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

Date	03 October 2022
Team ID	PNT2022TMID26387
Project Name	Project – 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 Requirement	Time management. Market demand drive production. Knowledge of seeds, crops, mechanism, soil, climate & agriculture science. Right use of resources like soil and water.
FR-2	User Registration	Registration through Form. Registration through Gmail. Registration through LinkedIN. Registration through Mobile Number.
FR-3	User Confirmation	Confirmation via Email. Confirmation via OTP. Two step verification for new device login.
FR-4	User Profile Update	Updating personal details. Updating educational details.
FR-5	User Login	Confirmation via Email. Confirmation via OTP.
FR-6	User Objectives	Formulation and implementation of policies. programmes aimed at achieving rapid agricultural growth through optimum utilization of land, water, soil and plant resources of the state.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	To empower farmers and to increase the productivity there is need to provide the best dissemination tool for their farming activities. Users may quickly log in using existing credentials, and if they don't already have an account, they can also register on their own by providing a unique, valid email address or a mobile number which make their process easier.
NFR-2	**Security**	The developed ICT agriculture tools focus on very important agricultural services such as crop detection, crop predictor will help farmers to make decision in future. won’t show the wrong analytic report while crop yielding.

NFR-3	**Reliability**	Since we had split the crops into categories in order to make easier choice for the user. Data processing time for each and every individual will be lesser. This will remove multilingual issues and bridge the gap between farmers and technology. Since we had split the crops into categories in order to make easier choice for the user.
NFR-4	**Performance**	Data processing involves raw data collections and organization to derive inferences. To minimize the overloads and to minimize the system's response time we have processed the data in structured organized form.
NFR-5	**Availability**	Both website and mobile application interface and developed in local language and the content is available in localized language. As the server is online the site is available 24/7 for the user needs.
NFR-6	**Scalability**	Increase in streaming data. Extend common data science capabilities across hybrid, multi-cloud environments. Increased productivity from warm temperature. Decreased moisture stress. Possibility of growing new crops. Productivity of soil and water.