Product Owner Certification

⚠ Waterfall

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┌──────────────┐   ┌────────┐   ┌──────────────────┐   ┌──────────────┐
│ requirements │ → │ design │ → │ implementation   │ → │ verification │
└──────────────┘   └────────┘   └──────────────────┘   └──────────────┘
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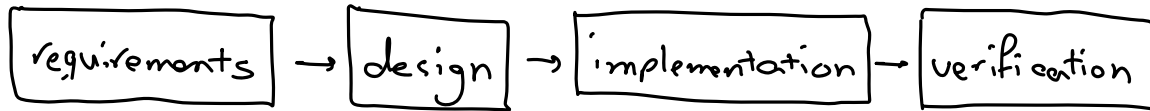
⚠ Minimum Viable Product

↳ a product or a service that has just enough core features to effectively deploy it to a select set of customers and early adopters who can give direct & valuable feedback while it's still early & inexpensive to make changes
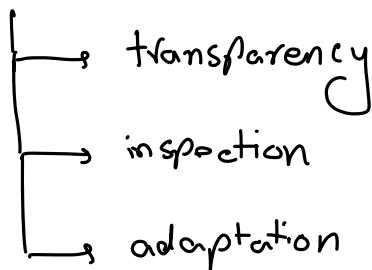
⚠ Agile Manifesto

↳ individuals and interactions over processes & tools

↳ working software over comprehensive documentation

↳ customer collaboration over contract negotiation

↳ responding to change over following a plan

⚠️ Agile principles

1	Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

7	Working software is the primary measure of progress.

2	Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

8	Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

3	Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

9	Continuous attention to technical excellence and good design enhances agility.

4	Business people and developers must work together daily throughout the project.

10	Simplicity--the art of maximizing the amount of work not done--is essential.

5	Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

11	The best architectures, requirements, and designs emerge from self-organizing teams.

6	The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

12	At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

⚠️ Scrum is a lightweight framework which helps people, teams and organizations generate value through adaptive solutions for complex problems
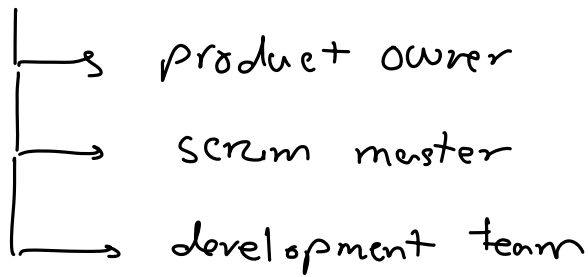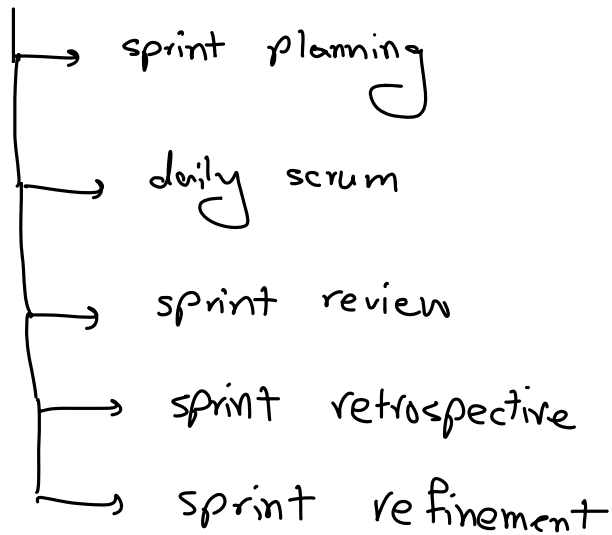
⚠️ pillars of empirical process control
- transparency
- inspection
- adaptation

⚠️ Scrum five values
- Courage, focus, commitment, respect, openness

⚠ Scrum roles
- → product owner
- → scrum master
- → development team

⚠ Scrum Events
- → sprint planning
- → daily scrum
- → sprint review
- → sprint retrospective
- → sprint refinement

⚠ Scrum is founded on empricism & lean thinking

⚠ Product Owner Accountability
- → developing and communicating the product goal
- → creating and communicating product backlog items
- → ordering product backlog items
- → ensuring that the product backlog is transparent, visible and understood
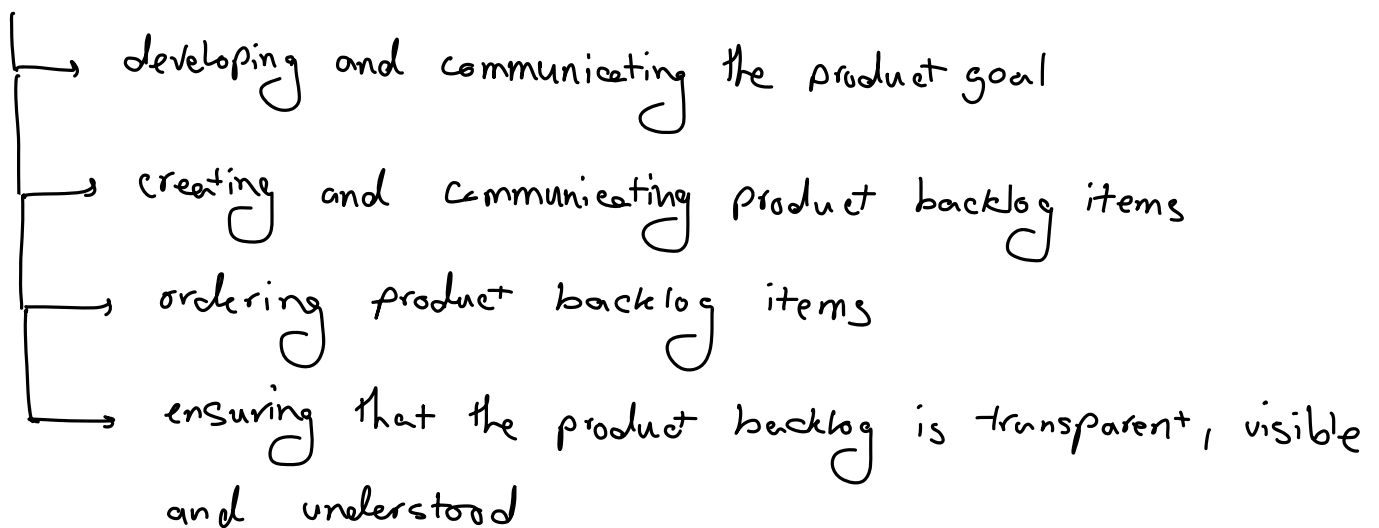
⚠ Product owner is a single person, not a committee

⚠ **Product backlog**
- list of what is needed to improve the product
- ordered list of items based on ROI, risk, ...
- transparent
- minimal but sufficient

⚠ **One Product has**
- one product owner
- one product goal at any given time → is a commitment
- one product backlog

⚠ **Product owner is accountable for creating & communicating the PG**

⚠ **the Increment**
- stepping stone to product goal
- building on prior increments
- ensuring cohesion & quality
- delivering usable value

- presenting at sprint review
- releasing value continuously
- meeting the definition of done

⚠ Sprint backlog consist of

- → the sprint goal (why)
- → selected product backlog items (what)
- → a plan (How) for delivering the increment

⚠ the definition of done is a formal description of the state of the increment when it meets the quality measures required for the product

⚠ Agile Product development using Scrum

① New ideas for product

② Define product vision

③ Product environment analysis

④ identify and define product strategic options

⑤ features identification and prioritization

⑥ Product backlog ↑ [DOR]

⑦ sprint planning

⑧ PBI in sprint backlog ↑ [Daily Scrum]

└─ sprint backlog ─┘

⑨ Increment [DoD]

⑩ Sprint review

⑪ releasable increment

⚠ Sprint planning

Sprint Planning Diagram

Inputs

Product Backlog

Product backlog (Product Goal & PBIs)

DoR filter

Scrum Team's Past Performance & Available Capacity

DoD

Increment

Sprint Retrospective Improvements

Sprint Planning

Participants

Product Owner

Developers

Scrum Master

1) **Why** : Define or refine Sprint Goal

2) **What** : Analyze, evaluate, and select Product Backlog for Sprint

3) **How** : Decompose enough work into actionable plan/tasks & estimates

Output (Sprint Backlog)

Selected PBIs

Sprint Goal

Actionable Plan

⚠ Daily Scrum

- Maximum 15 minutes timebox daily event

- Participants:
  - Developers (Mandatory)
  - Scrum Master & PO (Optional)

  Developers
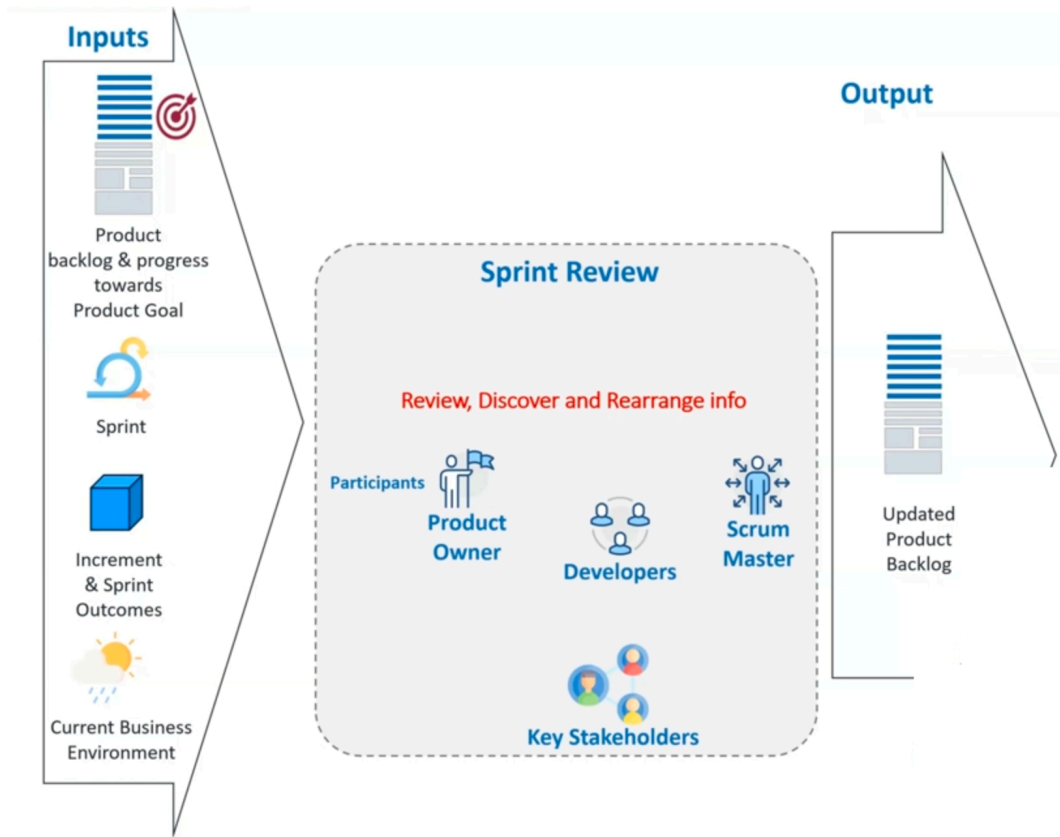
  Scrum Master

  Product Owner

- Objectives
  - Inspect progress towards the Sprint Goal — Sprint Goal
  - Create a plan for the next working day.

Sprint Goal	Sprint Backlog (User stories)	Tasks to do	Tasks in progress	Stories/Tasks Done
A basic online store to browse and purchase Books				

⚠️ Sprint review

Sprint Review

Inputs

- Product backlog & progress towards Product Goal
- Sprint
- Increment & Sprint Outcomes
- Current Business Environment

Sprint Review

Review, Discover and Rearrange info

Participants:
- Product Owner
- Developers
- Scrum Master
- Key Stakeholders

Output

- Updated Product Backlog

⚠️ Sprint retrospective

Sprint Retrospective

Inputs

- Sprint
- Definition of Done

Sprint Retrospective

Participants:
- Product Owner
- Developers
- Scrum Master

Inspect & Adapt
- How the Sprint went w.r.t.
  - Individuals, interactions, process, tools
  - Definition of Done

Output

- Actionable improvements
- Adapted Definition of Done