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Development Of Cryptocurrency Exchange Platform For Buying And Selling Cryptocurrency

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Abstract: As the internet is becoming more accessible and convenient, larger numbers of people and businesses are shifting towards digital transactions. Therefore, it's not surprising that newer forms of digital payment systems and cryptocurrencies are rapidly being developed. When compared no other method comes even close to the giant that is cryptocurrency. Currently Cryptocurrencies like Bitcoin and Ethereum are among the most popular forms of digital payments. Cryptocurrencies could be popularized as a viable option for digital currency. Despite a huge demanding market, very few well developed platforms for exchange of cryptocurrencies are available. And there are a bunch of challenges are standing up in a growing and developing technology. The study suggests that all these obstacles can be eliminated and serving technology can be improved. this well developed platform will enhances the transaction efficiency, safety and security of cryptocurrencies.

Keywords: Waterfall development methodology.

I. INTRODUCTION

A cryptocurrency is a digital asset designed to work as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units and to verify the transfer of assets. Decentralized finance could become a platform for more innovative, inclusive and transparent financial services. Cryptocurrencies are a type of digital currencies, alternative currencies and virtual currencies. Cryptocurrencies use decentralized control as different to centralized electronic money and central banking systems. In this platform customers are allow to trade cryptocurrencies for assets. When a market order is selected, the trader is authorizing the exchange to trade the coins for the best available price in the online marketplace

Paper is organized as follows. Section II describe the related work done in the domain before. Methodology used for the development of the project and the steps used in the projects that is given in Section III. Section IV presents experimental results showing results of the implemented system. Finally, Section V presents conclusion.

II. RELATED WORK

There is the growing popularity of the cryptocurrencies and increasing awareness towards cryptocurrency investments in large no. of population in India and rest of the world, It is predicted that cryptocurrencies are going to bring huge innovative technological shifts in finance sector and will lead to growth. Due to the cryptocurrencies are based on blockchain technologies, these cryptocurrencies are decentralised so very safe about its transactions and are very efficient in energy consumption too. so, experts are very sure that the cryptocurrencies are very futuristic and reliable technology. Countries like El Salvador and Cuba have recognized cryptocurrencies as a legal tender which indicates that cryptocurrencies can be used as regular currency.

III. METHODOLOGY

The application is developed using waterfall Development Methodology. the application have three tier architecture consist of presentation tier, application tier and data tier. The presentation tier is the user interface and communication layer of the application, where the end user interacts with the application. Its main purpose is to display information to user and collect information from the user. The application tier, also known as the logic tier or middle tier, is the heart of the application. In this tier, information collected in the presentation tier is processed sometimes against other

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information in the data tier using business logic. The application tier is responsible to add, delete or modify data in the data tier. The data tier, data access tier or database, is where the information processed by the application tier is stored and managed.

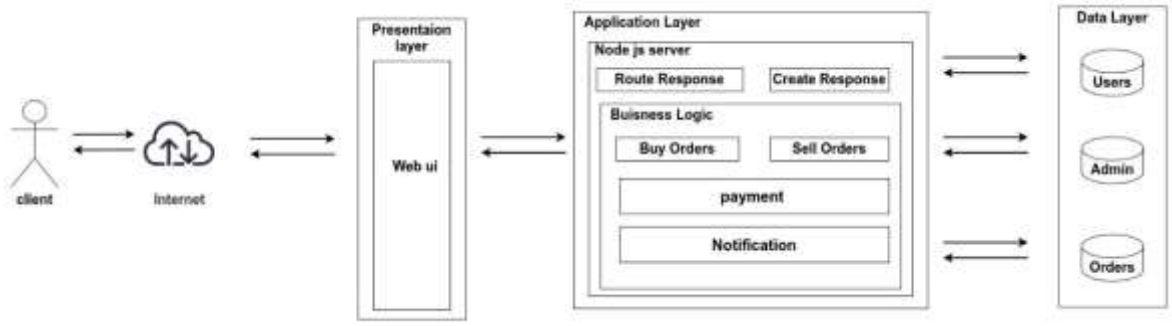

Fig 1 System Architecture

End user create the account by using interface. then user has the option like buy or sell cryptocurrency where they can interact with the 100 top most cryptocurrency for buying and selling. the application layer sends the request to admin for verification . Client fills the required information by using user interface. Database stores all the information provide by user. Final Result is generated in profile by GUI using the information stored in database. The database is handle by admin.

Steps:

1. Start.
2. Create account using right information.
3. Fill the detail and complete the KYC using the aadhaar card.
4. Login using credential and if right user gets the access to website.
5. After getting access to website user can buy and sell the cryptocurrency.
6. For buy order, Select the cryptocurrency and amount and pay through the Razor-pay.
7. After buy order is created network will approve the order. And then the cryptocurrency is credited to user portfolio.
8. User can manage their buy and sell order in the orders section.
9. User can manage their investment in portfolio section.
10. User can logout.
11. stop.

IV. EXPERIMENTAL RESULTS

All the Figure 1, 2, 3 shows the main screen of the website. The fig 1 shows the sign in screen of the website whereas The fig 2 shows the main login screen of the user where user can manage their all the order and portfolio and user can buy the new currency and sell the currency. The fig 3 shows the buy screen of the website where user can fill the detail about the currency and buy the currency and after the network approved the order the currency will credited to user account.

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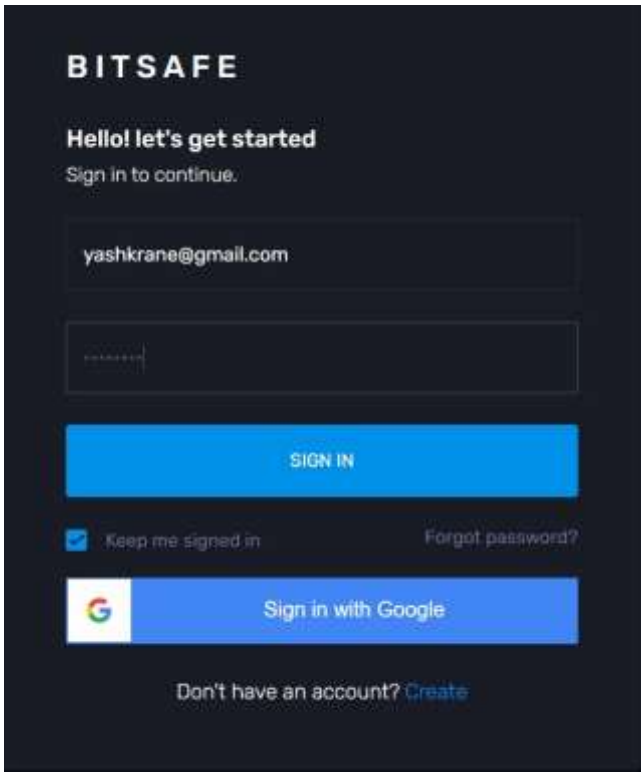

Fig 2 Sign in page of the propsed system

Fig 2 shows the sign in screen of the website. Where user have to fill the right credential and if the details are valid user gets the acces to website where they can buy and sell the cryptocurrency.

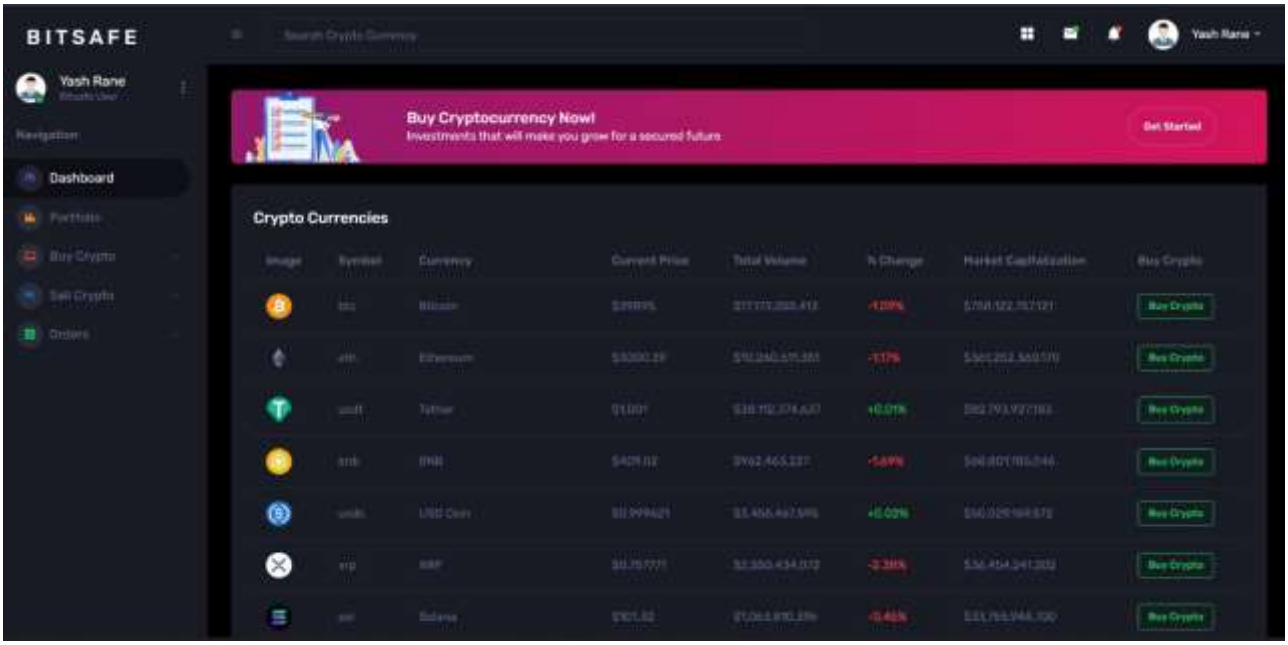

Fig 3 Dashboard

Fig 3 shows the user page. Where we can see the Dashboard, Portfolio, Buy Crypto, Sell Crypto, Order page. On the dashboard the topmost cryptocurrency are listed with all their information.

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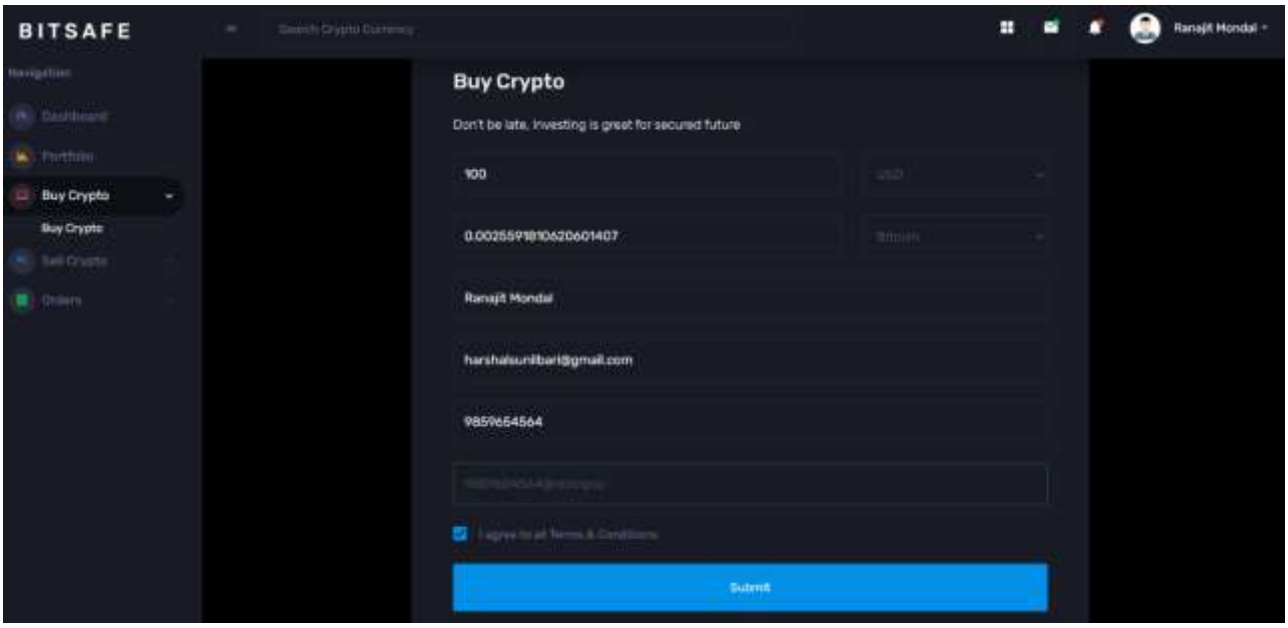

Fig 4 Buy cryptocurrency page

Fig 4 shows the buy crypto page. In this page the user can fill all the detail about which currency they wanted to buy in that user have to give the units of the currency and the currency name and walleId. And using that user can buy the cryptocurrency.

V. CONCLUSION

According to the research conducted, it is evident that there is surge in demand of cryptocurrencies due to which there is need of efficient cryptocurrencies exchange is appeared. Cryptocurrencies are very secure, safe and based on blockchain technology. The cryptocurrencies are a hot topic in the global financial system. There is great volatility of cryptocurrencies exchange rates. With this, there is a high risk of trading these cryptocurrencies. Their growth has been able to gain the attention of many speculators. They are easily portable. It is only after the required trust in the cryptocurrencies after which they will be used on a wider scale. If the cryptocurrencies fail to gain that trust, then their boom might decline. They are still in their infancy and it is not sure as to when they will be maturely traded in the markets globally. Many different cryptocurrencies have gained the required attention. This is clearly seen that demand is going to increase consistently. Due to its decentralized working system.

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