**Project Design Phase**

**Solution Architecture**

|  |  |
| --- | --- |
| Date | 6 March 2025 |
| Team ID | SWTID1741279149154202 |
| Project Name | Coin Spark |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

The solution architecture for the Cryptocurrency Tracking Application ensures a scalable, efficient, and user-friendly platform for tracking real-time cryptocurrency market data, trends, and analytics.

**Goals of the Solution Architecture:**

Identify the Best Tech Solution:

* Utilize modern front-end frameworks (React.js) and APIs (RapidAPI, CoinGecko) to provide a seamless and interactive crypto market tracking experience.

Define Structure & Characteristics:

* Ensure a modular, scalable, and maintainable software architecture that supports future feature enhancements like AI-based price predictions and DeFi analytics.

Outline Features & Development Phases:

* Clearly define project milestones, including UI/UX design, API integration, database structuring, and deployment strategy.

Establish Specifications for Development & Delivery:

* Provide well-defined guidelines for system architecture, API integrations, data flow, and real-time data handling.
* Implement a high-performance backend to support large-scale user requests without delays.

