

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

|               |                                      |
|---------------|--------------------------------------|
| Date          | 15 October 2022                      |
| Team ID       | PNT2022TMID49608                     |
| Project Name  | Project – Crude Oil Price Prediction |
| Maximum Marks | 4 Marks                              |

#### Functional Requirements:

Following are the functional requirements of the proposed solution

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|------------------------------------|
| FR-1   | User Registration             | Registration through Form          |
| FR-2   | User Confirmation             | Confirmation via SMS.              |
| FR-3   | Fetching input data           | Give the model the input data.     |
| FR-4   | Generating Results            | Prediction of Oil Prices.          |

#### Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | Usability                  | People with no proper awareness about the regular change in price of crude oil can get to know,<br>User interfaces are easy to use.         |
| NFR-2  | Security                   | Access permission for the local system must be given by the system's data administrator.  |
| NFR-3  | Reliability                | The system will show the results regularly.<br>Because there is very little variance from the prediction, the testing is highly dependable. |
| NFR-4  | Performance                | The front page will not exceed more than 2 seconds.<br>Using LSTM networks gives highly performance.  |

|       |                     |   |
|-------|---------------------|---|
| NFR-5 | <b>Availability</b> | The system is provided with the past ten days data.                   |
| NFR-6 | <b>Scalability</b>  | RNN (LSTM) network model works efficiently for large number of users. |