

# INVENTORY MANAGEMENT SYSTEM

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## Abstract

An Inventory Management System that allows to manage and maintain the stock easily. The Inventory Management System has been developed to allow users to add an inventory, delete an inventory, enter inventory quantity, update inventory status and more. The IMS is to manage the details of inventory, customer, Supplier, Purchase and Payments. It manages all the information about Inventory receiving stock, Inventory purchasing stock. It is important to ensure quality control in college that handle revolving around consumer goods. It is also an important means of automatically tracking large shipments. Users are provided with graphical GUI for accessing historical data.

## 1. Introduction

Inventory Management System is a desktop application designed on PHP technology using MYSQL Software. The main aim is to develop a software in which all the information regarding the stock of the organization has designed. The main ideas to develop a software interface for godowns for managing the total transactions for goods and money management. The application contains the organization user, sales details, Purchase details and the remaining stock are presented in the organization. Application also provides the remaining balance of the stock as well as the details of the balance of transaction. The Inventory Management system has several critical components and raw materials to decremented and incremented for goods. The

applications maintain the centralized database. The aim of the application is reduced to the manual effort needed to manage the transactions and historical data used in various godowns.

## 2. Objectives

The objectives of the project are requirement for achieving the fundamentals for manage the stocks easily. It develops an application that deals with the day to day requirement of any production organization. The privacy and security issues and technological variations have become more important matters since there are no strict policies and monitoring systems. It develops the easy management of the inventory. It handles the inventory details like sales details, purchase details and balance stock details. It provides competitive advantage to the organization. It provides details information about the stock balance. It makes the stock manageable and simplify the use of inventory in the organization.

## 3. Existing System

Inventory Management System is a manual one in which users are maintaining ledgers books etc to store the information like suppliers, details, inwards, deliveries and returns of items in all godown, customer details as well as employee details. It is very difficult to maintain historical data, consumes more time and effort for updating. Reports

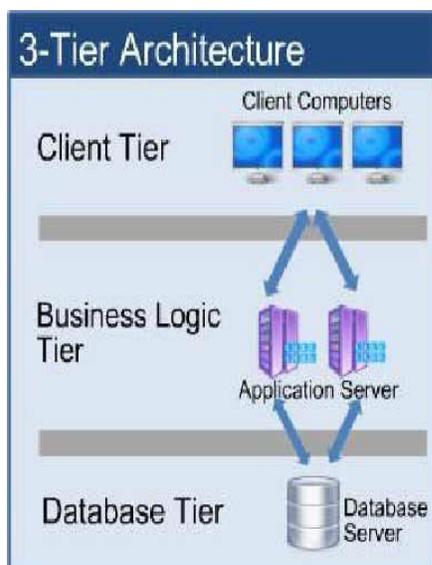
are not in attractive manner. Slow processing speed. Ready made data retrieval is difficult.

#### 4. Proposed System

Proposed system is a software application which avoids more manual hours that need to spend in record keeping and generating reports. No specific training is required for the employees to use this application. They can easily use the tool that decreases manual hours spending for normal things and hence increases the performance. It is very easy to maintain the stocks of the various items in all godowns. Keep track the inventories between the transaction with different locations. Having record of picking and selling products from a warehouse. Avoiding the out of stock situations.

#### 5. System Architecture

The Inventory Management System is based on 3-tier architecture. The 3-tier includes the three hierarchy of the flow of programming logic from user interface to database and again database to user interface with the desired information requested by the clients. In between there involves the logic layer for effectively and correctly manipulating the request.



#### Client tier

The main function of this tier is to display information to the user upon user's request generated by user's inputs such as firing button events. For example, inventory list will display when user click "display" button if he or she wants to know the list of stock remaining in the organization.

#### Business tier

The middle tier, business logic, is called by the client to make database queries. It provides core function of the system as well as connectivity to the data tier, which simplify tasks that were done by the client's tier.

#### Data tier

Data layer is also the class which gets the data from the business tier and sends it to the database or gets the data from the database and sends it to business tier. This is the actual DBMS access layer or object layer also called the business object. The database backend stores information which can be retrieved by using the MySQL database Connectivity.

#### 6. Software Description

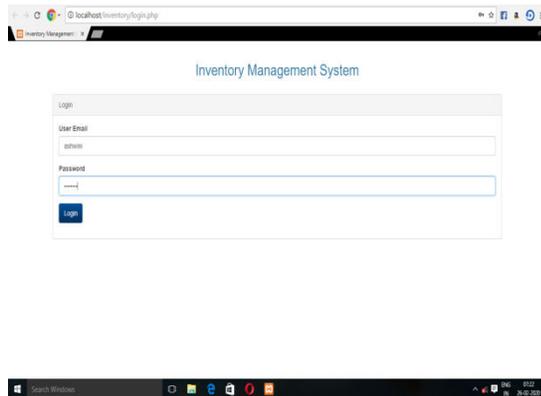
##### PHP

PHP is a server-side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases including MySQL, Oracle, Sybase, Informix, and Microsoft SQL Server.

#### 7. Modules

The Inventory Management System consists of the modules like Login, Home, User, Category, Brand, Product and Order.

### i) Login:



Admin login is determined by the username and password that has all the authority to add, update and delete the stock of the requirement.

### ii) Home

This module displays the total category, total brand, total price, total product and total quantity of the stock.

### iii) Category

This module displays the total item of all category in the stock list.

### iv) Brand

Quantity of item should be branded for the specified category.

### v) Product:

This module takes input as Category, Brand, Price and Quantity and list all the products for given details.

### vi) Order

The number of products that should be ordered is given as input and the output is receiver, delivery for product details, brand and delivery date.

## 8. Conclusion

Inventory Management System is important for keeping costs down, while meeting regulations. Supply and demand are a delicate

balance, and inventory management hopes to ensure that the balance is undistributed. The efficiency of any system designed to suit an organization depends cooperation during the implementation stage and also flexibility of the system to adopt itself to the organization. The advantages over traditional manual systems are application access through out all the godowns from the same location, reducing the manual work, storage the data at a secured centralized locations and quick generation of reports as per our requirements.

## 9. Future Scope

Inventory Management system functionality can be added more based on the user requirements and specifications. The software performance is increased by adding maximum number of cores in future. The project can be expanded as per the need of organization. Sales and purchase return system will be added in order to make return of products. Database for different products range and storage can be provided.

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