Project Design Phase-I Proposed Solution Template

DATE	15.10.2002
TEAM ID	PNT2022TMID41701
PROJECT NAME	Project - Crude Oil Price Prediction
MAXIMUM MARK	2 Mark

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 individuals. The Continuous usage of statistical and econometric techniques including Al 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 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 minimising the risks associated with volatility in oil prices. 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 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 variables, but they are also affected by keyevents
5	Business Model (Revenue Model)	 It can help decision makers – either firms, private investors, or individuals – when choosing to buy or sell 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 crude oil prices.
6	Scalability of the Solution	 PCA, MDS and LLE methods are used to reduce the dimensions of the data Improve the accuracy of the RNN and LST Models.