PROJECT OBJECTIVE

| Date | 15 November 2022 |
|--------------|----------------------------|
| Team ID | PNT2022TMID21644 |
| Project Name | Crude Oil Price Prediction |

Research on crude oil price forecasting has attracted tremendous attention from scholars and policymakers due to its significant effect on the global economy. Besides supply and demand, crude oil prices are largely influenced by various factors, such as economic development, financial markets, conflicts, wars, and political events. Most previous research treats crude oil price forecasting as a time series or econometric variable prediction problem. Numerous research has recently been conducted in an effort to analyse the difficulty of predicting oil prices and find the best solutions. Although recently there have been research considering the effects of real-time news events, most of these works mainly use raw news headlines or topic models to extract text features without profoundly exploring the event information. It will be beneficial for our government, businesses, and investors to anticipate its demands. As part of this research, artificial neural networks (ANNs) will be built to forecast crude oil prices. In this study, we suggest a cutting-edge method for predicting the price of crude oil using analytical. The future price of the crude oil will be predicted on basis of the inputs given by the user. The predicted price would be for the next day. Hence, it is concluded that the proposed model achieved higher forecasting accuracy and takes less computational time with the modes' reconstruction as opposed to using all the decompose modes. As a part of future scope, there is being an idea to improve the model by considering the latest news, disaster, tweet, and social media sensitive messages.

By the end of this project, we will be able to learn the following skills:

- LSTM
- Time Series Analysis
- Python
- Python Flask
- IBM Cloud
- Watson Studio