

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

Date	11 October 2022
Team ID	PNT2022TMID27824
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	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Data Collection	Data from user through Form
FR-4	Data Processing	Pre-processing the data that is been collected.
FR-5	Yield Prediction	Prediction is done using, K-means Clustering, Apriori Implementation & Navie Bayes Implementation.
FR-6	Results	Suggestions of the crops and the estimated yield are given as result.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	To use a particular product at ease, including elements such as: Navigation, Purpose of features & Quality of performance.
NFR-2	<b>Security</b>	To protect sensitive data of the user, include firewalls to prevent unauthorized access. Account creation & Password generation
NFR-3	<b>Reliability</b>	Percentage of the probability of failure or rate of failure, Number of critical failures, Time between critical failures.
NFR-4	<b>Performance</b>	Efficiency of the system ,database response time
NFR-5	<b>Availability</b>	Consistent Availability of the system and its features to the user.
NFR-6	<b>Scalability</b>	The highest workloads under which the system will still perform as expected.