

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

Date	17 October 2022
Team ID	PNT2022TMID03411
Project Name	Project - 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	Registering through a form Registering through mail
FR-2	User Confirmation	Email confirmation OTP confirmation
FR-3	Login	Log in to the application by entering required credentials (email ID and password)
FR-4	Dashboard	View the products details (Name, quantity)
FR-5	Add items to the Inventory list	Users can add items that they wish to buy to the inventory
FR-6	Stock Updation	Increasing the availability of a particular product

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	If the system has a steep learning curve, then it would mostly not be purchased by the company needing an inventory management system. <ul style="list-style-type: none"><li>• The UI is simple and easy to navigate</li><li>• Consistent design and colours are used.</li><li>• The webpages are responsive</li><li>• Email delivery is to be fast</li></ul>
NFR-2	<b>Security</b>	Security refers to the safety and management of the inventory of a company such that only authorised personnel are allowed to access them. <ul style="list-style-type: none"><li>• Login system is used to provide authentication.</li><li>• Users need to create account and verify it with their email OTP.</li><li>• Cookie based security is user for authentication on client side.</li></ul>

NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"> <li>• Exception handling will be done at the code level to ensure that the app performs well even when errors happen in the runtime</li> <li>• Multiple instances of the App would be online to ensure continued operation</li> </ul>
NFR-4	<b>Performance</b>	<p>Performance of an inventory management system depends on the efficiency with which various tasks in it can be executed.</p> <ul style="list-style-type: none"> <li>• Reduces manpower, cost and saves time. Emails will be sent automatically when stocks are not available.</li> <li>• Makes the business process more efficient.</li> <li>• Improves organizations performance.</li> <li>• It will be perform fast and secure even at the lower bandwidth</li> </ul>
NFR-5	<b>Availability</b>	The use of IBM DB2 ensures high availability
NFR-6	<b>Scalability</b>	<p>The scalability of an inventory management system refers to the extensibility of its operations.</p> <ul style="list-style-type: none"> <li>• DB2 is highly Scalable</li> <li>• The code is developed efficiently to easily add new features without many changes by reusing the code.</li> <li>• Docker in IBM Container registry is used which is highly scalable</li> </ul>