

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

| | |
|---------------|---|
| Date | 19 October 2022 |
| Team ID | PNT2022TMID04847 |
| 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 Email confirmation |
| FR-2 | User Confirmation | OTP confirmation Log in to the application by entering required |
| FR-3 | Login | credentials (email ID and password) View the details of the product (Name, quantity) |
| FR-4 | Dashboard | |
| 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 | Usability | If the system has a steep learning curve, then it would mostly not be purchased by the company needing an inventory management system. The UI is simple and easy to navigate Consistent design and colours are used. The webpages are responsive Email delivery is to be fast |
| NFR-2 | Security | Security refers to the safety and management of the inventory of a company such that only authorised personnel are allowed to access them. 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 |

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