



Smart Contract DAPP Based On Ethereum

## White Paper

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## 01. Abstract

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Blockchain is slowly changing the world, as in the years when smartphone exploded. With more and more commercial transformations. Blockchains are increasingly adapting to a variety of business scenarios and will change or subvert more and more industries. And today we're going to talk about DApp.

DApp is an abbreviation of Decentralized Application, translated as: Decentralized applications. App, as we all know, is the application program we installed on smartphones. The DApp has a more 'D' than the App, and 'D' means decentralized. So, it means a decentralized application/decentralized application.

DApp is an internet application, the biggest difference from traditional apps is: DApp runs on a decentralized network, which is a blockchain network. There is no centralized node in the network that can control DApp completely. And we all know that the App is centralized. You need to request a server to get the data and process the data, etc.



The blockchain is the underlying environment for the application to run against the DApp. Simply, it can be analogized to IOS, Andorid and other mobile operating systems running on top of various apps. If we think of block chains as a database that can't be tampered with, and smart contract as programs that deal with databases, it's easy to understand Dapp. A Dapp doesn't just have smart contract, but also needs a friendly user interface and other things. Smart contracts are very suitable for the application scenarios requiring high trust, security and persistence. For example, scenarios that can be applied in the future include: Games, digital money payment, digital assets, voting, insurance, financial applications, forecast market, property rights management, Internet of things, point-to-point transaction, decentralized autonomous organizations, etc.

The birth of the blockchain makes the Internet industry take off once again. In the future, it will have unlimited imagination space. Blockchain games and payment have the characteristics of safety, efficiency, decentralization, non-tampering, fast building consensus and trust, automatic execution, cost saving, more accurate transaction, and no interference from any third party. With the popularity of numerous capital crocodiles and geek teams, there is huge room for growth in the future. While "100Luck" is an efficient, secure and automated DAPP based on the Ethereum network. It belongs to a bonus game.



## 02. Smart contract of the Ethereum

### ■ What is Ethereum?

Ethernet workshop (Ethereum) is a decentralized application platform based on block chain technology. It allows anyone to build and use decentralized applications running through block chain technology in the platform. You can understand Ethereum as an Android system, which is a development platform on which various applications can be loaded. Users can use Ethereum as a "financial block", on which it is easy to issue money, customize derivatives, and to build identity system and decentralize organization. Therefore, it is also known as Block Chain Version 2.0. With its commitment to reducing complexity and characteristics, Ethereum becomes a common underlying platform, openly and decentralized, which can create a wide variety of applications.

### ■ What is the smart contract?

The program at Ethereum is called a smart contract, which is a collection of code and data (state). Smart contracts can be understood as contracts (event-driven) that can be automatically executed (event-driven) on the block chain and written in code. Compared to Bitcoin, Ethereum is more complete (in computer science jargon, it's called "Turing complete"), which enables us to write programs that can do almost anything (smart contracts), just as we do in any high-level language.

## 03. The reliability of Ethereum network and smart contracts

### ■ Distributed Interface, which is stable and reliable

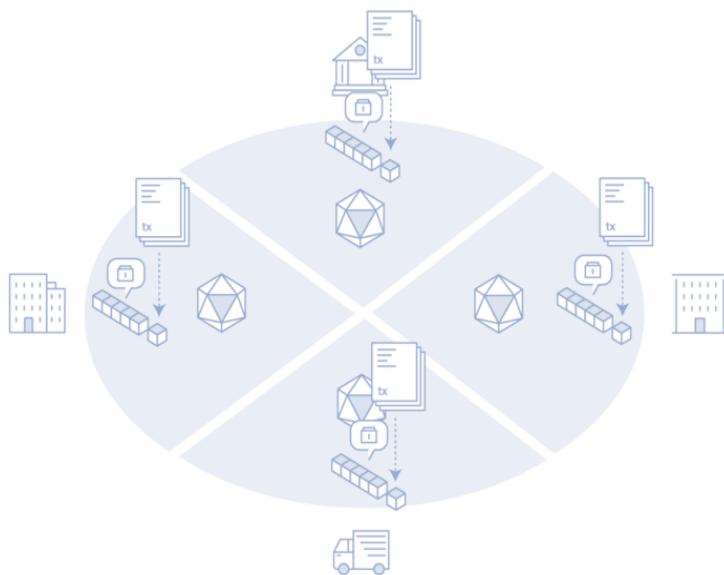
The distributed structure adopted by the bottom block chain of Ethereum ensures the security and reliability of data and storage. Distributed structure refers to multiple paths between nodes in a network. Distributed structures have no fixed form of connection. There is more than one path from the sending point to the receiving point. During the communication, the network selects the actual path in accordance with the dynamic situation of each node. The control function of the communication is scattered over the nodes. It is one of the most complex structures. Its



communication control is also the most complex, and the management of data resources scattered on various nodes is also very complex. Because there are many paths between nodes, it has high reliability to ensure communication when some nodes and links fail.

## ■ Distributed accounting

The distributed accounting of Ethereum can ensure the security and authenticity of account book. The record of historical transactions is passed to each node in the Ethereum, that can own and store a complete and consistent transaction record. Even if the account book of individual node is attacked and the data is tampered with, the security of the general ledger of the whole network will not be affected.



Schematic diagram of distributed accounting book

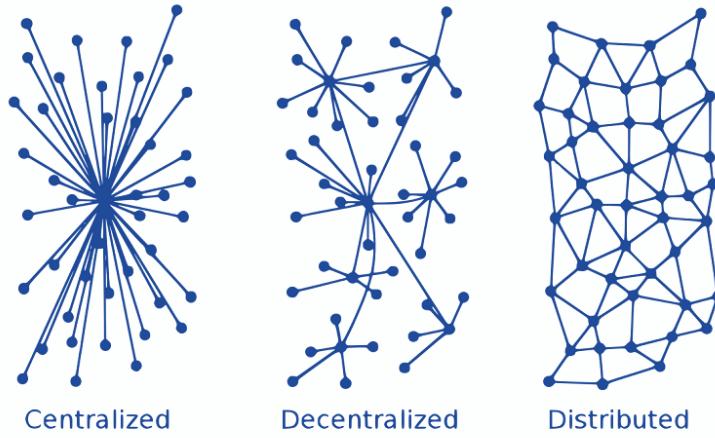
## ■ Distributed propagation

The nodes of the whole network are connected by the agreement point of underlying network, and there is no single centralized server. Messages are sent directly from a single node to all other nodes in the whole network through the P2P network layer protocol.

## ■ Distributed storage

Distributed storage All data is stored in the computer of each node through the distributed propagation and that can be updated in real time ,which is equivalent to sharing data such as account

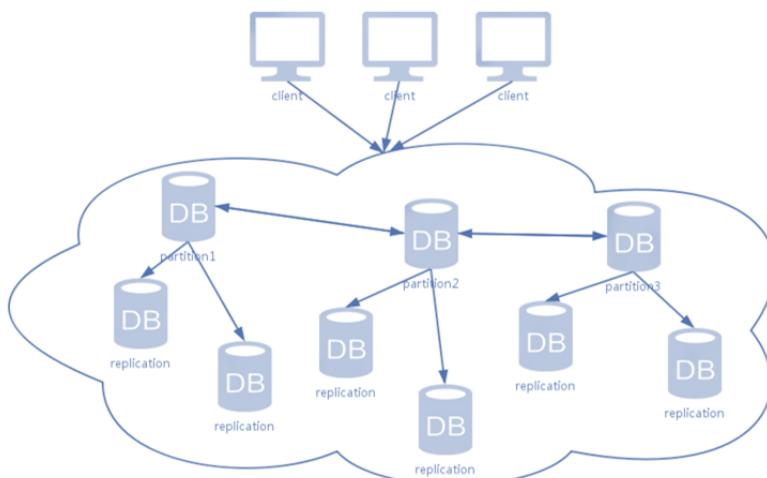
book in real-time with all network nodes. Decentralization is realized, and data tampering caused by single node attack is effectively avoided ,which greatly improves the security of the database.



## ■ Decentration and trustworthy mechanism

The bottom block chain of Ethereum realizes decentralization and intelligent contract technology through the distributed structure, and constructs a trustworthy mechanism which is not human-centered. Each connected computer is an individual instead of a central server, which is connected to thousands of other computers by protocol, and eventually is connected to a dense network of computers around the world, where messages sent from one node can eventually spread to all nodes around the world. The advantage of this architecture is that even if some nodes fail, it will not affect the communication of the entire network.

This chain transmission mechanism makes each endpoint of the chain become the source of information, and when the information of one endpoint of the block chain system is changed due to





other external reasons, which can not affect the legitimacy of the overall data. This kind of decentralization and trustworthiness mechanism, which relies on intelligent contract mechanism and strong consensus mechanism that is not influenced by human factor within the block chain, and is very valuable.

### ■ Stronger security consensus mechanism, third party is not involved

The intelligent contract of Ethereum is a digital contract based on cryptography technology that is a computer program, not a traditional paper contract. Intelligent contract is a program that automates the processing of traditional contracts in the form of computer instructions. Briefly speaking, a smart contract is a piece of code that triggers execution when both parties trade on a block-chain asset that is called a smart contract.

#### **Smart contracts have the following advantages:**

(1) The contract is written into the block chain in the form of digitalization, because of the characteristics of the block chain, the data can not be deleted and modified, and the whole process is transparent and traceable, which ensures the traceability of history;

(2) Because the behavior will be recorded permanently, the interference of malicious act on the normal execution of the contract can be avoided to a great extent.

(3) Decentralization avoids the influence of centralization factors and improves the advantage of smart contract in cost efficiency;

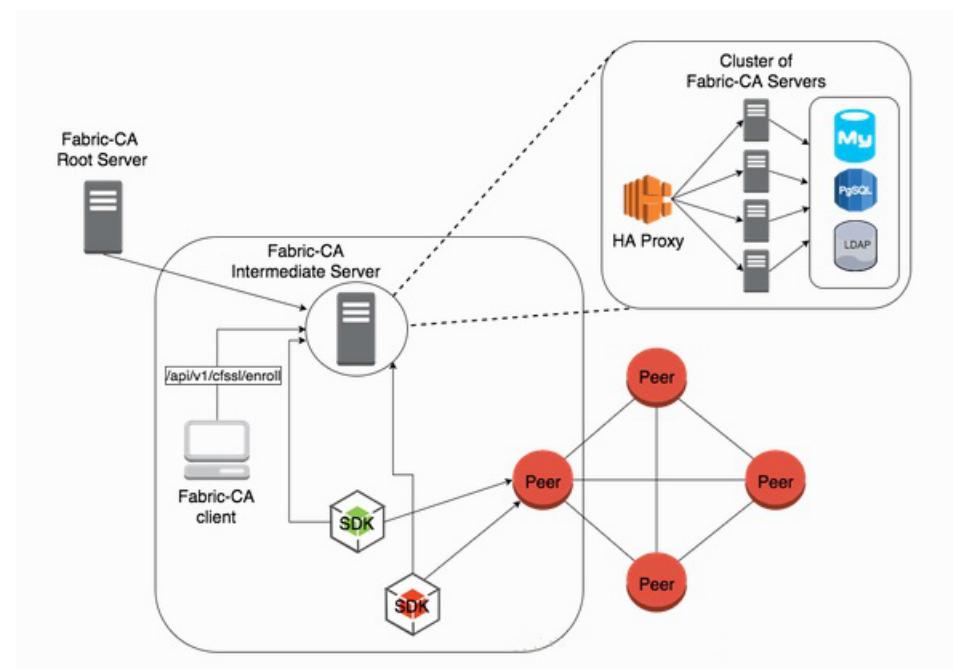
(4) When the content of the contract is met, the code of the smart contract will be started automatically, which not only avoids the manual process, but also ensures that the issuer can not

breach the contract;

(5) A state machine system is constructed by the consensus algorithm of block chain, so that the smart contract can run efficiently.

### ■ Information can not be tampered, which can ensure the transaction safety

The Pow consensus mechanism adopted by Ethereum bottom block chain, the link relationship between public chain and private chain, and the consensus mechanism make the information can not be tampered with and ensure the security of block chain data storage. If consensus is the basis of block chain, then consensus mechanism is the soul of block chain. Consensus mechanism is an algorithm to reach a consensus on the order of things in a period of time. On the blockchain, everyone will have an account book of all the transactions in the chain, and when a new transaction is generated on the chain, everyone will receive this information at a different time. Some people who want to do bad things may publish the wrong information at this time, and then one person needs to verify the information received by everyone and finally publish the most correct information.



### ■ Asymmetric encryption is adopted to ensure the security

Elliptic Curve encryption (ECC) is a public key encryption technology, which is based on elliptic curve theory and can be faster, smaller and more efficient when creating keys. Instead of using the product of large prime numbers, ECC uses the properties of elliptic curve equations to generate keys.

Elliptic Curve Cryptography (ECC) is a kind of public key encryption technology. Based on elliptic curve theory, it realizes encryption, decryption and digital signature by making use of the discrete logarithm of Abel group composed of elliptic curve points over finite field. By correspondence between the addition operation in the elliptic curve and the modular multiplication operation in the discrete logarithm, the corresponding cryptosystem based on the elliptic curve can be established. An elliptic curve is a plane curve determined by the following Weierstrass equation: E:  $y^2+a_1xy+a_3y=x^3+a_2x^2+a_4x+a_6$ .

ECC has great development potential in intelligent terminal applications because of its small key length, high security performance and low time-consuming digital signature. For example, palmtop computer, mobile phone and so on can have better performance. In the network, ECC algorithm also ensures the real-time performance of its cooperative work. Using ECC algorithm to encrypt data with high sensitivity level (such as key) can meet the requirements of large amount of data at speed, and has high security, and it can ensure the safety of the system very well.



## 04. 100Luck—smart contract based on Ethereum network the feature of DAPP

### ■ Decentration

100Luck has no centralized database, all applications are open source, run independently rather than controlled by an entity, and all data and records are encrypted on an open and decentralized block chain. Unlike traditional applications, it has no actual controller and is managed by 91 nodes around the world, which are distributed in the United States, Russia, China, Australia, France, Japan, the United Kingdom and other countries.

## ■ Data encryption, data security

100Luck is a block chain system based on Ethernet. The distributed interface and smart contract technology in block chain technology enhance the security and reliability of data. 100Luck is developed based on Ethernet network, which adopts decentralized technology to increase the security and data transferability of the system through the chain relationship between the sub blocks and the main blocks of the block chain. At the same time, the system adopts a variety of encryption algorithms, POW consensus mechanism, security encryption algorithm, etc., not only through the chain encryption provided by block chain technology itself, but also through bank-level user data encryption, dynamic authentication, multi-level risk identification and control to ensure the safety of capital transactions.

## ■ Code open source, trust relationship is built automatically

100Luck already has a mature self-open source self-help contract mechanism that automatically builds trust relationships, information security and consensus. Smart contract is a digital contract based on cryptographic technology, is a program, it realizes the automatic processing of the traditional contract in the way of computer instructions. Smart contract is written into the block chain in the form of digitalization, because of the characteristics of the block chain, the data can not be deleted and modified, and the whole process is transparent and traceable, which ensures the traceability of history. At present, 100Luck has built a mature, open source smart contract algorithm, which can quickly transplant the system to other systems, quickly establish the trust relationship within the system, and quickly serve the system.

## ■ The data can not be changed and the system runs automatically

100Luck can define the smart contract rules within the block chain, so the data can not be changed, the system runs automatically, and there is no need for human intervention. One of the characteristics of smart contract is that after the internal program rules are defined, it can not be modified. 100Luck open source contract mechanism makes the running of smart contract system. When the use of source code 100Lucks the requirements of the program, the system will run automatically and do not need to maintain the system instructions manually.

## 05. 100Luck activity introduction

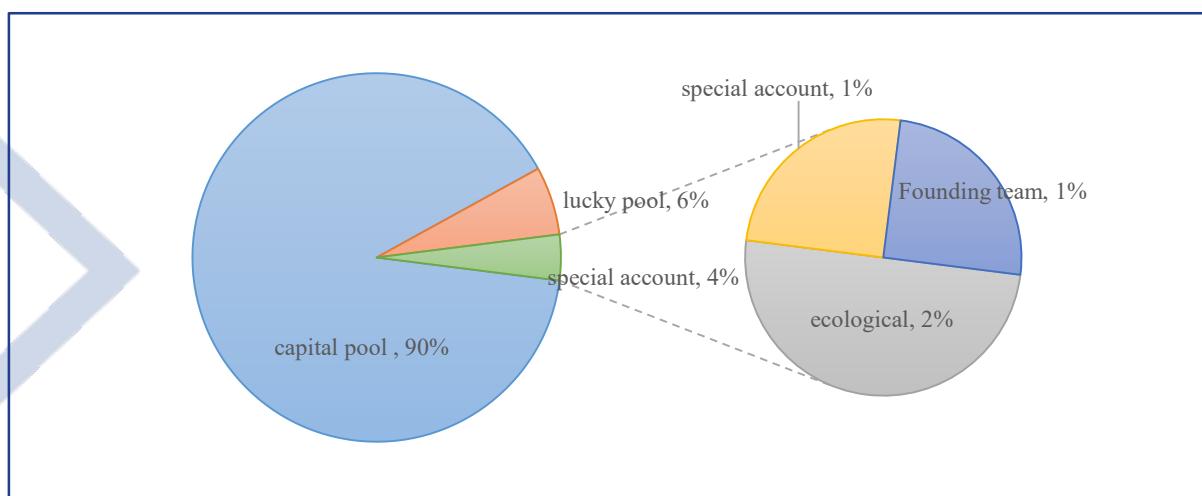
100Luck, Chinese full name—"100 lucky people", unique innovative play so that every player has no worries, the last 100 players will carve up the lucky pool to get a huge return, do not have to worry that they are the last one.

100Luck is based on the DAPP dividend application run by Ethereum network, using smart contract technology, all the rules are written to death, there is no background operation, there is no central database, the source code is completely open, can not be tampered with, and the intelligent contract is executed automatically.

Revenue is automatically settled from the contract address to their own cold wallet address, there is an essential difference with the central platform, do not need to withdraw cash manually, waiting for audit time, etc., welcome technical bigwigs to check and audit.

All players who enter the Ethereum network are automatically assigned to the Ethereum network smart contract address for the following proportions:

90% of the betting amount goes into the betting pool and is used for bonus settlement; 6% of the betting amount went into the lucky pool, and the last 100 lucky people divided up the lucky pool according to the proportion of bets in Ethereum network. 4% of the betting amount goes to the special account, of which 2% goes to ecological application development and construction, 1% to the Lucky token Development Fund 1% for founding team awards and 80% of monthly earnings to pay dividends to the game.



## 06. LOGO Implied meaning

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- ◆ Official website of 100Luck: [www.100Luck.org](http://www.100Luck.org)
- ◆ 100Luck -- full name in Chinese: 100 lucky people
- ◆ 100 represents the last hundred players. Luck means Luck, which means "100% Luck" for participating players. The last 100 players in 100Luck will divide up the lucky pool and get huge returns.

## 07. 100Luck reward mechanism

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### ◆ Differential income

A1: 1-5 ethereum daily dividend: 0.5%

A2: 6-10 ethereum daily bonus: 1%

A3: 11-50 ethereum daily dividend 1.2%,  
(automatic)

### ◆ Dynamic reward

A1: 50% of first generation, 20% of second generation, 10% of third generation (with burns)

A2: 1 generation 100% 2 generation 70% 3 generation 50% 4 to 10 generation 10% 11-20 to unlimited generation 5% over 21 generation daily bonus 1% (with burns)

A3: generation of second generation of the three generations of 70% and 50% 100% 4 to 10 or 11-20 to 10% infinite generation 5% daily dividend 2% above 21 generation (not burn) (automatic)



### ◆ Grade income statement

Grade	invest	earnings	1 layer	2 layer	3 layer	4-10layer	11-20layer	Countless layer Push two straight	burns
A1	1-5	0.5%	50%	20%	10%	-	-	-	with
A2	6-10	1%	100%	70%	50%	10%	5%	1%	with
A3	11-50	1.2%	100%	70%	50%	10%	5%	1%	without

Note: Officially online, the game completed 6 rounds, intelligent contract automatically open V3 level. The fund pool is 0, all accounts return to zero and reshuffle, retain the recommendation relationship, smart contract automatically carve up the lucky pool to the last 100 users, start a new round of games.

## 08. Rare global payment currency-Lucky

**Token name: Lucky**

Lucky based on Ethernet network operation, the number of rare and precious value, total 1 million, team with 10%, 10% for funds, 80% of the currency by 100 luck Dapp dropped to a player, the intelligent contract will automatically drop betting records according to the chain Lucky to all 100 luck players, we will do truly valuable encrypt digital currency, COINS, refused to air as the 100 Lucky launched in succession the growing global mainstream exchange as well as the ecological, the Lucky has a great appreciation of space.

## 09. Applied ecology: Blockchain payment and games

■ Blockchain + payment (faster)

As we all know, there are billions of turnovers in global payments every year. Most of the international transfers are through Western Union Bank. The cycle is long and the cost is high. From daily international travel of clothing, food, housing, transportation, medical care, we can feel that the



transnational payment is extremely inconvenient. Currently, there is a lack of a truly global currency for cross-border payments. The Lucky based on blockchain technology is born for global payment. It uses blockchain technology, which is safe, fast, convenient and low-cost in the payment process. We will start from the bonus game, issue Lucky tokens, and the number of Lucky tokens is very limited. The future appreciation space is huge. Players can use it as payment currency, and also can collect it as souvenir. In the future, a series of blockchain-based technologies will be developed with Lucky tokens as the payment base currency. Open and fair smart contract applications will be successively launched, so stay tuned.

### ■ Blockchain + games (more secure)

The Internet game industry is also a huge cake, rigid demand market, and an area that will soon be subverted by blockchain technology. We hope to recruit the first batch of investment players through this game, on the one hand, through the game form to raise funds for the development of chain payment and chain game applications; On the other hand, to recruit a large number of players to participate in the game, earn dividend income and promotion income, form player big data, and send out earnings to all players through the smart contract according to the size of the contribution, to prepare for the market for chain payment and chain game applications.

## 10. Basic principles of 100Luck

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- ◆ Fair (blockchain technology)
- ◆ Just (DAPP Smart Contract)
- ◆ Open (open source code)
- ◆ Recognized (mainstream wallet such as imtoken, mainstream currency Ethereum)

## 11. Advantages of 100Luck

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"100Luck" adopts blockchain technology, has no trader, no server, no central account. It is the world's first one only certified by Ethereum block official website and passed: "Open source smart contract", all source code has been encapsulated in the Ethereum public chain, no one can tamper with the code, tamper with the system, use the Ethereum assets in the contract. "100Luck" in the

Ethereum public chain, according to the smart contract agreement, automatic settlement, automatic operation, automatic arrival, never shut the network!

## 12. Distinction from the conventional system with 100Luck

### Traditional project

- I. There are centralized accounts, project-side packaging, institutional rules changing at any time, artificial control, unpredictable people, and misappropriating and escaping.
- II. There is a centralized APP and server database, which can be closed or stopped at any time, and it is impossible to know the movement of funds.
- III. Registered members (requires real-name authentication, mobile phone number, email address, identity information, network map, RMB flow... The data evidence chain has legal and financial risks).

## 13. Open source smart contract application 100Luck

- I. The currency standard Ethereum is invested and dividends are also Ethereum, and no currency is converted.
- II. Using Ethereum public chain technology, DAPP smart contract, completely decentralized, open source code can be publicly inspected, welcome the review, testing and demonstration of the global technology giant.
- III. All systems and rules, dividend settlement methods, are all written to open source programs, and can not be changed. The smart contracts are automatically executed (can not artificially change all data such as background and system). No one can use the Ethereum assets of the contract address.
- IV. There is no danger of policy, law, finance, platform running, etc. The globally recognized cold wallet protects your assets..
- V. Automatically identify the decentralized cold wallet address (imtoken, mathwallet, etc.) and the DAPP blockchain browser to enter directly..
- VI. There is no need for real-name registration, no identity authentication, daily dividends, automatic settlement, no commission, no specific withdrawal time, and the essential difference from the centralized account.



# TEAM

## 14. Our team

Our team comes from all over the world. Currently, the team has a total of 38 people from Russia, USA, Australia, China, Japan, and Korea. The promoters are from Russia, one of the core members of the Ethereum community. We share common hobbies and goals. We firmly believe that blockchain smart contracts will bring a fundamental revolution to the Internet. We are experts in blockchain technology applications. I hope to develop more and better blockchain applications and change the world.



### **Анатолий Dempsey Team sponsor**

born in 1981, Russian, graduate student, graduated from Moscow State University, majoring in computer. Technology genius, with 9 years of experience in blockchain development, has unique insights into the innovation and application of blockchain, and has built a complete technical solution based on blockchain technology.



### **Channing Luck co-founder**

born in 1989, England, graduate student, graduated from SMU Southern Methodist University, majoring in marketing, accounting, finance, ITOM and management, after that specializing in computer science. Has a five-year blockchain investment experience, specializes in advertising design and market psychology, proficient in computer programming and fluent Chinese.



## Cleveland

Cleveland was born in 1989. She was born in Russia, American, master's degree, graduated from North Carolina State University, majoring in economics, accounting, finance and computer science. A well-known overseas investment company manager with three years of blockchain investment experience and own financial management company in the United States. Proficient in financial management and Chinese..



## Larry

aussie, undergraduate, majoring in marketing and computer science and applications, graduated from St. Petersburg Aerospace Instrument University. He has 10 years of experience in computer software development and application and three years of blockchain investment experience. Proficient in computer programming and consumer psychology..

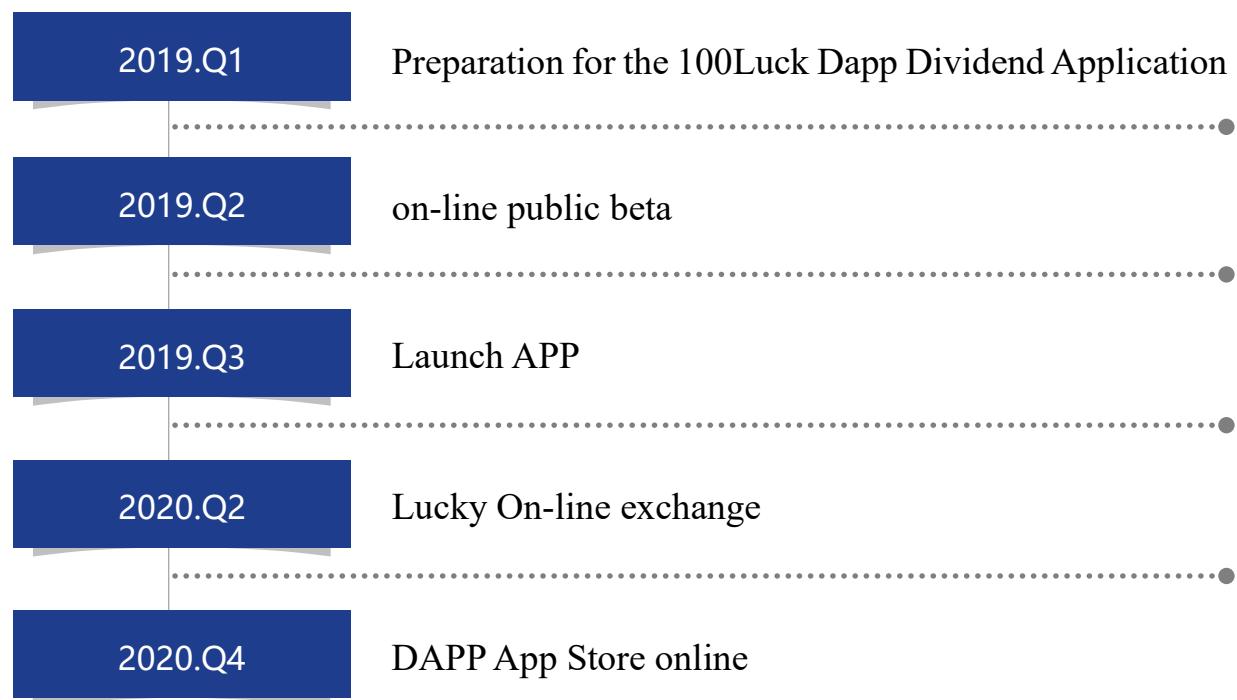


## Elvis

Born in 1987, American, PhD candidate, graduated from north Carolina state university, majoring in computer science. With many years of system development and design work experience, five years of blockchain investment experience, in the United States has its own computer software design and development company. Proficient in computer programming and software development..

## 15. Route map

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## 16. Risk warning

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Investors must carefully read the project white paper before participating in this "100Luck" investment. Unless the investor understands everything in the project white paper, the project vision, and the risk of possible failure, it should not be involved in "100Luck".

Participate in the public offering, please do a good job in project research and participate carefully. The Investor agrees that it is possible or not to use the Platform to be risky by the Investor and not to hold the "100Luck" Board of Directors accountable.

After the investment, "100Luck" will be sent to the investor through the smart contract, without any form of warranty, express or implied, including and not limited to all implied warranties of merchantability, fitness for a particular purpose, etc. Since some jurisdictions do not allow the inclusion of implied warranties, the above statements that do not contain implied warranties may not apply to you.

"100Luck" does not represent any form or legally binding investment. In light of the unpredictable circumstances, all individuals or groups that purchase "100Luck" will do so at their own risk, although the team will do its best to achieve all of the goals of the White Paper. Having "100Luck" below means that you have the right to consume the following to use all products or services on the platform.