Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID37336
Project Name	Project – Crude oil price prediction
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Crude oil is the world's leading fuel ,and its prices have a big impact on the global environment and its forecasts are very useful to governments , industry is individual. The continuous usage of statistical and econometric techniques including AI for crude oil price prediction might demonstrate demotions to the prediction performance.
2.	Idea / Solution description	RNN is used with long short term memory to achieve future crude oil using previous history of crude oil. The cost is measured as the mean squared error to determine its effectiveness. The performance of the proposed model is evaluated using the price data in the WTO crude oil materials.
3.	Novelty / Uniqueness	• Crude oil price fluctuations have a far reaching impact on global economies and thus price forecasting can assist in minimizing the risk associated with volatility in oil prices. • Prices forecasts are very important to various stakeholders: government , public and private enterprises, policymakers ,and investors.
4.	Social Impact / Customer Satisfaction	• It is used to predict the future price and use the oil according to the prices. • This price has direct effects on several goods and products and its fluctuations affect the stock markets. • Oil prices are not only driven by economic variable ,but they are also affected by key events.
5.	Business Model (Revenue Model)	• It can help decision makers – either frims, private investors, or individual –when choosing to buy or sell the crude oil. • Crude oil is one of the most profitable trading commodities for traders. • RNN and LSTM models are used as the benchmark model to predict the crude oil prices.
6.	Scalability of the Solution	• PCA, MDS and LLE methods are used to reduce the dimensions of the data. • Improve the accurancy of the RNN and LSTM models.