Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID13212
Project Name	Project - Crude Oil Price Prediction
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The price of crude oil, the primary fuel used in the world, has a significant effect on the economy, environmental, and oil exploration and exploitation operations. Forecasts for oil prices are immensely helpful to businesses, governments, and people in general. Despite the existence of numerous approaches, the tremendous volatility of oil prices means that forecasting them remains one of the most difficult forecasting challenges.
2.	Idea / Solution description	In this approach we'll be using LSTM, The LSTM introduces the memory cell, a unit of Computation that replaces traditional artificial neurons in the hidden layer of the network. With these memory cells, networks are able to effectively associate memories and input remote in time, hence suit to grasp the structure of data dynamically over time with high prediction capacity.
3.	Novelty / Uniqueness	• There are plenty of algorithms based on machine learning but didn't provide proper results, we'll try to predict crude oil prices using Long Short-Term Memory (LSTM) based recurrent neural networks which will be more suitable for this problem. • Price forecasts are very important to various stakeholders: governments, public and private enterprises, policymakers, and Investors.
4.	Social Impact / Customer Satisfaction	• It is used to forecast future pricing and to optimize oil cost. • This price directly affects a number of goods and products, and its changes have an impact on the stock markets.
5.	Business Model (Revenue Model)	• When deciding whether to buy or sell crude oil, it can assist decision-makers from businesses, private investors, or individuals.

		• One of the most profitable trading commodities for traders is crude oil.
6.	Scalability of the Solution	• RNN remembers each and every information through time. we'll consider all pervious values for prediction • Improve the accuracy by using RNN and LSTM models.