Data Collection and Preprocessing Phase

Date	3 october 2024
Team ID	LTVIP2024TMID24963
Project Title	Time Series Analysis For Bitcoin Price Pridiction
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Report:

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan:

Section	Description
Project Overview	This project, titled "Time Series Analysis for Bitcoin Price Prediction Using Machine Learning," aims to develop a predictive model for Bitcoin prices. By analyzing historical price patterns and using the Prophet model, the project seeks to forecast future Bitcoin price trends and provide valuable insights for potential investors, analysts, or stakeholders interested in cryptocurrency markets. The final model selection and evaluation are based on various performance metrics, ensuring that the chosen model offers high predictive accuracy and reliability for Bitcoin price forecasting.
Data Collection Plan	The project will collect historical Bitcoin price data with associated timestamps, including relevant external factors like volume, global economic events, and potential market indicators that may affect cryptocurrency prices. Data collection will focus on securing high-quality, reliable time series data from recognized sources, ensuring completeness and accuracy for the model training and evaluation phases.
Raw Data Sources Identified	. **Cryptocurrency Exchanges (e.g., Binance, Coinbase)**: Provides open-source historical price data, including opening, closing, high, low, and volume information for Bitcoin. - **Financial APIs (e.g., Alpha Vantage, CoinGecko)**: Offer extensive time series data for cryptocurrency prices and volumes, often enriched with market indicators and timestamps.

	- **Market Data Providers (e.g., Yahoo Finance)**: Supply Bitcoin historical prices and additional features like economic indicators or global financial news that may correlate with Bitcoin price movements.

Raw Data Sources Report:

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