Project Design Phase-II
Technology Stack (Architecture & Stack)

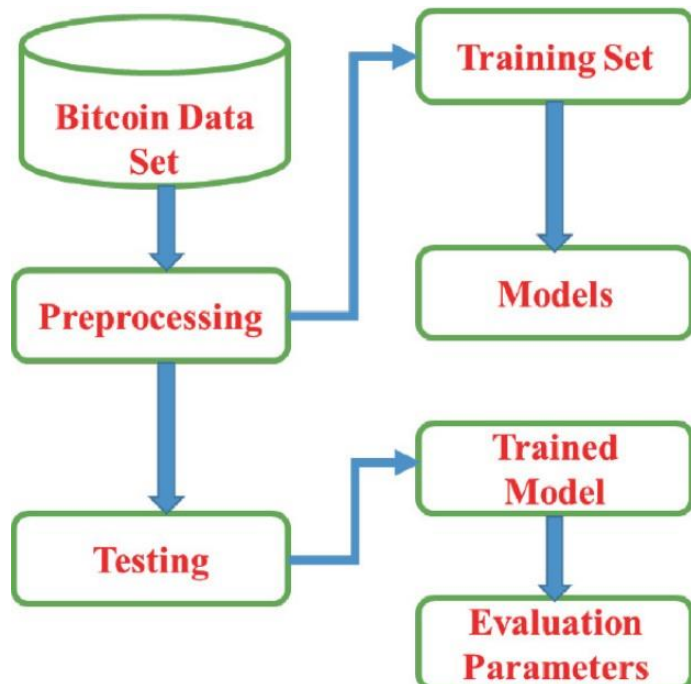| Date	18 November 2023
Team ID	Team-591961
Project Name	project - Time Series Analysis For Bitcoin Price Prediction Using Prophet
Maximum Marks	4 Marks

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Python
6.	Cloud Database	Type of dataframe taken using yticker	Took by using yticker
7.	File Storage	Stored in colab evnironment	Colab
10.	Machine Learning Model	Time series forecasting with Prophet	Facebook Prophet library
11.	Infrastructure (Server / Cloud)	Application Deployment Cloud Local Server	Colab

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python's Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Encryption
3.	Scalable Architecture	Justify the scalability of architecture	Yticker, tensorflow, matplotlib, datetime
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Evaluation metrics to check performace	MAE, MSE, R2, RMSE