PROJECT DESIGN PHASE-II
Solution Requirements (Functional & Non-functional)

Date	**14-NOV-2022**
Team ID	**PNT2022TMID46300**
Project Name	**Exploratory Analysis of Rainfall Data in India for Agriculture**
Maximum Marks	**4 Marks**

Functional Requirements:

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Registration Process	Registration through Phone Number
FR-2	Confirmation	Confirmation via OTP message
FR-3	Updating Profile	Enter the personal details
FR-4	Home Page	Able to view the • Profile • Crop details • Rainfall prediction
FR-5	Rainfall Prediction	• Enter the month • Enter the Year • Click on predict
FR-6	ML Model	The user data is sent to the Machine learning model.
FR-7	Preprocessing data	• Data exploration • Feature selection • Missing values • Feature scaling • Splitting of train and test data
FR-8	Building ML Model	• Random forest algorithm is applied • Train the model using training data • The model is evaluated with the test data.
FR-9	Result	Shows the predicted rainfall data.

Non-functional Requirements:

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	It's a user-friendly application which enable people to use without any technical knowledge.
NFR-2	**Security**	User data will be protected from unauthorised access and the data are secured.
NFR-3	**Reliability**	The application will operate effectively without causing any failure and errors, so maintance won't be big problem.
NFR-4	**Performance**	Overall performance of system is efficient to predict the rainfall with much speed without delay.
NFR-5	**Availability**	The availability of the application is that it will be active and available to all the users.
NFR-6	**Scalability**	The scalability of our system is one that can handle rapid changes to workloads and user demands.