

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	23 October 2023
Team ID	Team-592401
Project Name	Time Series Analysis For Bitcoin Price Prediction Using Prophet
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	Data Acquisition and Preprocessing	<ul style="list-style-type: none">Data CollectionData CleaningFeature Engineering
FR - 2	Model Selection and Customization	<ul style="list-style-type: none">Prophet IntegrationParameter TuningModel Validation
FR - 3	Model Development and Training	<ul style="list-style-type: none">Data PreparationModel TrainingModel EvaluationVisualizations
FR - 4	User Interface and Accessibility	<ul style="list-style-type: none">User Interface DesignUser Access LevelsReal-time Updates

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR - 1	Usability	The user interface should be intuitive and user-friendly, allowing users of varying expertise to easily interact with the forecasting model.
NFR - 2	Security	Robust security measures should be in place to protect user data and maintain the privacy and integrity of the system.
NFR - 3	Reliability	The forecasting model must consistently deliver accurate predictions, with a focus on minimizing errors and ensuring dependable performance.
NFR - 4	Performance	The system should provide timely and responsive forecasts, efficiently handling

		data processing and model training to meet user expectations.
NFR - 5	Availability	The system should ensure high availability, minimizing downtime and ensuring users can access the model when needed.
NFR - 6	Scalability	The solution should be designed to scale efficiently, accommodating growing data volumes and user demands without compromising performance.