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

Date	03 October 2022
Team ID	PNT2022TMID46353
Project Name	Project-
	"Exploratory Analysis Of Rainfall Data In
	India For Agriculture''
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Maximum Marks	4 Marks

## **Functional Requirements:**

Following are the functional requirements of our proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Download and load the dataset	Download and load the appropriate dataset.
FR-2	Pre-processing of data	Preparation of raw data and make it suitable for building of machine learning model.
FR-3	Building machine learning model	<ul> <li>✓ Exploring the data and choose the suitable algorithm.</li> <li>✓ Prepare and clean the dataset.</li> <li>✓ Split the prepared dataset and make cross validation.</li> <li>✓ Perform machine learning optimisation.</li> <li>✓ Deploy the model.</li> </ul>
FR-4	Train the data	Train the model using training set.
FR-5	Test the data	At last, test the model for evaluation of final model.

## **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Local presence/traceability of WIS source in the farming community.
NFR-2	Security	Providing secure system networks then determine authenticity, originality and security.
NFR-3	Reliability	System will operate without failure for a specific period of time.
NFR-4	Performance	Our model predictions are same as the true values. So, the performance is higher.
NFR-5	Availability	Available to different groups of farmers including women, older persons, etc.
NFR-6	Scalability	In our model, Prediction of data will be faultless.