Project Design Phase-I
Solution Architecture

Date	23 OCTOBER 2023
Team ID	Team-59262
Project Name	Project – Time series analysis for Bitcoin Price Prediction using fb prophet
Maximum Marks	2 Marks

Solution Architecture:

- The best tech solution for the project includes Flask and Golang for the backend, ReactJS for the frontend, an ML model based on Facebook Prophet for Bitcoin rate prediction, and AWS for hosting.

- The software architecture consists of a frontend (ReactJS), a backend (Flask and Golang), and an ML model for Bitcoin rate prediction.

- Key features include real-time Bitcoin data display, a simulation for buying/selling Bitcoins, and Bitcoin rate prediction.

- The project is divided into frontend development, backend development, ML model development, and AWS infrastructure setup phases.

- Technical specifications include database schema, API endpoints, and ML model training parameters.

- The project management approach follows Agile practices for effective development.

- Quality standards, testing procedures, and deployment guidelines are established to ensure project success.

Solution Architecture Diagram:

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                    ┌──────────┐
                    │   User   │
                    └──────────┘
                   /            \
                  /              \
         ┌──────────┐        ┌──────────────┐
         │ Chatbot  │        │ React Website│
         └──────────┘        └──────────────┘
                  \              /
                   \            /
              ┌──────────────┐
              │ Flask Backend│
              └──────────────┘
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                  ┌──────────────┐
                  │ Prophet Model│
                  └──────────────┘
```