

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID10046
Project Name	Project – Crude Oil 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 Entering to the Webpage	The user should click on Prediction button which redirects to the price prediction page
FR-2	User gives the previous first 10 days Crude Oil Prices values	When the user gives the first 10 days values and clicks on Predict button the next day's crude oil predicted value will be shown

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The Crude Oil Price Prediction system is more useful to the Oil Traders, Producers and importers to predict the future Crude oil prices and they require good internet connection, good system environment and previous 10 days crude oil prices to predict the next day price.
NFR-2	Security	The developed system is more secure and there is no involvement of user data hence the developed system can be used to predict the prices and the developed system is more secure
NFR-3	Reliability	The developed system is more reliable since it can predict the crude oil prices more accurately and with more accuracy, since we use RNN and LSTM in our developed system the model predicts the prices more accurately and so the system is more reliable.
NFR-4	Performance	The developed system is deployed in a form of web page and it can be deployed in cloud services for hosting, wherein the performance will be good and it can handle all the users traffic to the web page.
NFR-5	Availability	The webpage for Crude oil price prediction will be available to all users for predicting the future crude oil prices, the only requirement for the user is to have the previous 10 days prices values to predict the prices for the next day.
NFR-6	Scalability	The developed system is more scalable, while it can predict the future crude oil prices and if the developed system is deployed in a cloud service it is more scalable and can handle the user traffic dynamically.