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Bither

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Bither

Bither is an infrastructural protocol that you can produce and run your required applications and smart contracts in decentralized way on a safe base called **blockchain** with most of the programming languages and even with no programming knowledge or skill. Bither is trying to provide a more reliable and safer world using blockchain technology. In this regard, the experienced experts at marketing and technical affairs has begun a close coordination with bither to achieve more goals.

Fast, safe and reliable; are just some parts of uncountable facilities the platform enables programmers to use them. They can produce codes for security of programs and smart contracts with no need to consider any programming complexity, and to implement products at the shortest time possible.

In addition, this platform can be used for safe money transfer with the lowest fee, at the shortest time and no restriction for money.

Therefore, you can pay the bills of websites and shops online, peer to peer and machine payments by bither. To achieve this performance, some wonderful actions are being done.

Blockchain

This is just an example: When you deposit in a bank, they save information related to this account in a centralized database. Against bank system, information is available to all people in bitcoin. Bitcoin has solved these problems by dividing database to small sets called **blocks**. These blocks are distributive and available for all. In another word, everyone who uses bitcoin, saves a copy of whole database called blockchain. Blockchain is shared among all users of bitcoin to investigate bitcoin addresses values and to prevent any double payment and other vandalism.

Blockchain is a new technology being used in online financial transactions. It is possible to fine other usages. This technology will be used to distribute, identify and enroll a wide range of financial services. However most people think the only usage of blockchain is being used in bitcoin, it can increase

people's trust to the Internet. For instance, it can be an interface for financial transactions between people and stuff in addition to connection stuff to each other and to the Internet. This technology has allocated the most investment – one billion dollars - on an emerging technology to itself last year. Blockchain was designed to prevent tricks on transactions. This is a distributed database. Everyone can investigate validity of any transactions.

Blockchain technology works like digital signature. Safe Information transfer from a place to another would be possible. The most significant merit of this technology is the powerful auto tuning. Blockchain is an open source technology. Nobody owns blockchain. It has no central executive to validate transactions. So it automatically tunes network. Blockchain can be a database, protocol or software. It would not be possible to rewrite or change when information saved. This design enables blockchain to create a permanent history. Such technologies are clearly charming in several aspects (usually implemented on an unsafe network) such as; commercial, financial transactions and information transfer.

Banks and fiat currency

With the advent of banks, banknotes were printed and the first Fiat currencies emerged. Fiat currency is printed with the backing of gold and silver. It means the same amount of silver or gold must be existed in the storages of central bank. Otherwise, they face many economic problem.

Online banking and intermediary companies

The internet solved many problems. One of its usage is online banking. The users can have their own bank at home or mobiles. No requires to going to bank to do their transactions like payments. But the big problem was that users could not purchase anything online from other countries' websites in the first years. So in 2001 **PayPal** Company officially released a service that enabled the users to pay online across the world. PayPal is an intermediary company and enrollment is required for using.

The advent of bitcoin

Bitcoin was born in 2009 and revolutionized world economy. Bitcoin is the first decentralized digital money to prevent inflation and keep money value and people's properties in a long time that was presented by Satoshi Nakamoto in

2009. Bitcoin involved into money and started one of human's dreams; a smart world with no intermediate. Several currencies and many decentralized projects appeared after bitcoin. Bitcoin is absolutely the most important economic phenomenon in 21st century.

Bitcoin

Bitcoin is an internet innovation with similar functions of "unbacked money" or Governmental money. This innovation means bitcoin's creators has succeeded to convert this idea to a significant fact in a short while. Because the value of bitcoin has been increased from less than 1\$ to several hundreds of dollars in global markets. It is possible to pay at any price.

Bitcoin network does not have any centralized controller. No governmental organizations or institution manage it. Money transfer from a point to another is informed across the network and all points will be aware of that. Before bitcoin has been invented, online financial systems required a central controller system for security. Satoshi Nakamoto suggested an alternative way "proof of work" by offering an innovative way in peer to peer network.

Bither

Platform for making applications and smart contracts in blockchain base

Bither is an infrastructural protocol that you can produce and run your required applications and smart contracts in decentralized way on a safe base called **blockchain** with most of the programming languages and even with no programming knowledge or skill. Bither is trying to provide a more reliable and safer world using blockchain technology. Fast, safe and reliable; are just some parts of uncountable facilities the platform enables programmers to use them. They can produce codes for security of programs and smart contracts with no need to consider any programming complexity, and to implement products at the shortest time possible.

In addition, this platform can be used for safe money transfer with the lowest fee, at the shortest time and no restriction for money.

Therefore, you can pay the bills of websites and shops online, peer to peer and machine payments by bither. To achieve this performance, some wonderful actions are being done.

The purpose of creating bither is to provide a safe protocol for payment and to produce decentralized programs on Blockchain. Bither is a safe and reliable base to make easily with no complexity related to programming, on the safe base "Blockchain". Its purpose is based on two critical categories:

1. Technical department

Bither is trying to easily, safely and quickly provide the process of producing small and big programs on the safe base of blockchain by compiling more programming languages. In this regard, developer team of this protocol is trying to produce small programs on blockchain in wizard for those have no technical knowledge. Technical team of Bither including some experienced, creative, active and interested experts have intelligent ideas about payment way, sample and practical programs production on blockchain that make a significant future for this technology.

Technical section goals

Blockchain technology and encryption system will make our world's future, because this useful, safe, reliable and simple-complicated technology will give us wonderful facilities can be used to provide a healthier, safer and more reliable world. In near future, this will become one of inseparable part of any businesses, because reliability and safety will be a requirement and expectation. If your business does not follow this rule, you will not receive an acceptable response from your customers even your business is still alive. This is a smart decision that every business can do something special to develop and rescue itself.

However moving from traditional and old-fashioned systems to universal, safe and reliable blockchain oriented seems too difficult and complicated. This is a fact. Therefore this change scares people. Cause of that, technical team of bither is going to make this process easy. They have big applicable objectives to decrease risk of transformation. At first, this team has started with strong

compilers for several programming languages. It enables all programmers to safely and reliably produce programs and smart contracts on bither in decentralized way.

Attention: the compilers are always updated by technical team and more progress of the compilers for several programming languages will be continued.

In the second place, the concerned users are those have no technical skills about programming, however they need decentralized programs or smart contracts. In this regard, technical team special and amazing plans for them:

Technical team of bither suggest making some wizard programs and practical smart, simple or complicated contracts to normal users. Smart wizards produced by technical team give them many amazing options. So they can use them to establish their own business or smart contracts by only some clicks or change a little depending on their requirements and give their own users.

2. Marketing department

Marketing team of bither is always trying to provide payment in the real world and companies, organizations, institutes, academic colleges and medical centers. It supports them in all aspects such as production of required plans or programs. This team includes some creative, interested and experienced experts who are experienced in the real world and virtual world. This is very important to help them to achieve this protocol's goals. One of items that bither entered to work in virtual and real marketing based on is the impact of strong capability to grow the protocol fast.

Available bugs and solutions:

In crypto currency world, we often have faced amazing and sometimes impossible ideas. When we take a look at these projects, we understand they are acclaimed. They always held ico with validity and amazing visualizations of its idea and project. They collect a lot of money even not required and dose not motivate them to continue the activities. Cause of that, there are a few

committed companies which go across their specific goals. It means there is a meaningful gap between specific goals and achieved goals.

Many of these companies waste the time of production and goals to enter their coins and tokens in exchange websites. This causes the coins' or tokens' owners sell and buy them under the influence of developers. In this situation, it is possible the developers start to inject much money to the coin and make it valuable with no justification,

Bither team has specified different ways to achieve its goals. It is "being active in real and virtual world" and "get companies' attention to take part" using provided base of bither.

Smart contract and Dapps:

Using the bither platform, you can create and execute decentralized applications and smart contracts, as described below ; Here are some of the advantages:

Decentralized applications (Dapps)

Blockchain technology has opened a new gate in the field of decentralized applications which used to produce and run clear and reliable programs. This will make a revolution in applications production. By using this technology we can produce decentralized and unstoppable programs which in there will be no interface to manage users' information. It means that users can utilize all Apps' options and facilities unlimitedly and with no censorship. Since decentralized applications are available as open source app, their function can be investigated and certified.

Advantages of decentralized Applications

- Reliable
- Clear
- Unchangeable and unstoppable
- Staying safe from ddos attacks

- Information security
- Lack of interface, No management of users information by third person
- Decentralized information
- So on

Using blockchain and producing decentralized Applications has many difficulties throughout the design, besides the advantages available for programmers. Writing blockchain base for decentralized applications is too difficult and time-consuming. It is a reason to not used blockchain. Therefore bither has provided this base for programmers. They can produce decentralized applications on blockchain at the shortest time with less difficulty and feel comfort about the safety and speed. Despite these, technical team of bither is always in support of developers and programmers to make decentralized applications on blockchain base.

Smart contracts:

Smart contracts in bither system are known as decentralized applications (dapps) can be used to run a new generation of contracts based on trust. Fast design, certification and running the codes using the miners are the critical features for these contracts .Smart contracts are the computer codes perform a part of traditional contract in blockchain section. Everyone can investigate theses codes and use the contract if agrees. This such a clarification causes all the users feel comfortable about completely implementing the contract with no changes in the terms.

Background:

Bither is a platform under blockchain that uses Proof of Work system (PoW) in its chain. It means the transactions need to be mined for confirmation. The miners are in charge of this responsibility. Algorithm used in this blockchain is ethash. It is an updated version of kodac algorithm. This algorithm can start mining in bither network with the miners using CPU and GPU. We recommend GPU as the stronger device in mining. You should also note that, mining naturally will be more difficult as the bither chain goes ahead.

In bither platform, data mentioned below is saved in each block:

Hash: Hash block. The miner finds this hash, then creates the block.

Difficulty: difficulty of network during this block.

Miner: a person who has mined this block.

Gas Limit: the amount of gas usable in this block.

Gas Usage: used gas is a portion of gas limit.

Time: the time block is mined.

Size: volume of block.

Extra: miner can put message or anything in this section.

Nonce: nonce of this block.

Reward: the reward given to miner of this block.

Transactions: performed transactions in this block. It can be empty.