

## ABSTRACT

**Problem Statement :** A department store is a retail establishment offering a wide range of consumer goods in different areas of the store, each area ("department") specializing in a product category. In modern major cities, the department store made a dramatic appearance and permanently reshaped shopping habits, and the definition of service and luxury.

This project develops a Departmental Store Management System (DSMS) is commonly found today at most retail store registers. Store merchandise, identified by a price code is checked out by a cashier who then accepts payment for the item(s). A DSMS is either read by a bar code scanner or manually entered by the cashier. At the completion of a sale, a receipt is created for the customer and sales information is collected for the generation of reports at a later time. A DSM system should help you alleviate the daily chores of your business. A DSM system should not interfere or make it harder for you to run your business. It should run parallel to your business operation. A perfect DSM system should run your business for you, but not in a literal sense where it takes total control. You want one comprehensive package for your entire business, either small or large. And it should scale as much as your business grows. The system also provides for processing the return of purchased items and reimbursement to the customer. While many DSM Systems support multiple terminals that are networked together and interface with external systems (such as inventory control) the primary goal of this system is to develop a self-contained sales terminal application that supports the purchase and return of store merchandise.

## **MODULE DESCRIPTION**

Department Store Management System describes the structure of a Department Store Management System classes; their attributes, operations (Or methods), and the relationships among objects.

The main classes of the Department Store Management System are Products; Sales, Payments, Discounts, Stock, Inventory

Classes of Department Store Management System Diagram:

- Products Class Manage all the operations of Products
- Sales Class: Manage all the operations of Sales
- Payments Class: Manage all the operations of Payments
- Discounts Class Manage all the operations of Discounts
- Stock Class Manage all the operations of Stock
- Inventory Class Manage all the operations of Inventory

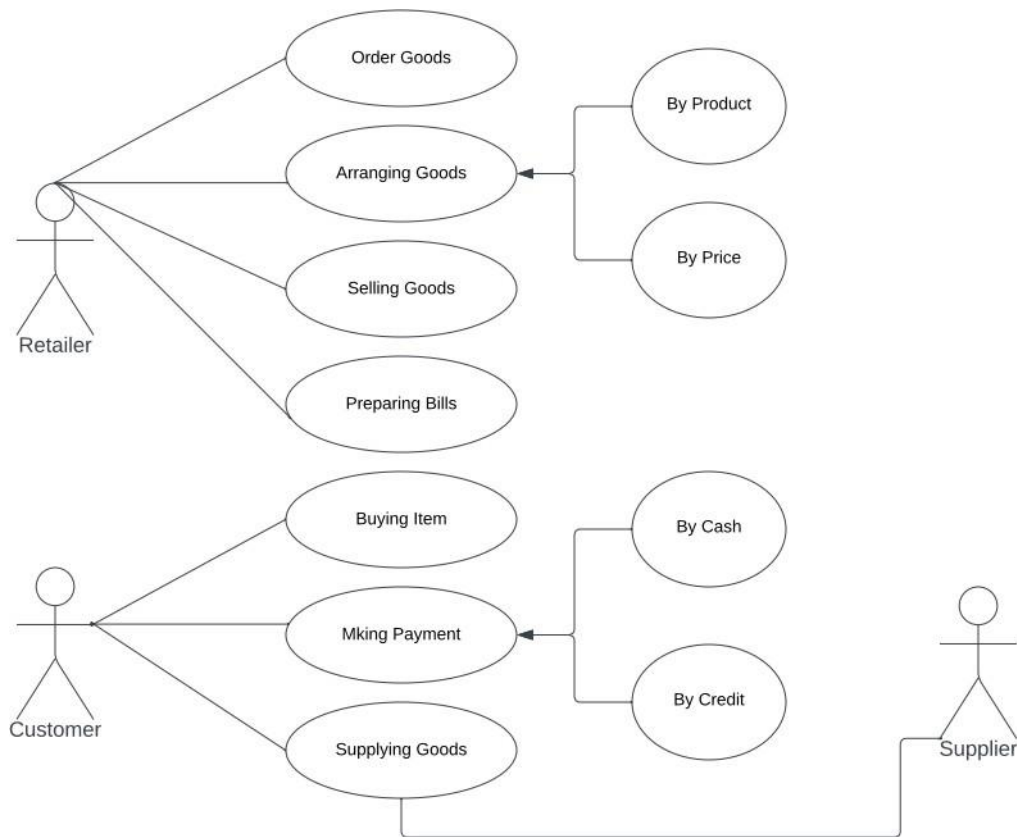
Classes and their attributes of Department Store Management System Diagram:

- Products Attributes
- Sales Attributes
- Discounts Attributes
- Stock Attributes
- Inventory Attributes

Classes and their methods of Department Store Management System Diagram:

- Products Methods
- Sales Methods
- Payments
- Discounts Methods
- Stock Methods
- Inventory Methods

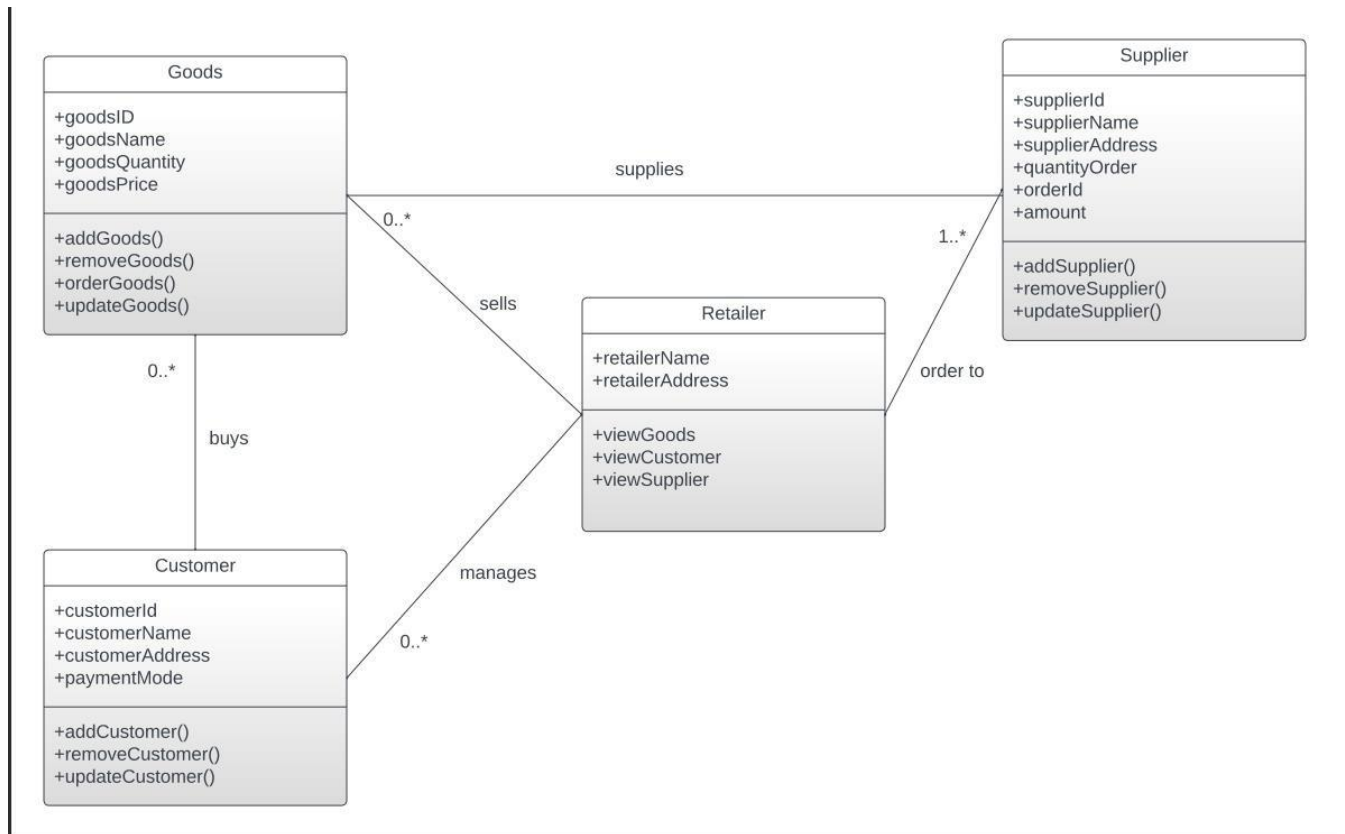
## USE CASE DIAGRAM:



→Customer entity: use cases of customer entity are Buying items, making payments i.e., by cash or by credit and Supplying goods.

□Retailer entity: use cases of retailer entity are Order goods, arranging goods i.e., by product or by price, selling goods and preparing for bills. Whereas supplier supplies goods.

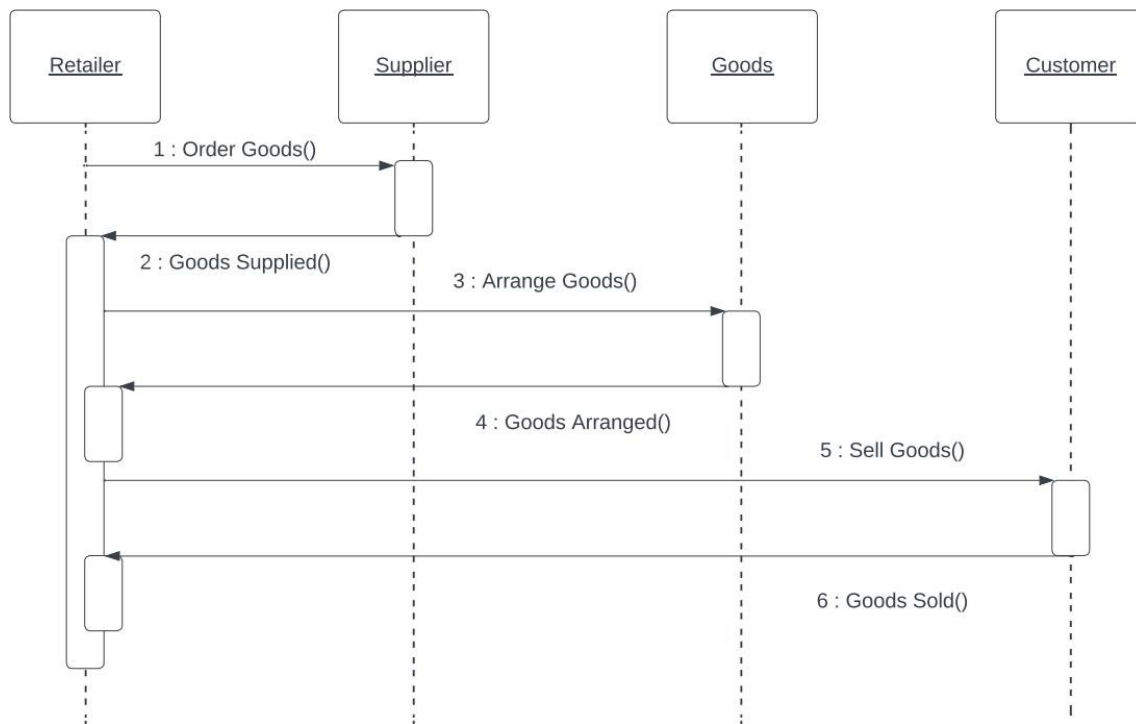
## CLASS DIAGRAM:



Classes and their methods of departmental store:

- Goods class: add Goods (), remove Goods (), order Goods () and update Goods ().
- Supplier class: add Supplier (), remove Supplier () and update Supplier ().
- Retailer class: view Goods (), view Customer () and view Supplier ().
- Customer class: add Customer (), remove Customer () and update Customer ().

## Sequence diagram with explanation



Retail Store Management System is a system for managing, i.e., ordering, organizing and selling products.

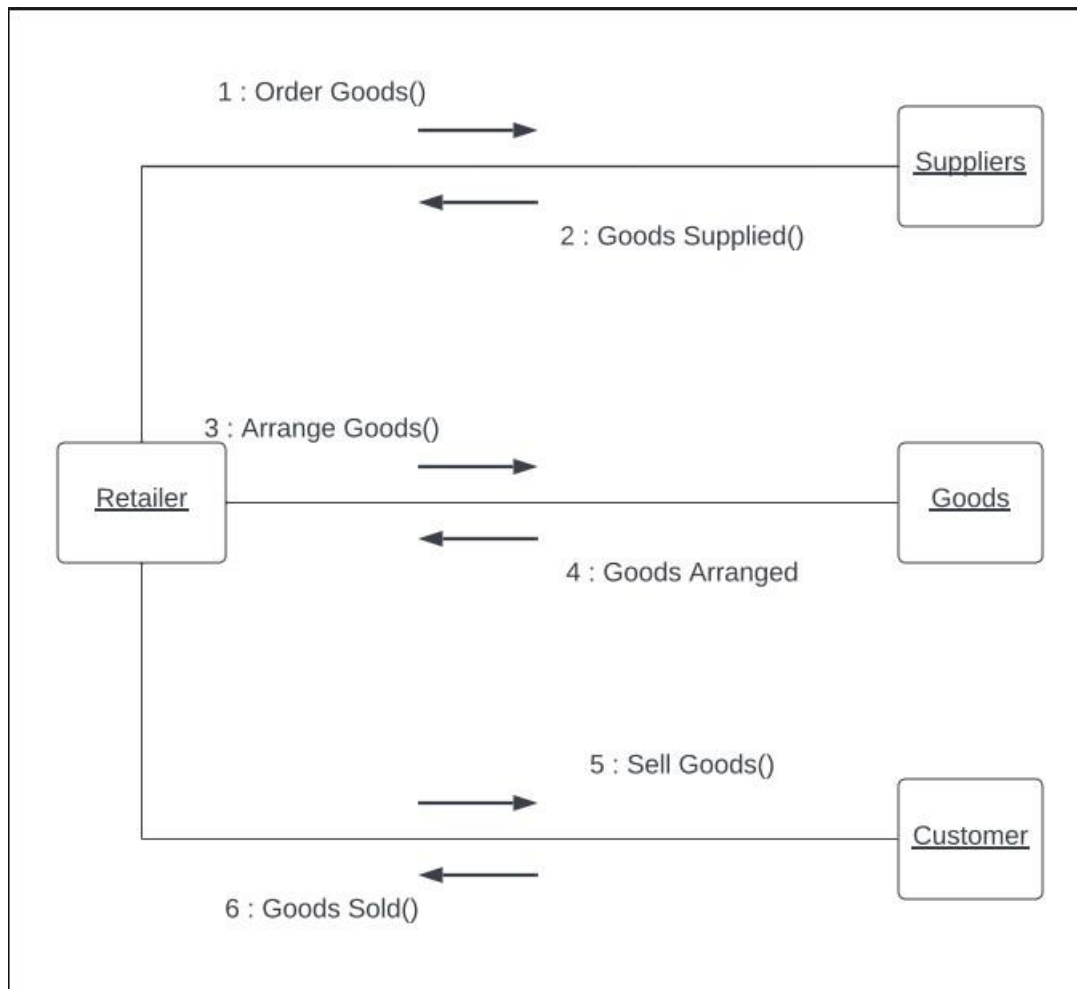
The retailer checks the availability of products in the store. When inventory is low, the retailer orders products.

When ordering the goods, the goods are accepted in the store, the retailer sorts them by product or price, then the retailer makes the payment. If the stock is available, he organizes the sale of the goods.

The retailer then sells the goods directly to the customer. The customer buys the items from the retailer. The retailer issues the invoice for the goods purchased by the customer, receives the amount on credit or in cash from the customer.

The supplier delivers the goods to the store in the system. The general system is used to manage the products in the store.

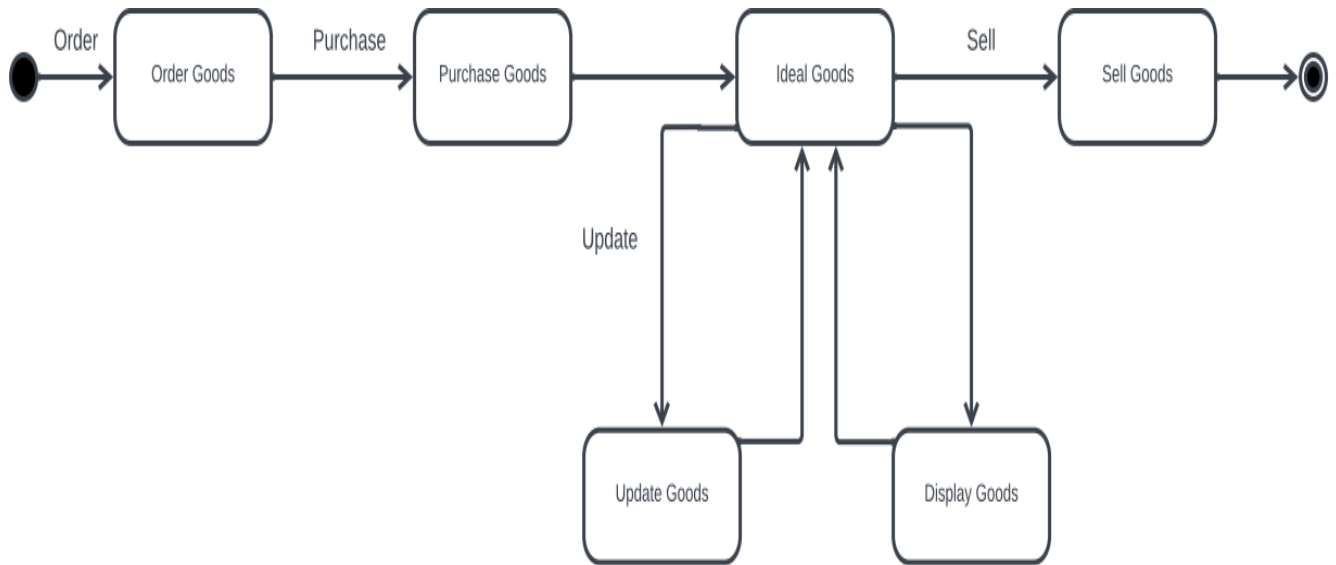
## Communication diagram with explanation



The Retailer checks for the availability of goods in the store. If the stock of goods is less then retailer places order for goods. While ordering the goods, goods area received at store, the retailer then arrange them by product or by price, then retailer makes payment. If the stock of goods is available then he will arrange goods for selling.

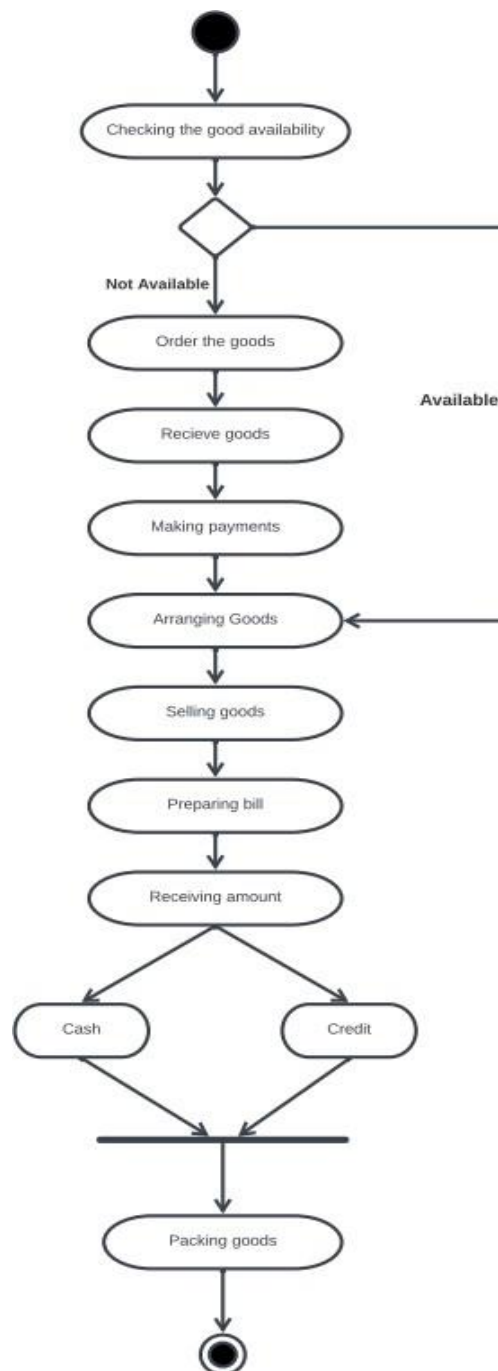
The retailer then sales the goods directly to the customer. The customer buys the items from retailer. The retailer prepares bill for goods purchased by the customer, he receives amount by credit or by cash from customer. The supplier supplies the goods to the store in the system. The overall system is used to manage the goods in the store.

## State chart diagram with explanation



The State Chart Diagram explains that the Retailer checks the stock of items at the store. If the retailer's stock of items is low, an order for goods is placed. When the items are ordered, they are arrived at the shop, and the merchant arranges them by product or by price before making payment. If the products are in stock, he will arrange for them to be sold. The retailer then sells the products to the buyer directly. The customer purchases the things from the store. The shop generates a bill for the products acquired by the consumer and collects payment from the buyer via credit or cash. The provider delivers the products to the system's shop. The overall system is utilized to handle the store's items.

## Activity diagram with explanation

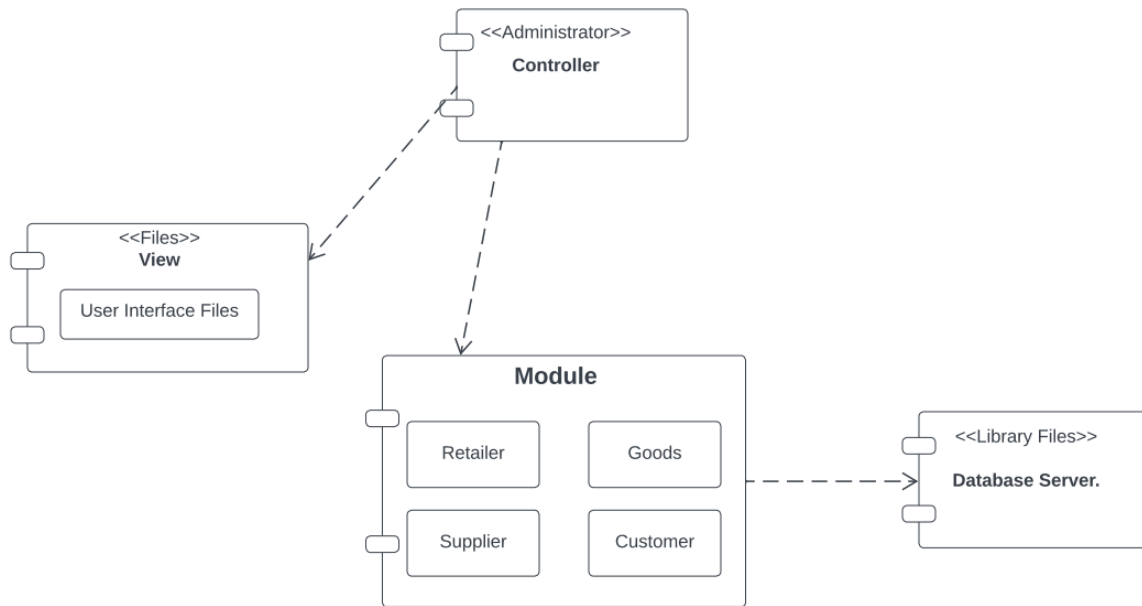


This is the Activity Diagram of Department Store Management System, which shows the flows of Activity. After that user can manage all the operations on Stock, Products, Sales, Inventory, Payments. All the pages such as Sales, Inventory, Payments are secure and user can access these pages after login. The diagram below helps demonstrate how the process works in a Department Store Management System. The various objects in the Inventory, Retailer, Supplier, Goods, Customers —interact over the course of the Activity.



## Component diagram with explanation

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This is a Component diagram of Department Store Management System which shows components; provided and required interfaces, ports, and relationships between the Products, Inventory Discounts; Payments and Sales. This type of diagrams is used in Component-Based Development (CBD) to describe systems with Service-Oriented Architecture (SOA). Department Store Management System UML component diagram; describes the organization and wiring of the physical components in a system.

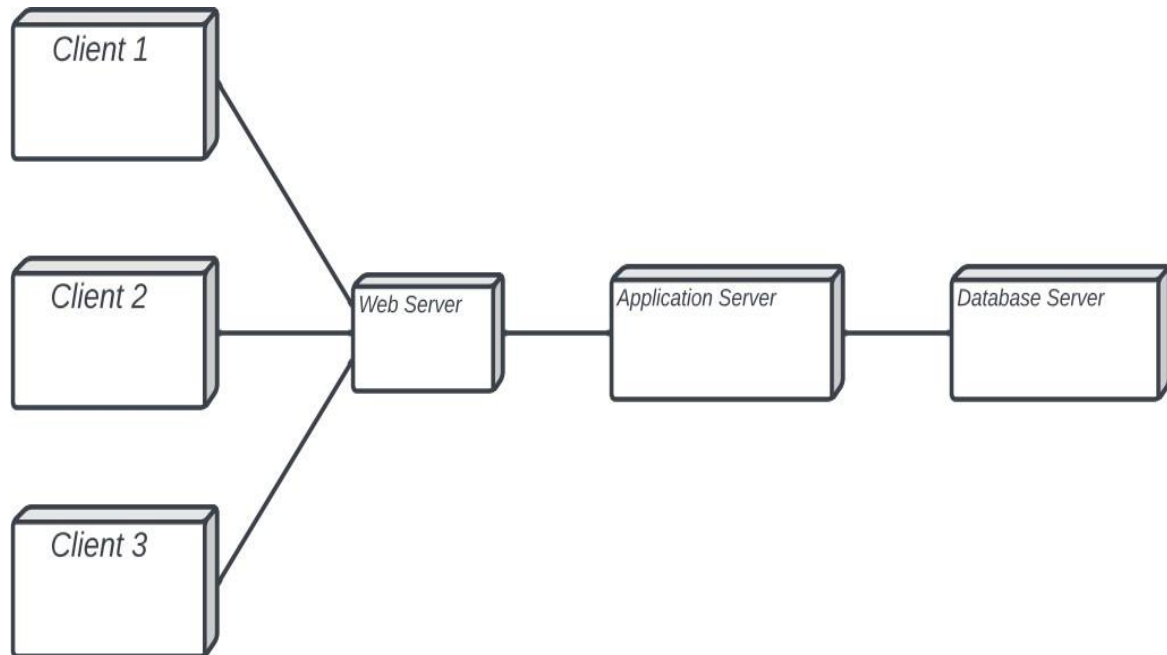
Components of UML Component Diagram of Department Store Management System:

- Administration Component
- Database Server Component
- Module Component
  - Retailer
  - Goods
  - Supplier
  - Customer
- Files View Component

## Features of Department Store Management System Component Diagram:

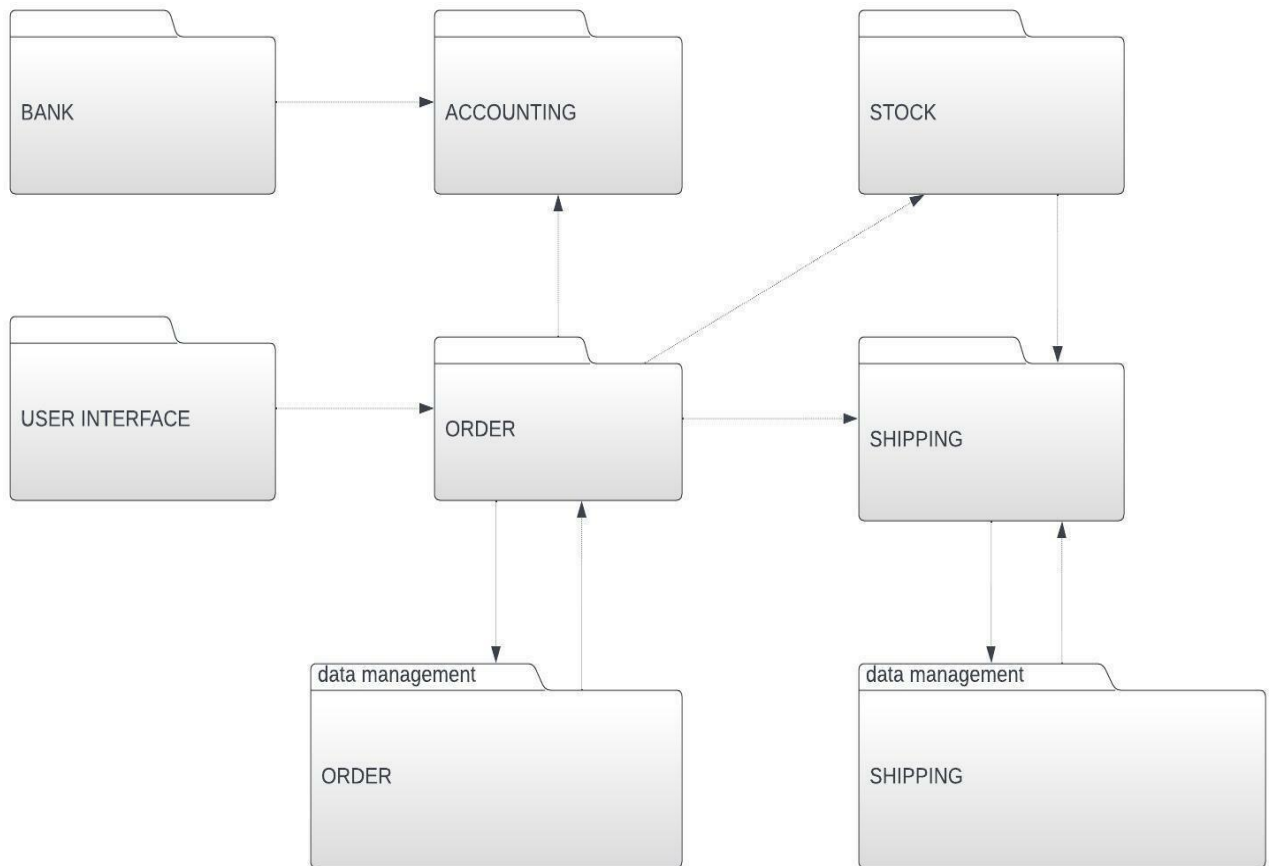
- You can show the models the components of Department Store Management System.
- Model the database schema of Department Store Management System
- Model the executables of an application of Department Store Management System
- Model the system's source code of Department Store Management System

## Deployment diagram with explanation



This Deployment Diagram Department Store Management System activity diagram illustrates the activity flows. The user may then control all stock, product, sales, inventory, and payment-related actions. All the pages, including Sales, Inventory, and Payments, are safe to visit after logging in. The procedure of a Department Store Management System is illustrated in the diagram below. Over the course of the Activity, the different items in the Inventory—Retailer, Supplier, Goods, and Customers—interact with one another.

## PACKAGE DIAGRAM:



First the customer visits and then orders the items he need and system then notifies the order details to the departmental store and then it is processed to the shipment where we have to confirm the order and users able for conformation and then it is to be checked in available stock in the store and starts the shipment and notifies the user about the order and enables the user to track the order.

## **Conclusion**

The model of Department Store Management System shows all the visual instrument of database tables and the relations between Sales, Discounts, Products, Inventory etc. We used structure data and to define the relationships between structured data groups of Department Store Management System functionalities. The main entities of the Department Store Management System are Retailer, Goods, Supplier, Customer.

The details of Products are store into the Products tables respective with all tables There is one-to-one and one-to-many relationships available between Retailer, Supplier, Goods, Customer