

STOCK MANAGEMENT SYSTEM

PROBLEM STATEMENT

- The stock maintenance system which take care of sales information of the company and analyze the potential of the trade. It maintains the data in efficient manner. The existing system was recorded manually on pen and paper and time consuming one. To overcome this we are operating it in system and database for delivering accurate and real time information on stocks. This is also helps in calculating the total stocks, pending stocks and updating. It is mainly used in business sector to maintain stock level and profit and unprofitable product. This is mainly used by sales person and customers. This system is used for time and money saving, increases productivity and efficiency and also used for accurate data analysis of stocks. Also used for analysis the data in real-time requirements of the stocks.

PURPOSE

- The entire process of stock maintenance is done in a manual manner considering the fact that the number of customer for purchase is increasing every year, a maintenance system is essential to meet the demand. So this system uses several programming and database techniques to elucidate the work involved in this process.

SCOPE

- The system provides an interface to the customer where they can fill in orders for the items needed.
- The sales person is concerned with the issues of items and can use this system.
- Provide a communication platform between the customer and the sales person.

IMPORTANCE

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.

OVERVIEW AND PLANNING

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

OVERALL DESCRIPTION

PRODUCT PERSPECTIVE:

The stock maintenance acts as an interface between the 'customer' and the 'sales person'. This system tries to make the interface as simple as possible and at the same time not risking the work of data stored in.

SYSTEM FUNCTIONS:

- ☐ secure order of information by the customer.
- ☐ schedule the customer an appointment for normal delivery of the product.

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.

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.

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.

HARDWARE REQUIREMENTS

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

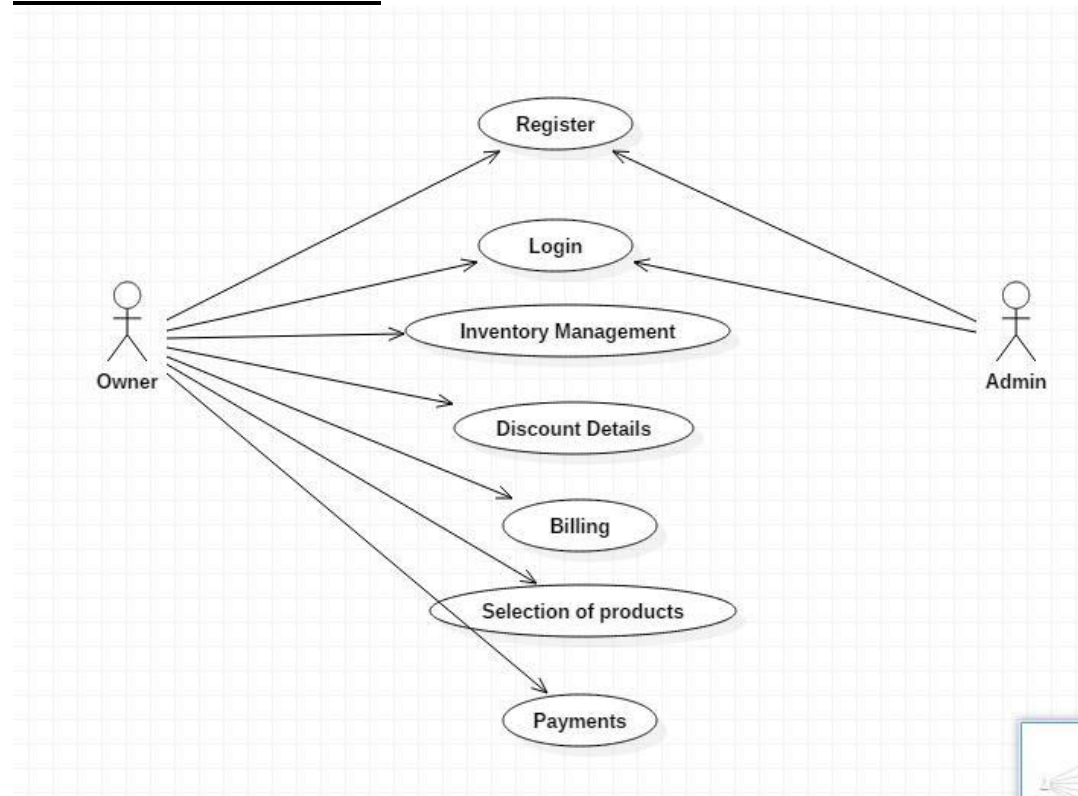
SOFTWARE REQUIREMENTS

- OPERATING SYSTEM: windows 8/10
- FRONT END : java netbeans
- BACK END : mysql

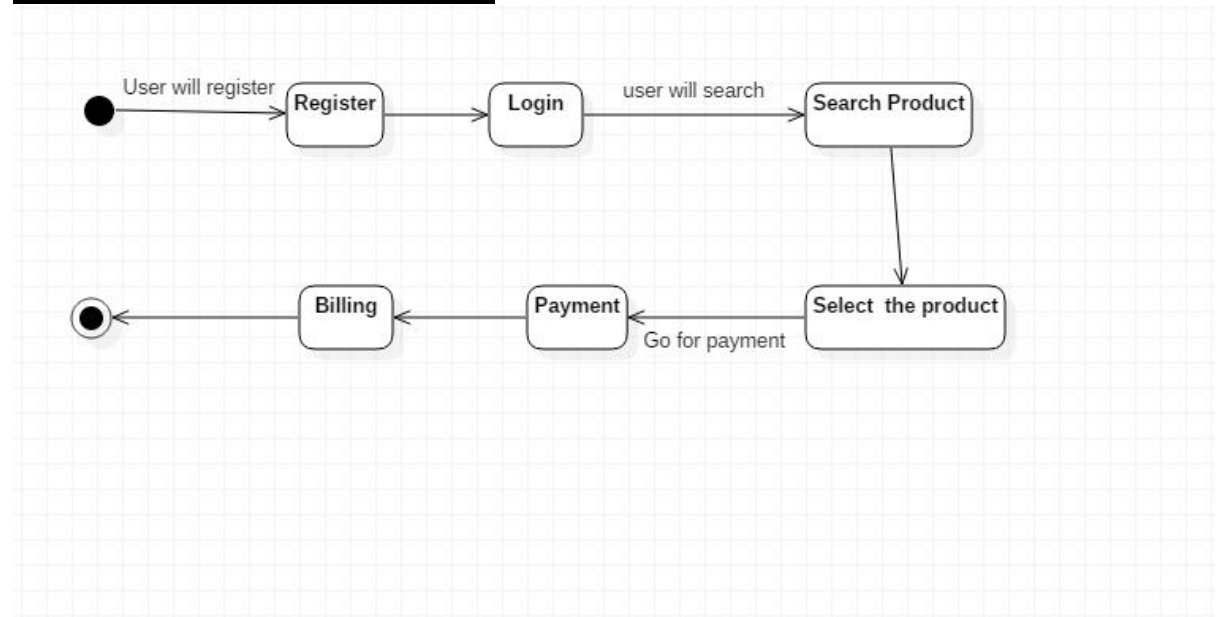
SYSTEM DESIGN

2.1 High-Level Design

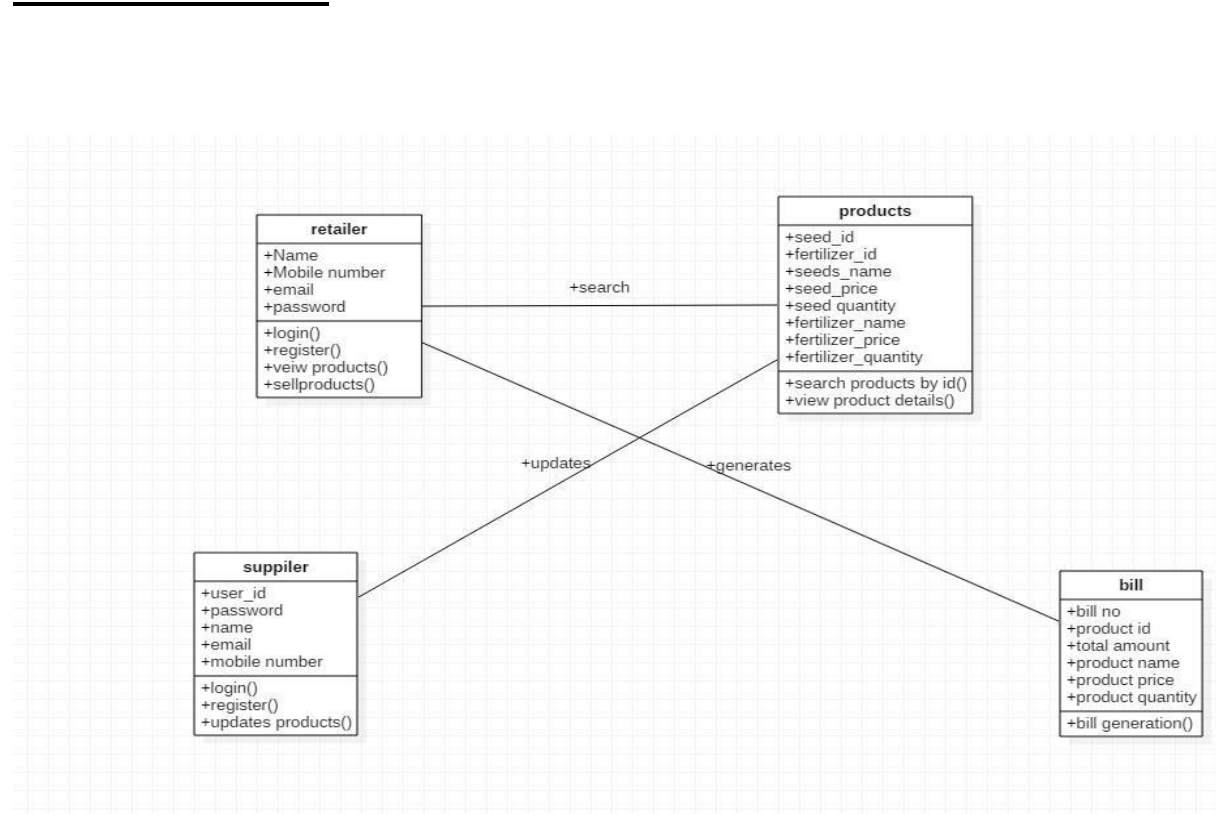
USECASE DIAGRAM



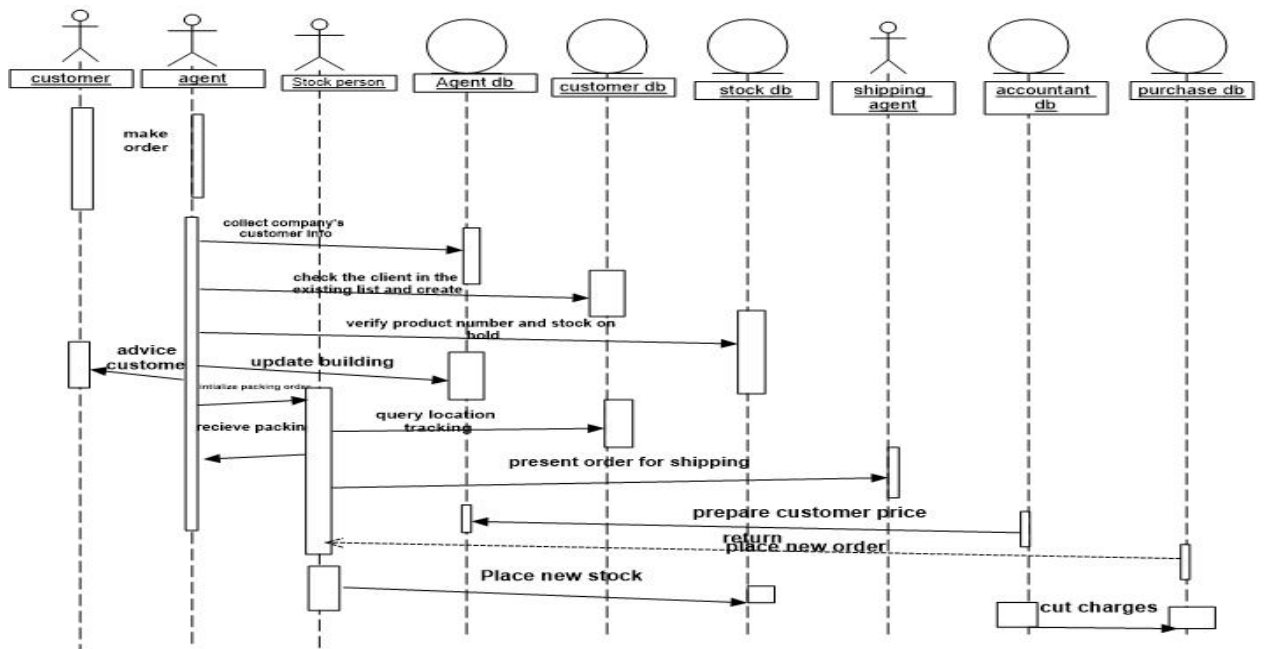
STATECHART DIAGRAM



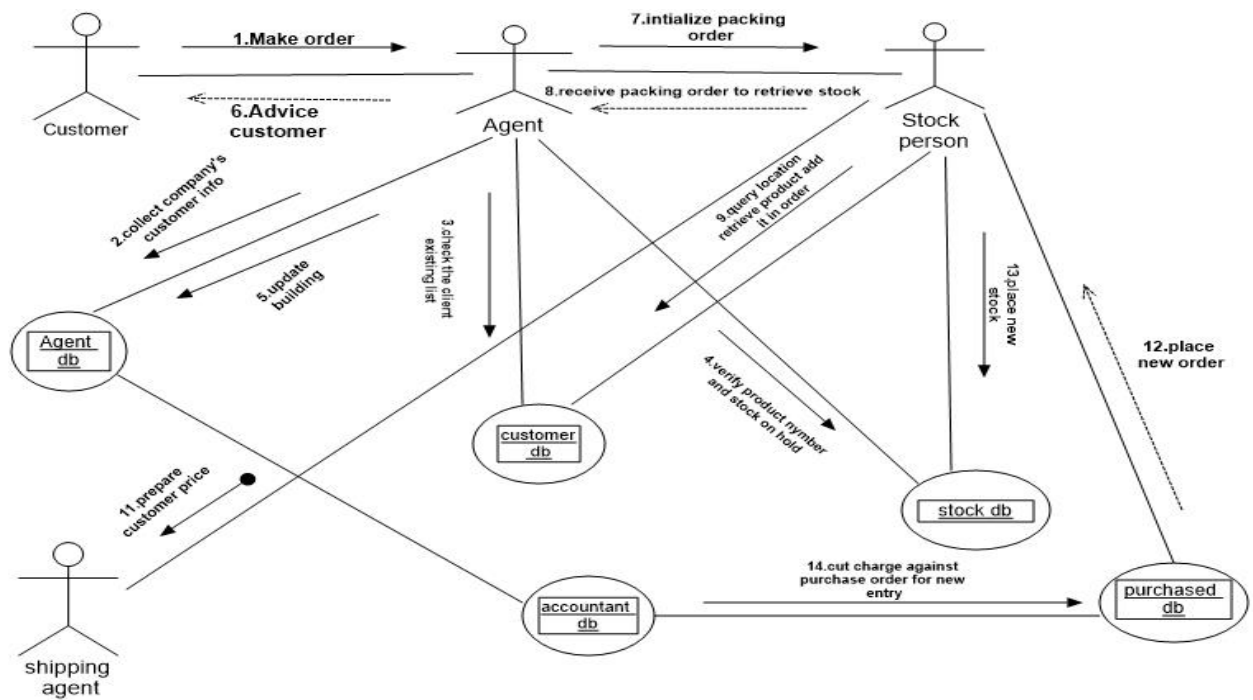
CLASS DIAGRAM



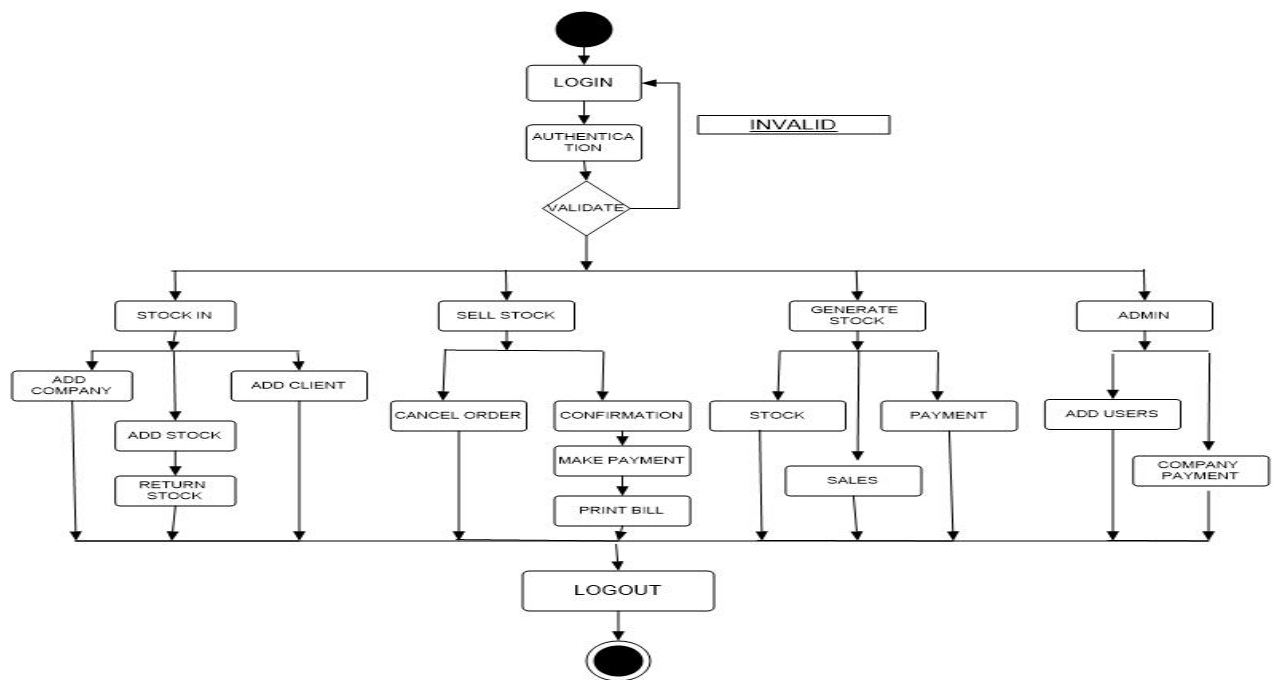
SEQUENCE DIAGRAM



COLLABORATION DIAGRAM:

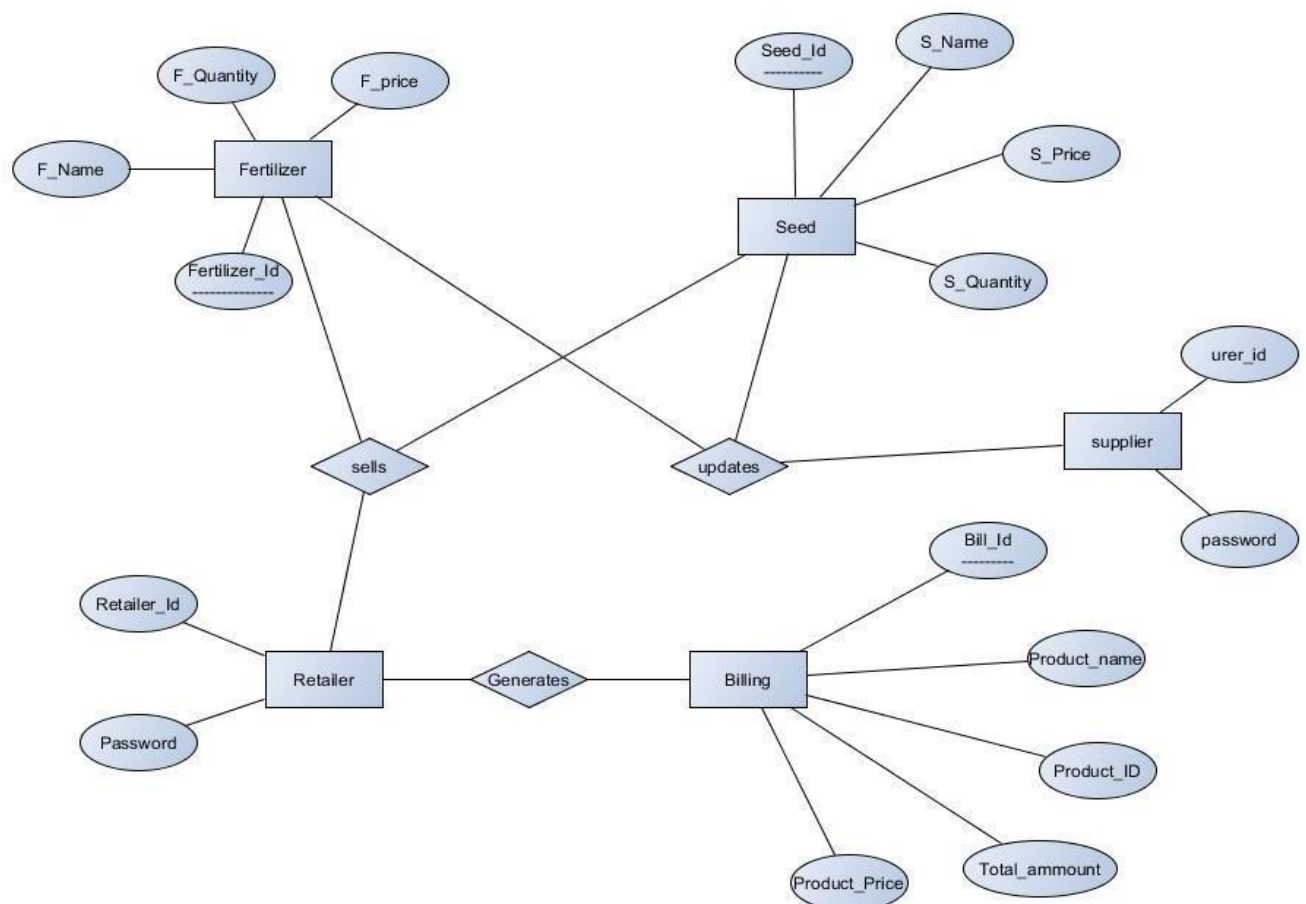


ACTIVITY DIAGRAM:

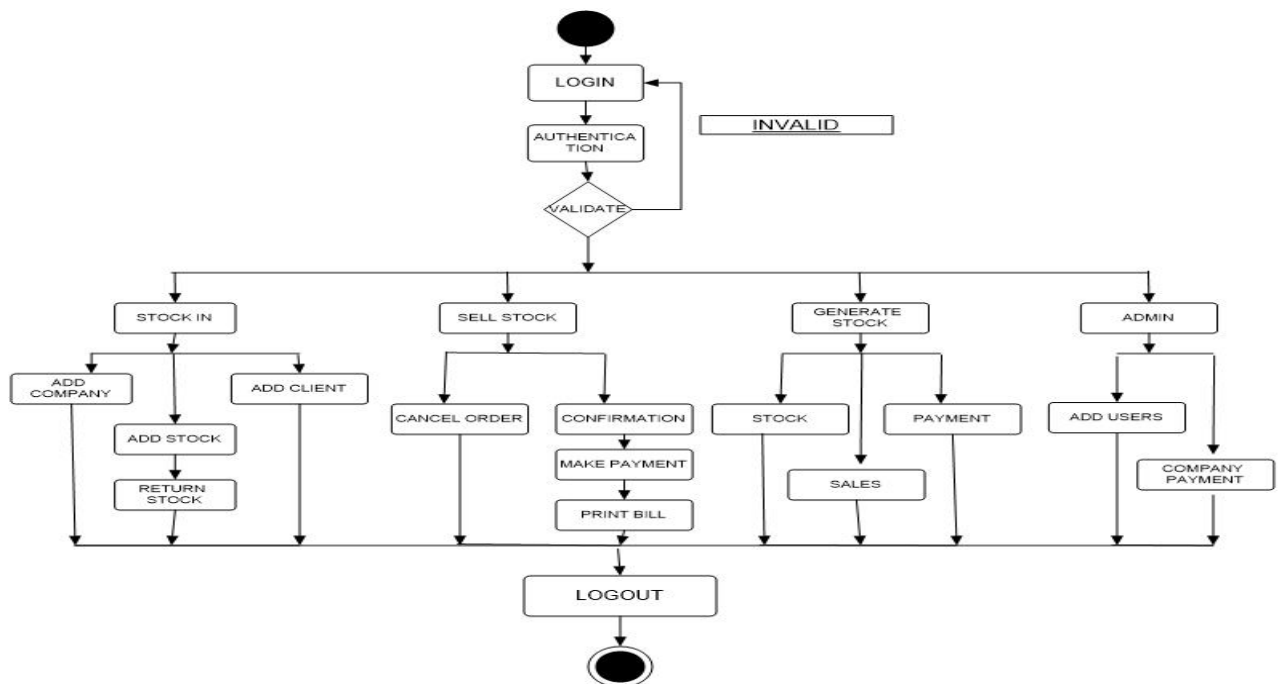


LOW-LEVEL DESIGN

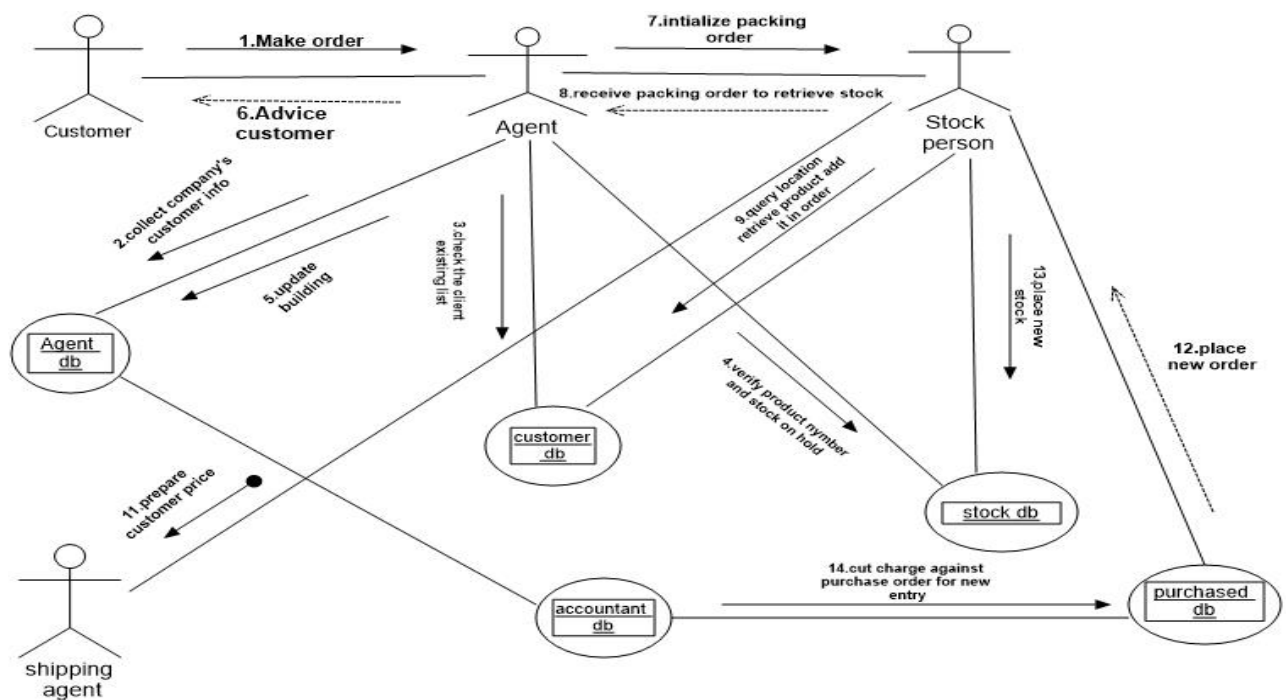
ER DIAGRAM



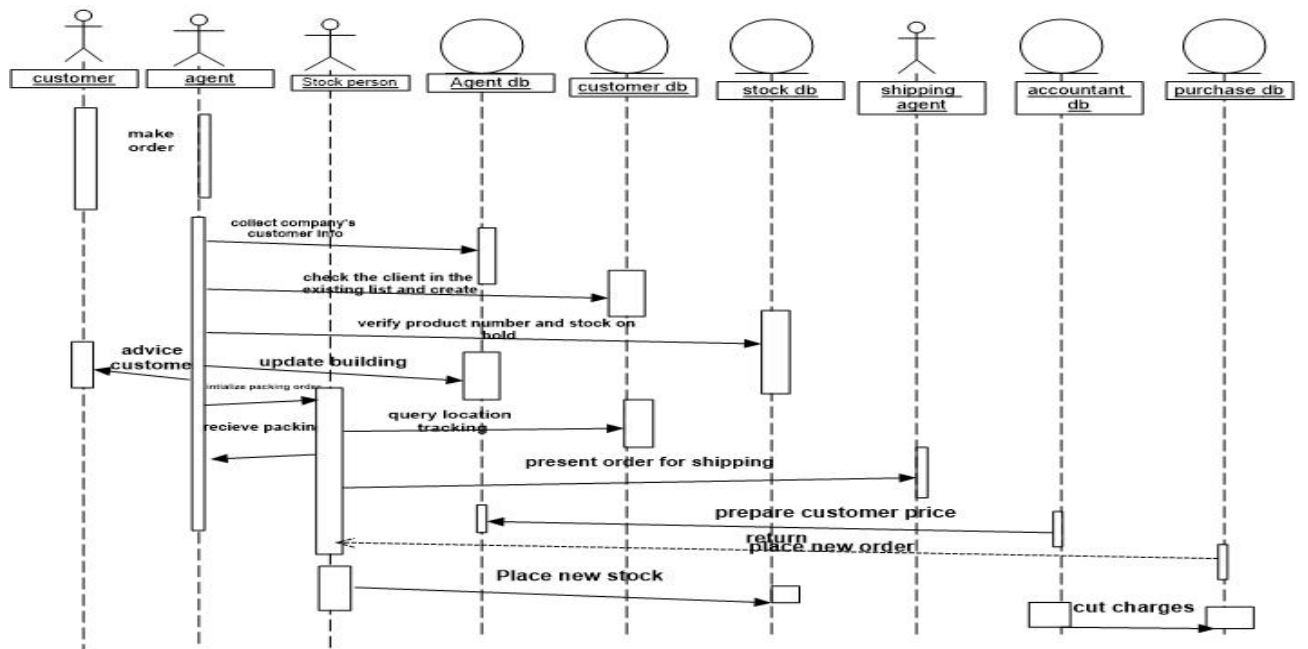
ACTIVITY DIAGRAM



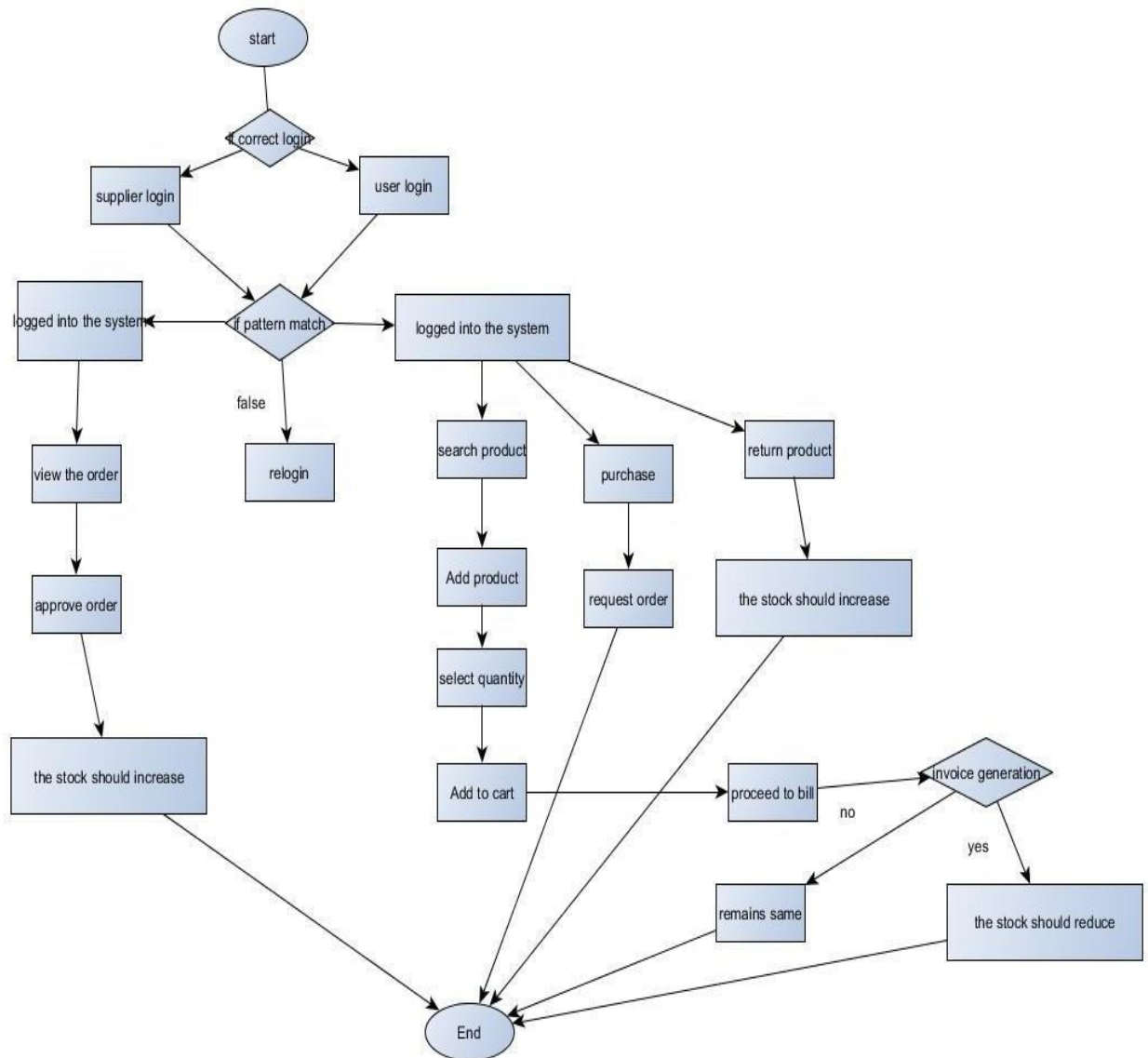
COLLABARATION DIAGRAM



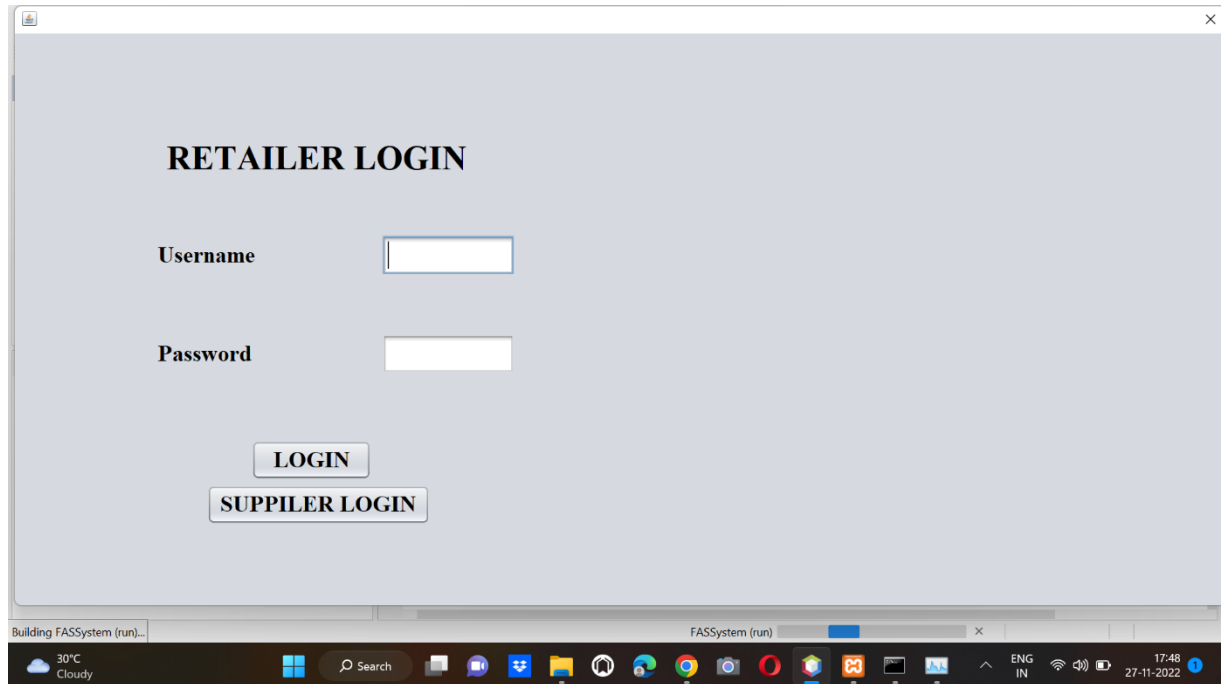
SEQUENCE DIAGRAM



SYSTEM IMPLEMENTATION



OUTPUT/RESULTS



A screenshot of a web application window titled "RETAILER LOGIN". The window has a light gray background. It contains two input fields: "Username" and "Password", each with a white text box. Below the "Password" field are two buttons: "LOGIN" and "SUPPLIER LOGIN". The window is running on a Windows operating system, as indicated by the taskbar at the bottom. The taskbar shows the Start button, a search bar, and several application icons. The system tray on the right shows the date and time as 17:48 on 27-11-2022.

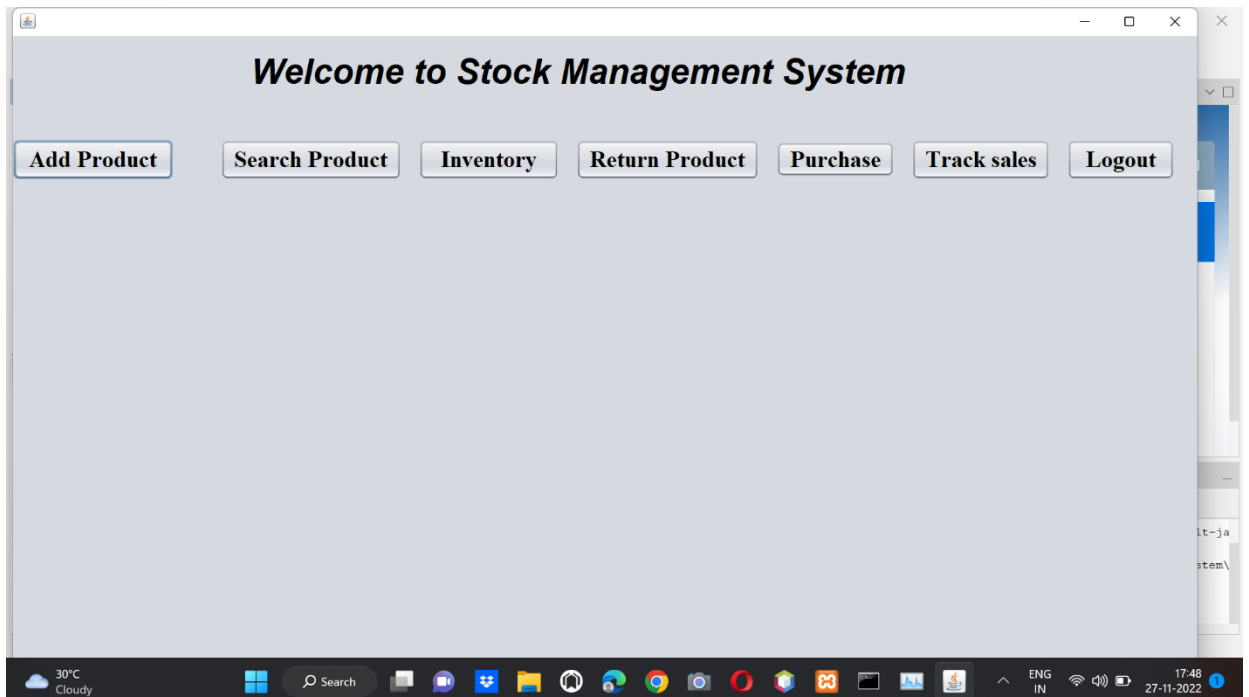
RETAILER LOGIN

Username

Password

LOGIN

SUPPLIER LOGIN



A screenshot of a web application window titled "Welcome to Stock Management System". The window has a light gray background. It features a horizontal row of seven buttons: "Add Product", "Search Product", "Inventory", "Return Product", "Purchase", "Track sales", and "Logout". The "Add Product" button is highlighted with a blue border. The window is running on a Windows operating system, as indicated by the taskbar at the bottom. The taskbar shows the Start button, a search bar, and several application icons. The system tray on the right shows the date and time as 17:48 on 27-11-2022.

Welcome to Stock Management System

Add Product **Search Product** **Inventory** **Return Product** **Purchase** **Track sales** **Logout**

The screenshot shows a web browser window with a light gray background. At the top center, the text "Add Product" is displayed in a large, bold, black serif font. Below this, there are seven rows of form fields. Each row consists of a label in a bold, black serif font followed by a white rectangular input box with a thin gray border. The labels are "Item Id:", "Item Name:", "Quantity:", "Price Per Unit:", "MFD:", "EXP:", and "Batchno:". At the bottom of the form area, there are two buttons: "Add Product" on the left and "Back" on the right. The "Add Product" button is highlighted with a thick red border, while the "Back" button has a standard gray border. The browser's address bar at the top shows a URL starting with "http://localhost:3000/". The Windows taskbar is visible at the bottom of the screen, showing various application icons and the system clock indicating 17:48 on 27-11-2022.

Back

Search Product


View Cart

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

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

Return Product

Back

Search bill no

44

Item_Id

ft6

Item_Name:

groundnut

Qunatity (in lit/kg)

6

Price Per Unit

400

Total Price

2400

Search

item_id	item_name	quntatity	price	totalprice
ft6	groundnut	6	400	2400

Return

Search Date

2018-10-29 00

Search

Back

billno	item_id	item_name	quntatity	price	date
44	ft6	groundnut	6	400	2018-10-...

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.

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.