

**Project Design Phase – 1**  
**Proposed Solution**

Date	10 <sup>th</sup> of October
Team ID	PNT2022TMID03411
Project Name	Inventory Management System for Retailers

**Proposed Solution**

S.No	Parameter	Description
1	Problem Statement (Problem to be solved)	The problem statement aims to make desktop application for retailers and to track all areas of Inventory Management System like purchase details, sales details, stock management and other policies.
2	Idea / Solution Description	The application is developed to help retailers track and manage stocks related to their own products. The System will ask the 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. 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.
3	Novelty / Uniqueness	Apart from the standard features of the inventory management system like handling products, warehouses, locations we also plan to include the feature of sales prediction using

		<p>regression and the previous sales data within our application.</p> <p>We also make the development and maintenance easier by containerizing the app using Docker</p>
4	Social Impact / Customer Satisfaction	<p>With this system we aim to make better use of the inventory available for the retailers. This improves the management and reduces excess inventory and thus reduces the wastage of products.</p> <p>It also improves the relationship with vendors and suppliers and can negotiate better deals with the suppliers by knowing the demand beforehand.</p>
5	Business Model (Revenue Satisfaction)	<p>Retailers can order the right amount and type of stock at the right time with the aid of an inventory management system. It eliminates the unnecessary expense for the retailers.</p>
6	Scalability of the Solution	<p>A scalable cloud architecture is made possible through virtualization. Unlike physical machines whose resources and performance are relatively set, virtual machines (VMs) that we use in IBM cloud are highly flexible and can be easily scaled up or down. Kubernetes allows users to horizontally scale the total containers used based on the application requirements, which may change over time. It's easy to change the number via the command line</p>