



# UNICORNGO

ONLINE GAME



# WHITE PAPER

## Table of Contents

Summary	3
<i>Vision</i>	4
<i>The Issue</i>	4
<i>Solution</i>	4
<i>Technological Limitations</i>	4
<i>Goals</i>	5
To create the first decentralized game featuring deficit of gaming resources. The game developers will control as little as possible in this game, while the society will be able to check all transactions and actions without a need in third parties.	5
<i>Tasks</i>	5
<i>Mission</i>	5
<i>Social Effect</i>	5
<i>Market Potential</i>	5
Technical Description of the Game	6
The Idea	6
The Game's Character is the Unicorn	6
Each unicorn has the following features:	7
Breeding unicorns:	10
GEN-0 Unicorns	11
The Marketplace	11
Filter ptions:	12
The Gene Lab	12
Stock	12
User (Members Area)	13
Technical Requirements	14
Our Team	14
Road Map	14
Key Aspects	14
Manual	15
Disclaimer	15
Copyright	15
Risks	15
Conclusion	15



## Summary

Blockchain technology is dramatically changing the global financial landscape and attracting more and more people to it. Nevertheless, an average person doesn't understand what is cryptocurrency and why it is important, set aside the technological basis of cryptocurrencies. As a result, people tend to have concept of blockchain, while long-term effects of the technology are ignored to a large degree.

We are promoting the blockchain technology, making it closer to people with gamification. We create a game world featuring augmented reality and control of the character by power of mind (4<sup>th</sup> stage). In our world, every game element is an asset in the inner game economy.

UnicornGO is a collection online game meaning the users can own unicorns, plots of land and candies. The players can buy and sell unicorns at the marketplace; they can breed unicorns and get new ones, and give unicorns as a gift. After breeding, a new unicorn is born, which will feature genes of both its parents.

Furthermore, users can buy, sell, exchange and present stuff for unicorns: clothes, trimming, plots of land, houses and a special asset, the magic tree. Trees give fruits such as candies, which unicorn use to recover. Also, candies can be used for growing new trees.

The game will feature: realistic genetics, geolocation, augmented reality, inner game economy and a combat system. We will create an exchange market for exchanging inner game resources, and a gene lab to breed mutants.

Our ultimate goal is to create a truly decentralized game featuring deficit of digital resources. The developers will control as little as possible in this game, while the society will be able to check all transactions and actions without a need in third parties.

The game will have its own inner currency CandyCoin built on ERC-20 token. The total supply of the coins is 12,000,000.

Transparency makes for a secure gaming environment. Combined with liquidity pertaining to cryptocurrencies, the gaming environment will convert the virtual objects into investment assets along with traditional asset classes. Given the deflation mechanism which is a feature of economic activity, owners of CandyCoins will see their assets go up in price.

The current document describes how the gaming world is created. It also contains technical aspects of the project, mechanics of the gaming process and economics requirement.



# Introduction

## *Vision*

The blockchain technology is used more and more by the gaming industry nowadays. This is happening due to the nature of people: we, humans, need to entertain ourselves and bring some game and fun into our lives. Bearing in mind that the modern world will use blockchain technologies in terms of finance widely and introduce cryptocurrencies into the global economy, one can say for sure that the gaming industry will soon use blockchain as its basis.

## *The Issue*

Currently, there is a project CryptoKitties, which was the first project to use this tendency. But there are a number of issues pertaining to this project:

1. The inflation issue of the CryptoKitty tokens related to unlimited supply of the tokens due to unlimited and unrestricted breeding of Kitties.
2. Limited use of the blockchain technology. The Kitties failed to become a truly decentralized game, in other words, more stable over time.

## *Solution*

UnicornGo has an answer for the above issues:

1. The game features advanced gene-based breeding system by use of CandyCoin currency. This currency provides for deficit of the game resources. Also, it promotes price rise of the assets and makes it possible to enjoy the game.
2. The smart contract system is used in full. This allows for making transactions and performs other actions with no third parties involved.

As a result, UnicornGo promotes investment potential and gaming interest.

## *Technological Limitations*

As long as decentralization technologies have just appeared and only evolving, there are some limitations which should be taken into consideration. We plan to overcome them in the future as decentralization technologies are developed.

First of all, the transaction fees are high enough, and this imposes some limitations. Currently, transaction speed of Ethereum network is limited by a value of 15 tx/sec. We use Metamask extension for secure and stable authorization in Ethereum network. The extension can only be used with desktop browsers. Later, there will be a mobile app, and we will switch to a popular blockchain with zero transactions.



# About UnicornGo

UnicornGo is a digital gaming universe based on cryptotechnologies. It features augmented reality where each element is an active part of the inner game economics built on Ethereum blockchain protocol.

## *Goals*

To create the first decentralized game featuring deficit of gaming resources. The game developers will control as little as possible in this game, while the society will be able to check all transactions and actions without a need in third parties.

## *Tasks*

1. To develop a gaming environment featuring realistic genetics for breeding pets; geolocation augmented reality and neurointerfaces based on Neurobasic developments.
2. To create an inner gaming crypto-economy by use of the Metamask technology of Ethereum network. To form an exchange market for exchanging inner gaming resources, and a gene lab to breed mutants.

## *Mission*

We are committed to unite several innovation technologies and effectively apply them in the gaming world and everyday life.

Blockchain technologies. During 1<sup>st</sup> and 2<sup>nd</sup> stages we will be doing the project based on Ethereum, but later we will switch to a more convenient platform with zero commissions for transactions and greater transaction speed.

Augmented reality will be provided by our partner project IZETEX.

A feature of controlling character with power of mind is provided by another partner of us, BasisNeuro.

## *Social Effect*

It is important to bear in mind the game's potential and integrate it into the society by means of the fascinating gaming world with augmented reality. This will allow for a boom of consumer interest towards blockchain technologies.

## *Market Potential*



Users communicate with the interface by means of a smart contract on Ethereum. This means that each action the user performs is a transaction.

**By doing so, the user, while within the game, will pay for:**

- ★ Offering a unicorn (as well as plots of land, candies and accessories) for sale (for quoting a price);
- ★ Taking unicorns out of the sale list;
- ★ Asking for a price for breeding;
- ★ Prohibiting unicorns from breeding;
- ★ Promoting unicorns in the news feed.

**Also, users can (for a fee):**

- ★ Buy a unicorn at the marketplace;
- ★ Buy breeding with another unicorn and get a new one;
- ★ Buy a comment on any unicorn's page (there will be a link to the comment's author next to the comment);
- ★ take advantage of the gene lab.

Also, the CandyCoin, which is the inner gaming cryptocurrency, coupled with a deflation mechanism, will make it possible to see a price growth of CandyCoin on a continued basis.

## Technical Description of the Game

### The Idea

The game is a marketplace where everyone can buy a unicorn for himself, can sell it, breed any two unicorns and get a new one as a result based on genomes of the two bred. Unicorns can also be presented for free.

Each unicorn has its own notional value (that is, the price the owner can sell the unicorn at) and the calculated price. The latter is produced by a formula which takes into account the number of views of the unicorn, the number of "likes", comments and selling/buying activity on that particular unicorn. Popular unicorns get more expensive with the course of time, so users should collect unicorns and make their assets bigger in price.

### The Game's Character is the Unicorn

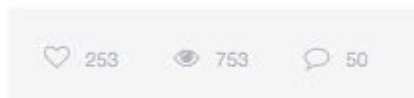
It is an animated image (flat-designed) to make it more realistic.



Each unicorn has the following features:

*Popularity metrics:*

number of likes, number of views and comments.



*Unicorn's name:*

the name is given at birth (or when a GEN-0 unicorn is purchased – see below about the GEN-0 and later generations of unicorns). The name can't be changed afterwards.

## **Mr. Incredible Unicorn**

*Calculated price:*

the coefficient is calculated based on the number of views, likes and comments for a particular unicorn and its buying and selling activity; In course of time, this factor will depreciate (and even become negative). To keep it high, the user

should perform actions on his/her pet.

 +23.4453


*The generation of unicorn:*

this relates to how many times this particular genom has been breded. *GEN-0 – original unicorn without parents. This one will be discussed further.*

 Gen-3


*Date of birth of the unicorn:*

it is the moment when the unicorn appeared at its owner after breeding and having obtained its name.

 May 27, 2015

*Recovery after breeding:*

this factor tells about how much time a unicorn needs to be able to breed once again after breeding. *The breeding process will be described later.*

 Swift

*Unicorn's geo place:*

if the unicorn has just been born, then its geo location is the place of birth; If a unicorn has been sold/bought, then the geo location is the place where the new owner lives. *Location is determined by the user's IP. This will be discussed further.*

 USA

*Tags describing the unicorn:*

these ones are set during birth (or buying a GEN-0 unicorn). Tags are used for searching unicorns on the website.

Nice

Gute

Usual

Just

Angry

*Social share panel.*



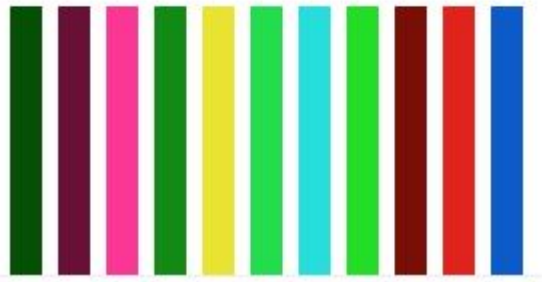
*Gene:*

this is how unicorn look like. 11 (eleven) strings in the genome are the editable features of the unicorn (the horn, ears, eyes, the head form, nose, body, legs etc.). The letter above is the type of each editable feature (for instance, 1<sup>st</sup> row – the horn – can be straight (R), it can also be curved (S), rounded (O) etc.) The color of



the stripes under the letters represents colors of that editable feature.

**R M P O K F L D T E M**



#### Owner:

each unicorn belongs to a certain user of the game. Each time the unicorn is sold, it is transferred to a new owner.

↑ Owner



**Alex Alexeev**

Singapore, Singapore

#### Comments:

each unicorn has comments. To leave a comment, a user should pay. Cost per comment depends on the coefficient of the calculated unicorn price.

#### Comments (3)

Price for comment is: 0.0000004312 \$

Your text

SUBMIT



**Ravi Sah**

May 27, 2016 at 9:14am

Pellentesque gravida tristique ultrices. Sed blandit varius mauris, vel vulputat urna hendrerit id. Curabitur rutrum dolor gravida turpis tristique efficitur.



**Phoenix, the Creative Studio**

May 27, 2016 at 9:14am

Nunc ornare sed dolor sed mattis. In scelerisque dui e arcu mattis, at maximus urna conmodo. Cras magna nunc, cursus lobortis luctus at, sollicitudin vel neque. Duis eleifend lorem non ant. Proin ut ornare lectus, vel eleifend est. Fusce hendrerit dui in turpis tristique blandit.



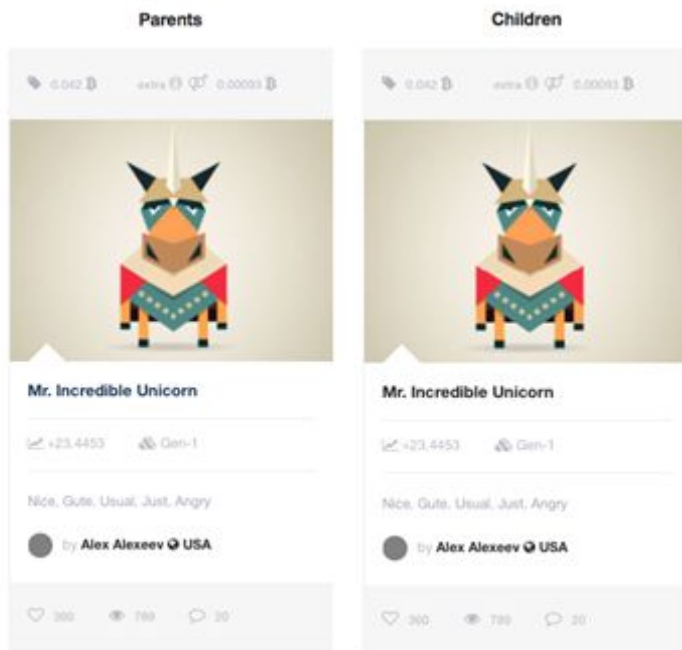
**Dorian Camp**

May 27, 2016 at 9:14am

Cras magna nunc, cursus lobortis luctus at, sollicitudin vel neque. Duis eleifend lorem non ant

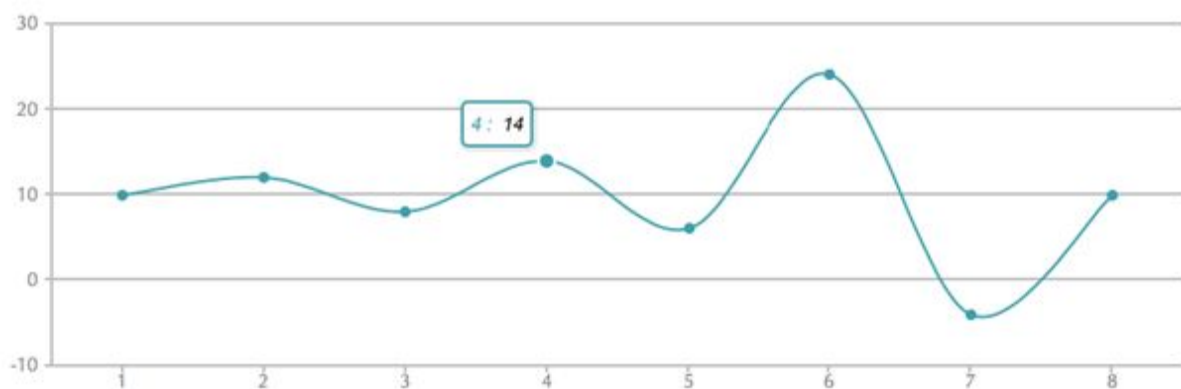
### Parents and children:

each unicorn (except the GEN-0 generation) has its parents (2 genes which gave birth to a particular unicorn) and its children (the unicorn that were created using gens of a certain unicorn);



### Popularity chart:

shows change of the calculated price coefficient of a certain unicorn in course of time (this can fall below zero).



### Breeding unicorns:

To get a new unicorn, two others need to be bred.

- ★ A user can only do so if he/she owns 2 unicorns. To do this, the user goes to the unicorn's webpage, presses "Breed" and chooses another unicorn from the list of his/her unicorns.
- ★ Also, the user can breed his/her unicorns with other users' unicorns. There are 2 ways to do so:

1. The user places an offer for his/her unicorn, that is, the price he/she can lend the unicorn for breeding at. Then any game player can copulate his/her unicorn with the offered one. The offered unicorn is placed into a special section in the marketplace (the dedicated section where unicorns are offered for breeding), and the user will get paid for each breeding.
2. In this section, the user finds a unicorn which suits him/her by the set of features, pays for breeding and gets a new unicorn as a result of breeding.

This way, we see a win-win strategy: the user who offered his/her unicorn gets paid for breeding while the user who bred a unicorn with the offered one acquires a newly born unicorn.

After breeding, unicorns need some time to recover. Depending on the genome, unicorns can have the following time periods for recovering:

Lightning	– 5 to min.
Sports Car	– 20 to min.
Fast Energy	– 1 to 2 hours.
Moderate	– 2 to 4 hours
Slow	– up to 24 hours
Sluggish	– 1 to 2 days
Tortoise	– 2 to 4 days
Sloth	– up to 1 week.

Incest is allowed in the game. If two unicorns with the same genomes are copulated, deviations are possible. Some sections are excluded from the genome and a unicorn can be born, say, without an ear or a leg. If a genome loses more than 3 sections, then such unicorn loses its ability to breed forever, so it is crucial not to copulate unicorns with the same genomes.

## GEN-0 Unicorns

It is a unicorn that has never been bred yet. Unicorns are emitted by the developers during the launch of the game. This is how the initial marketplace is formed. Unicorns will be completely different and won't look like each other.

Simultaneously, some unicorns will be offered for sale. New ones will appear after the first ones have been bought. The GEN-0 unicorns will be sold based on action principle with the following algorithm:

- ★ the starting price is set which will be dropping with the course of time;
- ★ as soon as the unicorn is bought at a certain price, the next one will be offered at a price which is greater than the purchase price +20%, and this new price will be also decreased over time;
- ★ there will be a minimum price which will serve as a threshold. Unicorns will be never sold at a price lower than that threshold.

To make the first purchase more appealing, users will be offered an option to choose colors of their unicorns' parts after purchase (by default, unicorns are black-and-white).

## The Marketplace

One of the distinct feature the game will have (which will definitely put the game out of similar games) is the advanced search along the marketplace. There will be a certain filter option with each of unicorn feature. Also, there will be time and price filters as well. There will be a certain filter option with each of unicorn feature. Also, there will be time and price filters as well.

### Filter ptions:

- ★ unicorn name;
- ★ GEN level of unicorns (generation level);
- ★ geo location of unicorn;
- ★ date of birth;
- ★ number of purchases of a particular unicorn;
- ★ calculated price coefficient;
- ★ price asked by owner;
- ★ unicorn tags;
- ★ recovery pace after breeding;
- ★ colors of unicorn's body parts;
- ★ unicorn owners;
- ★ number of views;
- ★ number of likes;
- ★ number of comments;
- ★ price per comment.

As a result of such advanced search, the user will have plenty of data to choose a unicorn for purchasing or breeding. All the user has to do is just try different filter options and see.

## The Gene Lab

This section allows users to create unicorns at his own choice. The section make it possible to choose colors of all the 11 genome sections at extra fee. The chosen colors will be distributed randomly along the part of the unicorn's body.

## Stock

This section keeps ratings of all unicorns owned by users.

Any user can sort the rating out by:

- ★ calculated price coefficient;
- ★ number of likes;
- ★ number of views;
- ★ number of comments;

- ★ price asked by owner.

Also, Stock keeps records of ownership for a certain unicorn. In other words, in this section we can see who was a unicorn given to, who gave this unicorn and what was the price the unicorn was sold at.

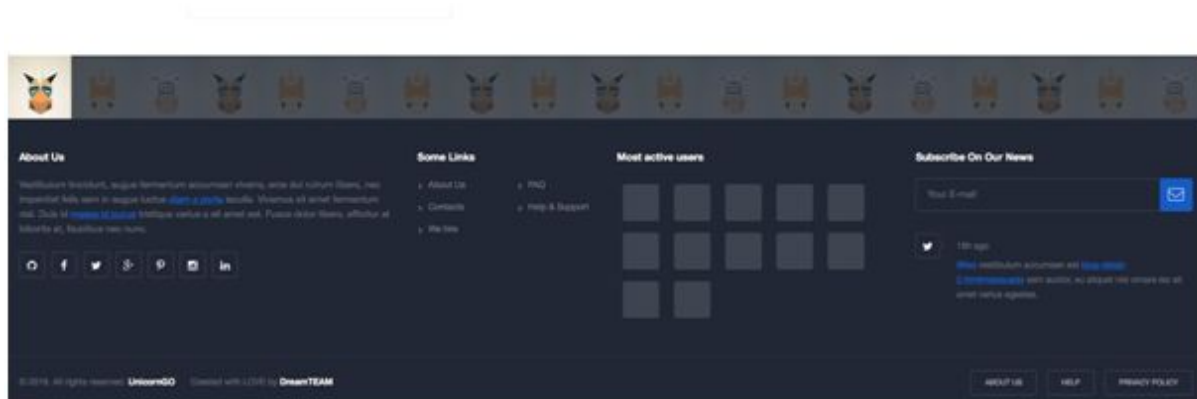
## User (Members Area)

Users get registered and authorized based on their Ethereum-addresses by use of Metamask plugging.

*In Members Area, users can (this will be seen by everyone):*

- ★ download and delete an avatar picture.
- ★ choose and edit a nickname;
- ★ turn on and off geolocation feature. Users won't be able to choose their geo position. Instead, it will be determined automatically. Geo position will also be displayed at the user's unicorns.
- ★ provide links to their social media profiles;
- ★ place a link to their personal website;
- ★ show/hide from other users their statistics;
  - total number of views for this particular user;
  - total number of comments for this user;
  - total number of likes for this user;
  - summary of all calculated price coefficients for all the unicorns the user owns;
- ★ edit personal data;
- ★ see all the unicorns the user owns. The Members Area will sort out all the user's unicorns by the following options:
  - all;
  - only new;
  - offered for sale;
  - offered for breeding;
  - favourite.

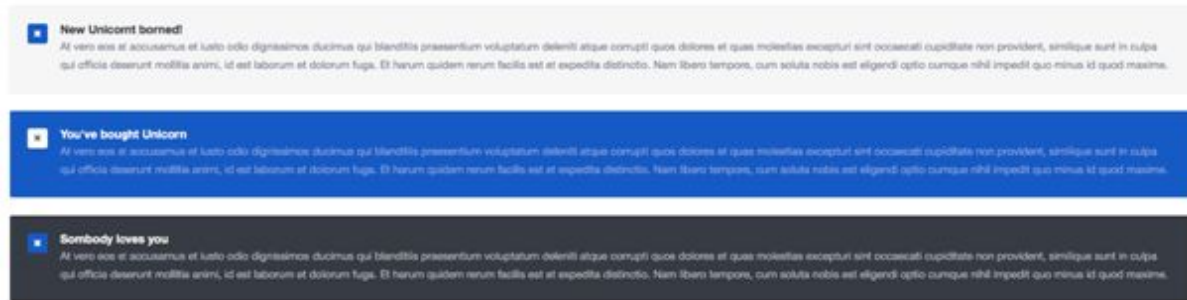
*Users can promote their unicorns.*





To do so, users should go to the unicorn's page and press "Publish in News Feed" button. To publish information, users should pay a fee. After the publication, the link to the unicorn will be displayed in the unicorn news feed (which will be present on all the website pages).

All the user's actions will be displayed in the "Action" section.



## Technical Requirements

- ★ online browser
- ★ Ethereum
- ★ Metamask

## Our Team

## Road Map

- ★ Idea
- ★ Creation of first unicorn prototypes and development of user interface of the game
- ★ Advertising the game to general public
- ★ Token emission
- ★ Launch of the 1<sup>st</sup> part of the game

## Key Aspects

Purchased tokens won't be accessible until launch of 2<sup>nd</sup> stage of the game.



# Manual

## Disclaimer

This is not a call to action! Any kind of participation in this exchange of tokens is invalid if prohibited by law. This document has been written for information only and doesn't impose any juridical obligations on the authors or any third party. UnicornGO project doesn't make any declarations (explicit or implicit) and doesn't bear responsibility for using information included in the document. Information in the document has been included in the document for guidance only and doesn't form recommendation for investments. Users of this document should act on their own opinion and should be cautious prior to act, or refrain from actions based on this document.

The content of the document can be updated or changed. The actual version of the document can be found at [unicorngo.io](https://unicorngo.io).

## Copyright

The team owns all the rights for intellectual property created during the game without any limitations. Such property include names, images, concepts, ideas, inventions, constructions, codes, insights, processes, marks, methods, software, compositions, formulae and data, whether patented or not, whether having trademarks and not having ones. Any kind of use of this material without approval from developers is strictly prohibited.

## Risks

The team is not responsible for any losses related to issues with UnicornGO software. The team reserves the right to cancel token distribution at any time. Development process of UnicornGO can be stopped for a variety of reasons, including absence of interest at general public, absence of financial sources, bankruptcy of the company, death of key developers etc.

Under no circumstances UnicornGO or its affiliated parties bear responsibility before any person or company for any kind of losses, obligations, costs and expenses of any kind, whether they are direct or indirect, compensation, accidental, actual, exemplary, punitive or special for using links to or opening this technical document, as well as for any content including but not limited to loss of business, loss of profits, loss of data, goodwill or any other intangible losses.

## Conclusion

So now, having learnt all the details of UnicornGO, we hope you have formed an idea of this game and how it will look like in the future. We also hope you realize its potential on the gaming market



along the general tendency towards development of the crypto economy. We have just started using this niche, and perhaps we'll have huge success in the future. We do believe in blockchain, in this game, in our team and, eventually, in our blockchain society!

For further actions please go to the project's website <https://unicorngo.io>

Sincerely,  
UnicornGO team.

Facebook:

<https://www.facebook.com/unicorngo2018>

Twitter:

[https://twitter.com/UnicornGo\\_2018](https://twitter.com/UnicornGo_2018)

Instagram:

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Telegram:

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