a 10-day forecast of conditions so that I can plan at least a week ahead
  - Tasks:
    - Parse the weather data in day packets
    - Push several days data to the client
- PBI: As a subscriber, I want to see precipitation accumulations and forecast so that I can plan my activities.
  - Tasks:
    - Parse snow/rain data from the provider's data
    - Push the snow/rain data to the client
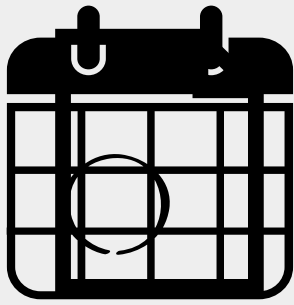   - Redesign client screen for new data
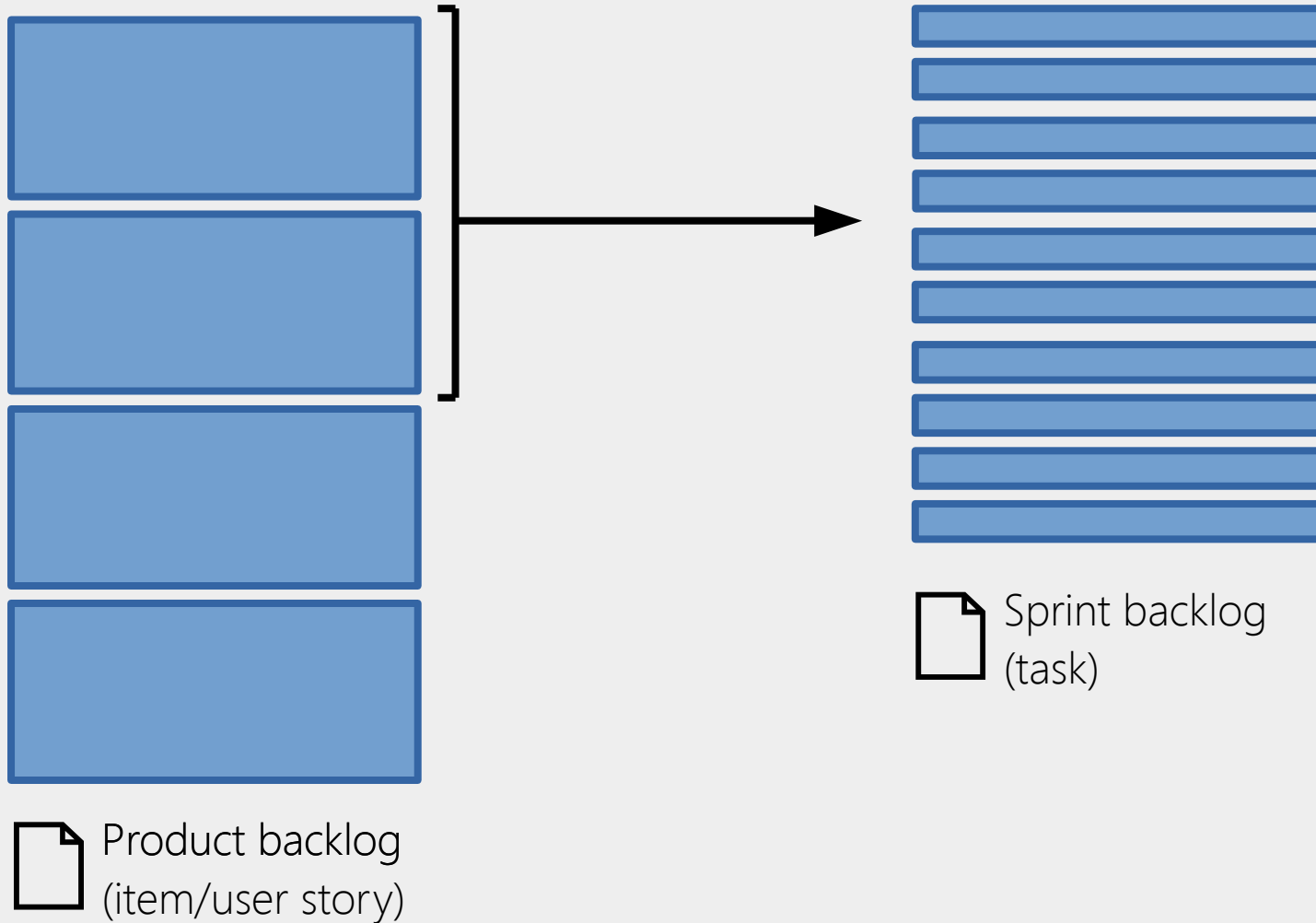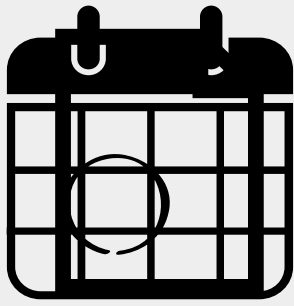   - Refactor the server code

Burndown Charts

Scrum Process

image from neon rain interactive

Sprint Planning

Product backlog
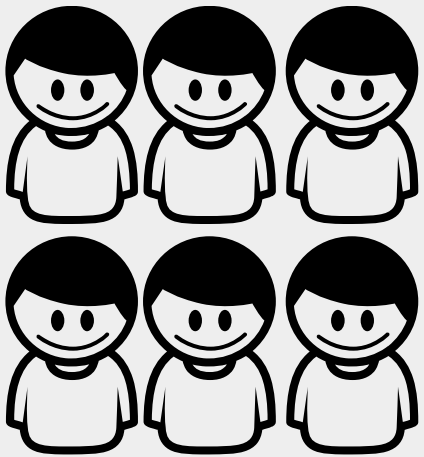(item/user story)

Sprint backlog
(task)

Daily Scrum Meeting

Daily / less than 15-minutes / Stand-up
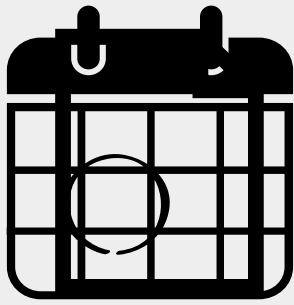Not for problem solving

What did you do yesterday ?
What will you do today?
What obstacles are in your way?

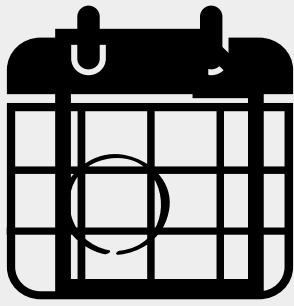Team members, ScrumMaster, Product Owner

Sprint Review

Informal / 2-hour preparation time rule / No slides

Team presents what it accomplished during the sprint
Demo of the product

Product Owner, Team members, ScrumMaster, customers, stakeholders, experts, executives, anyone interested

Sprint Retrospective

PROCESS

👎 Stop doing

👍 Continue doing

👍 Start doing