1. INTRODUCTION
2. Objective of the System:

* Provide Ecommerce that have a payment feature as Blockchain:

Cryptocurrency has become extremely popular over the past few years, but many consumers and investors are not aware of crypto’s benefit yet.

A cryptocurrency is a form of digital asset based on a network that is distributed across a large number of computers. This decentralized structure allows them to exist outside the control of governments and central authorities.

Consumers don’t know that they can use crypto for shopping purposes and use it as a source of money.

Our Website also aims to promote crypto as well as using digital india scheme too by using crypto as a online source of payment.

* Provide a decentralised crypto transaction system:

Nowadays, the most common term used is a virtual currency, the currency that is only available virtually like bitcoins, ether. So, all these virtual currencies are mined by the miners and created a new block which then added to the existing blocks thus creating the blockchain.

In our real world, there are two types of transaction that exists, centralized transaction and decentralized transaction. The centralized transactions are the one that is controlled by the one authority like RBI in India, all the transactions are controlled by the RBI. The user makes a payment through the bank payment gateway and the bank then processes the request and sends you the response for that request which is either failure or success.

While in the decentralized transactions, the transaction is not controlled or authorized by one authority but all the peer members available in the network at that time. So, in this type of transaction, the user sends the request in the form of a block. The block is then broadcasted to every party in the network which then approves the transaction and only then the money is transferred to Merchant’s Account.

* Provide News of all the Crypto in one place:

A cryptocurrency is **a digital currency, which is an alternative form of payment created using encryption algorithms**. The use of encryption technologies means that cryptocurrencies function both as a currency and as a virtual accounting system. To use cryptocurrencies, you need a cryptocurrency wallet.

This feature provides all the news and articles related to the crypto curriences that they are holding all at one place. This helps them to keep an eye on the updates and policy changes on the crypto they have.

* Provide a better price list for all the Crypto:

**Cryptocurrencies are purely digital. They have no physical form and only exist within the code of a [blockchain](https://www.bitstamp.net/learn/blockchain/what-is-a-blockchain/). Because of this, some people believe they shouldn’t be worth anything. But that’s not how pricing works.**

Cryptocurrencies are a tradable asset, much like stocks, commodities, securities and so on. Their price is determined by how much interest there is on the market in buying them – that’s called **demand** – and how much is available to buy – that’s **supply**. The relationship between the two determines the price.

If there is significant demand for a particular coin, but the currently available supply is limited, then the price increases. The demand for coins sometimes rises regardless of the currency’s true value – this is termed **overbought**. Alternatively, if a significant quantity of a coin is sold without a solid reason, it is described as **oversold**.

This feature helps users to keep a track on the fluctuating prices of all the crypto currency that are available.

* Learn everything related to Blockchain.
* Learn positive and negative impact on each sector of industry:

Technology has added efficiency and modern conveniences to daily life. These conveniences include the new digital traits computer experts have managed to apply, online currencies that are commonly called cryptocurrencies.

 Protection from inflation:

Inflation has caused many currencies to urge their value to decline with time. At the time of its launch, almost every cryptocurrency is released with a tough and fast amount. The ASCII computer file specifies the quantity of any coin; there are only 21 million Bitcoins released within the planet. So, because the demand increases, its value will increase which might maintain with the market and, within the long run, prevent inflation.

2. Self-governed and managed:

Governance and maintenance of any currency is also a serious factor for its development. The cryptocurrency transactions are stored by developers/miners on their hardware, which they get the transaction fee as a gift for doing so. Since the miners have become acquired it, they keep transaction records accurate and up-to-date, keeping the integrity of the cryptocurrency and also the records decentralized.

3. Decentralized:

A major pro of cryptocurrencies is that they are mainly decentralized. Many cryptocurrencies are controlled by the developers using it and those who have a significant amount of the coin or by a corporation to develop it before it’s released into the market. The decentralization helps keep the currency monopoly free and in restraint, so nobody organization can determine the flow and so the worth of the coin, which, in turn, will keep it stable and secure, unlike fiat currencies which are controlled by the Government.

4. Cost-effective mode of transaction:

One of the most uses of cryptocurrencies is to send money across borders. With the help of cryptocurrency, the transaction fees paid by a user are reduced to a negligible or zero amount. It does so by eliminating the need for third parties, like VISA or PayPal, to verify a transaction. It removes the requirement to pay any extra transaction fees.

5. Currency exchanges finish smoothly:

Cryptocurrency can be bought using many currencies rather like the US dollar, European euro, British unit of measurement, the Indian rupee, or Japanese yen. Varied cryptocurrency wallets and exchanges help convert one currency into another by trading in cryptocurrency, across different wallets, and by paying minimal transaction fees.

6. Secure and private:

Privacy and security have always been concerns for cryptocurrencies. The blockchain ledger relies on different mathematical puzzles, which are hard to decode. It makes cryptocurrency safer than ordinary electronic transactions. Cryptocurrencies are for better security and privacy, and they use pseudonyms that are unconnected to any user account or stored data that might be linked to a profile.

**Disadvantages of Cryptocurrency:**

1. Illegal transactions:

Since the privacy and security of cryptocurrency transactions are high, it’s hard for the government to trace down any user by their wallet address or keep tabs on their data. Bitcoin has been used as a mode of payment (exchanging money) during many illegal deals in the past, like buying drugs on the dark web. It has also been used by some people to convert their illicitly acquired money to hide its source, through a clean intermediary.

1. Risk of Data Loss:

The developers wanted to make virtually untraceable ASCII documents, strong hacking defenses, and impenetrable authentication protocols. It would make it safer to position money in cryptocurrencies than physical cash or bank vaults. But if any user loses the private key to their wallet, there is no getting it back. The wallet will remain locked away along with the number of coins inside it. It might result in the loss of the user.

1. Power lies in few hands:

Although cryptocurrencies are known for their feature of being decentralized, the flow and amount of some currencies within the market are still controlled by their creators and some organizations. These holders can manipulate the coin for enormous swings in its price. Even hugely traded coins are at risk of these manipulations like Bitcoin, whose value doubled several times in 2017.

1. Buying NFTs with other tokens:

Some cryptocurrencies can only be traded in one or some fiat currencies. It forces the user to convert these currencies into one all told the most currencies, like Bitcoin or Ethereum first and then through other exchanges, to their desired currency. It can apply to just some cryptocurrencies. By doing this, the extra transaction fees are added within the method, costing unnecessary money.

1. No refund or cancellation:

If there is a dispute between concerned parties, or if someone mistakenly sends funds to a wrong wallet address, the coin cannot be retrieved by the sender. It might be utilized by many folks to cheat others out of their money. Since there are no refunds, one can easily be created for a transaction whose product or services they never received.

* Learn outcome of Blockchain on each sector of industry.

Cryptocurrencies became a worldwide phenomenon during the talk that they are visiting to replace general currencies within the near future. Cryptocurrencies adoption continues to understand momentum partially due to the world’s progression towards a cashless society.

1. Justification and need for the system:
2. Features:
3. Ecommerce Site with Crypto: Crypto\_trans provides best ever shopping experience with not only restriction payments from banks and cards but transacting through crypo currency that you’re holding with you.

Features in Ecommerce Site:

* + - * Signup: This Page will allow user to create their account with our ecommerce site.
      * Login: This Page will allow the existing customers or users to log into their accounts to check and order products from our site.
      * Add To Cart: This will allow users to add goods into their cart and proceed further on the order page.
      * Feedback Page: This will allow users to add the feedbacks that they have regarding our site or goods and services that we deal in.
      * Forget Password: This will help those users who don’t remember the password that they have entered while signup process, they can change their password by just clicking on the forget password button.

1. Blockchain Transaction System: Not only ecommerce website but you can use this transaction system where a user can send or receive money to/from any other user.
2. Crypto News: This Feature helps users to check news and articles related to crypto currency. This helps users to know important news or related articles for the crypto that they’re holding.
3. Crypto Prices: One of the most important features is price listing, the prices changes accordingly whenever there is a change in the prices.
4. REQUIREMENT ANALYSIS

a. User Requirements (Use Case)

b. DFD / wireframe (for Website / App)

c. ERD

d. Class Diagram

e. Flow Chart or Decision table (As per requirement)

1. DESIGN OF THE SYSTEM
2. Hardware, Software requirements:

* Mongo Db for database connection
* Express
* React
* Node

1. System requirements:

* Minimum 4 Gb RAM
* 10 Gb space available on Hard Disk
* Minimum i3 Processor
* An Operating system
* Active Internet connection with minimum speed 512kbps and above
* At least one Internet browser e.g., Chrome, Firefox, Microsoft Edge etc.
* At least one installed code Editor to test and debug the code.

c. Detailed System Specification (Module Wise: Input , Output , Functional detail)

d. Table description

4. IMPLEMENTATION

a. Screen Shots

5. TESTING & TEST RESULTS

a. Sample test data/ Output screen printouts etc.

6. CONCLUSION

a. Conclusion

b. Future Scope