

Project Design Phase-II Data Flow Diagram & User Stories

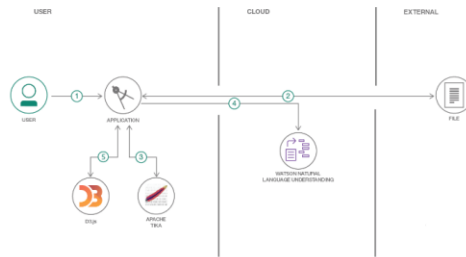
Date	29 June 2025
Team ID	LTVIP2025TMID41713
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	4 Marks

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.

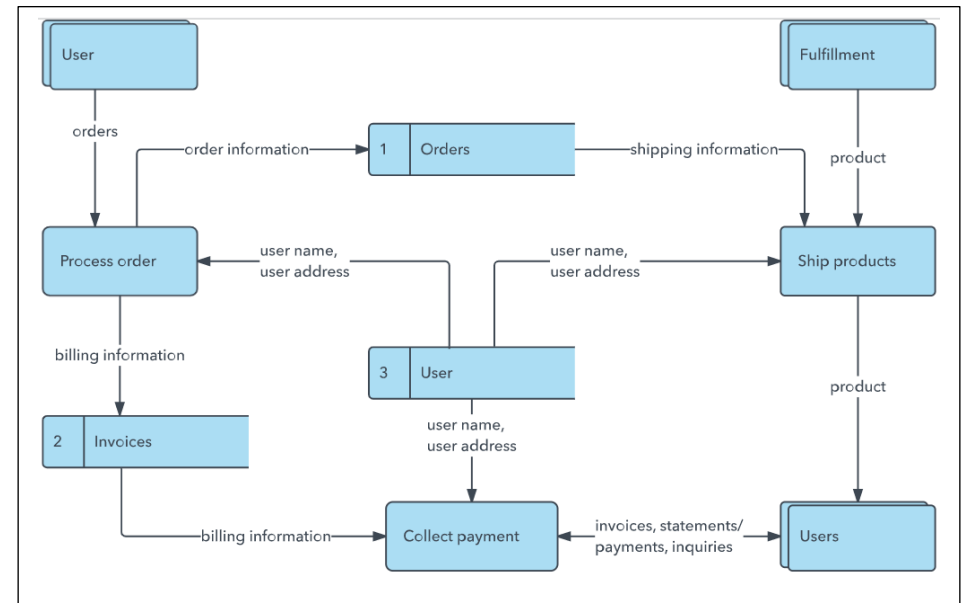
Example: (Simplified)

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.

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
Commuter	Real-time traffic information display	USN-1	As a commuter, I want to view up-to-date traffic volumes on my route so I can choose the fastest path.	User sees present traffic data mapped and receives timely updates	High	Sprint-1
City Planner	Traffic analysis dashboard	USN-2	As a planner, I want to access a dashboard with historical and predicted traffic data for different zones.	Planners download/analyze reports showing accurate past/future trends.	High	Sprint-1
Logistics Manager	Route optimization through API	USN-3	As a logistics manager, I want to plug our software into an API to get real-time traffic estimates for routing.	API is accessible, responds in <1s, and returns accurate traffic predictions.	Low	Sprint-2
Data Scientist	Data quality monitoring	USN-4	As a data scientist, I want to monitor incoming data streams for quality and missing data alerts.	System flags gaps/anomalies, with alerts sent within 5 min of issues.	Medium	Sprint-1
Platform Admin	System health and uptime monitoring	USN-5	As an admin, I want automated system health checks and uptime alerts to ensure the service is reliable.	Uptime is monitored; downtime alerts sent within 1 min of failure.	High	Sprint-1