Project Design Phase-II
Data Flow Diagram & User Stories
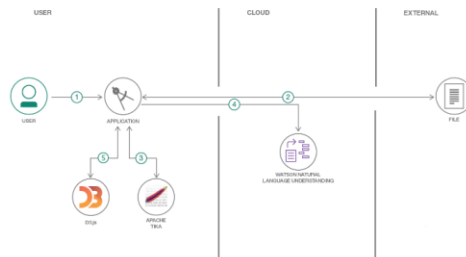
Date	20 June 2025
Team ID	LTVIP2025TMID60795
Project Name	Pattern Sense: Classifying Fabric Patterns Using Deep Learning
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. In the context of **Pattern Sense**, the DFD shows how image data is uploaded, processed through the deep learning model, and how classification results are returned to the user.
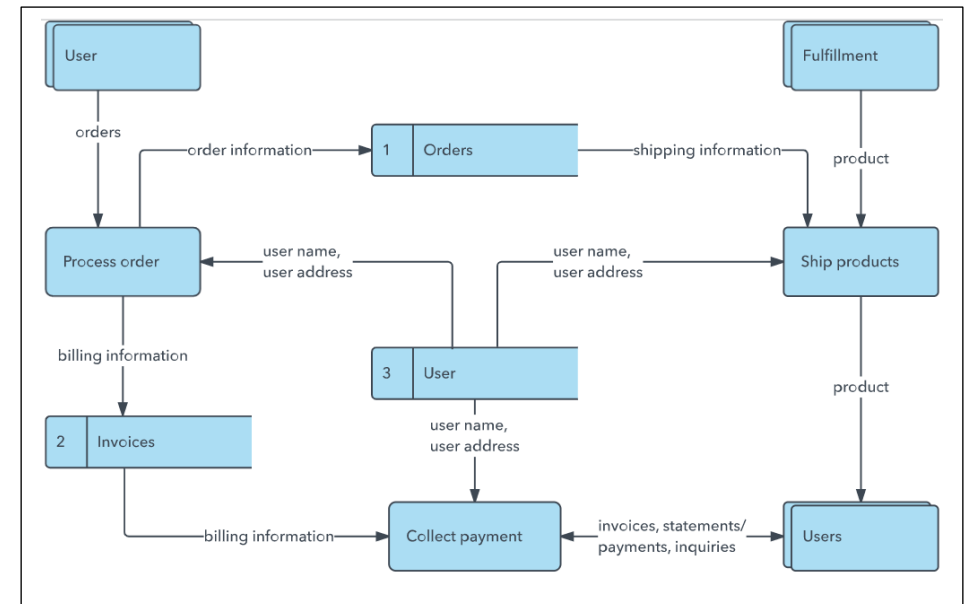
Example:

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.

Example: DFD Level 0 (Industry Standard)

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
User (Web)	Image Upload & Prediction	USN-1	As a user, I can upload an image to classify its fabric pattern..	Image gets uploaded and classified accurately	High	Sprint-1
User (Web)		USN-2	As a user, I can view the predicted label after image processing.	Pattern label is shown clearly	High	Sprint-1
Developer	Dataset Management	USN-3	As a developer, I can collect and pre-process the fabric dataset.	Clean, labeled dataset available for model training	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1