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# Simulated Share Trading Exchange-A Cryptocurrency Exchange

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**Abstract**- True cryptocurrency believers posit a world with virtually limitless applications for the block chain. They tout the prospect of a globally accepted currency that works with lightning speed, costs virtually nothing, and guarantees 100% security and anonymity while eliminating the need to trust third parties. So far, the reality of cryptocurrency has not lived up to its hype. It turns out that cryptocurrency transactions can be slow, and expensive, because the blockchain, scales poorly. However, the really interesting divergence between pitch and reality has to do with the purported consequences of decentralization — the claim that bitcoin obviates the need for trust. This article interrogates the claim that trust can be replaced with blockchain technology. It tests the claims that Bitcoin eliminates the need for trust against real world experiences of Bitcoin holders and markets. It documents the many points at which cryptocurrencies shifts the locus of embedded trust, rather than eliminating the need for such trust. Finally, the article concludes that rather than replacing trust, cryptocurrencies instead require users to repose their trust in less transparent, less reliable and less accountable parties.

**Keywords**: cryptocurrency trading system, Bitcoin, Blockchai,real time cryptocurrency trading, blockchainieee, sst(simulated trade Exchange)

### 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 Platform?

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.

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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. LITERATURESURVEY

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.

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## 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.

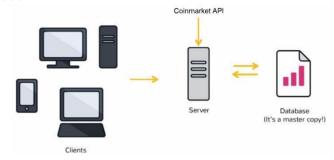


Fig 1:- System Flow Diagram

## 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. sst 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.

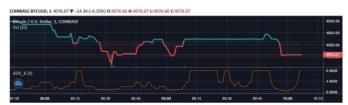


Fig 2:- Buy/Sell Price Chart Diagram

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.

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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 windows 10
- Languages:- MySQL, PHP, Laravel
- Web Sever:- Apache Tomcat

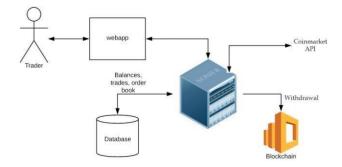


Fig 5:- System Architecture

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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:- sst Landing Page (Homepage)

## 1. User Login



Fig 4:- Login Page (User)



Fig 4(a):- User 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.

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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, Whirpool, 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 plaform 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 cryptocoins are always cool & profitable. Today everybody wants to

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

### 7. FUTURESCOPE

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+ cryptocoins are investment opportunities always. Its great startup ideas for traders who are the early bitcoin adopters & backers.

#### 8. REFERENCES

- [1] Ujan Mukhopadhyay. A Brief survey of cryptocurrency Systems.IEEE2016
- [2] S. Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System", 2009, [online] Available: https://bitcoin.org/bitcoin.pdf.
- [3] E. Androulaki et al., "Evaluating User Privacy in Bitcoin", *Financial Cryptography and Data Security*, 2013, [online] Available: http://eprint.iacr.org/2012/596.pdf. Arthur Gervais. Is Bitcoin a Decentralized Currency? IEEE.2014
- [4] Ryan Farell. An analysis of the cryptocurrency industry. available at repository. upenn. edu, 2015.
- [5] anonymous.Mining. https://en.bitcoin.it/wiki/Mining, 2014.
- [6] Jason Teutsch, Sanjay Jain, and Prateek Saxena. When cryptocurrencies mine their own business.
- [7] D. Tapscott A. Tapscott "Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money" in Business and the World Penguin UK 2016.
- [8] A. Hertig "SegWit Goes Live: Why Bitcoin's Big Upgrade Is a Blockchain Game-Changer" Coindesk 2017.
- [9] S. Porru A. Pinna M. Marchesi R. Tonelli "Blockchainoriented software engineering: challenges and new directions" Proceedings of the 39th International Conference on Software Engineering Companion IEEE Press pp. 169-171 2017.

[10] X. Xu C. Pautasso L. Zhu V. Gramoli A. Ponomarev A. B. Tran S. Chen "The blockchain as a software connector" Software Architecture (WICSA) 2016 13th Working IEEE/IFIP Conference on pp. 182-191 2016.

e-ISSN: 2395-0056

- [11] Global Online Trading System (GoTrade) Gunnar Cuevas-IEEE2007
- [12] https://www.irjet.net/archives/V6/i3/IRJET-V6I31231.pdf