

Project Design Phase-II

Data Flow Diagram & User Stories

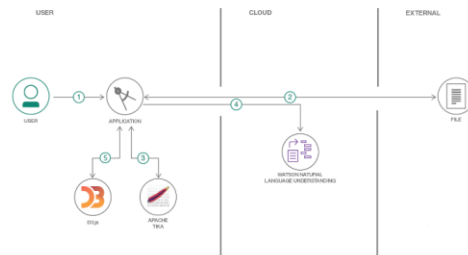
Date	20 December 2025
Team ID	LTVIP2026TMIDS83736
Project Name	Rising Waters: A Machine Learning Approach to Flood Prediction
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example: [\(Simplified\)](#)

Flow



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Web User	Homepage	USN-1	As a user, I can view the project introduction	I can see system overview	High	Sprint-1
	Manual Prediction	USN-2	As a user, I can input flood parameters (monsoon, topography, drainage, etc.)	System accepts all 8 parameters	High	Sprint-1
		USN-3	As a user, I can submit parameters and get flood prediction	I receive flood risk result	High	Sprint-1
	Image Prediction	USN-4	As a user, I can upload flood images	System accepts image files	Medium	Sprint-2
		USN-5	As a user, I can view image-based prediction results	System displays flood assessment	Medium	Sprint-2
	Navigation	USN-6	As a user, I can navigate between all pages	All links work correctly	High	Sprint-1
system	Core Function	USN-7	System loads ML model on startup	Model loads without errors	High	Sprint-1
		Usn-8	System processes inputs and returns predictions quickly	Response under 3 seconds	High	Sprint-1