

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	19 October 2022
Team ID	PNT2022TMID16110
Project Name	Inventory Management System for Retailers
Maximum Marks	4 Marks

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through Username and Password
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Sign In	Sign in to the application by Gmail, Username and Password.
FR-4	Dashboard	Can view the product details.
FR-5	Ordering	Order required products by putting them in a cart first.
FR-6	Restocking	Ordering more products when the stock is low.

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Designing/Developing the site to be having a learning curve. Having simple and easy to navigate website for users. Attractive looking web-page. Making the site to be responsive for desktops and mobile users.
NFR-2	<b>Security</b>	The security should be strong as to the attackers wont be penetrating to the authorized users account or data. Log in system is used to prove authentication and authorization. Security can be increased by using OTP. Cookies based security system for authentication and improved visiting experience on the site for clients.

NFR-3	<b>Reliability</b>	<p>Should be having the capacity to handle sufficient numbers of users and not be lagging or experiencing any discomfort when browsing when the web-page is busy.</p> <p>Should have minimum errors when executing the programs.</p> <p>Should be available even at the times of calamity.</p>
NFR-4	<b>Performance</b>	<p>The convenience of this is it reduces the time period of searching in aisle, searching for desired product, etc.</p> <p>It reduces costs, saves time, restocking period and predicts the best selling products.</p> <p>This makes the business more productive and profitable by having an organized management system.</p>
NFR-5	<b>Availability</b>	<p>This uses IBM DB2 to ensure high availability of database servers and performances.</p>
NFR-6	<b>Scalability</b>	<p>As DB2 is highly scalable, the coding can be produced and developed efficiently and new features can be introduced easily.</p> <p>Reusing the code can be done to add any new features.</p> <p>IBM Container in Docker registry is used which is highly scaleable.</p>