

Project Design Phase-I

Proposed Solution Template

Date	31 October 2023
Team ID	SI-GuidedProject-609307-1697997262
Project Name	Project - Time Series Analysis For Bitcoin Price Prediction Using Prophet
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Bitcoin being the most prominent and widely traded among them. However, the extreme volatility and non-linear nature of Bitcoin prices present a significant challenge for accurate prediction. The problem is to develop an accurate and reliable time series forecasting model for predicting Bitcoin's future prices using the FbProphet algorithm.
2.	Idea / Solution description	Time series analysis for Bitcoin price prediction using Prophet offers an effective way to gain insights into the cryptocurrency market. By collecting and preprocessing historical data, training a Prophet model, and continuously monitoring and updating the model
3.	Novelty / Uniqueness	Time Series Analysis Is unique on the date selected and predicts the price of Bitcoin. We will be Creating a model through which we can use it for prediction and it goes through User Interface (UI) and it can generate detailed prices for the Given date.

4.	Social Impact / Customer Satisfaction	Using Prophet for Bitcoin price prediction through time series analysis can have a significant social impact by providing valuable insights for investors in the rapidly evolving cryptocurrency market. High customer satisfaction is achieved through accurate short-term and long-term price forecasts, aiding decision-making and risk management, ultimately promoting financial inclusion and stability.
5.	Business Model (Revenue Model)	Time Series Analysis Will Generate Revenue through tiered subscription plans, with premium features such as real-time updates and historical data analysis. Additional income streams can include consulting services and partnerships with cryptocurrency exchanges for data access.
6.	Scalability of the Solution	Time Series Analysis is designed to be scalable. The web will be able to easily adopt and support new features and languages. Additionally, Its automatic feature selection and flexibility in modeling seasonality make it a suitable choice for adapting to Bitcoin's volatile price patterns.