

Inventory Management System Project

Project Description

An inventory management system is a project that helps people control and keep track of the goods they buy, process, and sell. It includes many software programs to track stock levels and movements.

Project Abstract

For organizations that handle transactions involving consumer goods, an inventory management system is critical for quality control. A huge retail store could run out of supply of a critical item if inventory is not properly managed. When it's time to reorder, an effective inventory management system will notify the retailer. This inventory management system is also useful for tracking huge shipments automatically. Counting each pair of stocks by hand will almost certainly result in a mistake. The risk of human error can be reduced by using an automated inventory management system.

An Inventory Management System also aids in the tracking of retail product theft, providing useful information regarding store revenues and the need for theft-prevention devices. Scanning a barcode on the item or a barcode scanner is how Automated Inventory Management Systems function. The central computer system then keeps track of this data. The purchase order can also include a list of items that need to be pulled for packaging and shipping. In this situation, the Inventory Management System can perform a range of tasks. It can assist a warehouse worker in locating things on an order list, encoding shipment information such as tracking numbers and delivery addresses and removing purchased items from the inventory tally to maintain a correct count of in-stock items. All of this information works together to give firms real-time inventory tracking data. The simple search in a database makes it easy to find and look at inventory information in real-time.

Project Modules

The **inventory management system project modules are the features or functions that are expected in the developed software.** Each of the modules was based on the activities of inventory management and they will be automated to reduce the task of faculties and staff. Here is the list of modules for the Inventory Management System:

- **Product Management:** Product Management serves as a central repository for product and market data for Sales, Marketing, Development, and other departments. Over the product-market lifecycle, Product Management is responsible for identifying and supporting the development of desired, practicable, viable, and sustainable products that meet customer needs.
- **Monitor and Categorize Products:** Production monitoring gives you a complete picture of the manufacturing process, alerts you to any faults early on, and helps you avoid delivery

delays. And when you understand and control your production process from beginning to end, only two things can happen higher product quality and happier consumers.

- **Manage Product Pricing:** Managing Product Price is a set of tools, procedures, methods, and cultures used by companies that create and manufacture products to ensure that their profit (or cost) targets are met.
- **Sales and Stocks Management:** Stock management can also assist you in determining how many goods you need on hand at any one time. This helps to avoid product shortages and allows you to have just enough inventory in the warehouse without having an excess.
- **Monitor Purchasing Transaction:** The purchase management team must evaluate and select the best suppliers based on product quality and cost.
- **Manage Reservation and Orders:** They must manage reservations and maintain correct records to ensure that all rooms are filled as soon as feasible. This job frequently collaborates with the managers of the revenue and rooms divisions.
- **Revenue and Expenses Management:** Revenue and management aid in the prediction of consumer demand in order to maximize revenue growth by optimizing inventory and price availability. The goal of revenue management isn't to sell a product for a cheap price today in order to offer it for a greater price tomorrow.

These modules must be present in creating the Inventory Management System Project to satisfy the needs in managing Inventory transactions. Through this, the management and monitoring of stocks and sales would be much easier for the firm admin. Inventory Management System modules can also be seen as project features.

Project Proposal

Problem Statement:

Demand is frequently unpredictable in inventory systems, and lead times can often vary. Managers frequently keep a safety supply to minimize shortages. In such cases, it's difficult to say what order amounts and reorder points will result in the lowest total inventory cost.

The inventory issue refers to the general issue of deciding how much inventory to keep on hand in expectation of possible demand. Loss occurs when a business is unable to meet demand (for example, when a store loses sales or when soldiers in a war run out of ammunition) or when commodities are stocked for which there is no demand.

Solution

Inventory management's major goal is to make ordering, stocking, storing, and using inventory as simple and efficient as possible for firms. You'll always know what things are in stock, how many there are, and where they are if you manage your inventory properly. An inventory system's main function is to keep track of your products and supplies. When you buy inventory, you need to keep track of when you bought it, when you sold it, and how much you have on hand. It also tells you where your inventory is.

Objective

The inventory management system was developed to keep the number of idle, waste, surplus, scrap, and obsolete things to a bare minimum. To treat inventories as a risky investment.

To save money on inventory storage, replacement, and shortages while improving production and distribution efficiency.

Scope

An inventory system's scope can include valuing inventory, measuring inventory change, and forecasting future inventory levels, among other things. At the end of each period, the value of the company's inventory is used to figure out how much money the company makes and loses.