

Project Design Phase-I
Solution Architecture

Date 26th October 2023
Team ID PNT2023TMID-592801
Project Name Machine Learning Approach for Predicting Rainfall
Maximum Marks 4 Marks

Solution Architecture:

The Rainfall Prediction Solution Architecture encompasses data gathering via API calls or existing datasets. Data preprocessing ensures data quality and feature extraction for modeling. Machine learning models using techniques including regression, classification, and ANN, are developed and continuously refined. Real-time rainfall predictions are generated for specific timeframes and regions, with ongoing analysis and adaptation to changing conditions. A continuous learning loop incorporates user feedback and validation data to enhance prediction accuracy, benefiting water resource management, agriculture, and disaster preparedness.

Solution Architecture Diagram

