Date	10 October 2022
Team ID	PNT2022TMID13214
Project Name	Project – Crude Oil Price Prediction

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2
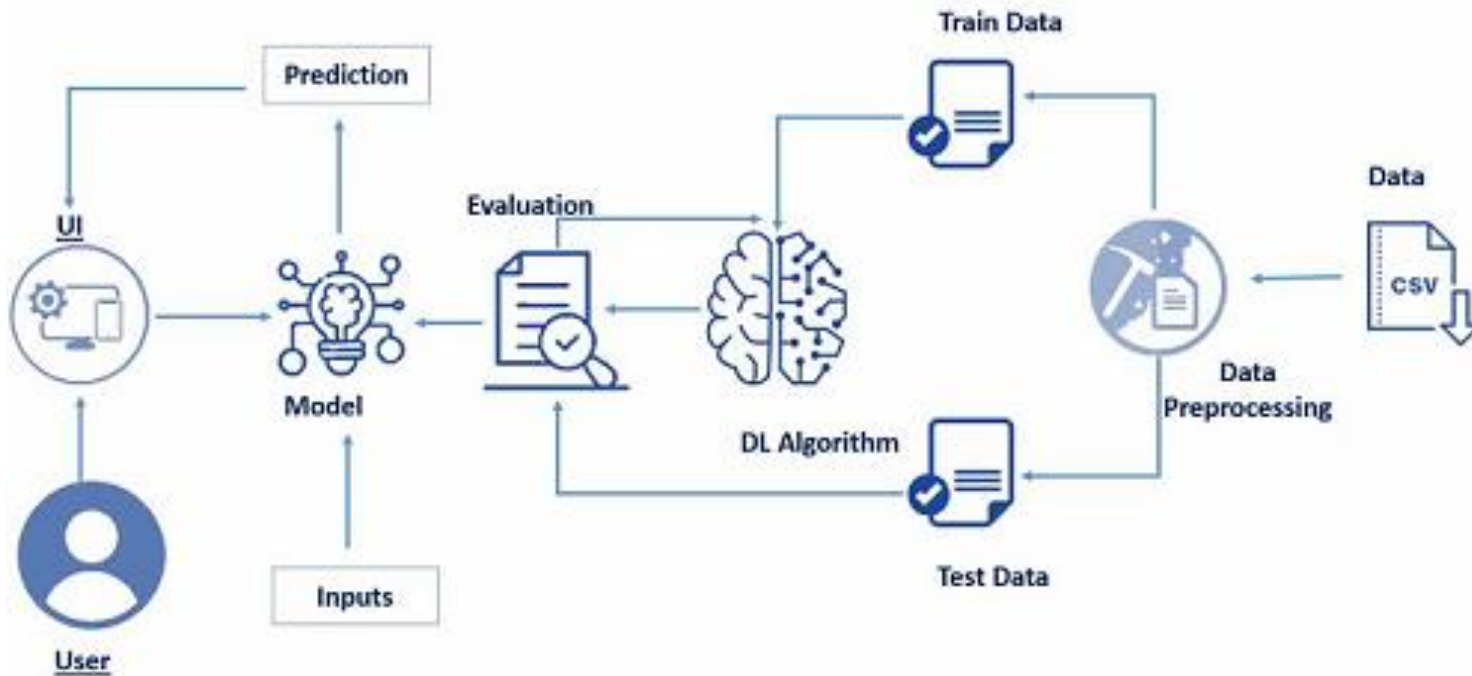
OIL PRICE PREDICTION

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web UI for User Interaction	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Prediction	Price Prediction Model	Python
3.	Web Application	For deploying the dynamic Web UI	Python (Flask)
4.	Database	Email, Phone Number, Age, and Name (String, Integer, Integer, and String)	MySQL, NoSQL
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Local Filesystem
7.	Deep Learning Model	Model trained on time series price history.	RNN-LSTM
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Web Application
2.	Security Implementations	OAuth Authentication	Authentication provided by Google
3.	Scalable Architecture	Microservices	AWS Lambda
4.	Availability	Distributed Servers	CDN
5.	Performance	25,000 Requests per second	Flask