

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

Date	16 October 2022
Team ID	PNT2022TMID44240
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	Annual rainfall data analysis	The annual rainfall data is analyzed and the variation in distribution over the area is studied with the statistical parameters
FR-2	Intensity of Rainfall	1. The rate of which it is falling 2. Intensity represents the depth of precipitation accumulated per unit time
FR-3	Rainfall gauge	Collects water falling on it and records the change over time in the rainfall depth
FR-4	Rainy season and dry season in tropical and semi tropical regions	During rainy season crop's water need is covered by rainfall and during dry season the major supply of water should come from irrigation
FR-5	Agriculture in India still dependent on rainfall	Agriculture in India is dependent on the monsoon season because farmers are not well equipped with the manual of manual irrigation
FR	Rainfall prediction	The prediction helps people to take preventive measures and more over the should be accurate

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The system should be easy to install and simple to use
NFR-2	<b>Security</b>	The system should authenticate users
NFR-3	<b>Reliability</b>	The system should perform the intended tasks for a specific.
NFR-4	<b>Performance</b>	The system should perform the intended tasks
NFR-5	<b>Availability</b>	The system should be available all the time when it is required

NFR-6	<b>Scalability</b>	The system must be scalable enough to support 1,000,000 visits
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