

Project Design Phase

Solution Architecture

Date	04 February 2026
Team ID	LTVIP2026TMIDS55682
Project Name	Exploratory-Analysis-Of-RainFall-Data-In-India-For-Agriculture
Maximum Marks	4 Marks

Solution Architecture Overview

The proposed Rainfall Prediction System follows a layered solution architecture that bridges agricultural business problems with a technology-driven predictive solution. The architecture consists of Presentation Layer, Application Layer, Processing Layer, Machine Learning Layer, and Data Storage Layer.

Users interact through a web interface. The Flask backend processes requests, applies preprocessing techniques, and invokes the trained Random Forest model. The system returns rainfall probability along with agricultural advisory recommendations.

Solution Architecture – Rainfall Prediction System



