

Project Phase II

Technical Architecture(Architecture & Stack)

Date	17 October 2022
Team ID	PNT2022TMID17971
Project Name	Project – Traffic and Capacity Analytics for Major Ports.
Maximum Marks	4 Marks

Technical Architecture:

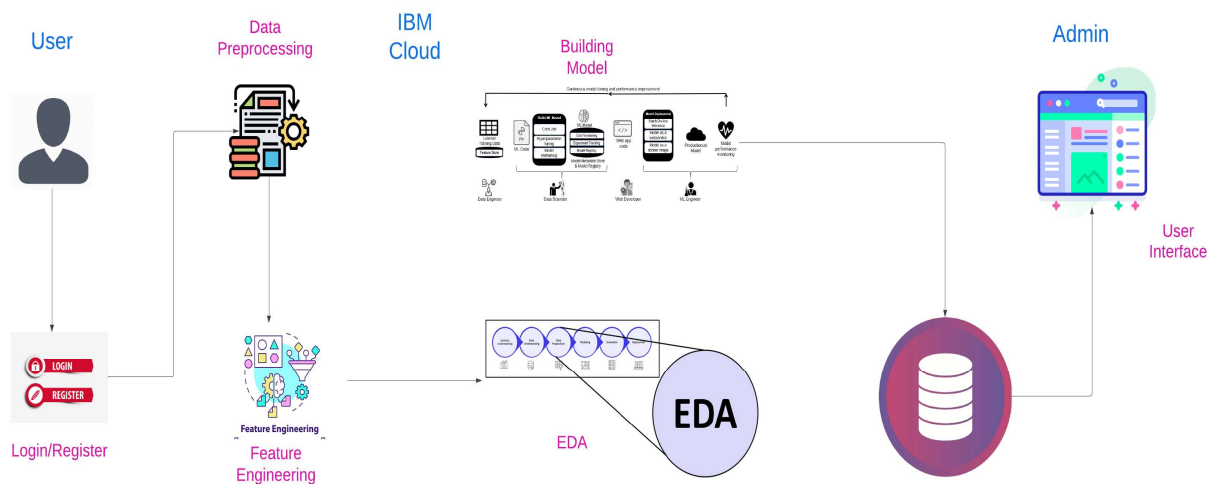


Table-1 :Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can Interact with web Application	HTML, CSS, JavaScript .
2.	Data Pre processing	Pre processing of data should be done	Python
3.	Feature Engineering	Feature engineering of Dataset by adding newvalues to the existing dataset.	Python
4.	Exploratory Data Analysis	Exploring the data using boxplot, pie plot, scatterplot etc..	Python
5.	Model Building	Build the model using machine learning algorithm	python
6.	Data Storage	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	User Interface	Dashboard showing the port details	HTML,CSS, JavaScript.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Security Implementations	The main security concern is for users account hence proper login mechanism should be used to avoid hacking.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
2.	Availability	The system shall be available 24 hours a day 7 days a week. User can access at anytime	
3.	Performance	The system should require a fair amount of speed especially while browsing through the catalogue	