

Project Design Phase-II Data Flow Diagram & User Stories

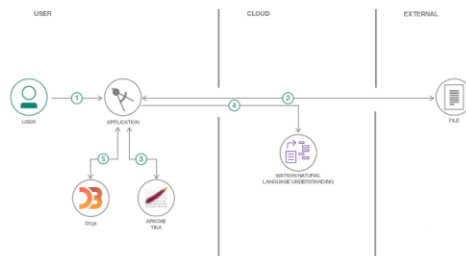
Date	31 January 2025
Team ID	PNT2025TMID09535
Project Name	iRevolution: A data driven exploration of Apple's iPhone impact in India
Maximum Marks	4 Marks

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.

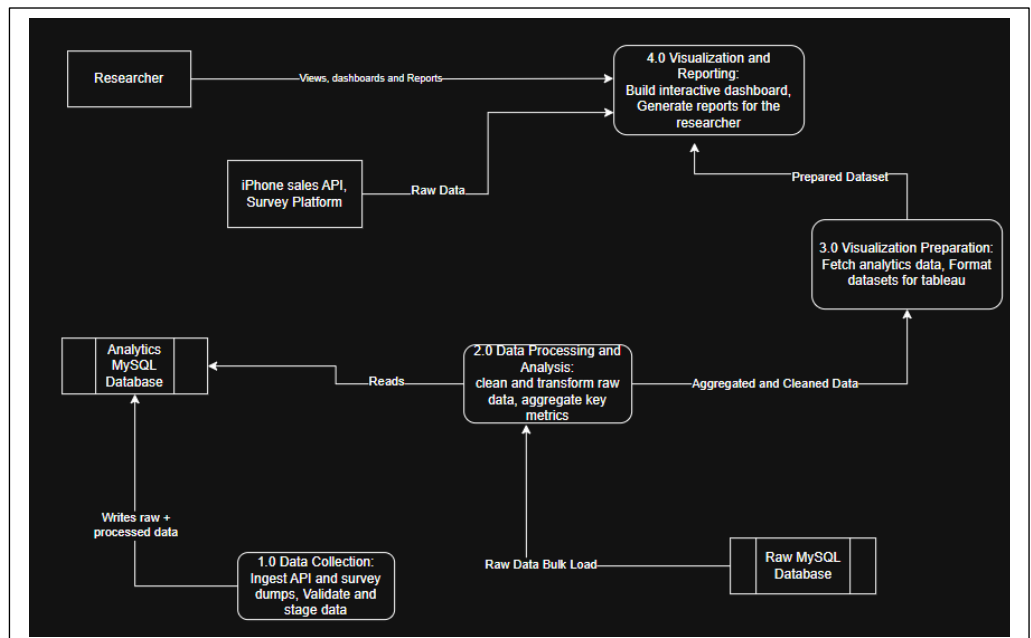
Example: (Simplified)

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.

DFD for iRevolution: a data driven exploration of Apple's iPhone Impact in India



User Stories

Use the below template to list all the user stories for the product. These stories reflect a solid blend of backend data work, visualization goals, and user journey clarity.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Data Analyst	Data Cleaning	USN-1	Handle missing values in iPhone adoption datasets.	No nulls in key dimensions; placeholder or imputation applied.	High	Sprint-2
Data Analyst	Data Cleaning	USN-2	Identify and rectify inconsistencies in dataset formats and entries.	All date, location, and price fields follow a standardized format.	High	Sprint-2
Business Analyst	Data Filtering	USN-3	Filter data based on region, year, and demographics.	Filters retrieve accurate subsets without errors.	High	Sprint-2
Consumer Insights Team	Data Visualization	USN-4	Visualize regional iPhone usage growth trends using Tableau.	Graphs show expected growth per region and match MySQL query results.	High	Sprint-3
Consumer Insights Team	Data Visualization	USN-5	Compare average monthly costs across Indian cities for iPhone users.	Heatmap reflects accurate averages verified via MySQL.	Medium	Sprint-3
Data Strategist	Analytics & Insights	USN-6	Identify top factors influencing iPhone adoption via Tableau charts.	Influencing factors are correctly visualized and match correlation results.	High	Sprint-3
Administrator	Access Control	USN-7	Manage user-level access rights for data dashboards.	Users can access only relevant dashboards as per role.	High	Sprint-1
Tableau Developer	Dashboard Design	USN-8	Create user-friendly dashboards with drill-downs for each iPhone model	Dashboards are interactive, responsive, and filterable by model and time	High	Sprint-3
Customer Care Executive	Support Interface	USN-9	Access common customer queries related to data trends	FAQs auto-load relevant charts or region-specific insights	Medium	Sprint-4
Public Viewer	Summary Insights	USN-10	View summarized visual insights on iPhone trends without login	Summaries display without errors and without requiring login	Medium	Sprint-4