

#### ◆ Agile Design Process

1. **Discovery Phase:** Understand the problem and gather requirements.
2. **Sketching and Prototyping:** Quickly create low-fidelity prototypes to explore design ideas.
3. **User Feedback:** Gather feedback from users and stakeholders on prototypes.
4. **Iterative Refinement:** Continuously refine the design based on feedback.
5. **Implementation:** Work with the development team to implement the design incrementally.
6. **Continuous Testing:** Test the design as it's being developed and updated based on real user behavior.

#### What is the Product Backlog?

The **Product Backlog** is a **dynamic list** created and maintained by the **Product Owner (PO)** that includes all the **features, functionalities, requirements**, and **tasks** needed to build a product. This list is continuously updated as the product evolves.

#### How the PO Creates and Manages the Product Backlog:

1. **Bridge Between Client and Development Team:**
  - The **PO acts as a bridge** between the **client** (who provides the requirements) and the **development team** (who builds the product).
  - The **PO understands the client's needs** and translates them into **technical requirements** that the development team can work on.
2. **Meeting with the Client:**
  - The **PO arranges meetings with the client** to gather detailed requirements for the software or application.
  - These meetings help the PO understand **what features** the client needs and **why** those features are important.
3. **Listing and Prioritizing Requirements:**
  - The **PO lists down all client requirements** (like new features, bug fixes, improvements, etc.).

- Then, the PO **prioritizes these requirements** based on their **importance** to the client, business goals, and **value** to the end users.
- **High-priority tasks** are placed at the top of the backlog so that the development team works on the most important tasks first.

#### 4. Managing the Product Backlog:

- The **PO continuously manages the Product Backlog** by adjusting priorities and adding new requirements as they come up.
- As the project progresses, the PO makes sure the backlog reflects the latest feedback from the client or stakeholders.

#### In Simple Words:

- The **Product Backlog** is a **living document** that the **Product Owner** creates and manages. It contains all the requirements and tasks for the software.
- The **PO works as a bridge** between the client and the development team, making sure the **client's needs** are understood and prioritized for the development team to build the software as per the client's expectations.

#### Summary:

Yes, the Product Owner **creates** the Product Backlog, **prioritizes** the client requirements, and **manages** the backlog throughout the project. The PO ensures the **backlog is aligned** with the client's needs and the **development team** works on the most important tasks first.

Aspect	Product Backlog	Sprint Backlog
Scope	Entire project features and tasks.	Selected tasks for the current Sprint.
Owner	Product Owner.	Development Team.
Timeframe	Long-term roadmap.	Short-term (1 Sprint).
Changes	Continuously updated.	Fixed for the Sprint duration.

#### Scrum Practice -

Here's the Scrum practice list arranged in a sequential order as typically followed in a Scrum process:

1. **Product Backlog:** The Product Owner creates and manages this prioritized list of requirements, tasks, and features.
2. **Sprint Planning:** The Scrum team selects items from the Product Backlog to create the Sprint Backlog and plan the upcoming Sprint.
3. **Sprint Backlog:** A detailed plan of work to be completed during the Sprint, derived from the Product Backlog.
4. **Sprints:** Time-boxed iterations (1–4 weeks) during which the team works on completing the tasks in the Sprint Backlog.
5. **Daily Standups (Daily Scrum):** Short daily meetings where the team discusses progress, challenges, and plans for the day.
6. **Sprint Review:** At the end of the Sprint, the team demonstrates the completed work to stakeholders for feedback.
7. **Sprint Retrospective:** After the Sprint Review, the team reflects on the Sprint to identify what went well, what didn't, and how to improve in the next Sprint.

## Example of a Daily Stand-up

Team Member	What I Did Yesterday	What I Plan to Do Today	Blockers
Alice	Finished the login page.	Start working on the dashboard UI.	None
Bob	Completed API integration.	Test the API and fix any bugs.	Waiting for data from Alice.
Charlie	Reviewed design feedback.	Finalize design for the home page.	None

## Key Differences Between Sprint Review and Daily Stand-up

Aspect	Sprint Review	Daily Stand-up
Purpose	To review and demo completed work and gather feedback.	To synchronize the team and address blockers daily.
Frequency	At the end of the Sprint (every 1–4 weeks).	Every day during the Sprint.

<b>Aspect</b>	<b>Sprint Review</b>	<b>Daily Stand-up</b>
<b>Duration</b>	1–2 hours, depending on the Sprint length.	15 minutes (time-boxed).
<b>Focus</b>	Reviewing completed features and gathering feedback from stakeholders.	Team members share updates, plans, and blockers.
<b>Attendees</b>	Scrum Team + Stakeholders.	Scrum Team (Product Owner and Scrum Master optional).
<b>Outcome</b>	Feedback from stakeholders, adjustments to the backlog, and planning for future work.	Clear understanding of daily progress and identification of issues.
<b>Scope</b>	Discusses the work of the entire Sprint.	Discusses individual daily tasks and blockers.

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#### 4. Conclusion

- **Sprint Review** is a collaborative meeting involving stakeholders and the Scrum Team to inspect the work done and adapt the Product Backlog accordingly.
- **Daily Stand-up** is a focused, brief meeting for team members to synchronize their efforts, share progress, and identify blockers.

#### DOD

**The Definition of Done (DoD) indicates that a product has reached a "done" phase because:**

- **The code is written, thoroughly reviewed, and tested.**
- **It functions as expected and meets the client's requirements.**
- **Documentation (if needed) has been completed.**

By meeting these criteria, the final product is reliable, complete, and ready for further stages such as deployment or moving from an alpha to a beta phase. This shared understanding ensures that everyone—developers, stakeholders, and clients—is aligned on what "done" really means for each feature or user story.

Aspect	Sprint Review	Sprint Retrospective
Purpose	To inspect the product increment and gather stakeholder feedback.	To inspect and improve the development process.
Focus	<b>Product Quality &amp; Client Requirements</b> – Ensuring the work aligns with business needs.	<b>Process &amp; Team Collaboration –</b> Identifying what went well and what needs improvement.
Participants	<b>Scrum Team, Stakeholders, Clients, Product Owner, Scrum Master, and sometimes Project Manager.</b>	<b>Scrum Team only (Developers, Scrum Master, Product Owner).</b> No stakeholders.
Key Activities	<ul style="list-style-type: none"> <li>- Demo of completed work.</li> <li>- Collect feedback from stakeholders.</li> <li>- Discuss what to work on next.</li> </ul>	<ul style="list-style-type: none"> <li>- Reflect on the past Sprint.</li> <li>- Identify improvements for teamwork and processes.</li> <li>- Plan action items for the next Sprint.</li> </ul>
Output	<ul style="list-style-type: none"> <li>- Updates to the Product Backlog based on feedback.</li> <li>- Decision on what features to build next.</li> </ul>	<ul style="list-style-type: none"> <li>- List of action items to improve the team's workflow and efficiency.</li> </ul>
Timing	At the end of the Sprint, before the Retrospective.	Right after the Sprint Review, before the next Sprint starts.
Duration	1-2 hours (varies based on Sprint length).	1-1.5 hours (for a typical 2-week Sprint).
Facilitated By	Scrum Master or Product Owner.	Scrum Master.

#### Key Differences:

- Sprint Review is about the Product (quality, requirements, and feedback).
- Sprint Retrospective is about the Process & Team Performance (what worked, what didn't, and how to improve).
- Sprint Review includes stakeholders, while Sprint Retrospective is only for the Scrum Team.

## **Sprint Review**

**A Sprint Review is a meeting held at the end of a sprint where the team presents the work they completed during the sprint to stakeholders. The main goal is to get feedback and ensure the product increment aligns with client and stakeholder expectations.**

### **Example: Sprint Review for a Search Functionality**

**Imagine the team was working on a new search functionality for a website. In the Sprint Review:**

**1. Showcase Work:**

- **The team demonstrates the search feature, showing how users can input keywords to find results.**

**2. Stakeholder Feedback:**

- **Stakeholders suggest adding a filter option for a better user experience.**

**3. Plan Next Steps:**

- **The Product Owner updates the backlog with the suggestion, prioritizing it for future sprints.**

## **Sprint Backlog**

**A Sprint Backlog is a list of tasks or items that the Scrum team commits to completing during a specific sprint. It is created during the Sprint Planning meeting and is derived from the Product Backlog. The Sprint Backlog focuses on what needs to be done in the current sprint and is owned and managed by the development team.**

### **Key Features of a Sprint Backlog**

- **Subset of the Product Backlog – Contains high-priority items that the team has agreed to work on.**
- **Detailed Tasks – Work is broken down into smaller, actionable, and manageable tasks.**
- **Commitment – The development team is responsible for completing all Sprint Backlog items by the end of the sprint.**

- **Dynamic Updates** – While generally fixed, tasks may be refined or adjusted as needed during the sprint.
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### Example of a Sprint Backlog

Imagine a team is working on an e-commerce application. Their sprint is two weeks long, and their Sprint Backlog might look like this:

User Story/Task	Details	Status
Implement Login Page	Develop login form, validate input	In Progress
Set Up User Authentication	Connect to backend authentication	Not Started
Add "Add to Cart" Functionality	Enable users to add items to cart	In Progress
Fix Bug: Checkout Button Not Working	Debug and fix checkout issue	Completed
Write Test Cases for Product Search	Create unit tests for search functionality	Not Started