Project Design Phase-II
Data Flow Diagram & User Stories
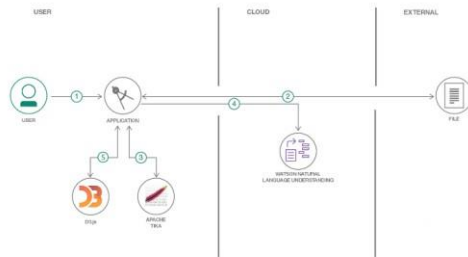
Date	29 June 2025
Team ID	LTVIP2025TMID38816
Project Name	cleantech: transforming waste management with transfer learning
Maximum Marks	4 Marks

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.
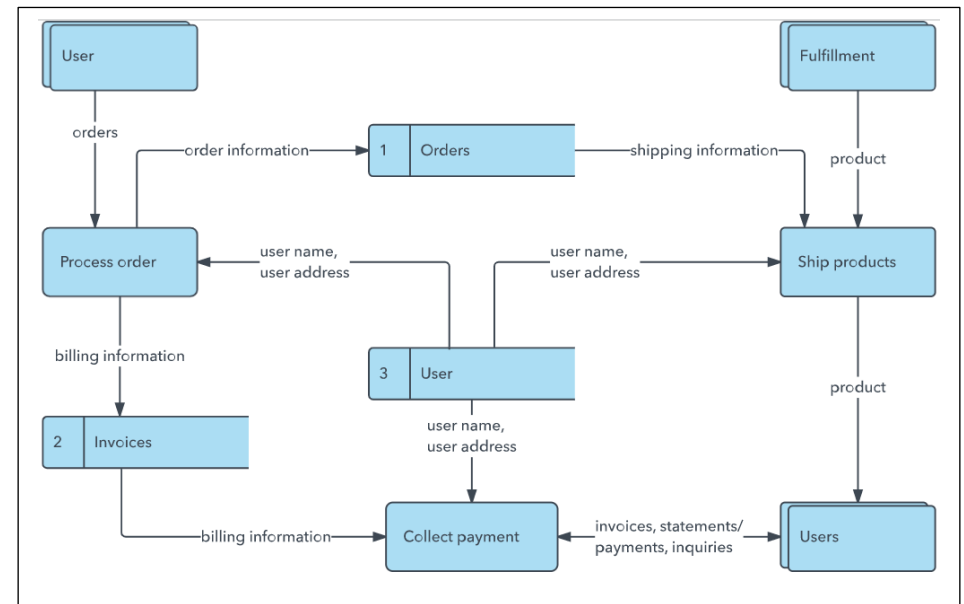
Example: DFD Level 0 (Industry Standard)

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.

	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Doctor (Web User)	Patient Risk Prediction	USN-1	As a doctor, I can enter patient clinical values to get an instant cirrhosis prediction.	I get a prediction as "Cirrhosis Detected" or "No Cirrhosis" after submitting the form.	High	Sprint-1
		USN-2	As a doctor, I can view the prediction result along with basic probability or model confidence.	I can see prediction accuracy/confidence score with the result.	Medium	Sprint-2
		USN-3	As a doctor, I can reset and enter new patient data without reloading the page.	Form resets to blank input fields.	Low	Sprint-3
	Patient Record Tracking (Optional)	USN-4	As a doctor, I can optionally save a patient's test inputs and prediction result.	Prediction is stored with a timestamp.	Medium	Sprint-3
Patient (Web User)	Self-Check (Limited)	USN-5	As a patient, I can enter my own clinical test results to check for liver cirrhosis.	User gets result without needing login.	Medium	Sprint-2
	Help / About	USN-6	As a patient, I can read about liver cirrhosis and how predictions are made.	Help/About section is available with educational content.	Low	Sprint-3
Admin	User Monitoring	USN-7	As an admin, I can view all doctors who are using the system and track usage stats.	Admin can see a dashboard with user logs.	Medium	Sprint-3
	Model Management	USN-8	As an admin, I can upload a new trained ML model without changing backend code.	Admin uploads .pkl file and selects it as active.	High	Sprint-3
	Authentication Management	USN-9	As an admin, I can reset passwords or deactivate accounts.	Admin can manage users from dashboard.	Medium	Sprint-3