Bafna Gold
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→ Stock Maintenance

1 Introduction

1.1 Purpose

The purpose of this SRS document is to define the functional and non-functional requirement for a stock maintenance system.

1.2 Scope

The Stock Maintenance System will serve as a centralized platform to manage the stock lifecycle, from receiving goods into inventory to dispatching them for sales or production use.

1.3 Overview

This SRS document provides a comprehensive description of the stock maintenance system, detailing its functional and non-functional requirements.

2. General description

It will be a web-based application designed to manage inventory, orders, and supplier relationship. The system will integrate with existing point of sale system.

3. Functional Requirement —

- User authentication — Implement role-based acces control for inventory managers, and Admin users.
- Inventory management — manage stock levels for m warehouse.
  Add or update stocks [illegible]
- Order management — create new purchase order with order date, delivery date & items
- Stock adjustment — Update inventory upon the succesful receipt of goods.
- Reporting — Generate inventory, order, and supplier performance reports.

4. Interface Requirement

- The system should have clean, responsive interface
- Interface with external systems like accounting software
- The system should communicate using secure protocols.

5. Performance Requirement

- The system should be able to handle 1,000 concurrent users.

- Average response time should not exceed 1.5 s.
- Stock updates should reflect across the system.

6. Design Constraint

- The system must use a relational database to ensure data integrity
- Implement data validation and error handling to prevent inconsistencies.

7. Non - Functional Requirement

- Security - use role-based access control to restrict unauthorized operation.
- Scalability - Optimize database queries to handle large datasets efficiently.
- Maintainability - Use a modular code structure for easy maintenance.
- Usability - The system should be intuitive, with clear navigation.

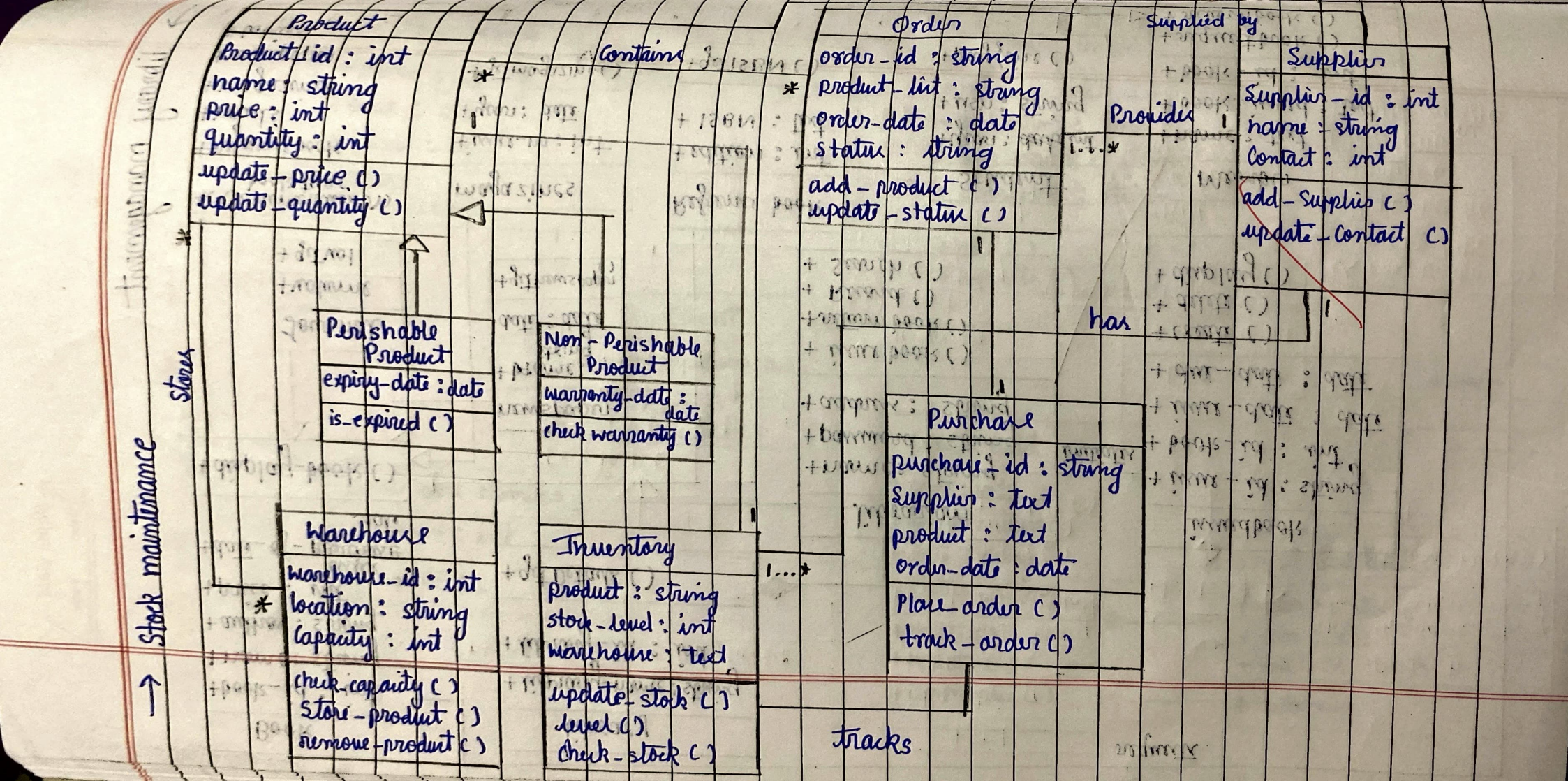
8. Preliminary Schedule and Budget

Budget estimate :

Development : $ 60,000

- Testing : $ 15,000
- Hardware & software : $ 20,000
- Miscellaneous : $5,000

Total estimated budget : $100,000.


Stock maintenance
Product
Product_id : int
name : string
price : int
quantity : int
update_price ()
update_quantity ()
Stores
Perishable Product
expiry_date : date
is_expired ()
Warehouse
warehouse_id : int
location : string
capacity : int
check_capacity ()
store_product ()
remove_product ()
Contains
Non-Perishable Product
warranty_date : date
check_warranty ()
Inventory
product : string
stock_level : int
warehouse : text
update_stock ()
level ()
check_stock ()
Order
order_id : string
product_list : string
order_date : date
status : string
add_product ()
update_status ()
Purchase
purchase_id : string
Supplier : text
product : text
order_date : date
Place_order ()
track_order ()
tracks
has
Supplied by
Provides
Supplier
Supplier_id : int
name : string
Contact : int
add_Supplier ()
update_Contact ()