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

Date	16 October 2022
Team ID	PNT2022TMID16626
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	Annual Rainfall is the arithmetically averaged total amount of precipitation recorded during a calendar month or year .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 ratio of the total amount of rain (rainfall depth) falling during a given period to the duration of the period 2. Intensity represents the depth of precipitation accumulated per unit time 3. The rate of which it is falling
FR-3	Rainfall gauge	Collects of water falling and records the changes 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 the 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 their crops.
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	Usability	The system should easy to install and simple touse
NFR-2	Security	The system should be authenticate by users
NFR-3	Reliability	The system should perform the intended tasks for a specific.
NFR-4	Performance	The system should perform the intended tasks

NFR-5	Availability	The system should be available all the time when it
		required

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