

T2

T2 CRYPTO APP

Unlock the Future of Finance :

T2 Crypto APP – your Gateway to Digital Assets





CREDITS

Meet the team

Roda Anshur

Zara Tahir

Chiara Pignoni

Paulina Malek





THE PROJECT

T2 CRYPTO

The T2 Crypto App is a revolutionary application designed to simplify the cryptocurrency investment experience for individual investors. Developed efficiently using Java, this app has been brought to life in a short timeframe to address the complexities faced by users when managing multiple digital assets across various exchanges. With the goal of providing a seamless and user-friendly solution, the app employs CRUD (Create, Read, Update, Delete) operations to fetch data from a secure database, while also integrating with a trusted third-party API to access real-time coin data and essential information.





THE PROBLEM

- **Investing in cryptocurrencies can be overwhelming for individual investors due to managing multiple digital assets across various exchanges.**

With a strong focus on user experience, security, and performance, the T2 Crypto App empowers individual investors to explore and participate confidently in the dynamic world of cryptocurrencies.

- **Tracking portfolio performance, monitoring price fluctuations, and making informed investment decisions require time and effort.**

The T2 Crypto App offers a user-friendly dashboard displaying real-time portfolio performance, including total asset value, gains/losses, and asset allocation. Users can conveniently track their investments in one place, regardless of the exchange they use.





ASSUMPTIONS

We made certain assumptions about user behaviour and interactions with the T2 Crypto App. Firstly, we assumed that users would be proactive in managing their cryptocurrency investments, regularly monitoring market trends, and staying informed about potential opportunities. To cater to this assumption, we designed the app with real-time market data and intuitive charts, enabling users to track price fluctuations and make informed investment decisions swiftly.

We also assumed that users would actively engage with the app's financial functionalities, such as adding or removing funds from their digital wallets and executing cryptocurrency transactions. To cater to this assumption, we envisioned a seamless process for users to add funds to their accounts and execute buy and sell orders with ease.

Moreover, we assumed that users would seek a clear and transparent overview of their transaction history and wallet balance. Hence, we designed the app to provide users with a comprehensive transaction history log and real-time wallet balance visualisation, empowering them to stay in control of their investments at all times.





TECHNOLOGY

What Technology did we use?

Programme and database :

- Java
- MySQL

Frameworks and web technology:

- Spring Boot
- JUnit
- Jpa
- JQuery
- Git/GitHub
- Ajax

Dependencies and plugins:

- Maven, Lombok
- Mysql-connector, validator

API's

- <https://api4.binance.com>

Security Measures:

- JbCrypt





ARCHITECTURE

The T2 Crypto App boasts a robust and scalable **Microservices architecture**, strategically designed to provide a seamless user experience and efficient management of cryptocurrency investments.

In line with the best practices of software development, the T2 Crypto App adopts the **Model-View-Controller (MVC)** pattern. This architectural pattern separates the app into three distinct components, facilitating efficient code organisation and maintenance.

We choose to build the app with MVC and Microservices architecture because it allows us to create a highly organised and flexible system that can easily adapt to the ever-changing demands of the cryptocurrency market. This architectural pattern separates the app into three distinct components, facilitating efficient code organisation and maintenance. The Model represents the underlying data and business logic, the View is responsible for presenting the data to the user interface, and the Controller acts as an intermediary, managing user input and updating the Model and View accordingly. This clear separation of concerns enhances code reusability and promotes a cleaner and more maintainable codebase.





CONTRIBUTIONS

Roda Anshur

Zara Tahir

Chiara Pigoni

Paulina Malek





CHALLENGES

- Security challenges
- Test challenges
- Git repository /GitHub





SOLUTIONS

- Improve security, authentication, verification, limits
- Improve user experience
- Accurate market data





Thank You

