

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

Date	21-October-2022
Team ID	PNT2022TMID42699
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture
Maximum Marks	4 Marks

Functional Requirements:

S No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1	Registration Process	Registration through Phone Number
2	Confirmation	Confirmation via OTP message
3	Updating Profile	Enter the personal details
4	Home Page	Able to view the <ul style="list-style-type: none">• Profile• Crop details• Rainfall prediction
5	Rainfall Prediction	<ul style="list-style-type: none">• Enter the month• Enter the Year• Click on predict
6	ML Model	The user data is sent to the Machine learning model.
7	Preprocessing data	<ul style="list-style-type: none">• Data exploration• Feature selection• Missing values• Feature scaling• Splitting of train and test data

8	Building ML Model	<ul style="list-style-type: none"> Random forest algorithm is applied Train the model using training data The model is evaluated with the test data.
9	Result	Shows the predicted rainfall data.

Non-functional Requirements:

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