

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

Date	19 October 2022
Team ID	PNT2022TMID10548
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	Import necessary packages	Importing packages like NumPy, pandas, seaborn, etc
FR-2	Download and load dataset	Download the dataset Load the Appropriate dataset
FR-3	Pre-processing of data	Making data suitable for building a good model
FR-4	Building Machine learning model	Choose the best algorithm. Check for the best optimised result.
FR-5	Train the data	Train the model using training data.
FR-6	Test the model	Test the model for the best evaluation and analysing.

### 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 be easy to use.
NFR-2	Security	Security is given over the model, so the user can use this with full trust. The system should protect the data and information related to the farms.
NFR-3	Reliability	Good connectivity and a supporting device . The system should be reliable and not crash when using it.

<b>NFR-4</b>	<b>Performance</b>	The system should output results of different inputs in a reasonable time..
<b>NFR-5</b>	<b>Availability</b>	Any person can use this and this is an open-source model.
<b>NFR-6 Scalability</b>	Farmers, Vegetable sellers, citizens can use this, prediction of data is accurate.	