**Roles**

- **PO**
  - Product Owner: set priorities

- **SM**
  - Scrum Master: manage process, remove blocks

- **T**
  - Team Members: Develop product

- **SH**
  - Stakeholders: observe & advise

**Sprint Process**

- Previous Sprint
  - Product Backlog
  - Increment
  - External Conditions

- Sprint Planning Meeting
  - Sprint: 1 month each

- Day
  - Day (details)
  - Daily Scrum
  - Daily Work

- Sprint Review Meeting
  - Increment
  - Blocks List
  - Product
  - External Conditions

- Next Sprint
  - Product Backlog
  - External Conditions

**Meetings**

- **Sprint Planning Meeting**
  - SM hosts; all attend. ½ day
  - Input: Product Backlog, latest increment, business and technology conditions
  - Output: Sprint Goal, Sprint Backlog
  - Agenda:
    1. PO presents Sprint Goal + top-prio Product Backlog items
    2. T estimates items and budget
    3. T selects set of items for sprint according to priorities
    4. T turns business requirements into technical Sprint tasks

- **Daily Scrum**
  - SM hosts; all attend; PO observes, catches up on status
  - 15 minutes; same time every day
  - Each T member (and optionally SM) answers:
    1. What did you do yesterday?
    2. What will you do today?
    3. What’s in your way?
    4. T updates Sprint Backlog
    5. PO answers T’s short questions if asked
    6. SM updates Blocks List

- **Sprint Review Meeting**
  - SM hosts; T attends; ca. 2-3 hours
  - Informal, informational
  - Agenda:
    1. Demo and discuss Increment
    2. PO formally accepts Product Increment (or not)
    3. SM announces next Sprint Review Meeting

- **Sprint Retrospective Meeting**
  - SM hosts; T attends (usually no PO!); ca. 2 hours
  - Agenda:
    1. Read prime directive
    2. What went well/wrong during sprint?
    3. How can we improve product, Scrum process, work environment, T performance, engineering practices?

- **Sprint Cancellation (rare)**
  - SM calls, if Sprint Goal cannot be met by T
  - Ex.: unsolvable impediments; drastic environmental change; severe misestimation.

**Artifacts**

- **Product Backlog**
  - List of business requirements & issues
  - Owned by PO
  - Anybody can add to it, but only PO prioritizes

- **Sprint Goal**
  - One-sentence summary, declared by PO
  - Mutually acceptable to T and PO

- **Sprint Backlog**
  - List of technical tasks per Product Backlog Item
  - Owned by T, status & estimates updated daily
  - Only T modifies it (PO must not change scope!)

- **Blocks List**
  - Impediments, blocks, pending decisions
  - Owned by SM, updated daily

- **Product Burndown Chart**
  - Visualizes overall progress (estimated remaining efforts) and team velocity
  - Updated after each sprint

- **Sprint Burndown Chart**
  - Visualizes sprint progress (estimated remaining time)
  - Helps detect problems in sprint
  - Updated daily

- **Definition of Done (DoD)**
  - List of quality criteria applicable to all requirements
  - Mutually accepted by T and PO

- **Product Increment**
  - Potentially shippable product version
  - DoD-compliant (tested, documented etc.)
  - Delivered once per sprint

- **Information Radiators**
  - Scrum and other artifacts (e.g. architecture diagrams)
  - Easily accessible for SH and other interested parties
  - Big posters/monitors in public areas or project wiki
  - Purpose: provide max. transparency about project