

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

Date	16 October 2022
Team ID	PNT2002TMID00123
Project Name	Estimate the crop yield using Data 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	Signup using the embedded form/through Gmail
FR-2	User Confirmation	Confirmation email on registering using form or otp
FR-3	User Login	Login using the credentials provided during the time of registration
FR-4	Crop Management	Manage different crops sold at a store by entering a name, price, description and discount offered
FR-5	Stock Management	Add new stock to the store by entering the desired item name and the quantity acquired. Stock gets removed automatically after each sale
FR-6	Customers	Add a customer if he/she is new to the store. Use the details to map each sale with a particular customer
FR-7	Sale	Add different items and the quantity bought by a customer to calculate the total billing amount and register the sale
FR-8	Crop Shortage Alert	Alert the user when an item goes below the threshold value
FR-9	Historical Data Analysis	Visualizations for the list of items sold along with the quantity during a particular time period

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The system uses a web browser as an interface, which all users are familiar about and no specific training is required
NFR-2	<b>Security</b>	Every data specific to a user could be accessed only by the respective user as every login activity is authenticated and authorize
NFR-3	<b>Reliability</b>	The users should be able to access the correct data at all times

NFR-4	<b>Performance</b>	The system should not take a longer time to send a response to the user that he is in need of and the resources should be allocated accordingly for different tasks such as the visualizations can take more time but whereas registering a sale/updating the inventory shouldn't
NFR-5	<b>Availability</b>	The system should be accessible at all times - 24/7 when the users aren't notified about the server maintenance
NFR-6	<b>Scalability</b>	The system should be able to accept any kind of new changes in the near future such as increase in the user count, throughput of data, extending it to hand-held devices ...