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

Date	31 October 2022
Team ID	PNT2022TMID14659
Project Name	Estimate the crop yield using Data Analytics
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	User can register through Forms or Gmail account or LinkedIN account.
FR-2	User Confirmation	Confirmation via Email or OTP
FR-3	User Profile	User specific information, Farm details, Yield history.
FR-4	Knowledge about factors that influence the yield	Behaviour of crops and the yield obtained is highly dependent on factors like rainfall, temperature, soil type, etc., Hence it is significant to know the impact of these factors on the yield with its past history.
FR-5	Estimation module	A prediction of crop yield is to be done based on the user's input data (season ,crop ,production ,area).
FR-6	Analysis	An analysis is done on the given data to gain useful insights on the crop yield.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Provide perfect data report after deep analysis of the past data. Helping farmers to overcome loss in farming and business.
NFR-2	**Security**	The user information is protected by the user login and registration with a secured password.
NFR-3	**Reliability**	Effective tool that all farmers can use, making it reliable by improving the accuracy of the estimation or prediction. This will bridge the gap between farmers and technology.
NFR-4	**Performance**	Multiple technologies and services that will improve the usability in agricultural activities.
NFR-5	**Availability**	Both website and mobile application interface and developed in local language and the content is available in localized language.
NFR-6	**Scalability**	With the data visual reports, farmers will be able to cultivate crop according to the area, climate, soil and other features that impact the crop yield and hence enhancing the productivity.