**Project Design Phase-**

**IProposedSolutionTemplate**

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| Date | 24october2022 |
| Team ID | PNT2022TMID08321 |
| Project Name | Project-Crude Oil Price Prediction |
| Maximum Marks | 2Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to besolved) | 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 ,indus  try is  individuals.Thecontin uous usageofstatistical  andeconometrictechniquesincludingAIforcrudeoil pricepredictionmightdemonstratedemotionstothe predictionperformance. |
| 2. | Idea/Solutiondescription | RNNisusedwithlongshorttermmemorytoachieve future crude oil using previous history ofcrudeoil.Thecostismeasuredasthemeansquared  error to determine it's effectiveness.Theperformance of the proposed model is  evaluatedusingthepricedataintheWTOcrudeoil materials |
| 3. | Novelty/Uniqueness | * Crudeoilpricefluctuationshaveafarreachingim pactonglobaleconomiesandthuspriceforecast ingcanassistinminimising the risks associated with volatilityin oilprices. * Price forecasts are very important to variousstakeholders:governments,publicand privateenterprises,policymakers,and investors. |
| 4. | SocialImpact/CustomerS atisfaction | * It is used to predict the future price and usetheoilaccordingtothe prices. * this price has direct effects on several goodsand products and its fluctuations affect thestockmarkets. * Oil prices are not only driven by   economicvariables,buttheyarealsoaffectedby key events.. |
| 5. | BusinessModel(RevenueModel) | * It canhelpdecisionmakers – either   firms,privateinvestors,orindividuals– whenchoosingtobuyor sellthecrudeoil   * crude oil is one of the most profitable tradingcommoditiesfor traders. * **RNNandLSTMmodelsareusedasthebenchma**   **rkmodeltopredictthecrudeoil prices.** |
| 6. | ScalabilityoftheSolution | * PCA,MDSandLLEmethodsareusedtoreduceth edimensionsofthedata * ImprovetheaccuracyoftheRNNandLSTMmode ls. |