PROJECT DESIGN PHASE II

FUNCTIONAL REQUIREMENTS

Date	15 October 2022
Team ID	PNT2022TMID29529
Project Name	Inventory Management System for Retailers

PROJECT DISCRIPTDESCRIPTION

The project is aimed at developing a desktop-based application named Inventory Management System for managing the inventory system of any organization. Inventory management is a systematic process of finding, storing, and selling the inventory of both raw materials (commodities) and finished products (products). In business terms, inventory management means managing the right inventory at the right level, at the right place, and at the right time. The goal is to always know where and how much inventory is in order to properly manage inventory levels. This includes all the inventory management until it reached the consumer. It includes finished products manufactured by the company and the raw material which may be required for the production of finished goods. It became our main goal to develop a system that can be used by both large corporations as well as small businesses.

SCOPE:

- **Manage Inventory**: Inventory management helps to manage the stock of the company. It provides proper details of the products what kind of raw material, what are the sizes we require and etc. to the purchasing department.
- **Less Storage**: When the inventory management provides proper information to management, they buy according to them which helps the company to store fewer products.
- **Improve Productivity:** Inventory management helps to improve the productivity of the machines and manpower. Employees are aware of stocks and the quantity that require to produce.
- **Increase Profits:** Inventory management helps to improve the profits of the company. it helps to provide proper information about stocks, that saves the unnecessary expenses on stocks.
- **Mail Notification:** Mail notification when the minimum stock limit is reached.

PURPOSE:

Retail inventory management is the process of ensuring you carry merchandise that shoppers want, with neither too little nor too much on hand. By managing inventory, retailers meet customer demand without running out of stock or carrying excess supply.

In practice, effective retail inventory management results in lower costs and a better understanding of sales patterns. Retail inventory management tools and methods give retailers more information on which to run their businesses. Applications have been developed to help retailers track and manage stocks related to their own products. The System will ask retailers to create their accounts by providing essential details. Retailers can access their accounts by logging into the application.
Once retailers successfully log in to the application they can update their inventory details, also users will be able to add new stock by submitting essential details related to the stock.

FEATURES AND REQUIREMENTS:

- **Inventory Control:** Inventory control handles products that are already in stock at the warehouse and plays a key role in supply chain management. Inventory control tools can categorize products by type, location and SKU (or serial number), audit data, generate reports in real-time and search, filter and view products. For more on inventory control methods, including expert advice.

- **Inventory Management:** Inventory management features govern the data from other parts of the system, like inventory control. That's not all; inventory management also handles business processes that occur before the stock arrives at a warehouse and how the inventory reaches other destinations. These features include tools for multi-location warehouse management and integrations with other software or enterprise resource planning (ERP) platforms.

- **Inventory Tracking:** To implement inventory controls, you need to track the status of products and materials in the supply chain. Perpetual inventory tracking features help automate manual tasks. For example, the system automatically generates a tracking number when it creates a receipt or invoice. Tracking integrations with third-party logistics (3PL) providers combined with an email solution lets businesses better manage customer relationships by sharing what's in stock or shipping times.

- **Inventory Barcoding:** Barcoding software helps eliminate data entry errors and automate business functions that require communication with other parts of the system. Collecting, storing and organizing digital inventory data makes inventory operations faster and more accurate. Barcoding software can integrate with digital documentation and reporting features (for example, touchscreen signatures and paperless invoicing). Mobile barcode scanning devices improve inventory accuracy, speed up back-office processes and stock replenishment and enable paperless documentation.

- **Inventory Optimization:** Take inventory planning to a higher level with inventory optimization. Add sophistication to a basic inventory plan. Instead of standard ordering formulas and a basic ordering process, you can use tools that provide automated reports, inventory trends and a view of changes across the entire supply chain.

- **Inventory Alerts:** Various modules trigger inventory alerts that help reduce waste, optimize inventory financials and manage customer expectations. These features include automated email or SMS messages that alert you to low inventory levels and shipment and supply chain delays. Inventory alerts offer an added level of operational control for sales forecasting, materials planning, shipping logistics and supplier management.