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

Date	03 October 2022
Team ID	PNT2022TMID21122
Project Name	Project – 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 requirement	The user data is required to analyse the historical data and data visualization on the crops yield.
FR-4	Data Storage	A private cloud storage is required with enhanced security level and with data encryption facility.
FR-5	Data Analysis	Analyse the datasets and choose only the required columns and clean the dataset by removing duplicates records.
FR-6	Estimation	A clear visualization chart and appropriate techniques to improve the accuracy of prediction.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The data reports which are provided are based on historical data and these recommendations will help the farmers in choosing the right time and season to cultivate and harvest crops and to gain more profit.
NFR-2	**Security**	The user data and the crop information is protected with IBM Cognos.
NFR-3	**Reliability**	The dashboard and the visualization charts are made simple so that the data reports are simple to interpret.Recovery speed is also a important factor.
NFR-4	**Performance**	The System is fast enough to handle large datasets with advanced visualization techniques.
NFR-5	**Availability**	The dashboard is user friendly and it is designed in such a way that it is easily accessible and can be accessed on smartphones,laptops,desktops with an active internet connection.
NFR-6	**Scalability**	The dashboard and the visualization charts should be able to provide data reports for larger datasets with accuracy.