

## Retrospective: Basic inventory CRUD features

- 💡 Reflect on past work and identify opportunities for improvement by following the instructions for the [Retrospective Play](#).

### 📋 Overview

Date	Nov 18, 2025
Team	Team Inventory
Participants	Dhrushi, Paryapti

### 🕒 Sprint Retrospective – CRUD Operations Sprint

#### Sprint Goal

Build the core CRUD functionality (Create, Read, Update, Delete) for the Inventory Management System and ensure basic operations work correctly.

➡ What went well	🔴 What could be improved	💡 What we learned
<ul style="list-style-type: none"><li>• <b>Clear requirements</b> made implementation straightforward.</li><li>• <b>Repository pattern</b> (using <code>InMemoryProductRepository</code>) made development flexible.</li><li>• <b>Unit tests executed successfully,</b></li></ul>	<ul style="list-style-type: none"><li>• No input validation layer yet → system accepts negative quantity/price.</li><li>• Some test cases had issues due to early mistakes with return types.</li><li>• Need to improve naming conventions and comments for better readability.</li></ul>	<ul style="list-style-type: none"><li>• Importance of writing tests <b>before</b> code (TDD mindset).</li><li>• How Maven compiles tests differently from main code.</li><li>• How to structure Java applications using services and repositories.</li><li>• How crucial <b>clean separation of</b></li></ul>

<p>validating add/update/delete logic early.</p> <ul style="list-style-type: none"> <li><b>TDD helped catch issues early,</b> reducing debugging later.</li> <li><b>Good team communication,</b> quick decisions, no major blockers.</li> <li>Code structure became clean and modular due to applying <b>SOLID principles.</b></li> </ul>	<ul style="list-style-type: none"> <li>Functional testing was added later — could have been planned earlier.</li> <li>Difficulties in Java version differences (<code>var</code> keyword issues).</li> <li>Documentation could have been updated more frequently during the sprint.</li> </ul>	<p><b>responsibilities</b> is (SOLID).</p> <ul style="list-style-type: none"> <li>Git setup and version control are critical to track changes and improvements.</li> </ul>
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💡 **Pro tip:** You can also run a retro on a Confluence whiteboard by typing /retro

## ✓ Action items

@Paryapti Macwan @22000381

Action Item	Owner	Priority
Add validation for negative quantity & price	Dev	High
Improve error handling in ProductService	Dev	Medium
Add manual testing scenarios for invalid inputs	Tester	Medium

Introduce logging using SLF4J	Dev	Low
Update documentation continuously (not only at sprint end)	All	Medium
Plan functional tests earlier in sprint	Scrum Master	Medium
Consider adding a file-based repo instead of in-memory	Dev	Low