

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

Date	16 Feb 2026
Team ID	LTVIP2026TMIDS57051
Project Name	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	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User details	Details via Email

**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 shall provide a simple, user-friendly web interface and easy navigation so that users with minimal technical knowledge can use it without difficulty.
NFR-2	<b>Security</b>	The system shall validate all user inputs to prevent invalid or malicious data. If deployed online, secure communication (HTTPS) and proper server-side validation shall be implemented to protect user data and prevent attacks.
NFR-3	<b>Reliability</b>	The system shall provide consistent and accurate predictions based on the trained machine learning model and handle errors gracefully without crashing.
NFR-4	<b>Performance</b>	The system shall generate rainfall predictions within 2 seconds after the user submits input data to ensure a smooth user experience.

NFR-5	<b>Availability</b>	The application shall be accessible 24/7 when deployed on a cloud platform, ensuring users can access predictions anytime.
NFR-6	<b>Scalability</b>	The system shall support increasing numbers of users and future feature expansions (such as multi-location predictions or real-time weather API integration) without major architectural changes.