

Inventory Management System

1.1 Problem Statement

Manually managing the records of each product is quite complex. It is a time-consuming procedure. If there are any errors, such as missing records that were stored offline, numerous problems develop, and it becomes difficult to recover the data, thus monitoring the details is not ideal.

1.2 Importance

This allows us to conveniently access and manage information. This also aids in the verification of existing stock and the updating of stock as needed. This also cuts down on the time it takes to find the goods in the current supply. An inventory system's purpose is to keep track of your items and supplies. Inventory management is the process of overseeing the ordering, storage, and usage of components used in the creation of the items that a firm 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 provides a list of available products, which are presented when a product is selected.

The entire quantity of the chosen product is shown.

A discount option has been included to preserve the client and owner relationship.

□ Billing

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

2.2 Challenges

- To demonstrate why this program is superior than the manual system.
- To describe the software's detailed methodology.
- To create software that is simple to use and avoids complexity.
- The program should meet the demands of the user.
- To offer reliable database services.
- Ensuring that the program operates in the user's location (user environment).
- Inadequate communication between the sales and supply chain management teams.

2.3 Assumptions

- Based on the sales orders sent to supply chain management, they examine the availability of raw materials before supplying and manufacturing items.
- The inventory system keeps track of the items and their quantities. The specific facts of the product are shown to the user based on the product's sales, and the customer chooses the product to sell based on this.

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.

Bawah Abuba Ibrahim

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2.5 Hardware Requirements

PROCESSOR : 64-bit

ROM : 2GB

RAM : 4GB

2.6 Software Requirements

OPERATING SYSTEM : WINDOWS 8/10 FRONT

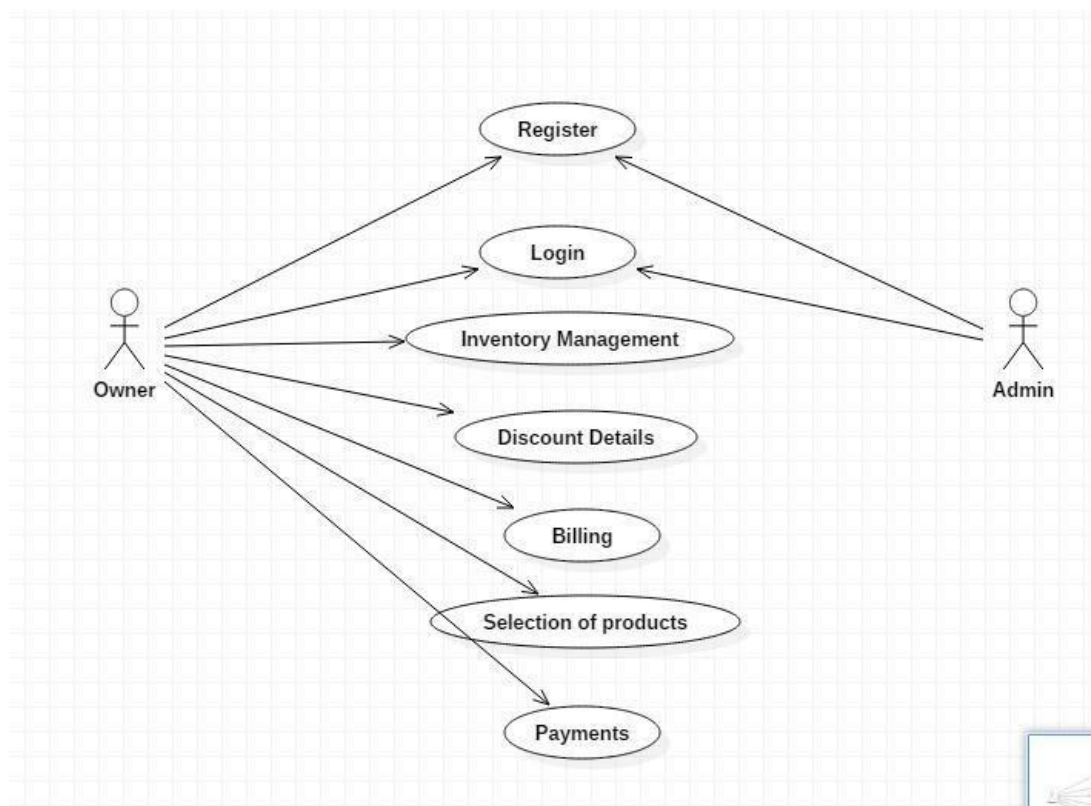
END : JAVA NETBEANS

BACK END : MYSQL

3. System Design

3.1 High-Level Design

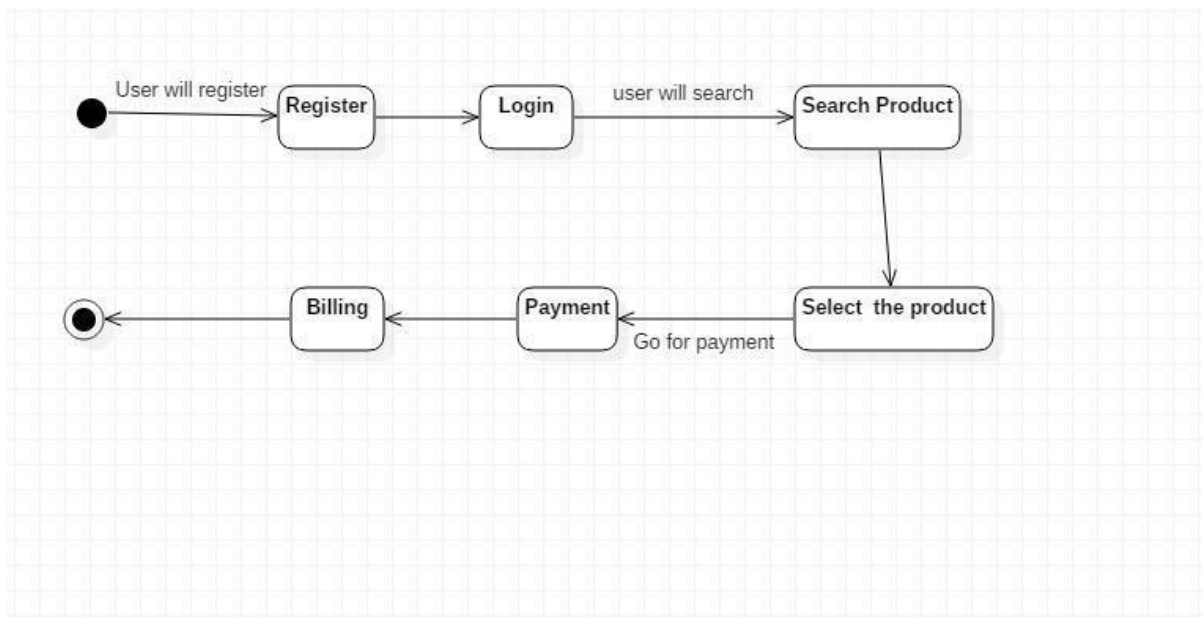
USECASE DIAGRAM



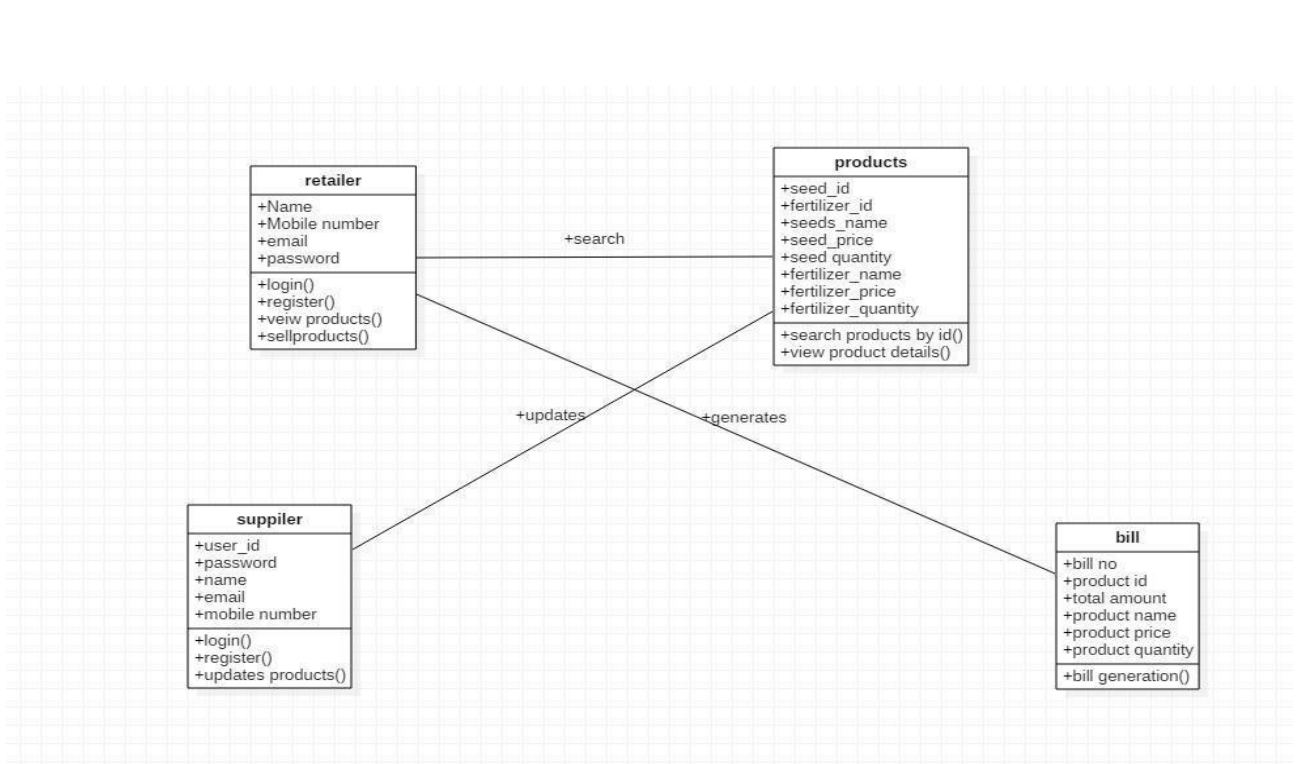
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STATECHART DIAGRAM



CLASS DIAGRAM

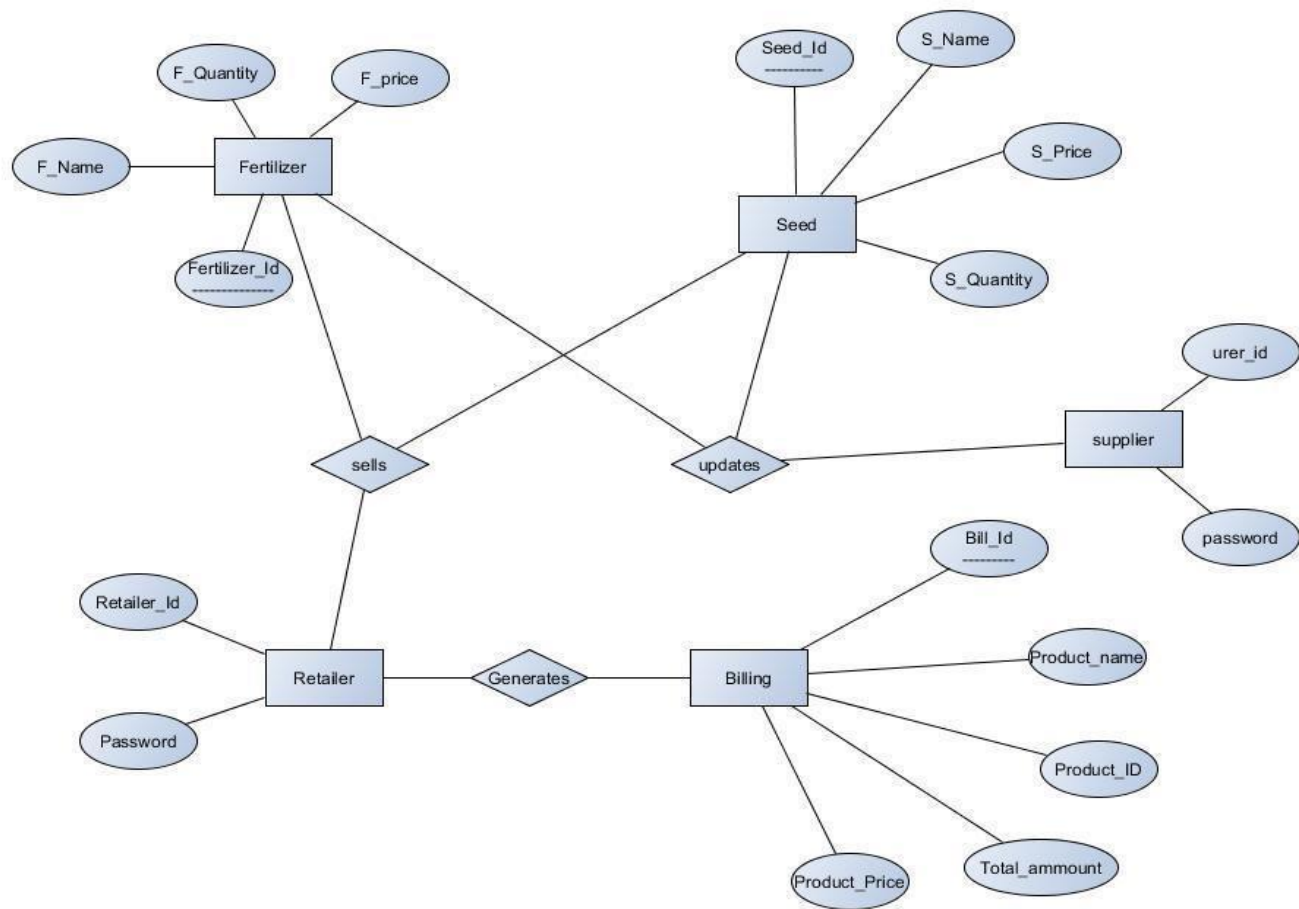


3.2 Low-Level Design

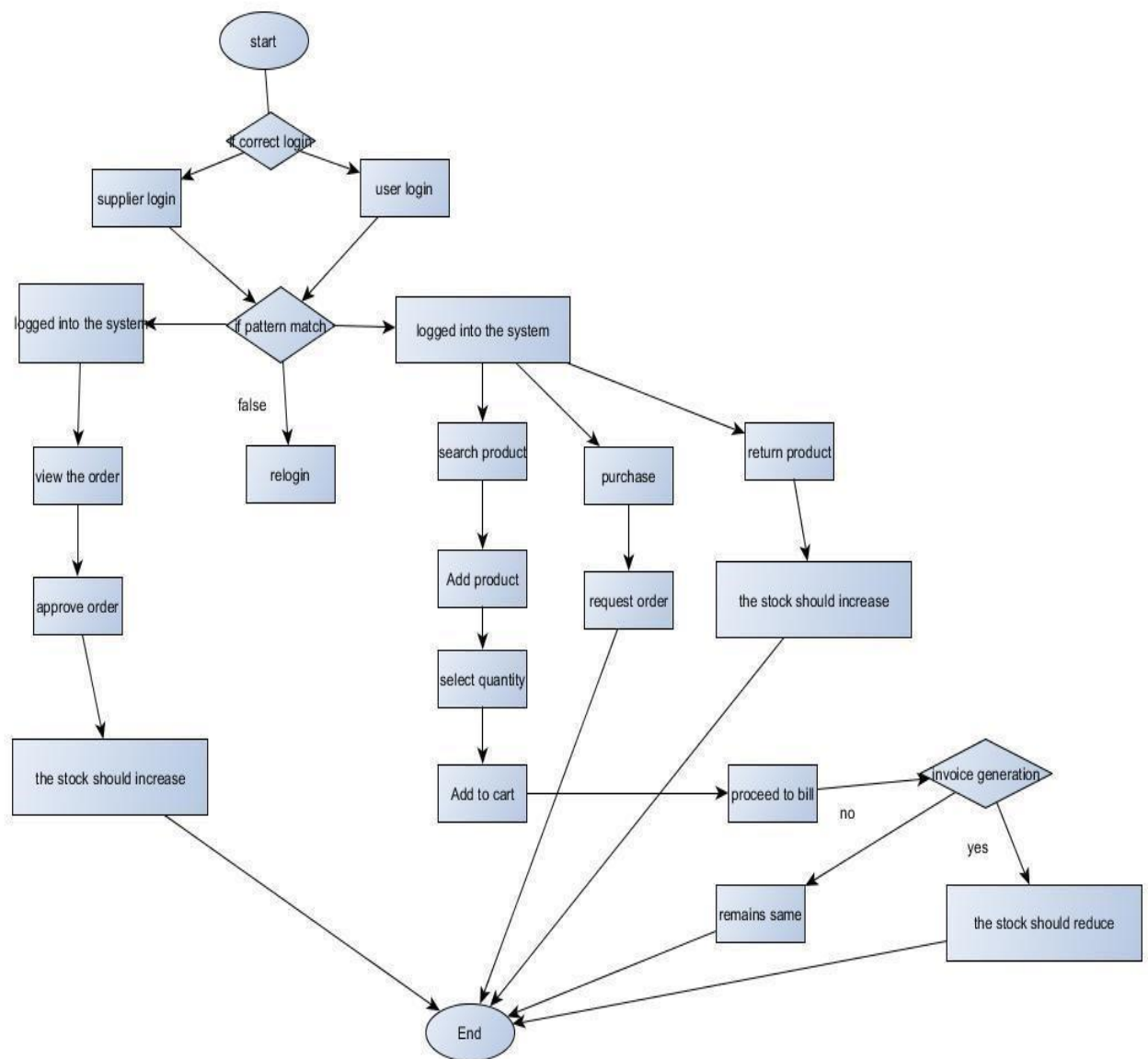
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ER DIAGRAM



4. System Implementation



4.1 Output/Results

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[illegible]

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□

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Add Product

Item Id:

ft6

Item Name:

groundnut

Quantity:

30

Price Per Unit:

400

MFD:

4/5/2017

EXP:

4/4/2019

Batchno:

h23

Add Product

Back

Message

×

i

Product Successfully Added

OK

—

□

×

Back

Search Product

Item_Id:

ft6

Search Product

ft6

Item_Name:

groundnut

Qunatity (in lit/kg):

6

Price Per Unit:

400

Total Price:

2400

Add to cart

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

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Back


Search Product

Item_Id:

ft6

Search Product

ft6



Item_Name:

groundnut

Qunatity (in lit/kg):

6

Price Per Unit:

400


Total Price:

2400

Add to cart

item_id	item_name	quantity	price	mfd	exp	batchno
ft6	groundnut	6	400	4/5/2017	4/4/2019	h23

Message

 Product Successfully Added to cart

OK

Back

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

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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

Return Product Back

Search bill no Search

Item_Id

Item_Name:

Qunatity (in lit/kg)

Price Per Unit

Total Price

Return

item_id	item_name	quntatity	price	totalprice
ft6	groundnut	6	400	2400

Search Date Back

Search

billno	item_id	item_name	quntatity	price	date
44	ft6	groundnut	6	400	2018-10-29 00:00:00

4.2 Discussion

In the future, the items can be scanned with a barcode scanner. A system may be created to accept online orders from clients and deliver them. With the use of feedback, a customer connection may be created.

5. Conclusion and Future Developments

In this project, we created a system that allows shops to effortlessly sell and maintain their items. It addresses ERP functional areas such as marketing and sales, supply chain management, accounting and finance, and human

Bawah Abuba Ibrahim

10863084

resources. As a result, the retailer's sales might be increased with the aid of inventory management. As a result, the essential items may be purchased based on demand. In the future, the items can be scanned with a barcode scanner. A system may be created to accept online orders from clients and deliver them.

With the use of feedback, a customer connection may be created.