

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

Date	03 October 2022
Team ID	PNT2022TMID32704
Project Name	Retail Store Stock Inventory Analytics
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	<ul style="list-style-type: none"><li>Users can register by using the Signup page for ordering the product.</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>Confirmation can be done via Email.</li><li>Confirmation via OTP.</li></ul>
FR-3	User Login	<ul style="list-style-type: none"><li>Login with the confirmed username and password.</li></ul>
FR-4	Forgot username and password	<ul style="list-style-type: none"><li>In case if the user forgot the registered username and password, they can reset the same with a link which will be sent to their registered E-Mail ID.</li></ul>
FR-5	Two-Factor Authentication	<ul style="list-style-type: none"><li>The customer's account security can be further enhanced with two-step verification.</li></ul>
FR-6	User Interface	<ul style="list-style-type: none"><li>The user interface is very user friendly and so the user can navigate through them with ease.</li></ul>
FR-7	Main Menu	<ul style="list-style-type: none"><li>The main menu has all the important options to which the user can navigate through.</li><li>The Dashboard contains the page for uploading and modifying the inventory data.</li><li>This step is crucial because this is where the data is uploaded after verification.</li></ul>
FR-8	Management of Stocks	<ul style="list-style-type: none"><li>The details of the incoming and the outgoing inventory. Details about stock availability.</li><li>Manage stock inquiries and track back ordering.</li></ul>
FR-9	Support Team	<ul style="list-style-type: none"><li>A separate team will be provided for the retailers for suggestions and ways to improve the overall sales.</li></ul>
FR-10	Billing System	<ul style="list-style-type: none"><li>Receipt is automatically generated for the stock. It is sent to the customer and availability of stocks is updated.</li></ul>
FR-11	Payments	<ul style="list-style-type: none"><li>The transaction is done in a secured way with encryptions.</li></ul>

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	<ul style="list-style-type: none"><li>• This application should provide user friendly interface.</li><li>• It should supports better inventory management by using visualization techniques.</li><li>• It should support the usage of datasets in CSV, excel, spreadsheets formats, etc.</li><li>• It should be easy to use and maintain.</li></ul>
NFR-2	<b>Security</b>	<ul style="list-style-type: none"><li>• This application should not allow unauthenticated users since it has Two-Factor authentication.</li><li>• So the access to databases are allowed only to the verified persons.</li><li>• Each and every data should be backed-up and stored in another secured folder in order to ensure high availability.</li></ul>
NFR-3	<b>Reliability</b>	<ul style="list-style-type: none"><li>• Data is required to be analysed in deep in order to generate favourable results.</li><li>• The prediction mechanism helps the application to always foresee the situation.</li><li>• It genuinely improves the customer satisfaction.</li><li>• But here, the efficiency of the dataset is taken into account.</li></ul>
NFR-4	<b>Performance</b>	<ul style="list-style-type: none"><li>• The system provides the analysis quickly since it uses visualization and prediction techniques.</li><li>• The product details must be updated frequently in order to obtain clear inventory management.</li><li>• The speed of the software and resources plays a vital role.</li></ul>
NFR-5	<b>Availability</b>	<ul style="list-style-type: none"><li>• Users should be able to access the system across the world.</li><li>• This can be achieved by using reliable network connections and servers.</li><li>• Maintenance of the application can be done during holidays with prior announcement in order to improve the up-time.</li></ul>
NFR-6	<b>Scalability</b>	<ul style="list-style-type: none"><li>• The system should support large datasets or small datasets according to the users.</li><li>• It should be scalable enough for any type of users.</li><li>• It should be able to visualize the dataset accurately without any errors.</li><li>• The retailers can use this model to improve their profit.</li></ul>