

**Project Design Phase-I**  
**Proposed Solution Template**

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|---------------|--------------------------------------|
| Date          | 10TH OCTOBER 2022                    |
| Team ID       | PNT2022TMID14256                     |
| Project Name  | Project – Crude Oil Price Prediction |
| Maximum Marks | 2 Marks                              |

**Proposed Solution Template:**

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

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | Oil demand is inelastic, therefore the rise in price is good news for producers because they will see an increase in their revenue. Oil importers, however, will experience increased costs of purchasing oil. Because oil is the largest traded commodity, the effects are quite significant. A rising oil price can even shift economic/political power from oil importers to oil exporters. The crude oil price movements are subject to diverse influencing factors. |
| 2.    | Idea / Solution description              | This Guided Project mainly focuses on applying Neural Networks to predict the Crude Oil Price. This decision helps us to buy crude oil at the proper time. Time series analysis is the best option for this kind of prediction because we are using the Previous history of crude oil prices to predict future crude oil. So we would be implementing RNN(Recurrent Neural Network) with LSTM(Long Short Term Memory) to achieve the task.                               |

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| 3. | Novelty / Uniqueness                  | <p>We use the concept of Artificial Neural Network and Machine Learning To predict the price of Crude Oil More accurately Than other existing Models.</p> <p>The main advantage of artificial neural network is that it continuously captures the unstable pattern and variations of crude oil price.</p>   |
| 4. | Social Impact / Customer Satisfaction | <p>Crude oil is amongst the most important resources in today's world, it is the chief fuel and its cost has a direct effect on the global habitat, our economy and oil exploration, exploitation and other activities.</p> <p>Prediction of oil prices has become the need of the hour, it is a boon to many large and small industries, individuals and the government.</p>   |
| 5. | Business Model (Revenue Model)        | <p>Financially, this project could benefit the small scale and large scale industries.</p> <p>The receipt and expenditure of oil revenues are matters for fiscal policy, and we consider them in the context Of India's federal system, where fiscal responsibility is divided between the federal government and state governments. But the time profile Of oil revenues is distinctive compared with fiscal revenues more generally: oil revenues are volatile, driven largely by the volatility of oil prices. The required datasets are obtained from Kaggle.com The dataset was used to train various models .</p> |

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| 6. | Scalability of the Solution | <p>In this Project , We use Artificial Neural Network and various ML Algorithms To predict the Unstable Variations of Crude Oil Price Over a Given Time Period.</p> <p>To Predict the Price of Crude Oil In Future We Train The Data Model With The Past Oil Prices Data Which we Obtain From Kaggle.com.</p> |
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