

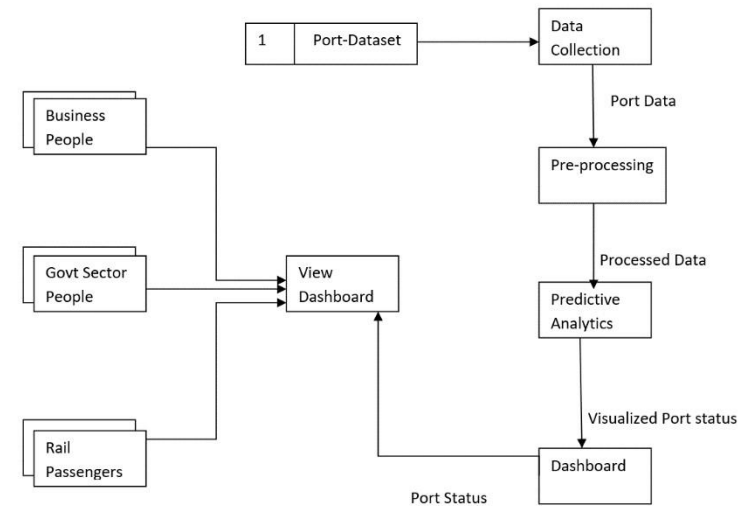
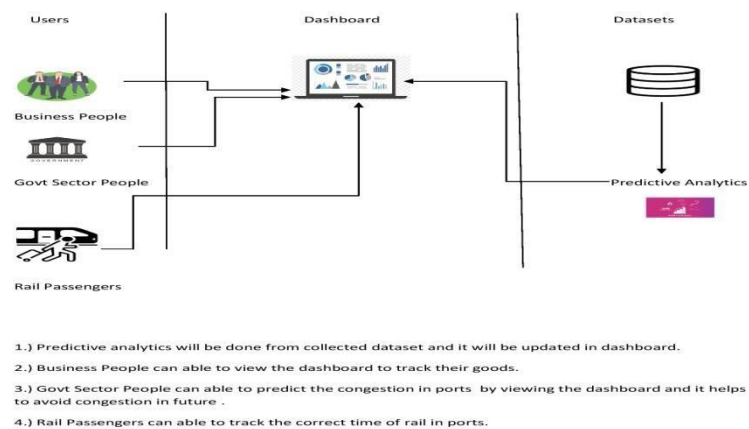
Project Design Phase-II Data Flow Diagram & User Stories

Team ID	PNT2022TMID44353
Project Name	Project – Traffic and Capacity Analytics for Major Ports.

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.

DATA FLOW DIAGRAM



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
Business People	Monitoring	USN-1	As a user, I can view the dashboard to see the port status .	I can visualize the port status in dashboard.	High	Sprint-1
	Tracking	USN-2	As a user,I can track the goods.	I can track the goods by it's arrival/departure time	High	Sprint-1
Government Sector People	Viewing	USN-1	As a user,I can view the port status regularly	I can able to know the port status	Low	Sprint-2
	Predicting	USN-2	As a user,I will reduce the congestion in ports by predicting the port congestion through dashboard.	I can able to predict the congestion in future	High	Sprint-2
Passengers	Tracing	USN-1	As a user, I can trace the arrival/departure time of rail in ports.	I can able to track the correct time of rail.	High	Sprint-2

Project Design Phase-II Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID44353
Project Name	Project - Traffic and capacity analytics for major ports.

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

Example: Order processing during pandemics for offline mode

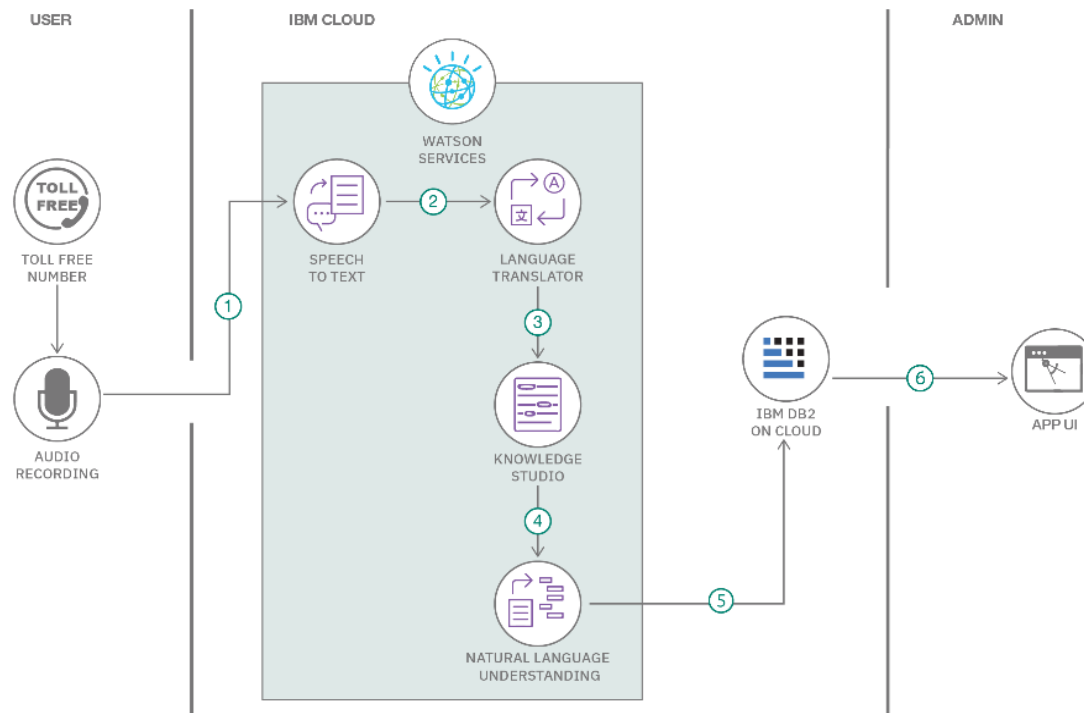


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Django
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	3 – tier, Micro-services
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	number of requests per sec, use of Cache