Ideation Phase

Define the problem statements

Date	18 October 2022
Team ID	PNT2022TMID04563
Project Name	Project – Crude oil price prediction
Maximum Marks	2 Marks

- Crude oil is the world's leading fuel, and its prices have a big impact on the global environment, economy as well as oil exploration and exploitation activities.

- Oil price forecasts are very useful to industries, government, and individuals. Although many methods have been developed for predicting oil prices. It remains one of the most challenges forecasting problems due to the high volatility of oil prices.

- In this paper, we propose a novel approach for crude oil price prediction based on a new machine learning paradigm called stream learning.

- The main advantage of our stream learning approach in that the prediction model can capture the changing pattern of oil prices since the model is continuously updated whenever new oil prices data are available, with very small constant overhead.

- To evaluate the forecasting ability of our streaming learning model, we compare it with three other popular oil prices prediction models.

- The experiment results show that our stream learning model achieves the highest accuracy in terms of both mean squared prediction error and directional accuracy ratio over a variety if forecasting time horizons.