Cryptocurrency Analysis WebApp

Field Of Invention

- The field of invention for a cryptocurrency tracker website that tracks records of all top trending cryptocurrencies is FinTech or Financial Technology.
- The website falls under the subfield of cryptocurrency tracking and analysis, which involves using technology to monitor, analyse, and report on the performance of various digital assets, including cryptocurrencies such as Bitcoin, Ethereum, and others.
- The website could also fall under the subfield of data analytics, as it would involve collecting, processing, and presenting large amounts of data to users in an easily digestible format.
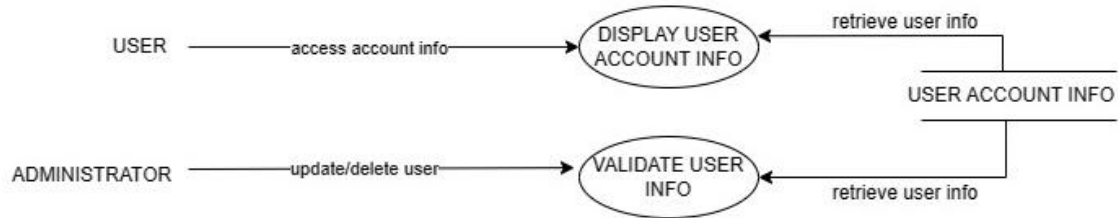
Background

Cryptocurrencies form a important aspect and part of our economy, and as it is a fairly new emerging domain, the information resources are widely scattered. This proves to be a major hurdle for potential and new investors as well who want to learn about this domain. Combining information from multiple resources - evaluating which ones to trust at the same time, and doing all this at regular intervals of time (considering the volatility of cryptos) increases the slope of the learning curve involved even more.
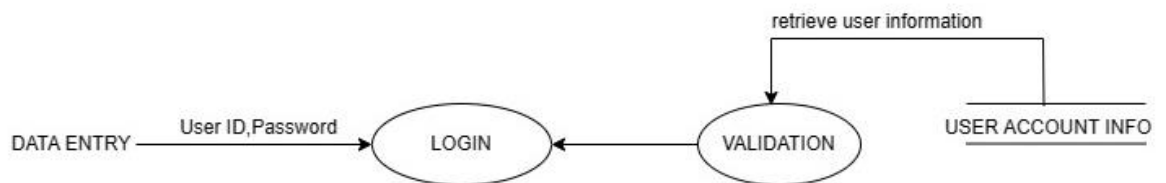
Objectives

- Our web-app aims to solve this problem designed to present all information in a structured and centralised manner.
- Perform analysis of past performance to make reliable predictions about future dips and rises.
- Provide handy tools like real time value, local currency conversions, monitor of top performing currencies, and other performance statistics.
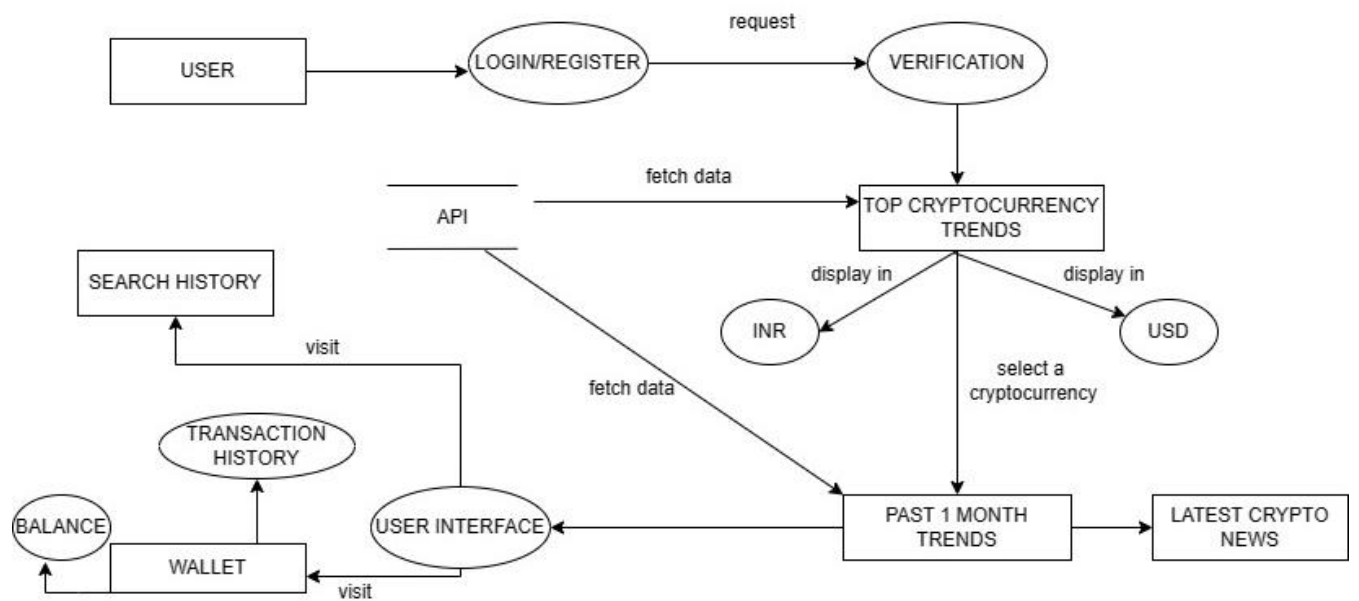
Model / Diagrams

USER ACCOUNT

USER ──access account info──▶ (DISPLAY USER ACCOUNT INFO) ◀──retrieve user info── USER ACCOUNT INFO

ADMINISTRATOR ──update/delete user──▶ (VALIDATE USER INFO) ◀──retrieve user info── USER ACCOUNT INFO

LOGIN

DATA ENTRY ──User ID,Password──▶ (LOGIN) ◀── (VALIDATION) ──retrieve user information── USER ACCOUNT INFO

CRYPTOCURRENCY TRACKING

USER ──▶ (LOGIN/REGISTER) ──request──▶ (VERIFICATION)

API ──fetch data──▶ TOP CRYPTOCURRENCY TRENDS

TOP CRYPTOCURRENCY TRENDS ──display in──▶ (INR)

TOP CRYPTOCURRENCY TRENDS ──display in──▶ (USD)

TOP CRYPTOCURRENCY TRENDS ──select a cryptocurrency──▶ PAST 1 MONTH TRENDS

SEARCH HISTORY ──visit──

TRANSACTION HISTORY

BALANCE ── WALLET ──visit──▶ (USER INTERFACE)

API ──fetch data──▶ (USER INTERFACE)

PAST 1 MONTH TRENDS ──▶ (USER INTERFACE)

PAST 1 MONTH TRENDS ──▶ LATEST CRYPTO NEWS

Claims

Smart crypto analysis and investment suggestions: The project's algorithms provide live crypto trends which further helps in improved investment suggestions is innovative. By utilizing advanced API tools and techniques, the project can offer tailored advice to its users, helping them make informed decisions about their crypto investments.

Interactive user interface: The interactive and user-friendly interface is a novel feature that makes the project accessible to a wider audience. The use of chart JS to present data in an easy-to-understand way is also an innovative approach.

Integration of a cryptocurrency wallet: Including a cryptocurrency wallet in a project that focuses on managing finances and investments is a novel and innovative idea making the project more versatile and appealing to a wider audience.

Overall, the project's combination of investment suggestions, cryptocurrency wallet integration, and user-friendly interface make it an innovative solution for making profitable crypto investments.

Technology Used

Software

- REACT JS
- MATERIAL UI
- CHART JS
- CSS
- JAVASCRIPT
- CONTEXT API
- COIN GECKO API
- FIREBASE

Abstract

The cryptocurrency Analysis WebApp is a web-based application which provide the easy and live trends of the top current cryptocurrencies such as ETH, Bitcoin, Dogecoin etc at one place in a combined manner and their past records which will ultimately help us to make better investments and also provide us the insights to make a profitable future investment in the crypto currencies. This app will provide the latest data and records such as the current price of each cryptocurrency (in INR as well as USD), their rank, market cap and the rise or fall in the value within the past 24 hours, you can search the results for any desired cryptocurrency. It will help the people to invest in these cryptocurrencies and get the most benefit out of that, as many crypto lovers are investing and buying the crypto currencies for the sake of making profitable

investments. The app will also have major application areas such as in the field of market and industry and in the investment sector as well.

End users

End users of a cryptocurrency tracker app can vary, but generally include anyone interested in investing or trading cryptocurrencies. Here are some examples of potential end users:

Cryptocurrency investors: These are individuals who have invested in cryptocurrencies and want to monitor their portfolio's performance and stay up-to-date with the latest market trends.

Traders: These are individuals who trade cryptocurrencies frequently, looking for opportunities to profit from price fluctuations in the market. A cryptocurrency tracker app can help traders by providing real-time market data, analysis tools, and trading signals.

Advantage

- Allows to track the total amount and value of cryptocurrencies across various wallets.

- This web app let you track historic transactions, their worth, and destinations or sources.

- This web app also gives the actual live price of any cryptocurrencies.

Conclusion

The cryptocurrency is the trend of today's generation and people are investing in these cryptocurrencies to gain maximum benefit from these investments hence a centralized data is required so that people can analyse the various cryptocurrencies and can make the best possible investment based on the market price,trends,market cap of these cryptos hence a crypto tracker web app came to rescue as they provide a centralized system where people can watch and compare cryptos before making any investments hence to secure and maximize the profit.

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