**Final Report**



## Project Aim and Description

### Project Aim:

The aim of our project, Cryptews, is to provide a user-friendly platform for individuals to access and interact with cryptocurrency data. It’s our goal to offer a secure and straightforward website for users to check cryptocurrency prices, market capitalization, monitor Bitcoin fear's impact on other cryptocurrencies, and convert their currency into five different cryptocurrencies. **Our primary and main goal is to help people engage with the crypto market confidently.**

### Project Description:

Cryptews is a cryptocurrency website/platform designed to provide information to help both novice and experienced cryptocurrency enthusiasts. The website shows multiple important features, including:

* **Cryptocurrency Price Checking**: Users can effortlessly track the real-time prices of various cryptocurrencies, enabling them to make informed investment decisions.
* **Market Capitalization**: Cryptews provides insights about the market capitalization of cryptocurrencies, offering a bigger perspective on the market's health.
* **Bitcoin Fear Index**: Monitoring Bitcoin's fear factor, which influences the overall cryptocurrency market, helps users know about market sentiment.
* **Currency Conversion**: Users can conveniently convert their currency into five different cryptocurrencies, expanding their investment options.

Cryptews is built to deliver a safe and reliable platform that boosts cryptocurrency education and helps users to participate in the crypto market with confidence.

## Functional and Non-Functional Requirements

### Functional Requirements:

**Cryptocurrency Price Display**: The platform must provide real-time pricing information for a range of cryptocurrencies.

**Market Capitalization Data**: Users should have access to useful market capitalization data for various cryptocurrencies.

**Bitcoin Fear Index Monitoring**: The platform shows a Bitcoin fear index to inform about market sentiment.

**Currency Conversion Feature**: Users should be able to convert their currency into five different cryptocurrencies.

**User Dashboard**: A personalized dashboard for users to have all the information mentioned above.

### Non-Functional Requirements:

**Scalability**: The system should be able to handle an increasing number of users and data without performance going down.

**Reliability**: The platform should provide accurate and updated cryptocurrency information.

**User-Friendly Interface**: The user interface should be intuitive and easy to navigate, catering to both beginners and experts.

## User Stories

### User Story 1:

As a cryptocurrency enthusiast, I want to check real-time cryptocurrency prices, so I can make informed investment decisions.

### User Story 2:

As an investor, I want to monitor the market capitalization of different cryptocurrencies to assess their market health.

### User Story 3:

As a trader, I want to keep an eye on the Bitcoin fear index to be informed of market sentiment and anticipate price movements.

### User Story 4:

As a beginner in the crypto world, I want to convert my local currency into various cryptocurrencies to diversify my portfolio.

## Individual’s Roles and Responsibilities

In our project, Ali had more responsibility for the back-end development, focusing on creating the infrastructure and managing server (aws) while Pedro, on the other hand, worked with the front-end development, ensuring a user-friendly and visually appealing interface. Additionally, both Ali and Pedro collaborated on the implementation of the APIs to integrate external data sources seamlessly. Their combined efforts contributed to the successful development and execution of Cryptews.