

Project Design Phase-I
Proposed Solution

Date	22 September 2022
Team ID	PNT2022TMID5025I
Project Name	Inventory Management System for Retailers
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Retailers who run their business with large scale or small scale stocks. It is crucial for an organization today to understand its inventory to achieve both efficient and fast operations, that too, at an affordable cost. Lack of the right inventory at the right time can mean back orders, excess inventory, etc. These drive up costs. Late delivery due to stock-outs is bound to give you a bad reputation. Inaccurate calculations of stock and price. Late deliveries are due to late planning. Poor tracking may lead to back orders.</p> <p>Overstocking of discounted products and neglecting the trends of seasonal sales may result in excess inventory. Therefore considering the economic crisis of the retailers and to reduce the manpower efficiently while handling data, it is very important to have a best inventory management system for retailers.</p>
2.	Idea / Solution description	<p>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.</p> <p>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. They can view details of the current inventory. The System will automatically send an email alert to the retailers if there is no stock found in their accounts. So that they can order new stock.</p>

3.	Novelty / Uniqueness	User can track the record of goods available using the application. Inventory tracking helps to improve inventory management and ensures that having optimal stock available to fulfill orders.Reduces manpower , cost and save time. Emails will be sent automatically While stocks are not available.Makes the business process more efficient.Improves organizations performance.
4.	Social Impact / Customer Satisfaction	Customer satisfaction is the key for success of a business.The availability of product is just one way in which an inventory management system creates customer satisfaction. Inventory management systems are designed to monitor product availability, determine purchasing schedules for better customer interaction.
5.	Business Model (Revenue Model)	<div><h3>How Inventory Management Works?</h3><pre>graph LR; Manufacturer[Manufacturer] -- Orders --> RawMaterials[Raw materials]; RawMaterials -- Produces --> FinishedGoods[Finished goods]; FinishedGoods -- Stores --> Warehouse[Warehouse]; Warehouse -- Sells --> PointsOfSale[Points of sale (distributors and retailers)]; subgraph Management; Manufacturer; RawMaterials; FinishedGoods; end; subgraph Tracking; Warehouse; PointsOfSale; end; Management --- Plus[+]; Tracking --- Plus; Plus --- IMS[Inventory Management System]; IMS --> MeetsDemands[Meets consumer demands]; IMS --> IncreasesSales[Increases sales];</pre></div>
6.	Scalability of the Solution	Scalability is an aspect or rather a functional quality of a system, software or solution.This proposed system for inventory management system can accommodate expansion without restricting the existing workflow and ensure an increase in the output or efficiency of the process.