

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

Date	03 October 2022
Team ID	PNT2022TMID24036
Project Name	Inventory Management System for Retailers
Maximum Marks	4 Marks

**Functional Requirements:**

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>	<p>The security should be strong as to the attackers wont be penetrating to the authorized users account or data.</p> <p>Log in system is used to prove authentication and authorization.</p> <p>Security can be increased by using OTP.</p> <p>Cookies based security system for authentication and improved visiting experience on the site for clients.</p>
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Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<p>Registration through Form</p> <p>Registration through Gmail</p> <p>Registration through Username and Password</p>
FR-2	User Confirmation	<p>Confirmation via Email</p> <p>Confirmation via OTP</p>
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.

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>	This uses IBM DB2 to ensure high availability of database servers and performances.

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>
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