## Project Design Phase-I Proposed Solution Template

Date	29 September 2022
Team ID	PNT2022TMID23411
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)	<ul> <li>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.</li> <li>The existing models are not user-friendly, so our idea is to develop an interface that is easy to use.</li> </ul>
2.	Idea / Solution description	<ul> <li>In order to develop a user-friendly web application. The dataset is collected from the yahoo's finance website.</li> <li>RNN is used with long short term memory to achieve future crude oil using previous history of crude oil.</li> </ul>
3.	Novelty / Uniqueness	<ul> <li>This model is mainly developed to focus on the accuracy on predicting prices. Though there are many sites to collect datasets for predicting prices. The yahoo's finance provides a reliable service.</li> <li>Price forecasts are very important to various stakeholders: governments, public</li> </ul>
		and private enterprises, policymakers, and Investors.
4.	Social Impact / Customer Satisfaction	<ul> <li>By accurately predicting prices investing firms, trading firms can potentially benefit.</li> <li>By making a user friendly and reliable interface higher customer satisfaction can be met.</li> </ul>
5.	Business Model (Revenue Model)	<ul> <li>It can help decision makers – either firms, private investors, or individuals – when choosing to buy or sell the crude oil</li> <li>Crude oil is one of the most profitable trading commodities for traders.</li> <li>RNN and LSTM models are used as the benchmark model to predict the crude oil Prices.</li> </ul>
6.	Scalability of the Solution	<ul> <li>Since we are using LSTM (RNN) we are able to predict the prices accurately.</li> <li>Since our training dataset is large this model is trustable.</li> </ul>