DHBW MANNHEIM | WEB-ENGINEERING



Crypto Trading Simulator

Planned for: Frank Schulz | Lecturer

Created by: Pius Walter, Golo Mühr, Silas Pohl | Students

6. Mai 2020

PROJECT IDEA

Project summary

The project consists of creating a web application for trading crypto currencies in a virtual environment. The web app combines the real life crypto trading market with a risk free way to learn and experience crypto trading first-hand and comparing your skills with friends.

Functionality

When opening an account, the user receives a virtual starting amount and can freely divide and invest this amount. The user is presented detailed graphs of the current exchange rates of the most common cryptocurrencies. When investing, the value of each users investment is computed and displayed live in US dollars according to the current exchange rates. There will also be a scoreboard, ranking users by the revenue they generated, thereby enabling users to compare their trading skills.

Basic concept of the architecture

The web app will be created with Node.js/Express, React and MongoDB as a MERN stack. All account information (login data, account balance, crypto currencies in the portfolio, trading history) will be stored in a MongoDB database. The live cryptocurrency exchange data will be provided by an API and the charts will be powered by TradingView. This guarantees a smooth user experience and a seamlessly integrated user interface displaying live data in a dashboard-like fashion.

Designed for: **Crypto Trading Simulator** Designed by: Pius Walter, Golo Mühl, Silas Pohl

Date: 06.05.2020

Customer Segments

Version: 1.0

Key Partners



Key Activities



Value Propositions



Customer Relationships

Being open and flexible to change in

customer demands - offering more

customizablity to experienced users

Provide comprehensive guides and

support to inexperienced users



- Cryptocurrency enthusiasts

- Investors

- Students in the trading sector

- Researchers

Customers are categorized by their level of experience in the field of cryptocurrency exchange.



Open source APIs

Resources acquired:

Live cryptocurrency trading data

Live market exchange

Accurate display of data

Key Resources

Reliable and secure user interaction



Values:

Market insights and virtual trading experience

Customer problems:

Lack of understanding of different cryptocurrency trading processes, risks and benefits

Customer segments:



A constant stream of live market data

Reliable and secure web interface

Web server with high availability Advanced code repository and

communication tools: GitHub, Discord

Inexperienced: First experience with cryptocurrency exchange

Experienced: Ability to simulate trading strategies without risk

Customer needs:

Experience and Design

Control and Information

Accessibility and Transparency

Flexibility and Customizability

Channels



Official and easy-to-use support and marketing channels such as email, web forums, blogs, marketing events, webinars etc.

Cost Structure



- Server infrastructure
- Live data subscriptions
- Developers

Revenue Streams





- Information
- Customizability

Pro Version provides larger market, more data, full control while trading and unlimited simulation scenarios

















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The Value Proposition Canvas

Value Proposition Crypto Trading Simulator - Invest In The Future Of Currency

Customer Segment

Interested in the field of trading crypto currencies. No limitation on income and gender. Age from 18 years.



