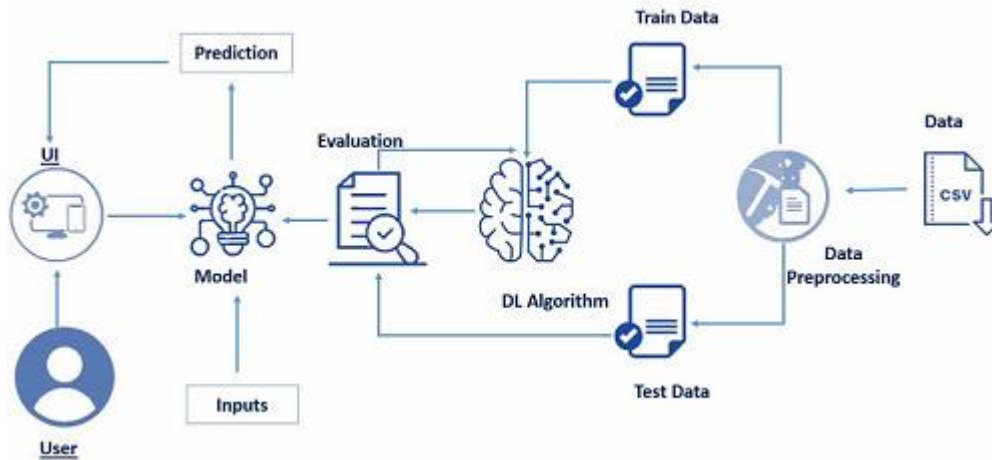


## Project Design Phase-II Technology Stack (Architecture & Stack)

Date	7 October 2022
Team ID	PNT2022TMID23859
Project Name	Project – Crude oil Price Prediction
Maximum Marks	4 Marks

### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	WEB UI	HTML, CSS, FLASK
2.	Application Logic-1	COLLECT DATABASE	Python
3.	Application Logic-2	Save database	MySQL
4.	Application Logic-3	model	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
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	DL Algorithm	To redict
9.	Machine Learning Model	Purpose of Machine Learning Model	Prediction Model
10.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :IBM	Local, IBM Cloud, Kubernetes.

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	IBM cloud	cloud
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256, Encryptions
3.	Scalable Architecture	3 – tier, Micro-services	Machine learning
4.	Availability	distributed servers	FLASK
5.	Performance	15 REQUESTS PER SECOND	DL