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

Date	15 October 2022
Project Name	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 Application	The application will be a web based application. Users can access the system on the internet.
FR-2	User Products available	The prices of the products that are available (crude oil) is constantly updated and the predicted price will be displayed.
FR-3	User Additional Features	The user will be able to see information about the increase or drop in prices of crude oil.
FR-4	User Exceptions	The user has access to/can view the price of crude oil in several currencies.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	We can select whether to invest in or buy the product based on the expected statistics which will be predicted a logical user interface will be provided to utilise the system
NFR-2	Security	The integrity of the historical data sets will be maintained, security will be provided for the users as specific cryptographic methods can be applied.
NFR-3	Reliability	The necessary analysis of the data will be done, which enhances the accuracy, thus this product is trustworthy and the predicted value we receive is reliable. An internet connection is also required to get the best output, data corruption will also be avoided.
NFR-4	Performance	The system will permit several users to utilise the resources at once while maintaining the highest level of price prediction accuracy.
NFR-5	Availability	The system will always be available to the users as long as they have a suitable and stable internet connection.

NFR-6	Scalability	LSTM network model works well for large number of users. Hence the system has room for a bigger
		audience and can be scaled up easily.