

Real-Time Cryptocurrency Trading System

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Abstract- Cryptocurrencies have emerged as important financial software systems. They rely on a secure distributed ledger data structure; mining is an integral part of such systems. Mining adds records of past transactions to the distributed ledger known as Blockchain, allowing users to reach secure, robust consensus for each transaction. Mining also introduces wealth in the form of new units of currency. Cryptocurrencies lack a central authority to mediate transactions because they were designed as peer-to-peer systems. They rely on miners to validate transactions. Cryptocurrencies require strong, secure mining algorithms. In this paper, we survey & developed the actual cryptocurrency trading or exchange platform in contrast used by major Cryptocurrencies Exchange platform but lack in some features or irrespective of user need. We evaluate the techniques, fast withdrawals, users/admin dashboard, fiat currencies & other respective terms. Overall, a perspective on how Cryptocurrencies exchange platform works, where they have comparable performance and assurance.

Keywords: cryptocurrency trading system - krypto, cryptocurrency blockchain, real time cryptocurrency trading, blockchain iee

1. INTRODUCTION

Bitcoin - the world's first cryptocurrency - was introduced in 2009 and since then over 1000 tradable tokens have come into existence. However, for a long time India missed out on the tremendous opportunity that the rest of the world had been enjoying.

1.1. What is Crptocurrency Trading System?

A service to trade cryptocurrencies and digital assets to fiat currency or other digital assets. A cryptocurrency exchange is any system that operates on the basis of trading cryptocurrencies with other assets. Like a traditional financial exchange, the cryptocurrency exchange's core operation is to allow for the buying and selling of these digital assets, as well as others. A cryptocurrency exchange is also known as a digital currency exchange (DCE).

1.2. Why is it so Important to Choose a Cryptocurrency Exchange?

This includes buying/selling cryptocurrencies with fiat

(fiat/crypto paring) as well as buying/selling cryptocurrencies with other crypto/crypto pairing. They can be viewed as an online marketplace for the entire cryptocurrency network. These exchanges are important because you can exchange FIAT (old fashioned digital money) into cryptocurrency (fast, often decentralized digital currency on next-gen blockchains). If ever these types of exchanges or services were targeted it would be hard to buy cryptocurrency. The only way to get some would be through mining or sites which offers best cryptocurrency exchanges like Koinex, Binance, Zebpay, Bitbns where you can trust and exchange multiple transactions.

Cryptocurrency Trading System using laravel framework for exchange platform needs to be developed where cryptocurrency prices need to be updated daily and users can buy/sell through dashboard. Today, you can hardly pick up a newspaper, turn on a television, overhear a conversation, or talk to a friend without mention of the Internet. It has done nothing short of change the way our world works and the way our nation invests.

Overall, it has changed us for the better. Point, click, and trade - these three little words sum up the allure of traders. Using nothing more than an Internet connection and an account with an online broker, one can buy and sell cryptocurrency with mere keystrokes.

2. LITERATURE SURVEY

The cryptocurrency market seems to be growing in popularity every day. With the astronomical rise of cryptocurrencies like Bitcoin, Ethereum, there seems to be an influx of people into the market & afford account creation feature open all the time. Such is the demand for entry into the market that trading account creation for new customers is periodically disabled.

The average daily trading volume of the market is usually in trillions of dollars. The total market cap of the entire market stands at more than half a trillion dollars which is an astonishing feat considering the market is less than a decade old. This makes choosing a best cryptocurrency trading platform rather difficult — We feel that there is no overall 'best' exchange, but there are exchanges that are the 'best' for each individual user according to their needs and preferences. While loop is a still trustful peer-to-peer transaction network for digital assets trading directly using fiat currency.

2. PROBLEM DEFINITION

The cryptocurrency market seems to be changing and growing in popularity every day. To overcome the price manipulation, cybercriminals activities, transaction delay, and to replace it with proper system with well focus on user perspective. Cryptocurrency exchange platform is the best place to start trading cryptocurrencies and its great source of cryptocurrency traders. You can trading various cryptocurrencies in one single platform and possible to integrate all crypto coins with cryptocurrency exchange platform.

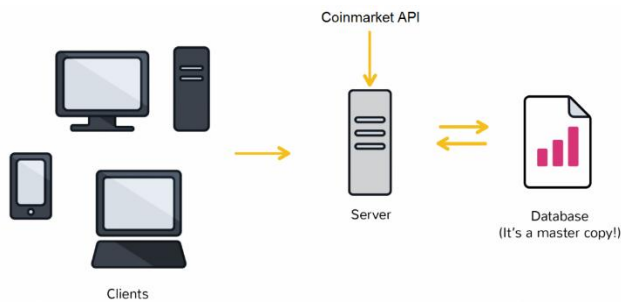


Fig 1:- System Flow Diagram

3. PROPOSED SYSTEM

This Project is about the Cryptocurrency Exchange Platform through which User can buy/sell crypto assets easily through the website easily. Administrator have all the privileges to allow the users to sell/buy online through transactions into a virtual world. Thereby, providing the platform through web have been developed to allow and unrealistic feature that user that fulfills based on user requirements.

There are several existing cryptocurrency trading system in market. Koinex loop, bitbns, coindelta flux, purse is among is a website for trading built-in with Ruby, Golang, Python, Pearl, Java other languages. Krypto Trading is aimed at developing a web-based system. In this system the person cansales online & do many things.

Blockchain is the technology supporting the process of mining and pricing bitcoins, a procedure whereby the users of this cryptocurrency make payments and transactions in an encrypted and authenticated form on a distributed database. So, we are using Coinbase & Coinmarket API's for prices and buy/sell.



Fig 2:- Buy/Sell Price Chart Diagram

Some predict that the next few years will see a big change in crypto as institutional money enters the market. Indeed, the number of daily cryptocurrency interactions is up year on year, which shows growth, despite some citing the waning nature of investors wanting to get involved.

Moreover, there is the possibility that crypto will be floated on the Nasdaq, which would further add credibility to blockchain and its uses as an alternative to current financial options. But some predict that all that crypto needs is a verified exchange traded fund (ETF). An ETF would definitely make it easier for people to invest in Bitcoin, but there still needs to be the demand to want to invest in crypto, which some say may not automatically generated.

4. IMPLEMENTATION OF THE SYSTEM

4.1. Hardware Requirements

Client side Hardware Requirements

- Processor:- Intel Dual Core or Any
- RAM:- 2GB
- Hard Disk:- Minimum 250 GB

Server side Hardware Requirements

- Processor:- Min. Intel i5 7th Gen or Any
- RAM:- Min. 4GB
- Bandwidth: Min. 250GB
- Hard Disk:- Min. 500 GB

4.2. Software Requirements

Client side Software Requirements

- Operating System - Windows 7 or Any Equivalent OS
- Web Browser - IE 9.0, Chrome v50, Firefox Mozilla or other Browser

Server Side Software Requirements

- Operating System :- Linux OS or windows10
- Languages:- MySQL, PHP, Laravel
- Web Server:- Apache Tomcat

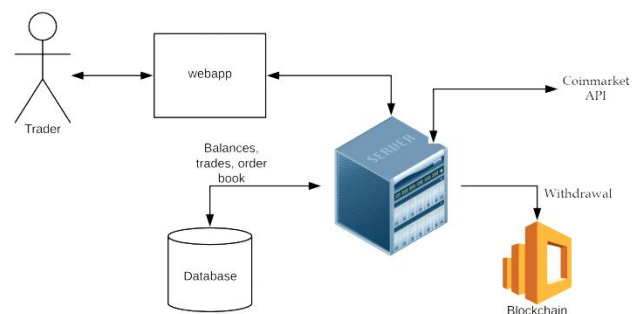


Fig 5:- System Architecture

The Homepage provide the features and general description of what services do we provide, faqs, about us and privileges for login & signup options:



Fig 3:- Krypto Landing Page (Homepage)

1. User Login

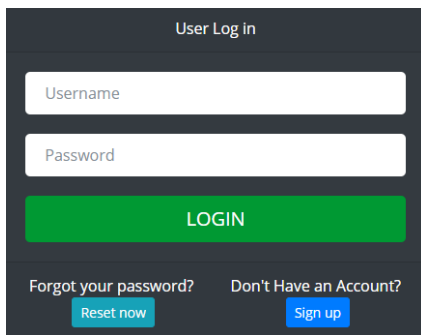


Fig 4:- Login Page (User)

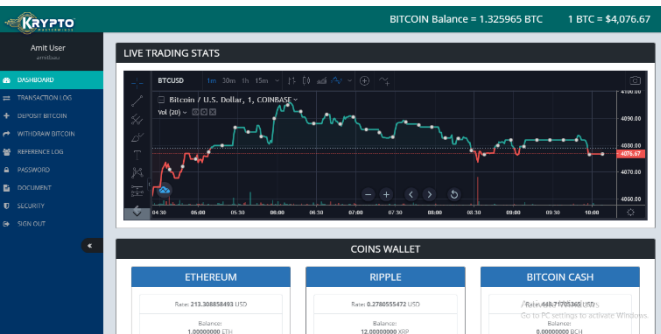


Fig 4(a):- User Dashboard

2. Admin Login

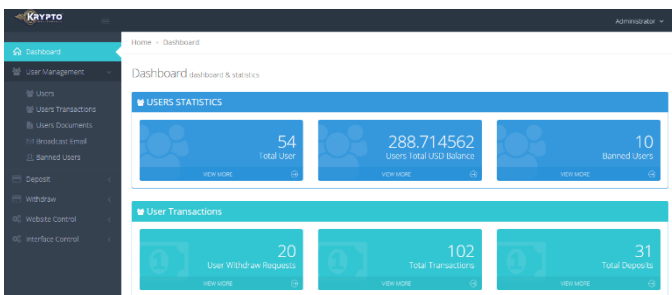


Fig 4(b):- Admin Dashboard

The User login will have the options for registering a new user or for an already existing user to login to his/her previously made account. So the existing user will have to enter their Username in the space given and type in the password for their account to access the services. It also has the option of “Forgot Password” which upon clicking will send a mail on the registered mail id regarding the retrieval or changing of password.

The Admin Login is accessed by the administrator of the application in order to make changes in the database and configuration of users and systems. Admin has privileges to authorized any user by his/her uploaded documents once verified. Thereafter user can start trading themselves by depositing in wallet and start trading.

5. SECURITY

5.1. Login Authentication (2FA)

There are several different ways in which someone can be authenticated using more than one authentication method. Currently, most authentication methods rely on knowledge factors like a traditional password, while two-factor authentication methods add either a possession factor or an inherence factor.

5.2. IP Address Validation

IP address validation relies on the fact that the majority of users will maintain a static IP over the duration of their site visit. During registration or sign up the IP in the session is logged along with date and time. So IP address help to keep the track of unusual activities from certain intruders.

5.3. Session, Hashing & Salt

The first method involves storing a unique salt in one of your configuration files, a define statement, or class constant. Salting your passwords prior to hashing (MD5, SHA1, SHA256, Whirlpool, etc.) hinders such attacks by increasing the amount of storage and computation required to crack your password. The primary concern with a singular unique salt for any number of stored passwords is that once figured out, the salt becomes utterly useless.

5.4. User Document Verification

Since after the login users UI is designed such that he/she need to be upload document for verification after that he/she can start trading in Krypto platform. Note user with valid government issued ID card are only allowed to trade and manually checked by the administrator himself.

6. CONCLUSION

So, that’s it. As you can see, each different exchange platform has slightly different advantages and disadvantages. Some specialize in giving a user-friendly experience whilst others favor more advanced trading options. Nowadays everyone wants to start cryptocurrency business. Because cryptocurrencies are always cool & profitable. Today everybody wants to

invest their time to do trading in cryptocurrency exchange platform to buy & sell the cryptocurrencies. Cryptocurrency trading & exchange marketplace could surpass the growth in 2018 & definitely trading volumes of major cryptocurrencies in the future.

7. FUTURE SCOPE

Nowadays, cryptocurrency exchange platform is the best place to start trading cryptocurrencies and its great source of cryptocurrency traders. You can trading various cryptocurrencies in one single platform and possible to integrate all crypto coins with cryptocurrency exchange platform.

There are millions of crypto coins in cryptoworld. However, 700+ coins are in trading world global. Bitcoin, Ethereum, Lot, NEM, Lite Coin, Shift, Dark Coin, Trump, Nxt, Dogg Coin & other 700+ cryptocurrencies are investment opportunities always. Its great startup ideas for traders who are the early bitcoin adopters & backers.

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