

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - xxx
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 most important fuel, and its prices have a significant impact on the global environment; forecasts are extremely useful to governments, businesses, and individuals. Continuous use of statistical and econometric techniques, including AI, for crude oil price prediction may result in degraded prediction performance.
2.	Idea / Solution description	RNN with long short-term memory is used to predict future crude oil using historical crude oil data. The mean squared error is used to calculate the cost's effectiveness. The proposed model's performance is evaluated using pricing information from WTO crude oil materials.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Because crude oil price fluctuations have a significant impact on the world's economies, price forecasting can help reduce the risks posed by this volatility.• Price projections are critical for a wide range of stakeholders, including governments, public and private businesses, legislators, and investors.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• It is used to forecast future prices and use oil accordingly.• This price has a direct impact on a variety of items, and its fluctuations affect the capital markets.• Oil prices can be influenced by major events in addition to economic factors.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">• It is used to predict future oil prices and allocate oil accordingly.• This price has a direct impact on a wide range of items, and its fluctuations have an impact on the financial markets.• In addition to economic factors, major events can have an impact on oil prices.
6.	Scalability of the Solution	<ul style="list-style-type: none">• PCA, MDS, and LLE methods are used to reduce the dimensions of the data.• Increase the RNN and LSTM models' accuracy.

