

# SOLUTION REQUIREMENTS

## (Functional & Non-functional)

Team ID	PNT2022TMID06285
Project Name	Project- "Exploratory Analysis Of Rainfall Data In India For Agriculture"

### **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 style="list-style-type: none"><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.

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