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

Date	15 October 2022
Team ID	PNT2022TMID40513
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 through Form SignUp through Gmail .
FR-2	User Confirmation	Confirmation via Gmail Confirmation via OTP
FR-3	User Login	Login through Form using Gmail or username & password. Login to Crop and Farmer Activity Information System. Username: us2 Password : 12
FR-4	Forgot password	OTP via Gmail & using authentication process.
FR-5	Data collection	Users(Farmers) upload the data. Admin uploads the data to the web page & train to calculate the crop yield.Change the description of a crop. Use garlic for an example. This enables them to make smart decisions, such as what crops to plant for better profitability and when to harvest. The right decisions ultimately improve farm yields.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Usability has been defined as a measurement

		of system effectiveness, efficiency, and satisfaction . Usability is also an assessment to measure quality level and human point of view about the systems.
NFR-2	**Security**	A challenge initiated to help farmers know where to add water or fertilizer using data such as soil PH, temperature, and moisture levels, combined with other data sources.
NFR-3	**Reliability**	The structure must be reliable and stringing giving the functionalities. The progressions made by the Programmer must be Project pioneer and in addition the Test designer.
NFR-4	**Performance**	The structure should not capitulate when various users would use everything the while. It should allow brisk accessibility to each and every piece of its users.
NFR-5	**Availability**	Crop yields are the harvested production per unit of harvested area for crop products. In most of the cases yield data are not recorded, but are obtained by dividing the production data by the data on area harvested.
NFR-6	**Scalability**	Recently, the Scalable Crop Yield Mapper (SCYM) was proposed to estimate gridded yield by integrating large sets of scenario simulations derived from crop model to statistical models that link crop yield with different combinations of remote sensing images without the need for ground observations.