ChainGuardians.io

A crypto-meets-anime NFT game

Public Whitepaper

Contents

1) Concept

The prophecy for the arrival of anime characters into the cryptosphere has been long foretold; but until now, has been nothing more than an urban myth.

In this unique universe, where anime meets crypto, Guardians have been forming alliances, battling rivals and fighting for survival within a post-apocalyptic, volatile and war-ridden universe.

These idiosyncratic anime-meets-crypto Guardians found their way from the depths of the blockchain labyrinths, developing: unique skills, magical abilities, heroic traits and followers throughout their journeys.

The first Chain Guardian to break free from the clutches of the blockchain tyrants, perhaps unsurprisingly, was Bitsee Naka, who overcame the oppressing centralised rule of the Gatekeepers over the Bitcoin blockchain entities. She is now the dedicated Guardian of the world of the Bitcoin blockchain.

Since Bitsee Naka's success, other Guardians have begun to spring from their blockchain oppressor's clutches, such as Seth Buter; however their battles have only just begun…

2) Introduction

ChainGuardians.io is a cryptocurrency-meets-anime themed blockchain collectable game. In-game assets are represented as unique ERC-721 tokens based on the Ethereum blockchain.

The ChainGuardians founders maintain experience in mobile and browser based game making as well as extensive experience and knowledge of the NFT gaming space and community.

ChainGuardians.io aims to bring the NFT community an unprecedented gaming ecosystem founded upon: competitive game play through chain analysis technology, advanced game economics which integrates players' real life cryptocurrency and NFT holdings, as well as the experience of expandable and persistent multi- blockchain worlds.

At ChainGuardians, our vision is to create some of the world's most enjoyable blockchain gaming experiences through combining traditional gaming concepts with blockchain technology.

The vast majority of the version one gaming content will be played through users' web browsers; whilst in our development aims we envision building a gaming platform which is capable of functioning upon existing or developing virtual worlds, or as a completely separate entity.

Our assets, including: weapons and armour, as well as our Guardian and supporting characters, are digital collectables also known as crypto-collectibles. The collectible assets, which can be deployed in our game, are represented through unique ERC-721 Non-Fungible Tokens (see below) on the Ethereum blockchain. This ensures our assets are one of a kind; preventing them from duplication or counterfeit.

All our collectible assets are of a limited quantity, ensuring they retain their scarcity and value within marketplaces. Users will have the option to buy and sell our assets, initially on secondary Non-Fungible Token marketplaces.

3) The Market

The player base for blockchain games has increased steadily as blockchain adoption accelerates.

It has become clear that as the demand for blockchain games grows, so does the community's desire for a game with longevity and balance. Many blockchain games, whilst starting out with unique ideas and promise, often stall beyond their pre-sales. From a player base perspective, there are several reasons for this, as outlined below:

The concept of excessive 'Pay to Win' is considered a problem in many prominent games today, as this hinders the entry of new players. This is true of many games and not just blockchain games. Players are often left in a position where they have spent large amounts of money, or crypto-equivalent, whilst their assets have often failed to hold any value.

More specifically to blockchain games: if the issuance of the first items (Non-Fungible Tokens) are the strongest, in order to reward early investors, and the subsequent items or characters are always weaker; it also reduces the motivation for new players to continue the game shortly after joining.

Factors for sustainable growth of the game are as follows:

- An environment where it is easy to join the game for new players

- Development of interesting games and playing methods
- Item prices and power are appropriately assigned
- The balance of moderate 'Pay To Win' and 'Play to Win' is accurate

Factors for players wanting to play the game (in no particular order):

- Play for fun
- Play for social (community driven value)
- Play to show (be the coolest, or most respected)
- Play to win
- Play for profit

We plan to achieve this through the following methods:

- Taking regular feedback from the community
- Focused development of end-game content in addition to advancements in playability
- Multiple game modes including: PVP, PVE, and collaborative player versus environment raids
- Thorough balancing of Guardians, lower ranking characters, items and economy
- Continued development of the battle meta and 'elemental' type balancing
- Introduction of features such as 'Bring Your Own NFT!' (see Colosseum Mini Game - Roadmap Item)
- The 'Loyalty System' (see Loyalty System - Roadmap Item)
- Thorough in-game testing, balancing and simulations
- Whitelisting through SafeName to prevent bots and excessive multi-account creation
- Events and competitions

4) Guardians as ERC-721 (Ethereum Network)

Whilst all Guardians are the dedicated defender of their respective blockchain worlds; all Guardians are represented through ERC-721 Non-Fungible tokens.

Each batch of ERC-721 tokens is unique to their respective blockchains, for example: whilst Bitsee Naka is the defender of the Bitcoin blockchain on our browser based game, she is represented by an ERC-721 Non-Fungible Token (NFT) on the Ethereum blockchain.

Only a set amount of each Guardian, as stipulated by the organisation, will be produced for each blockchain, and is only purchasable through our initial token sale. Afterwhich, Guardians can only be bought and sold once the organisation's marketplace is developed or through secondary marketplaces such as OpenSea.io.

Initially four Legendary (see below for rarity specifications) Guardians will be introduced into the world, which are based on the blockchain world of: Bitcoin, Ethereum, Litecoin and DASH. There will never be any more of these Guardians beyond the ones sold in the initial NFT sale. We envision this will protect the assets' values and reward the initial players who join the ChainGuardians' Cryptoverse.

Further Guardians and supporting characters will be developed in due course, with a particular focus on the introduction of Guardians which represent the blockchain world of the most popular cryptocurrencies.

Their rarity will be defined as follows: Legendary, Rare, Uncommon and Common.

5) Game Mechanics

ChainGuarsdians.io is a persistent multi-world turn-based real time strategy game which incorporates desirable rewards and transparent economies; player rewards are driven by both player purchases and crypto infusions which occur as a result of partnerships with other game tokens and blockchains.

Guardians will be able to join forces to take down opposing forces and GateKeepers in order to gain: power, credits, armaments, and even ever evolving powerful world artifacts.

ChainGuardians is a player controlled turn based battle game which is active in real time; whilst during idling (when a player is not online), advanced AI based battles can take place governed by a Guardians' attributes.

Strategically conquer: castles, fortresses and dungeons; or establish campsites with defensive attributes. You can ambush an enemy at night or during daylight.

Look to acquire loot and eradicate your enemies, or retreat and call for reinforcements. Participate in Chain-Battles with other players to reap high rewards. Who will come to join your ChainGuardians' force?

Battle in the world of Bitcoin, or expand into world of Ethereum, Dash and beyond.

Join the ChainGuardians project and play with real players whilst obtaining unique rewards!

<Game play preview will be released in summer 2019>

Guardian vs Guardian Duels

Guardians and supporting characters are able to challenge each other to 1v1 duels. Duels are played out through a series of turn-based offensive and defensive skills. The basic moves (slash, thrust, strike) provide equal expected value results against (parry, dodge, block). In other words, the first duel meta will consist of 33.33% chance of dodging an attack when defending; whilst attackers maintain a 66.66% chance of dealing damage. See the table below for a basic breakdown.

Guardians, as they are unique characters, have a special offense skill (Charge), and defensive skill (Dash) that have an expected value advantage over non-guardian characters. Some Guardians through their adventures may also learn a special move (Flash) that have a significant advantage over basic moves. Guardians may also equip rare, long range offensive weapons which also give them an extra offensive (Ranged) move. This move maintains the strongest offensive capability and is also especially powerful against the special Guardian move (Flash).

			DEFENSE					
			ALL			Guardian	Special	
			Parry	Dodge	Block	Dash	Flash	Total
OFFENSE	ALL	Slash	0	1.5	1	0.5	0.5	3.5
		Thrust	1	0	1.5	0.5	0.5	3.5
		Strike	1.5	1	0	0.5	0.5	3.5
	Guardian	Charge	1.5	0.5	1	1	0	4
	GunSword	Ranged	0	1	0.5	1	1.5	4
		Total	4	4	4	3.5	3	

It is worth keeping in mind that there is more than to the ChainGuardians' battle meta than initially meets the eye. For example: a strike move may be more effective on an opponent that has steel armour equipped, whilst slashing it may prove quite useless. Meanwhile, a non-playable character (NPC) with no armour will have little in the way of additional protection. It is also noteworthy that the Guardian or character's attributes will play a key role in determining the effectiveness and outcome of a battle. Thorough testing and balancing will continue and occur throughout all stages of the game's development.

6) Guardian Attributes

All Guardians have an overall Power Rating which constitutes a maximum score of 100. This rating is composed of the 12 attributes as outlined below:

- **Rarity (Max 20)**
- **Natural Ability (Max 15)**
- **Armour & Weapon Score (Max 5 + Max 5)**
- **Magical Item Score (Max 10)**
- **Guardian Skills (Max 5 for each of the 5 Skills)**
    - **Strength**
    - **Intellect**
    - **Stamina**
    - **Charisma**
    - **Agility**
- **Fame Score (Max 10)**
- **Active Score (Max 10)**
- **Age (hidden metascore)**

Rarity: some original Guardians have a greater value than their rivals as part of the natural universal order. The first four Guardians will always be amongst the rarest.

Natural Ability: rarer blockchain Guardians generally have a greater natural ability than other Guardians, however depending on the extent of their testing during escaping their oppressors, some have had to endure harder tests than others.

Armour & Weapon Score: Players can obtain stronger items through PvE and PvP combat which will enhance your Guardian's armour and weapon score. Players can also obtain armour and weapons through the official marketplace or private deals with other players on eligible platforms. Longer term, integration of other NFT equipment items is envisaged on our road-map.

Magical Item Score: In the deep depths of the cryptoverse elusive magical items exist. These items can be obtained through PvE and PvP combat which improves your Guardian's Magical Item Score.

Guardian Skills: Depending on your Guardian's journey they will have obtained particular skills which were required to free themselves from the shackles of control. These traits vary from Guardian to Guardian, with some traits being strong against certain Guardian traits, however weak against others.

Fame Score: Your Fame Score is calculated based on your PvE and PvP successes. Guardians with a high Fame Score (PvP ranking system) will receive bonus Charisma (Char) points; with the ability to carry more Apostles in their armies.

Active Score: Your Guardian's Active Score is calculated based on how frequently the Guardians have been used undefeated. This will create bonuses for the Guardian's unit. An undefeated Guardian, over time, can become very powerful due to a Guardian's force becoming well trained and seasoned.

Age: Wisdom is a hidden attribute. Guardians gain additional passive resistances over time such as against certain elemental types. This ensures some of the oldest Guardians become the strongest amongst their peers.

Experience: Engaging in PvE combat or PvP battles will increase your overall Experience Score - those who are more experienced in the art of war are stronger.

All Guardians, Lieutenants and Apostles start with a base level of one (1); with each battle your Guardians or characters will become stronger. Winning a battle will reap a greater amount of experience points.

Experience Growth

<This section is subject to change, with or without notice, for game balancing>

A Guardian's skills, including: Strength (Str), Intellect (Int), Stamina (Sta), Charisma (Char), and Agility (Agil) will govern a Guardian's power in different ways; the base numbers for duelling and battling will be affected as a result. For example: Strength will provide an offensive buff; whilst Agility will provide a defensive buff. Meanwhile, Intellect and Stamina determines a Guardian's Magical ability and Hit Point growth per level. Finally, a Guardian's Charisma will increase their Command (the number of units a Guardian can command over in battle - this is a roadmap item). See below for a typical indication:

Off. Buff				Def. Buff
Wield	MP	HP	Command	Speed
Str	Int	Sta	Char	Agil
2.00	3.00	2.00	3.00	3.00

A Guardian's skill statistics also impacts the type of Weapon, Armor and Magical Item that a Guardian can wield. Higher skill scores allow for a higher level item to be equipped.

Whilst a Guardian can equip the most powerful item in the world, it may still be capped by it's max Weapon and Armor score.

Requirement		
Str	Sta	Int
Offense	Defense	Magic
Weapon	Armor	
2.00	2.00	3.00

Elementals

There are seven Elemental Types: Psychic, Light, Sound, Air, Fire Water, Earth within the ChainGuardians' worlds. These elemental types generate advantages that are applied as a final buff/resistance after all other battle meta statistics are calculated. A Guardian's Elemental Type or types are determined based on their: rarity, LORE and developments leading up to

game play or gained over time.   Most Legendary Guardians have 2-3 elemental types from the outset, whilst only a very selected few will maintain beyond three Elemental Types.

Bitsee Naka is the original ChainGuardian and is dubbed 'The Chosen One'; ; thus she is granted 'enlightenment' (Psychic Elemental Type). Bitsee maintains strong compassion to her people (Air Elemental type), and has overcome much in her early struggle for survival (Earthly Elemental Type). Having journeyed through the emotional challenge of losing her family, she has also developed significant emotional strength (Fire Elemental Type).

Captain Devex Attazar 'roams the open seas' and has grown universal love (Air Elemental Type) of all things in all worlds. Having chartered the endless open seas that connects the worlds he has also developed Independence (Water Elemental Type).

A more thorough revelation of Guardian and character attributes will be revealed through story LORE and future Chronicles.

Elemental	Bitsee	Dasha	Captain
Psychic	P		
Light		L	
Sound		S	
Air	A	A	A
Fire	F		
Water			W
Earth	E		

The final attack damage buff is applied when there is a type advantage (indicated below); but the buff is nullified when the defending Guardian or character has the same Elemental Type. For instance, should a Guardian gain all Elemental Types, they would be immune to any type of attack buffs.

7) Unique Game Features

World Spheres

World Spheres are ERC-721 tokens which represent an extremely unique and low supply in game item. World Spheres are Limited to 9 per world and attribute special benefits to their holders. Legend has it that if a single player can obtain all 9 World Spheres, they will have the ability to make a wish come true.

Initial World Spheres are allocated in following ways:

Four are distributed to the community through:
- Early whitelist participants are given early access to purchase two World Spheres
- One World Sphere will be issued through a referral competition

- One World Sphere will be issued to a community member selected by the developer for ambassadorship or assisting growth

Five World Spheres will be scattered throughout the world:
- One given to the wealthiest in the world (person with highest ETH spent.)
- One handed down in the lineage of heros (random from purchase)
- One held by the all mighty (Developer)
- One guarded by the mightiest foe (An end game PvE Boss)
- One as a grand prize for the first PvP tournament: likely a round robin instant death tournament.

If one player ever manages to obtain all World Spheres and activates the 'Make a Wish' feature; the World Spheres will be re-allocated by the developer.

(I wish my Guardian can turn into Supersaiyan?   Done, it's now a smartcontract feature for the future, with some committed custom artwork as well)

CG-Force Amplification Artifact (ERC 721)

Anyone who holds gate portal access cards (an ERC-721) are able to participate in world creation events or during cataclysms.

During seeding events which occur throughout the cryptoverse, energy Force can be extracted from worlds. During these events players holding a gate portal access card, are able to draw these energy Force from their alternate universe Crypto holdings.

In other words, players are rewarded for holding cryptocurrencies which are stipulated by the developers. For example, holding a certain amount of Ethereum in your wallet, grant players energy Force points, that can be amplified by these Artifacts.

Powerful Force Amplification Artifacts can provide: 2x, 3x and 5x energy duplication; with a rumored legendary artifact cable of 50x projection.

For example: a 2x CG-Force amplification doubles the Force extraction. Although the amplification artifact can be used in conjunction but the stacks are applied with limitations. In other words, a player with a 2x and a 3x Amplification Artifact in the same account will only gain 3.5x total amplification.

8) NFT POS Mining (RoadMap Item)

Introducing the first ever NFT Mining through Proof-of-Stake (POS); where you can put your NFT to work to yield income. At ChainGuardians, we are the first project to introduce NFT Mining, where popular and rare NFTs can be deployed to mine ChainGuardian Coin (CGC): the official in game currency for ChainGuardians.

Mining Game Lore

"*Captain Devex Attazer and his pirates roam the OpenSeas between Cryptosphere's worlds; undertaking bounties from time to time whilst ferrying private armies and mercenaries between worlds.*

It was all but a regular fair until one day the Blockchain Pirates discovered the hidden secret of the OpenSeas. The Blockchain Pirates learned about the

secret of minting coins through Hashing: like money falling from the sky. These digital objects, later became known as (CGC) and sprung into existence as they performed secret rituals"

Some time later, the information spread throughout the Openseas of the Cryptosphere. NFT Heroes, Legends, Friends and Foes from all worlds came join in the 'NFT Global Hash Wars'."

Working Mining Specs

The Captain is the first ChainGuardian character on sale and maintains a Hashing Power of 13.5 TH. There will be a limited supply of the Captain available during our pre-sales. Every 20 minutes, 25 CGC will be distributed to owners based on the total Hashpower they retain. Halfing of rewards will occur every 12 months.

There is No Secret Mining

Worker Mining is a mini game road-map item that will be launched before the main ChainGuardians' game goes live. Players from all over the world will be granted the opportunity to mine CGC. The Captain and his crew will be one of the best Hashers, don't miss you chance to pickup a Captain!

Let The Global NFT Hash War Begins!

At fixed intervals, new batches of selected NFT tokens (from other popular NFT that players hold) will be introduced the NFT Global Hashing Mini-Game. Players can participate with their existing and favourite NFTs. New NFT statistics will be provided by using a reputable and well known API provider in the NFT space. The Hashrate of these NFTs will be based on the 'rarity' of

the asset as determined by (ChainGuardians and Partners). Don't get into FOMO mode, and get in the game early with NFT Global Hashing!

Initial NFT Considerations (subject to change without notice):
- Selected Crypto Punks: 180 GH (Initial Catch Numbers)
- Selected Crypto Kitties: 450 GH (Certain Fancy Cats)
- Selected Etheremon: 4.75 TH (Badges #1~3)
- Captain Devix Attazar: 13.5 TH

Supply: Total of 8% of 21M = 1.68M are mineable; with decreasing rewards over 933.33 days until no more are mineable (933.33 Days x 24 hour x 3 Div x 25 CG Rewards = 1.68M).

This Is Only The Beginning

NFT Mining is an early proof of concept in CG, but expendable to other real asset and token rewards through partnerships and growth (more details to be announced.)

9) Colosseum Mini Game (Roadmap Item)

Introduction

Powerful beasts and adversaries roam the cryptosphere; some of the rarest and most powerful often take part in the colosseum, either as slaves controlled by their masters, or as independent challengers seeking: money, fame or power.

"Bring Your Own NFTs!"

Users with some of the rarest NFT crypto holdings will be able to place their assets into The Colosseum; specific choices will depend on game-lore suitability, popularity, or formal partnership. For example: Axies, Etheremon, CryptoBeasties and Neon District. The power of the NFT will depend on its relative rareness and price. The assets' owner, who participates, are able to reap free rewards from winning in The Colosseum.

Players are also able to place their Guardians in the colosseum as challengers for a minimal entry fee. The challenger will be placed against a series of random challengers from low to high difficulty. From time to time, players may also get matched against other players either in real time battle or as shadows of former challengers. Rewards will be granted from entry fee pools as well as unique rewards provided by ChainGuardians only available in the Colosseum.

There will be an entry fee cut for every participant into the revenue stream for ChainGuardians.io.

Rewards are issued from entry fee pools; as well as unique rewards only available in the Colosseum. Rumour has it that one of the cryptosphere's rarest items, the World Sphere, will be granted to the winner of the 1st Seasonal challenge.

10) Loyalty System (RoadMap Item)

A powerful character development system that governs the loyalty of Guardians to its players, this value resets if the Guardian serves a new master (such as in the event of trade or sales over the marketplace). Players who own a ChainGuardian for a long period of time will have various benefits, versus someone who have just acquire one. This feature rewards and incentivises holding or 'hodling' (long term keeping) and adds sentimental value to an item; in addition to collective value.

The impact of the loyalty factor is unique to each Guardian: it can result in lower performance or failure to execute a player's commands. It's an art for a player to gradually learn how to increase a Guardian's loyalty, below are some guidelines:

- Naturally over time, a Guardian's loyalty to its owner will increase.
- Try assigning a strong booster item of the fitting type to your Guardian; or assign a fitting Lieutenant to increase loyalty.
- Powerful magical items that are assigned to your Guardian or lieutenant can increase your Guardian's loyalty
- Guardians which have not engaged in battle for some time can become restless and as a result their loyalty to their owners can subside
- A Guardian who does not have a lieutenant can become disgruntled as a result of having to manage an entire army on their own

11) Player On-Boarding and Considerations

Guardian Simulation Mode

We consider our role and capacity in onboarding users to Ethereum dApps pivotal as new users enter the space; therefore, we will be creating a playable Guardian simulation game mode enabling users to play several of the game modes.

This mode would be a simulation and would therefore not provide actual rewards towards the game nor would the players own the ERC-721 tokens. The outcomes of this game mode would not affect actual game play ranks or economy; but is designed to provide users with a feel for the initial game.

Crypto Boost: With Users' Existing Crypto Holding

Crypto Boost is one of the exciting features we are bringing to ChainGuardians. Simply by being an existing crypto user; additional and ongoing incentives will be granted throughout the game, in coordination with game world events such as: world seeding, gatekeeper destruction and other in game cataclysmic events.

Existing crypto holders are able to participate based on an advanced whitelisting system: SafeName.

The SafeName system helps to ensure accounts are unique and measure whether players' accounts are in good crypto standing; this is established through evaluating address transaction history and holdings through a process of Chain Analysis.

The process is completed through utilising publicly available block explorer information and all results are kept confidential; in addition, users may also opt to receive personalized and private reports for them to gain insights on their own cryptocurrency accounts. In layman's terms, players will be able to redeem in-game perks and bonuses by simply being an existing crypto user.

*** CryptoBoost Feature is implemented via SafeName, for more information see https://www.safename.io/cryptoboost ***

Limitations

The CryptoBoost function is capped to ensure funding sources are unique and to ensure there is a limit on the power that can be obtained through CryptoBoost. Furthermore, the free bonus items and rewards will be initially locked in game to avoid abuse.

12) World Expansions

As the game expand to new worlds, existing cryptocurrency organisations can be onboarded and introduce new game-play mechanisms. For example: if Cardano is introduced as a partner, 'a Cardano Guardian' and the respective world can be implemented.

Guardians from initial worlds, such as: Bitcoin and Ethereum, may return with revolutionary technology and cultures from their respective worlds.

Some game play modes will be unique to new world expansions. You are able to take your Guardians to explore new worlds for a small fee. Once you have

established a foothold in the new world, your Guardians will be able to quickly adapt and once again be amongst the strongest.

13) Roadmap and Future Development

Whilst the initial game-world will be browser based and more simplistic, the longer term goal for the project is to develop into a 3D immersive gaming platform and potentially integrate with a virtual world metaverse.

Integration with existing or developing metaverses such as: Decentraland, High Fidelity and Unity will be considered in line with development aims and game mechanics.

Roadmap

The roadmap is considered a working document; actual dates are targets and are not a promise of delivery; they are susceptible to change

Q2 2019
- Core Team formation, Incorporation Identity, Branding
- Establish core development team
- Establish smart-contracts for Guardians and other characters for NFT sale
- Establish social media presence
- Establish initial MARCOM plan and communications with NFT community
- Referral programme
- Whitelisting via partner organisation: NameSafe.io
- First NFT character for sale: Captain Devex Attazer

Q3 2019
- Round of private pre-sale: Initial NFT sale for Guardians, supporting characters, crates and unique NFTs
- Implement browser based version of PvP combat (Guardian versus Guardian) and establish worlds
- Continue marketing to onboard new players/users
- Continued development of browser based version of PvP combat including potential bug fixes and enhancing user facing processes
- Commence development of Squadron versus Squadron battle-meta
- Establish partnerships with NFT projects to further the reach of Bring Your Own NFT

Q4 2019
- Further NFT sales for new items (such as armour and weapons)
- Begin developing Loyalty System
- Further development of Squadron versus Squadron battle-meta
- Establish development aims for integration with browser based metaverse or stand alone further game development
- Team to attend an NFT conference to further promote ChainGuardians
- Coliseum Event implemented alongside initial development

Q1 2020
- Begin testing for implement of Squadron versus Squadron battle-meta (MOBA)
- Initial conceptual development of universe battle-meta (army versus army)
- Review integration/developments with browser based metaverse
- MARCOM efforts reviewed and potentially expanded
- 2021 Roadmap creation and update