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

Date	15 October 2022
Team ID	PNT2022TMID52964
Project Name	Project – EXPLORATORY ANALYSIS OF RAINFALL DATA IN INDIA FOR AGRICULTURE
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
FR-2	User Confirmation	Confirmation via OTP
FR-3	Dataset details	Download and load the appropriate dataset followed by data pre-processing
FR-4	Build a Machine Learning Model	Train the model using training data and find the best algorithm
FR-5	Prediction Model	Forecast weather conditions for a region and generate alerts for flood or drought
FR-6	Testing	Test the model using various performance metrics
FR-7	Application	Develop a website to display and visualize the weather forecast for the region of concerned user

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The usability is countrywide deployment (Villages to Cities) and made available in all regional languages so everybody can be benefited
NFR-2	**Security**	Security will be provided over the website and doesn't require personal details
NFR-3	**Reliability**	Can be accessed anywhere with good connectivity
NFR-4	**Performance**	It can provide accurate data or alerts to all users without delay and provide 24/7 availability
NFR-5	**Availability**	It will be an open-source model and hosted on internet so that users can browse it anytime
NFR-6	**Scalability**	The project can be scaled to domains other than agriculture with improved accuracy