

Phase 1: Problem Understanding & Industry Analysis

Project Title: Inventory & Order Tracking Dashboard

Objective:

The purpose of this phase is to thoroughly understand the problem domain and analyze how the Inventory & Order Tracking Dashboard project can provide value for businesses in the retail and e-commerce industry.

1. Requirement Gathering:

- Businesses need to track available products, their stock levels, and customer orders in real-time.
- Management requires a centralized dashboard to monitor low-stock alerts and order statuses.
- Sales and warehouse staff want an easy-to-use interface to update and monitor inventory.

2. Stakeholder Analysis:

- **Business Owners:** Want visibility into product availability and order fulfillment efficiency.
- **Warehouse Staff:** Need a system to monitor low-stock products and process restocking quickly.
- **Sales/Order Management Team:** Require order tracking to ensure timely delivery and customer satisfaction.
- **Developers/Admins:** Responsible for creating and maintaining the Salesforce solution.

3. Business Process Mapping:

- Products are added into the system with stock quantity details.
- Orders are created and linked to products via order items.
- Placing an order automatically reduces stock levels.
- Dashboard displays products, order statuses, and real-time charts for management review.

4. Industry-specific Use Case Analysis:

- In **Retail**, managers must track fast-moving items (like electronics, apparel) to avoid stockouts.
- In **E-commerce**, order fulfillment efficiency directly impacts customer satisfaction.
- In **Manufacturing**, tracking raw materials stock ensures smooth production cycles.

5. AppExchange Exploration:

- Reviewed existing inventory management apps on Salesforce AppExchange.
- Found that most provide large-scale enterprise solutions; our project focuses on a simplified, student-friendly version with custom LWCs and Apex automation.

Conclusion:

Phase 1 establishes the foundation of the Inventory & Order Tracking Dashboard project by analyzing requirements, identifying stakeholders, and mapping industry-specific needs. This ensures that subsequent phases (data modeling, automation, Apex, and LWC development) are aligned with solving real-world inventory management challenges.