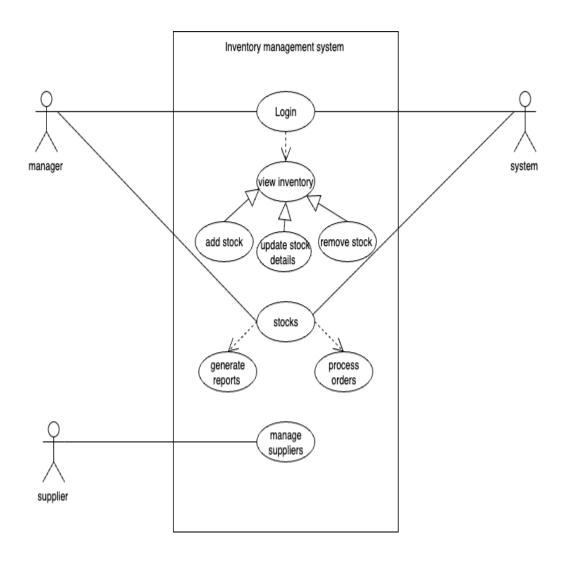
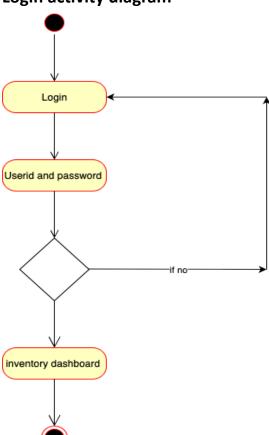
6.Use Case diagram and Activity Diagram

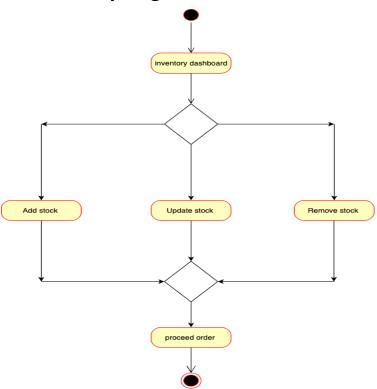


Activity Diagram

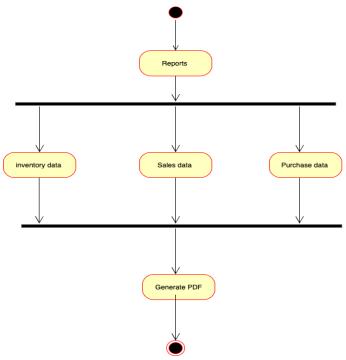
Login activity diagram



Stock activity diagram



Reports activity diagram



Use Case Specification Document

Project Name: Inventory Management system

Use Case Name : Add New product

Use Case ID: US-001

Author: Navadeep

Version: 1.0

Date: 15-08-2025

1. Use Case Description

This use case describes the process of adding a new product to the inventory database, including entering product details, setting pricing, and defining opening stock

2. Actors

Primary Actor: Admin / Store Manager

Secondary Actors: Inventory Database, Supplier

3. Preconditions

- Admin/Store Manager is logged into the system.
- User has product details ready (name, code, price, stock quantity).

4. Postconditions

- Product is successfully stored in the database.
- Opening stock is recorded and available for sales operations.

5. Basic Flow

- 1. Admin selects "Add Product" option from the dashboard.
- 2. System displays the "Add Product" form.
- 3. Admin enters product code, name, description, category, and pricing.

- 4. Admin enters opening stock quantity.
- 5. Admin clicks "Save."
- 6. System validates the data.
- 7. System saves product details into the database.
- 8. System confirms "Product Added Successfully."

6. Alternate Flow

Product Already Exists

If the entered product code already exists, system displays "Product Code Already in Use."

7. Exception Flow

Missing Mandatory Fields

If required fields (product code, name, price) are blank, system shows an error.

8. Assumptions

- Admin has correct product details from supplier.
- System has validation checks for duplicate codes.

9. Constraints

- Product code must be unique.
- Price must be greater than zero.

10. Dependencies

- Supplier database for reference details (if integrated).
- Internet connection for online systems.

11.Inputs and Outputs

- **Inputs:** Product code, name, category, price, opening stock.
- Outputs: Confirmation message, updated product list in inventory.

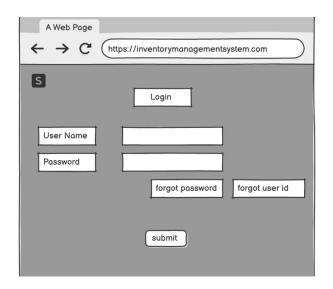
12.Business Rules

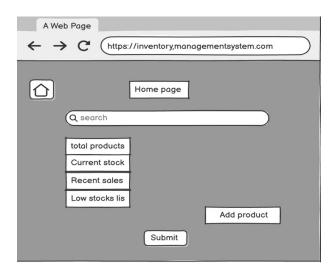
- Product name must not exceed 100 characters.
- Opening stock cannot be negative.

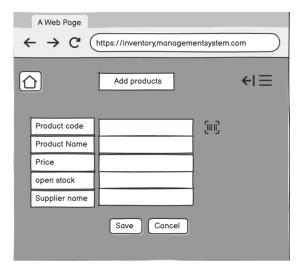
13. Miscellaneous Information

- Product images can be added after product creation (optional).
- Product categories are maintained in a separate master list.

7. Screens and pages







8. Tools-Visio and Axure

Microsoft Visio was used in the project to create process flows, activity diagrams, and use case diagrams. It helped in clearly showing the sequence of steps, decision points, and the relationships between different system components. The drag-and-drop feature made designing diagrams quick, and updates were easy to apply whenever requirements changed.

Axure was helpful for creating interactive wireframes and clickable prototypes. It allowed us to simulate the complete user journey — from the home page to login, search, add to cart, payment, and logout. This gave stakeholders a realistic view of how the application would work before actual development started, making feedback and approval faster.

Balsamiq was mainly used for low-fidelity wireframes. Its sketch-style design was perfect for brainstorming and quickly drafting ideas without spending too much time on detailed visuals. This helped in focusing on functionality first and refining the design later, saving time and improving collaboration between the team and stakeholders.

9. BA experience

My experience as BA in following phases:

1. Requirement gathering:

- I interacted with stakeholders to understand their needs and collected detailed information about the project.
- I used interviews, meetings, and questionnaires to ensure all requirements were captured clearly.
- I also documented all requirements in a structured format so they could be easily referred to by the team.

2. Requirement Analysis:

- I reviewed and analyzed the gathered requirements to make sure they were complete, clear, and feasible.
- I also identified any gaps, conflicts, or dependencies between requirements.
- I prioritized requirements based on business value and urgency to guide the development process.

3. Design:

- I worked with the design and technical teams to prepare wireframes, process flows, and functional specifications.
- I ensured the design aligned with business needs and user expectations.
- I also gathered feedback from stakeholders on the design before moving to development.
- Updated RTM

4. Development:

- I coordinated with the development team, clarified requirements, and answered queries to make sure the product was built as per specifications.
- I also tracked the progress of development activities.
- I monitored change requests and ensured they were reviewed and approved before implementation.

5. Testing:

- I participated in test case reviews, validated functionality against requirements, and ensured defects were reported and fixed.
- I also assisted in UAT (User Acceptance Testing) with stakeholders.
- I verified that all requirements were traceable to test cases to maintain coverage.

6. Deployment:

- I supported the team during the product release, ensured all final checks were done, and helped in preparing user manuals or training materials for a smooth rollout.
- I gathered post-deployment feedback from users to plan future enhancements.