Stock Management System

1.1 Problem Statement

In is very difficult to manage the records of every product manually It is very time consuming process. In case any problems occurs like missing the records which are saved in offline then many problems arises and it becomes difficult to get back the data so managing the details is not preferable.

1.2Importance

This helps us to access and manage the information easily. This also helps to verify the stock currently available with them and to update the stock when necessary. This also reduce the time to search the product from the current available stock.The role of an inventory system is to track your products and supplies. Inventory management is the process of controlling of the ordering, storage and use of components that a company uses in the production of the products it sells.

2. Overview and Planning
2.1 Proposed System Overview

This system has   the following modules

- **Login**
  The seller gives the user name and password and logs into the system.
- **Register**
  The seller gives the necessary details and register into the system
- **View and select   product**
  The database contains the list of available products and are displayed when selected.
  The total amount of the selected produced is displayed.
  To maintain the customer and owner relationship discount option is added

- **Billing**
  On selecting the products and quantity the amount is displayed along with the details of selected products

2.2 Challenges

- To explain that this software is better than manual system.
- To explain the detail process involved in the software.
- To develop a software which easy to use and avoid complexity.
- The software should satisfy the user needs.
- To provide accurate database services.
- To make sure that the software works at the user place (user environment).
- Mis-communication between the sales and the supply chain management team.

2.3 Assumptions

- Based on the sales orders given to the supply chain management they check the availability of the raw materials and then they supply and manufacture products.
- The inventory system has the list of the products and quantity of the products. Depending upon the sales of the product the exact details about the product is displayed to the user.

- From this the customers selects the product to sell.

2.4 Architecture Specifications

- The architecture of inventory management system uses client server model
- The design or architectural specification for the inventory management system is   Java since the JSP architecture will be used.
- The Java Database Connectivity (JDBC) will use the MySQL Connector for the server to communicate to the inventory database.
- Upon receiving requests from the clients, the server will issue transactions to the MySQL database.

2.5 Hardware Requirements

        PROCESSOR : 64-bit
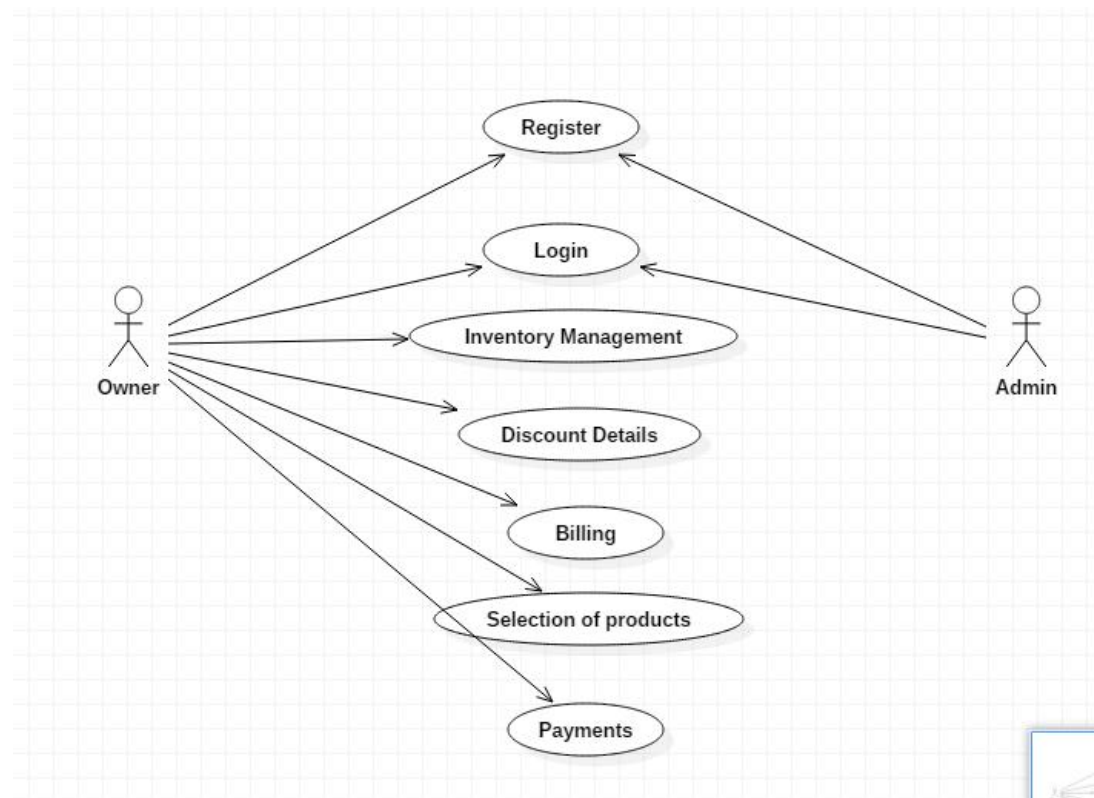   ROM :   2GB
        RAM :   4GB

2.6 Software Requirements

        OPERATING SYSTEM : WINDOWS 8/10
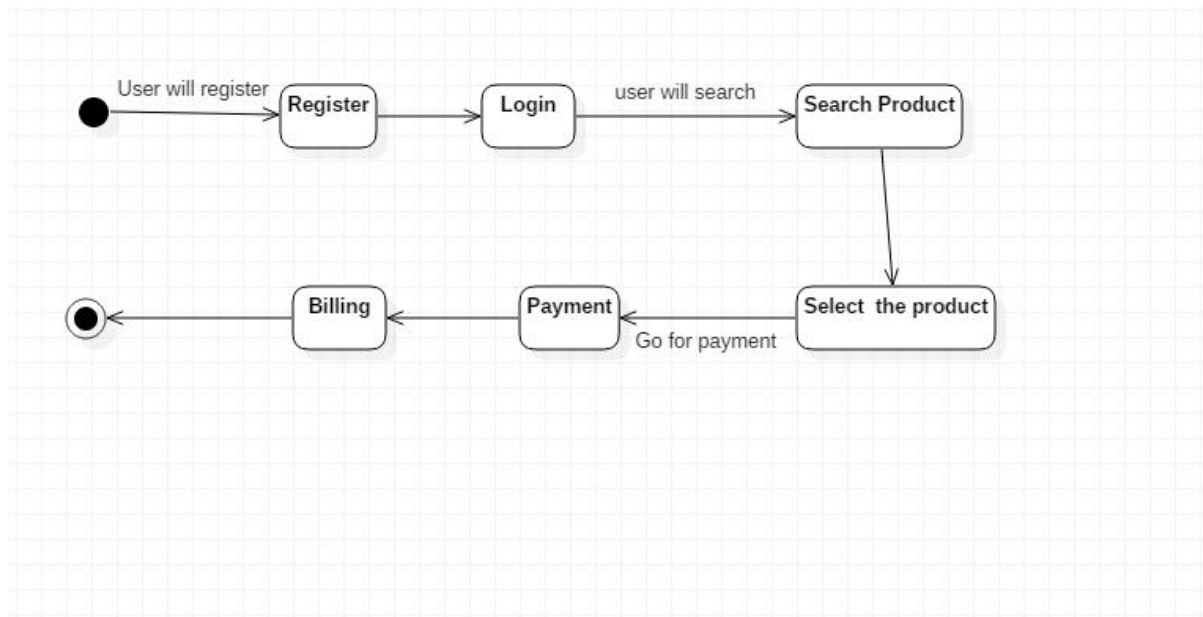   FRONT END : JAVA NETBEANS
            BACK END :   MYSQL
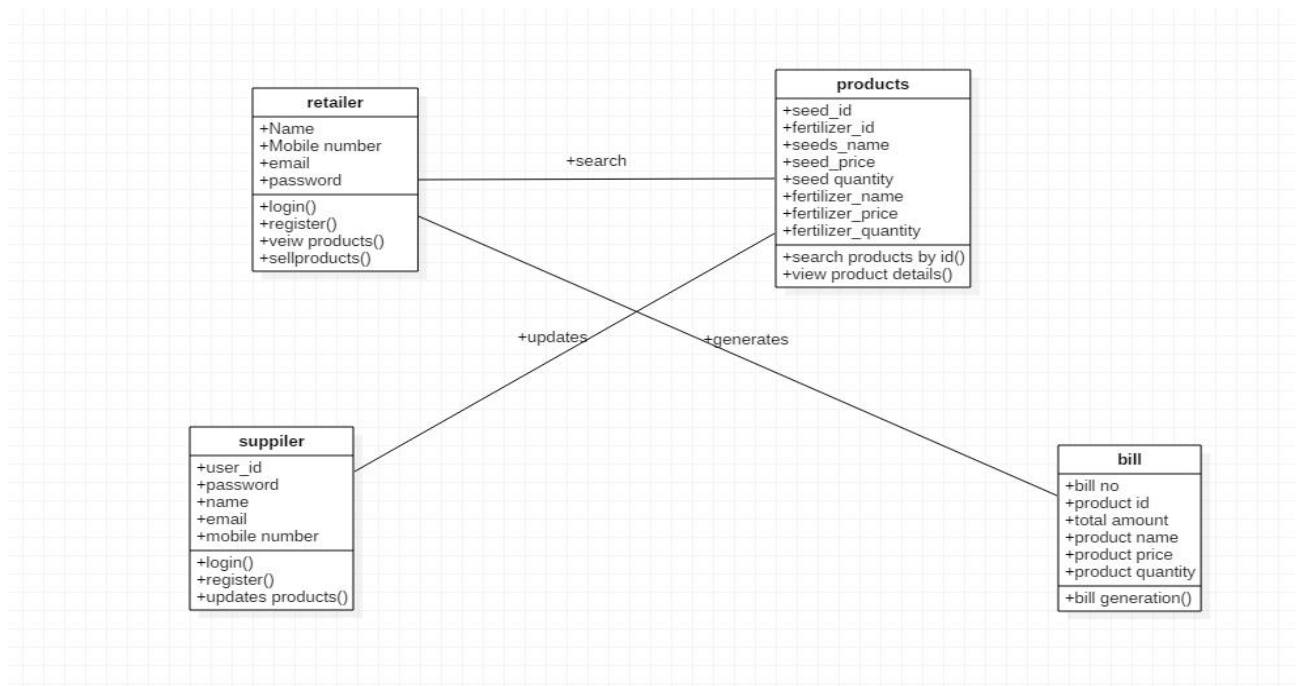

3. System Design

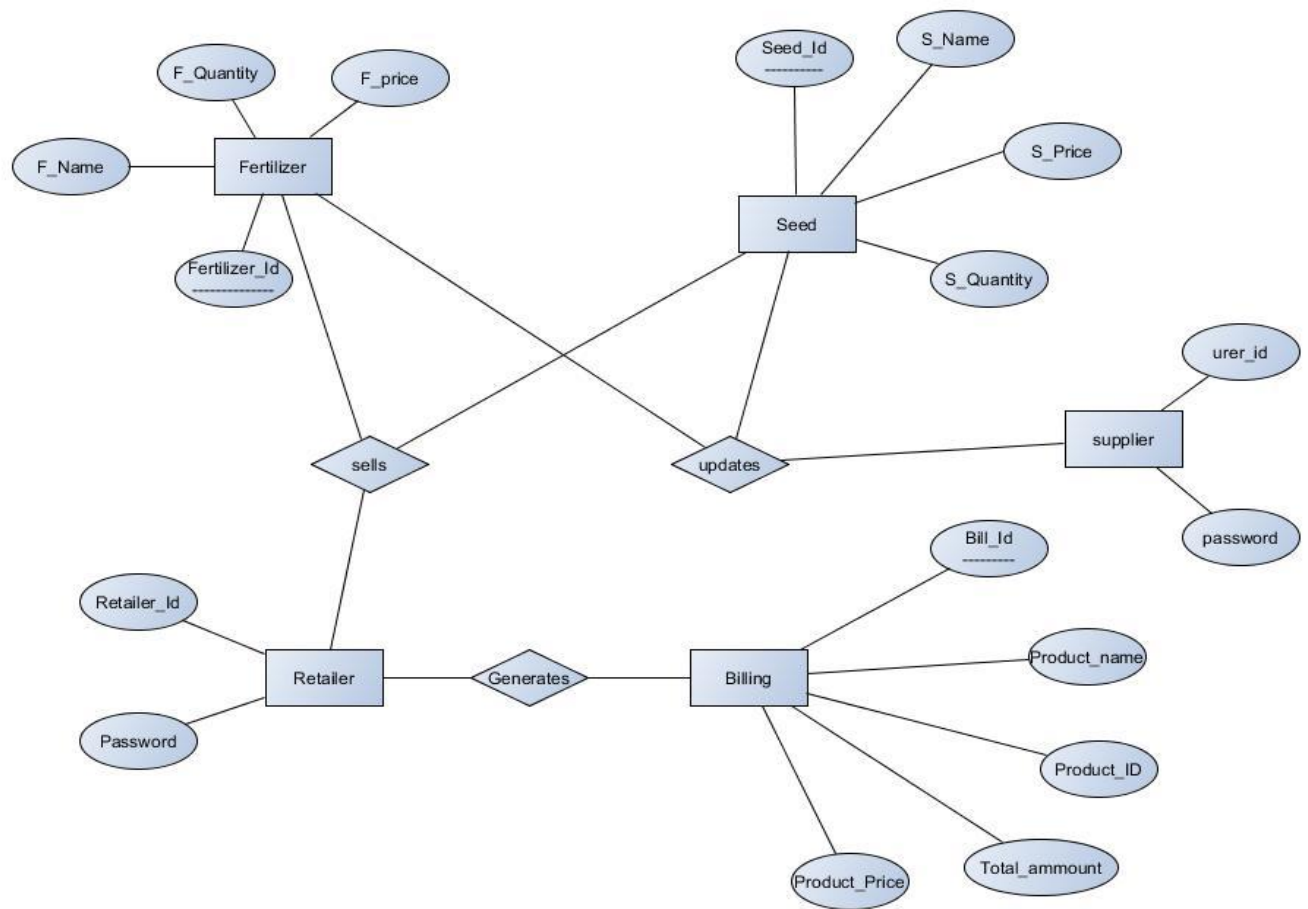### 3.1 High-Level Design

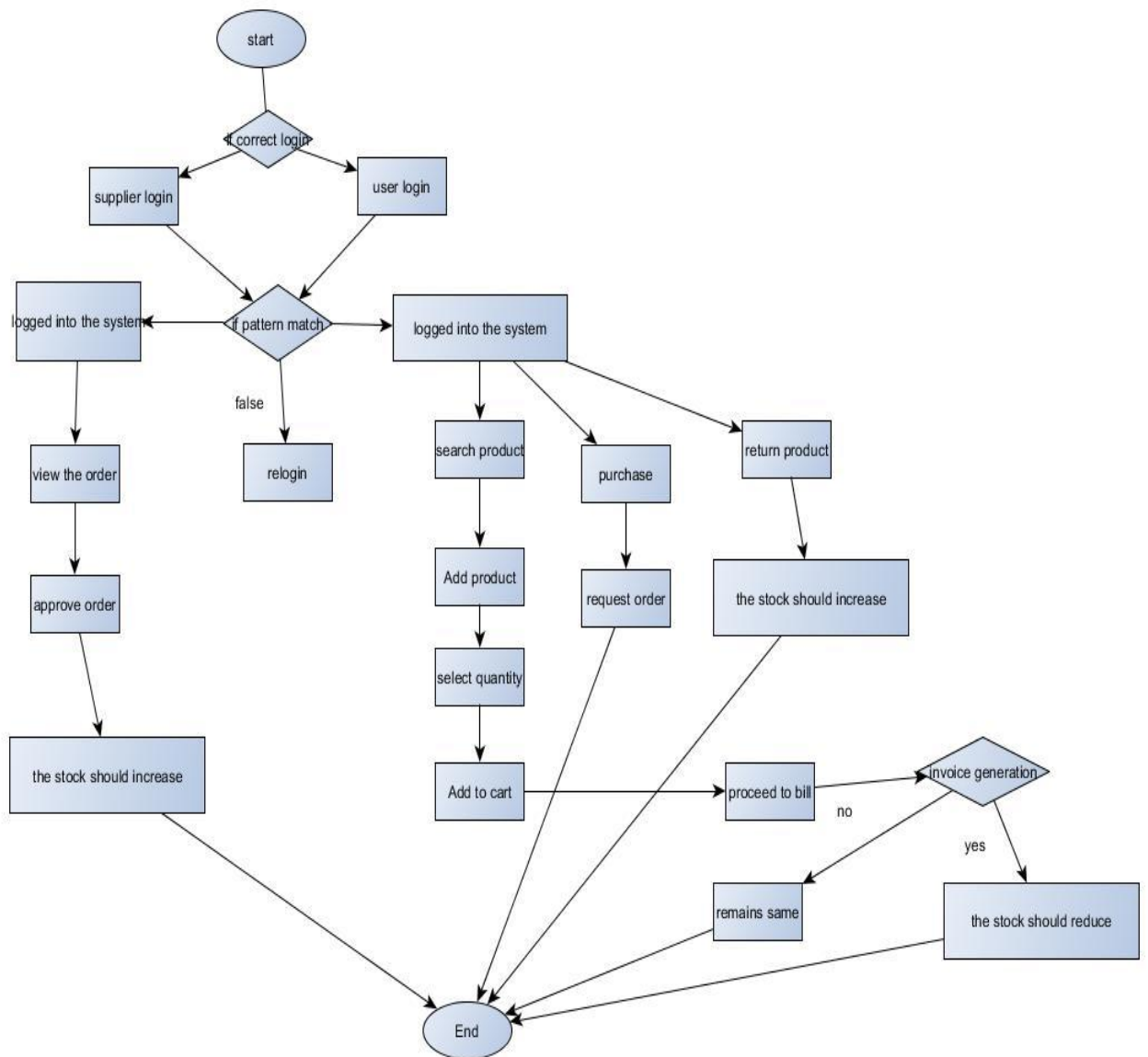**USECASE DIAGRAM**

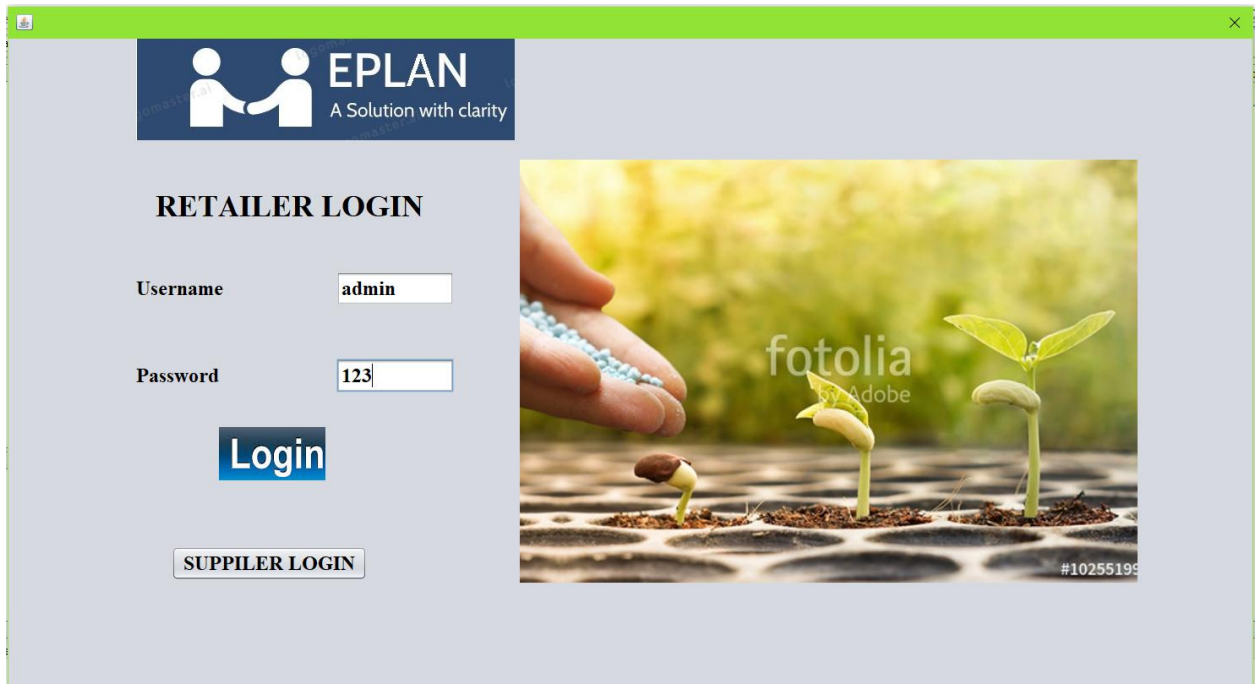# STATECHART   DIAGRAM

CLASS DIAGRAM

3.2 Low-Level Design

ER DIAGRAM

4. System Implementation

4.1 Output/Results

Add Product

Item Id:	ft6
Item Name:	groundnut
Quantity:	30
Price Per Unit:	400
MFD:	4/5/2017
EXP:	4/4/2019
Batchno:	h23

Message

Product Successfully Added

OK

[Add Product] [Back]

[Back]

Search Product

[View Cart]

Item_Id:	ft6
Item_Name:	groundnut
Qunatity (in lit/kg):	6
Price Per Unit:	400
Total Price:	2400

Search Product ft6

item_id	item_name	quntatity	price	mfd	exp	batchno
ft6	groundnut	30	400	4/5/2017	4/4/2019	h23

[Add to cart]

Search Product

Back

View Cart

Item_Id: `ft6`

Search Product `ft6` 🔍

Item_Name: `groundnut`

item_id	item_name	quntatity	price	mfd	exp	batchno
			400	4/5/2017	4/4/2019	h23

Qunatity (in lit/kg): `6`

Message ✕

ℹ Product Successfully Added to cart

[OK]

Price Per Unit: `400`

Total Price: `2400`

Add to cart

Back

View Cart

item_id	item_name	quantity	unit price	total price
ft6	groundnut	6	400	2400
ft6	groundnut	6	400	2400
ft6	groundnut	5	400	2000

Total Amount   6800

Proceed to bill

Inventory

Display Inventory **Back**

Item_Id	item_name	quantity	price	mfd	exp	batchno
ft5	sulphate	40	900	5/10/2017	6/10/2018	h789
ft4	ammonia	39	700	03/10/2017	03/10/2018	t200
ft3	NH4	50	700	22/11/2017	22/11/2018	b85
ft2	ammonia	90	150	20/08/2018	11/12/2019	am123
ft1	urea	57	200	20/10/2018	20/11/2019	asdc1
sd1	Grounnuts	400	300	4/5/2016	4/3/2018	h78
sd2	rice	66	500	4/6/2017	3/8/2108	g77
sd3	chilli	80	500	3/5/2017	5/7/2019	g67
sd4	wheat	90	300	7/2/2017	5/5/2019	h67
sd5	corn	50	900	8/7/2017	7/5/2019	hf6

Bill No: 45 **Date:** 2018-10-28 17:49:44.0

Item_id	Item_name	Quantity	price	total_price
ft1	urea	2	200	400

Total Amount: 400

Generate Invoice

4.2 Discussion

In future the products can be scanned with the help of barcode scanner. A system can be developed to take order from the customers online and deliver them. The customer relationship can be built with the help of feedback.

5. Conclusion and Future Developments

In this project we have developed a system which helps the retailers to sell and manage their products easily. It covers the functional areas of erp such as Marketing and sales, Supply chain management, Accounting and

Finance and Human Resources. So this can help in increasing the sales of the retailer through the help of the inventory management. So the required products can be bought based on the demand. In future the products can be scanned with the help of barcode scanner. A system can be developed to take order from the customers online and deliver them. The customer relationship can be built with the help of feedback.