PROJECT DESIGN PHASE – I
PROPOSED SOLUTION

Date	14th October 2022
Team ID	PNT2022TMID43400
Project Name	Project - Crude Oil Price Prediction

PROPOSED SOLUTION:

The Project Team shall fill the following information in the proposed solution template.

S. No.	Parameter	Description
1	Problem Statement (Problem to be Solved)	To help the investors, public and private organizations to find a way to predict the crude oil price so that they can understand the oscillations of the crude oil prices and also to help them understand the impact on global economics and minimize the risk associated with the transient nature of crude oil prices.
2	Idea / Solution description	The issues identified are overcome in our proposed solution by predicting the price of crude oil by utilizing several Deep Learning Algorithms. The algorithms are implemented in various fields such as the Opening, Closing and the Mean Price of Crude Oil. A Multivariate Analysis Model is planned to be built in the future to visualize how the price of crude oil changes concerning the other commodities.
3	Novelty / Uniqueness	We divide crude oil price forecasting approaches into three categories: (1) heuristic approaches; (2) econometric models; and (3) machine learning techniques. Heuristic approaches for oil price prediction include professional and survey forecasts, based on professional knowledge, judgments, opinion and intuition. Econometric models are the most widely used approaches for oil price prediction, which include autoregressive moving average (ARMA) models and vector autoregressive (VAR) models, with possibly different input variables. Machine learning techniques were proposed for oil price prediction, such as artificial neural networks, and support vector machines.

4	Social Impact / Customer Satisfaction	As crude oil is a major source of fuel, predicting its price would provide a clear-cut view of its trend. Governments, Private Enterprises and other institutions can stock it accordingly to prevent scarcity and sudden price rises. If the organizations can anticipate it and take the action accordingly, they would be able to overcome the issues during critical situations.
5	Business Model (Revenue Model)	The stakeholders involved are governmental and private organisations who can get themselves prepared from unpredictable situations by finding a solution for this problem statement.
6	Scalability of the Solution	To improve the precision of the solution we need to include more factors which are either affecting directly or indirectly the price of the crude oil.