

② stock maintenance

① Introduction

1.1) Purpose: Its purpose is to define function like for warehouse stock efficiently.

1.2) Scope: warehouse management from inventory tracking, taking orders & supplying stocks, transport etc.

② General description: monitoring stock levels, categories, stock based on type & location.

③ Functional Requirements

3.1) Inventory Management: Track stock levels of each item.

3.2) Receive Order: system allows customers to place orders.

3.3) Supplier Management: User can add, update, delete supplier information including contact details and order history.

• Reporting

3.4) Restocking alerts: When stock level fall before predefined threshold, automated alert to restock.

④ Interface requirements

① User Interface: system should have a graphical interface for staff to view stock levels.

② API integration: Integrate external API, for supplier database to automate restocking process.

③ Notification: integrated email or SMS alerts for low stock.

⑤ Performance Requirements:-

- ⑤.1 System should handle up to 500 users at the same time.
- ⑤.2 Stock update & order processing should happen within 3 sec.
- ⑤.3 System should be able to handle warehouse up to 100000 items.

⑥ Design constraints:-

- ⑥.1 System should be compatible with existing warehouse.
- ⑥.2 It should follow security protocols to prevent unauthorised access to warehouse.
- ⑥.3 Integration with external supplier must adhere to industry standard APIs.

⑦ Non-functional Req:-

- ⑦.1 Security:- System should keep customer and order details private.
- ⑦.2 Reliability:- Ensure 99.9% uptime to avoid disruption in warehouse operations.
- ⑦.3 Data Integrity:- Ensures that level & order information remains consistent & accurate.

⑧ Preliminary Schedule & Budget

Project is expected to take 3 months with a budget of \$20000.