

## Project Design Phase

### Solution Architecture

Date	15 February 2025
Team ID	LTVIP2026TMIDS77028
Project Name	Rising Waters – A Machine Learning Approach to Flood Prediction
Maximum Marks	4 Marks

### Solution Architecture:

The Rising Waters Flood Prediction System follows a modular, three-tier solution architecture that bridges the gap between disaster management needs and AI-based predictive technology.

The architecture ensures:

- Scalable deployment
- Reliable data processing
- Accurate prediction results
- Clear separation of frontend, backend, and data components

### Solution Architecture Diagram:

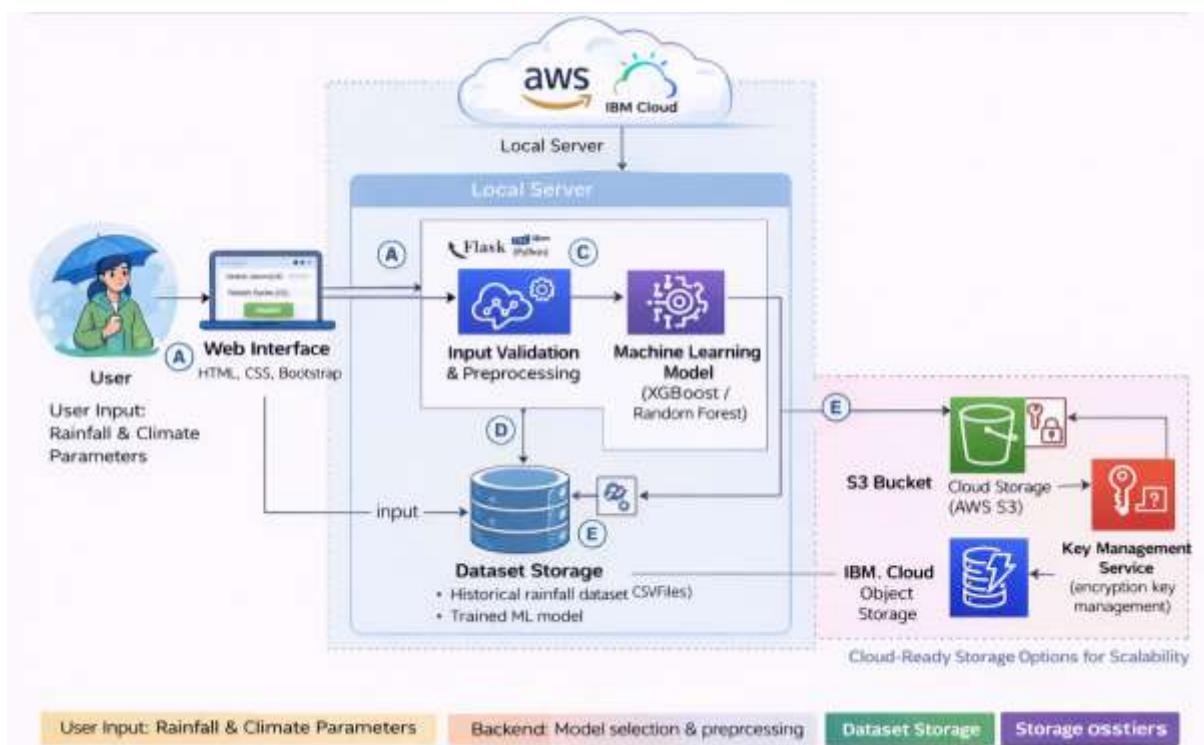


Figure 1: Solution Architecture and Data Flow of the Rising Waters Flood Prediction System

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>