

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

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Team ID	PNT2022TMID35256
Project Name	Inventory Management System for Retailers

Functional Requirements:

Following are the functional requirements of the proposed solution.

	Functional Requirement	Sub-Task
1	User Registration	Mail-in registration /Using a form to register
2	User Confirmation	Call/OTP/Email confirmation
3	Logging in	Enter the essential credentials to access the application (email ID and password)
4	Dashboard	View the products details (Name, description, quantity)
5	Adding items to the Inventory list	The inventory can be updated by users with items they want to purchase.
6	Updating of stock	Increasing the availability of a specific product

Non-functional Requirements: Following are the non-functional requirements of the proposed solution.

	Non-Functional Requirement	Description
1	Usability	<p>If the system has a steep learning curve, the organisation in need of an inventory management system is unlikely to purchase it.</p> <ul style="list-style-type: none"> • The user interface is straightforward and simple to use. • The design and colours are consistent. • The websites are mobile-friendly and responsive. • Email delivery must be quick.
2	Security	<p>Security refers to the safety and management of the inventory of a company such that only authorised personnel are allowed to access them.</p> <ul style="list-style-type: none"> • Login system is used to provide authentication. • Users need to create account and verify it with their email OTP. • Cookie based security is user for authentication on client side.

3	Reliability	<ul style="list-style-type: none"> • To ensure that the app functions properly even when mistakes occur during runtime, exception handling will be done at the code level. • To ensure sustained operation, many instances of the App would be online.
4	Performance	<p>The efficiency with which various tasks in an inventory management system can be completed determines its performance.</p> <ul style="list-style-type: none"> • Reduces manpower, costs, and time. When stocks are unavailable, emails will be issued automatically. • Improves the efficiency of the business process. • Enhances the performance of organisations. • Even at minimal bandwidth, it will perform quickly and securely.
5	Availability	The use of IBM DB2 ensures high availability
6	Scalability	<p>An inventory management system's scalability relates to the expansion of its activities.</p> <ul style="list-style-type: none"> • DB2 is extremely scalable. • By reusing the code, the code is created effectively to allow for the addition of new features with few adjustments. Docker, which is very scalable, is utilised in the IBM Container Registry.