

## 4. Stock Maintenance system

### a. SRS Document:

#### Stock maintenance system:

#### 1. Introduction:

- 1.1. Purpose of this document is to provide description about stock management system.
- 1.2. Scope of this document: The document provides description and explanation of the working of the system.
- 1.3. Overview:  
The system keeps track of the incoming and outgoing stock with expiry date.

#### 2. General Description:

The system should keep track of monthly incoming and outgoing of the stock. With Batch ID, from address, to address, and Quantity.  
The system should generate a real time update on the information like Dispatched, packed, delivered.

#### 3. Functional requirements:

- Details should be documented accurately.
- The query system must retrieve percentage increase in the stocks, present price, GMP and the remarks of the relationship manager must be displayed to the right.

#### 4. Interface Requirement:

The details of the query system must be displayed as playcards for each stock and must be changing every seconds.

#### 5. Performance Requirement:

The details of the stock from the exchange ~~must have a~~ query system must have a response time of 0.1 milli seconds. It must operate on 200 GB memory and must have minimal error rate.

#### 6. Design Constraints:

It must use hashmaps and must have an O(n) time search sequence. It must be able to run on old systems.

#### 7. Non-functional attributes:

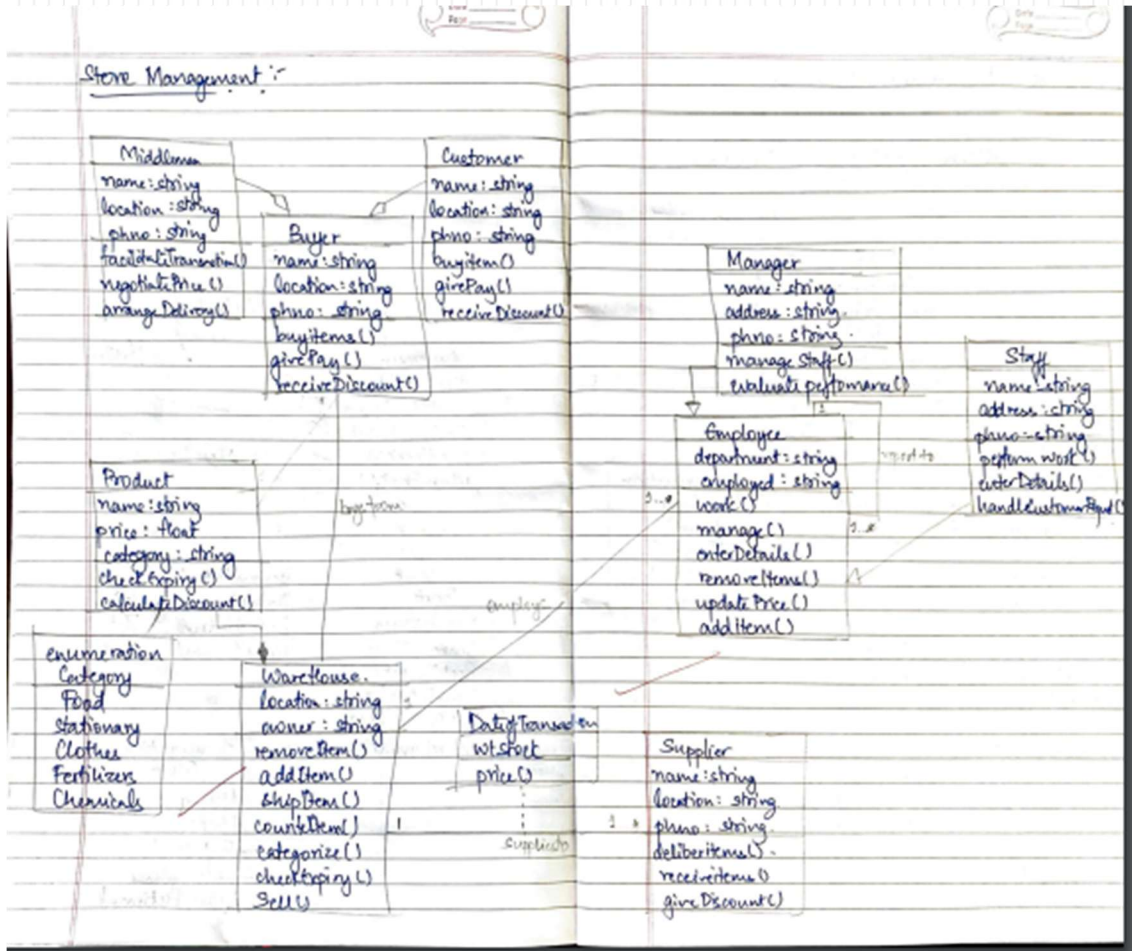
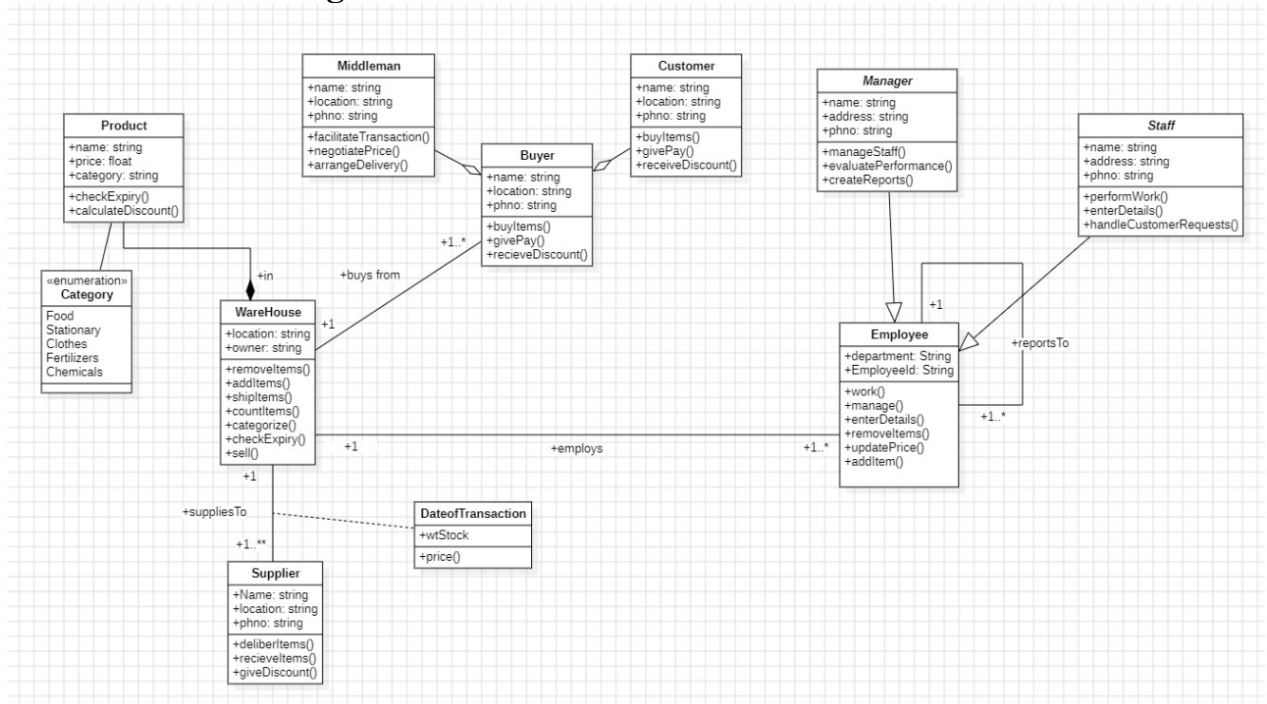
It must use elgamal encryption to transfer the details of the system from relationship manager and user.

#### 8. Preliminary Schedule and Budget:

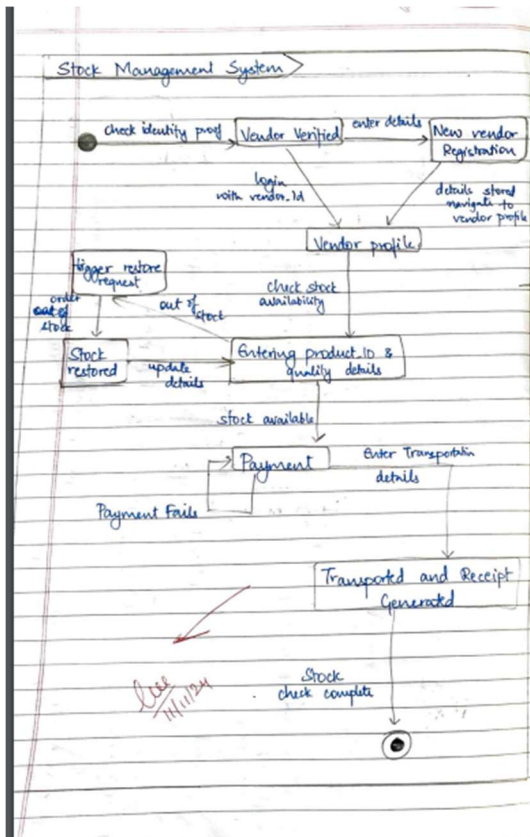
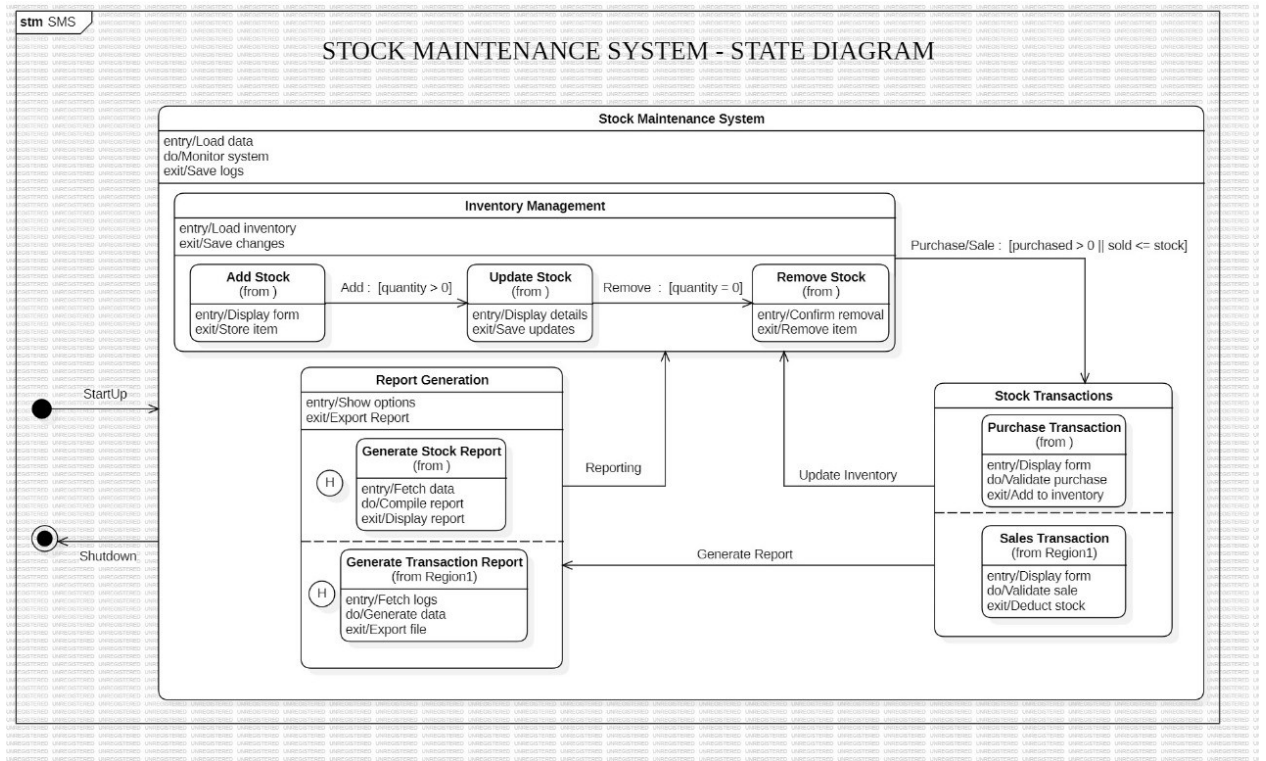
Requirement Analysis: 2 weeks.  
System Design: 4 weeks  
Development: 8 weeks  
Testing: 4 weeks  
Deployment: 2 weeks.  
Total: 20 Weeks.

Budget: Software Development: \$30,000  
Hardware Development: \$15,000  
Software Licence: \$5000  
Testing: \$10,000  
Management: \$5000  
Total: \$65,000

## b. Advanced Class Diagram:

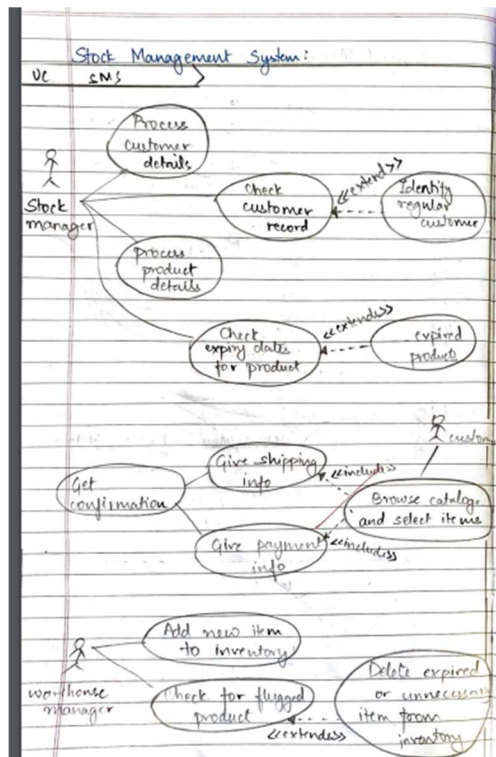
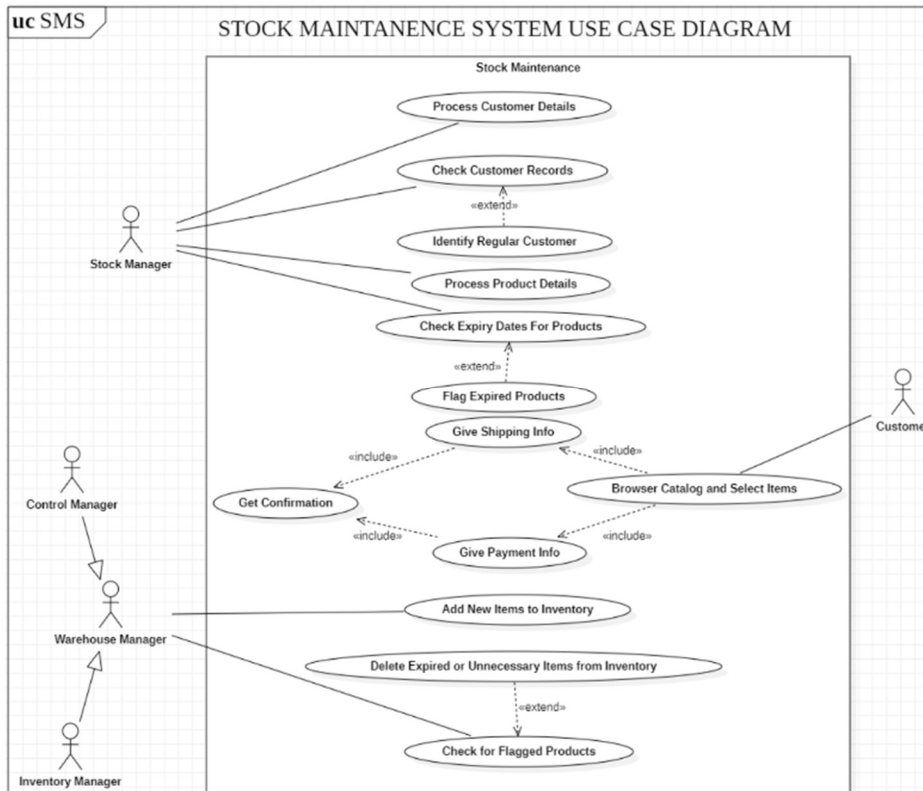


## c. Advanced State Diagram:

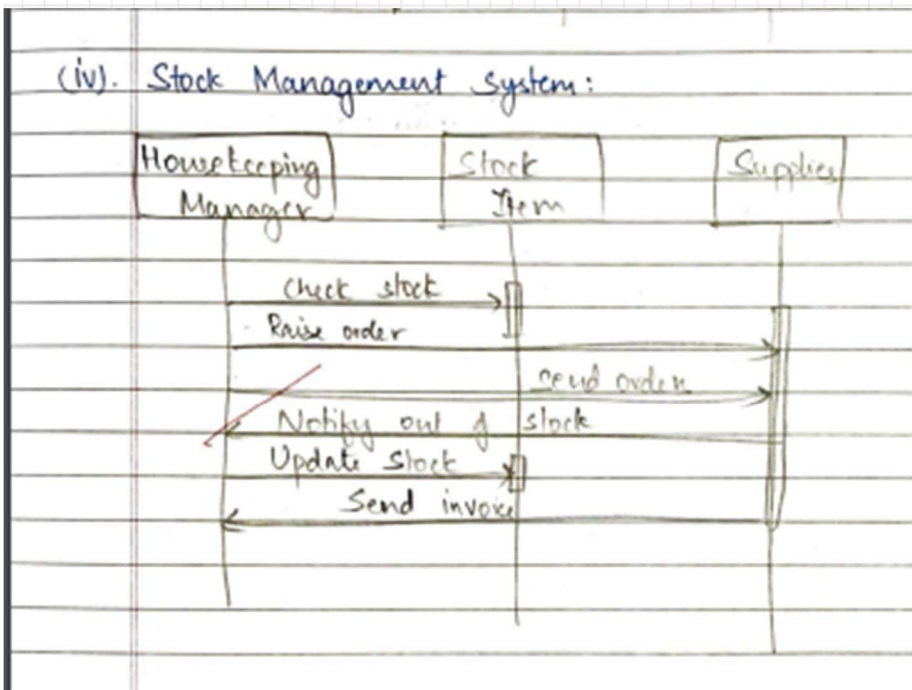
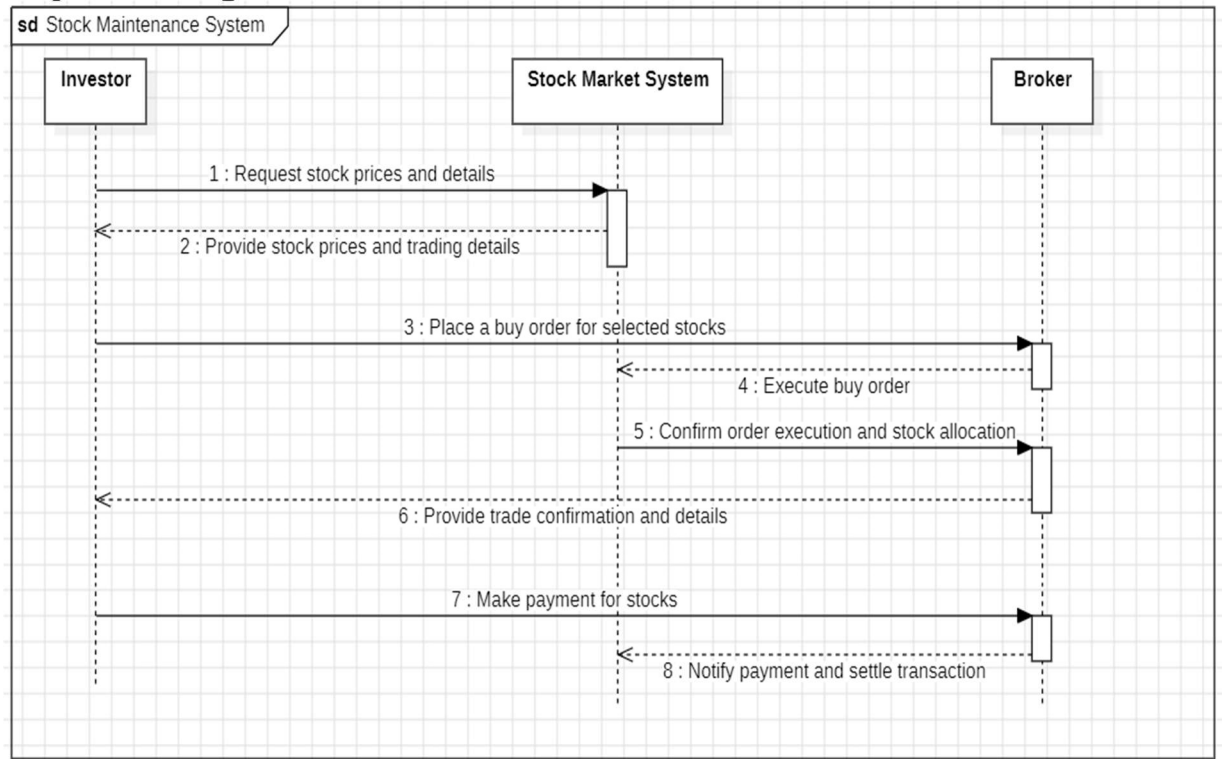




## d. Use Case Diagram:



### e. Sequence Diagram:



# f. Activity Diagram:

