

Overview



Welcome to the Unicorn Multiverse!

Crypto Unicorns is a new blockchain-based game centered around awesomely unique **Unicorn NFTs** which players can use in a fun farming simulation and in a variety of exciting battle loops.

Farming gameplay centers on **Land NFTs** which players can buy and upgrade over time. Unicorns love to help around the farm so players can put them to work increasing the productive output of Land and crafting materials to upgrade buildings. Individual Land can be combined by players into neighborhoods designed for highly social real-time gameplay. In this fashion, players can customize their Farm and show it off to the world!

We are starting with Farming gameplay followed by Jousting, Racing and Team RPG Battle. Each game type will leverage different Unicorn abilities over time. For example, a really good racing Unicorn might not be a great jouster nor "Battlecorn". Ultimately, we envision an ever expanding universe of game loops interconnected with the core farming loop. To achieve this, we want to work with the community and other developers to continue adding utility and fun to the Crypto Unicorns Multiverse.

Our Vision

As game developers we are excited to move away from the extractive nature of Free-2-Play to foster and nurture community run game economies. Crypto Unicorns is our first digital nation and we are extremely excited to build it in tandem with our player community!

Blockchain-based gaming is a nascent industry and we expect changes as we build fun and engaging titles under this new economic paradigm. It's our goal to embrace the core fundamental tenets of player ownership and forge into this new space as a developer. Our hope is that Crypto Unicorns will introduce millions of new players around the world to the benefits of in game asset ownership and the wider Web3 movement.

World Fiction & IP:

The Unicorn Multiverse has been frozen in time! No one knows what caused this cataclysm but it's up to the player community to hatch the Origin Unicorns and work to return the land to its former glory!

We see Crypto Unicorns as a blank slate IP inspired by some of our favorite brands of all time including Super Mario, Pokemon and Zelda. We sincerely hope the global community will fall in love with these Unicorns as much as we have and believe that by working together we can build a truly generational IP 🦄

- The Laguna Games Team

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Roadmap

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Nov 2021 - Feb 2022 - Community Genesis

Everything begins with our community. The focus here is on bootstrapping a powerful group of aligned players who are dedicated to the DAO's long-term mission and goals.

- **Nov. 15th** - Genesis Egg Sale
- **Dec. 15th** - Phase 1 Land Sale
- **Jan. 18th** - Phase 2 Land Sale
- **Jan. 28th** - Dark Forest Mini-Game
- **Feb. 2nd** - Phase 3 Land Sale
- **Feb. 28th** - Public Sale
- **Mar. 17th** - RBW Community Airdrop

May 5th, 2022 - Game Launch

Our initial launch includes the Farming core loop bringing harvesting, crafting, gathering, Unicorn breeding, Unicorn evolution, and the introduction of the Rainbow Token marketplace. This phase will focus on Unicorn NFT growth via breeding and onboarding a new cohort of players.

Feature Roadmap

This list is not comprehensive and may change as we continue to develop the game. Our internal product roadmap also includes a mixture of improvements to previously released features, smaller features, bug fixes, and tech debt. We want to balance our team such that we always have new features in progress but also allow us to take time to improve the game and our core technology.

Loot Boxes

Open all those glorious lootboxes in the game! Bring loot boxes into the game from your wallet to open them to get a wide variety of rewards.

Land Vending Machine & Keystone Crafting

You'll be able to get more land by crafting Keystones in the game, bringing them into your wallet, and using them to buy a brand new piece of land! Each Class has its own keystone so you can get the land that you want. This will also be the first time players can get Hidden Class Lands!

Quests

A continually rotating set of quests will be available for players, where you can send your unicorns on quests to get specific rewards.

Shadowcorns Staking Mini Game

The Shadowcorns must gain strength if they are going to get revenge on the Unicorns! They will need to navigate the Dark Forest to earn rewards...which door leads further into the forest towards rewards and which are dead ends? Stake your shadowcorn to find out!

Jousting

Our first battle loop will be Jousting! Unicorns will enter a Joust to compete for rewards against other Unicorns. To start, we'll have a general arena where all unicorns are on equal footing (hooving?) and after that, we'll be launching nine Jousting Arenas over time to match each Unicorn class.

Shadowcorn Act II

The first battle begins in the Dark Forest. The Shadowcorns and Unicorns are fighting over the valuable resources held in the Dark Forest. Unicorns will have to work together to overpower the Shadowcorns. Stake your Unicorns and Shadowcorns into different areas of the Dark Forest to compete for resources.

Golden Ticket Marketplace

Trade in your Golden Tickets for special rewards at the Golden Ticket Marketplace! The items here are valuable and limited, with wares changing regularly.

Neighborhoods

Bring your friends and Uni Fam together in the game world with Neighborhoods. Team work makes the dream work! Get a Townhall to start your neighborhood and unlock collaborative gameplay. You'll need to work together to face the Shadowcorns...

Racing

With Racing, players enter their Unicorns in exciting tournaments across a wide variety of tracks, each with unique properties. Race against other Unicorns to discover the fastest Unicorns!

Shadowcorn Raids (Dark Forest Act III)

Will the Unicorns be ready when the Shadowcorns invade with their army of minions!? The Shadowcorns are mysterious and hold their plans close so we can't share much about this... but they're planning something big.

Team RPG

Team RPG with PvE and PvP components. Unicorns will test their mettle against each other and hone their teamwork skills in this battle loop!

Please note that this Whitepaper was created before we launched the game and so may contain out of date information. As our product grows and evolves we will not be updating the Whitepaper. Players should explore the game to discover what has changed and work with other players to learn the secrets of Crypto Unicorns. We'll continue to post high level information in Discord and on our Medium blog as we release and update features. We won't release all the details & specifics though as we believe that a large part of the fun in games is learning as you play!

Gameplay



The primary gameplay in Crypto Unicorns is a farming simulation. Players purchase Land NFTs that they can upgrade over time. Land is the engine of our community-owned economy and is where Unicorns are bred, hatched, and evolved.



Land Gameplay

A player's farm is their "home on the range" within the Unicorn Multiverse. It's a completely customizable plot of land with a variety of productive buildings including the Stables, Nursery, Workshop, Gathering Cart, and Farm Plots. Unicorns are extremely helpful creatures (so long as you ask nicely!) and love to help out around the farm. Players benefit from working to upgrade their land which increases its productive output.

Key Buildings:

- **Farm Slots:** Players can plant seeds to grow berries which are used in breeding, evolution, and crafting.
- **Gathering Cart:** Players can send Unicorns on gathering quests and collect various rewards when they return!
- **Workshop:** Players can assign Unicorns to craft items from a list of potential recipes.
- **Nursery:** Players can breed, hatch, and evolve Unicorns.
- **Stables:** Players can upgrade the stable to increase the number of Unicorns that can be assigned to work on the Land.

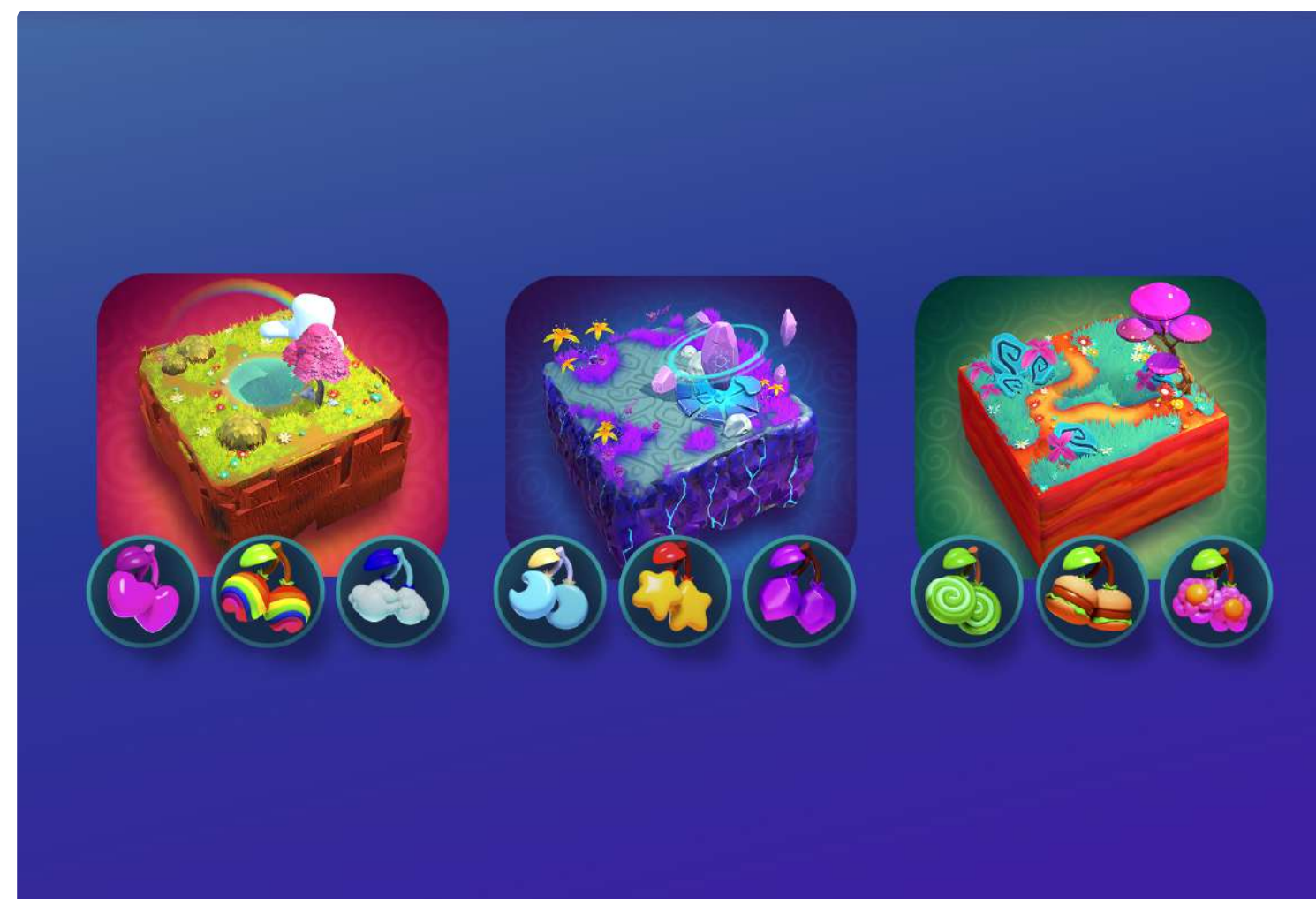
Types of Land:

Common:



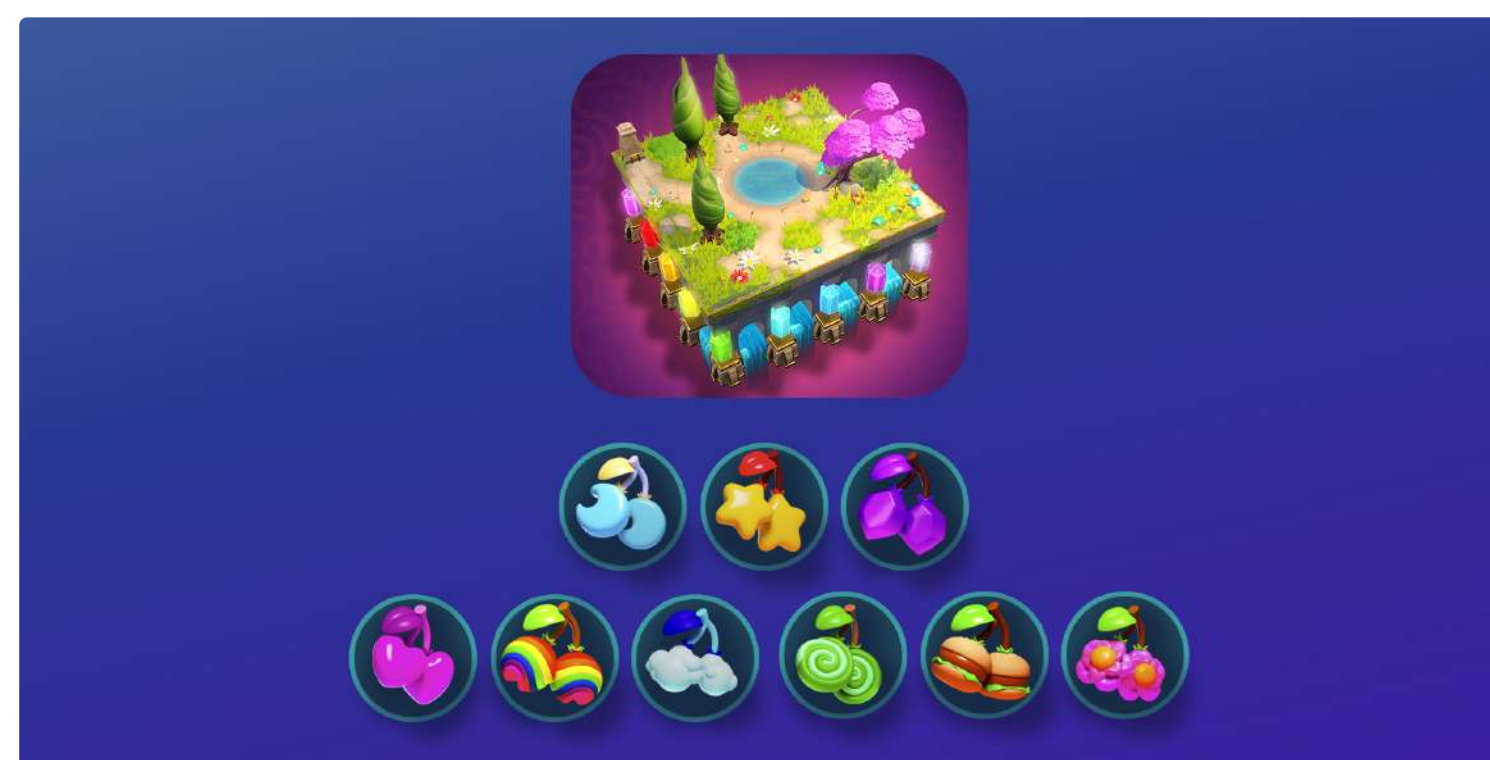
Common Land is the most basic type of land. Match Unicorns to their Land class to boost productivity.

Rare:



Rare land has synergy with an entire Unicorn class group (ie. Wonder -> Cloud, Heart, Rainbow). Assign Unicorns that match Land class groups to boost productivity.

Mythic:



Mythic land is the highest rarity and has a synergy with all Unicorn classes. Assign any Unicorn to work a Mythic land to boost productivity.

Farming



Berries grow from seeds planted by the player or their unicorns!

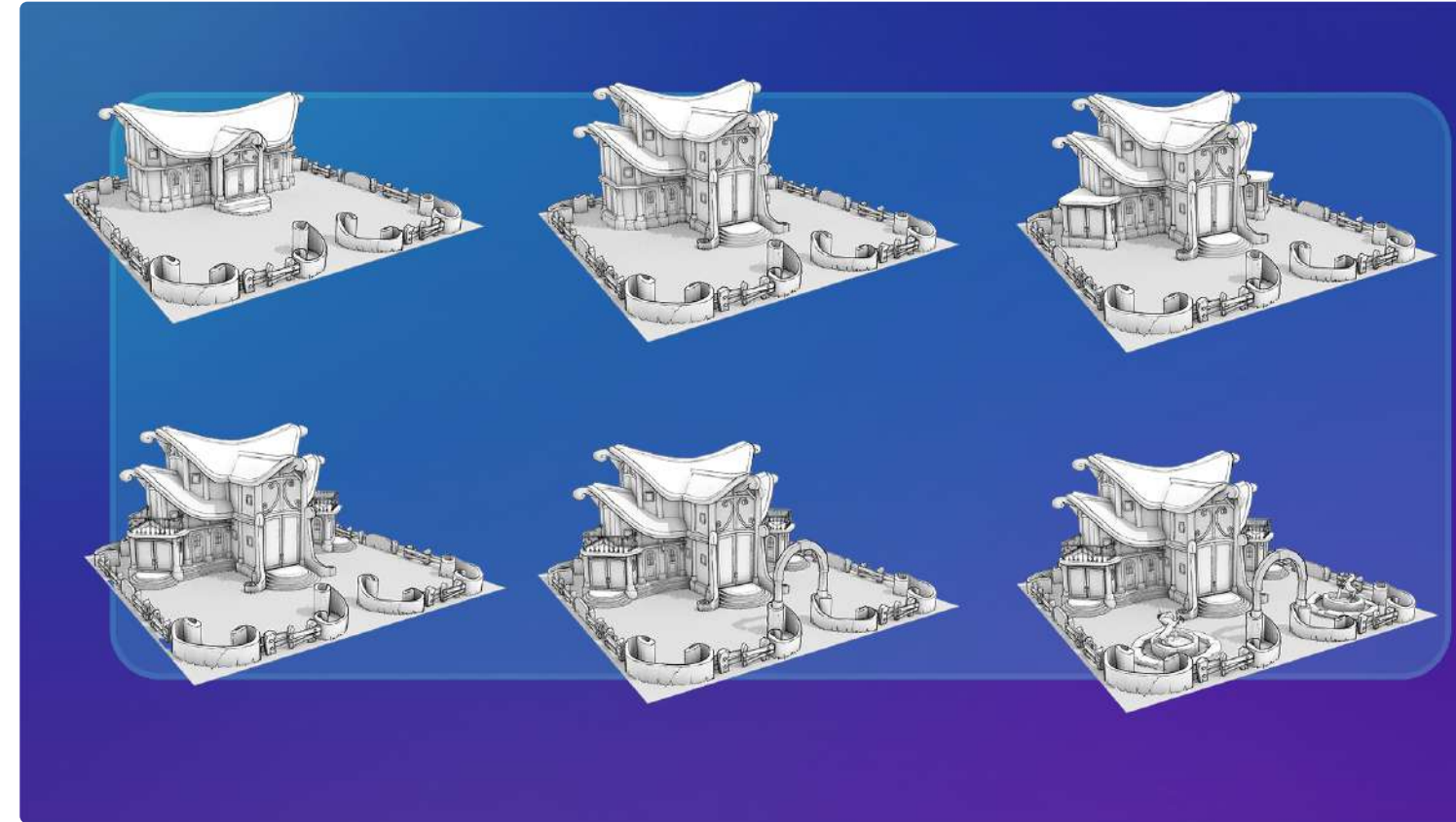
Players begin by adding farm plots to their Land. They can plant seeds on the farm plots and return later to harvest berries. Did you know that Unicorns **LOVE** berries? Players can assign a Unicorn when planting seeds to increase berry production. They can further boost berry production by keeping their Unicorns properly fed with berries so they don't get hungry on the job!

Initially, players can farm 10 types of berries including plain berries and one berry type for each Unicorn class. Players can use berries to breed and evolve Unicorns and as ingredients in crafting. When a player plants a seed they should expect a variable amount of berries corresponding to the seed type planted. Farms get bonuses based on Land adjacency.

It may come as a surprise to many players that Unicorns poop! Cleaning up Unicorn poop is a daily reality of life on the farm. The good news is that Unicorn poop doesn't smell and can often include items like seeds, so it's important to check back regularly so it doesn't pile up!

Stables

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The Stables are where Unicorns sleep after a hard day of work on the farm. Players can level up a Stable to increase the number of Unicorns they can assign to work at any one time. Players can expect additional features around the Stables to be added over time.

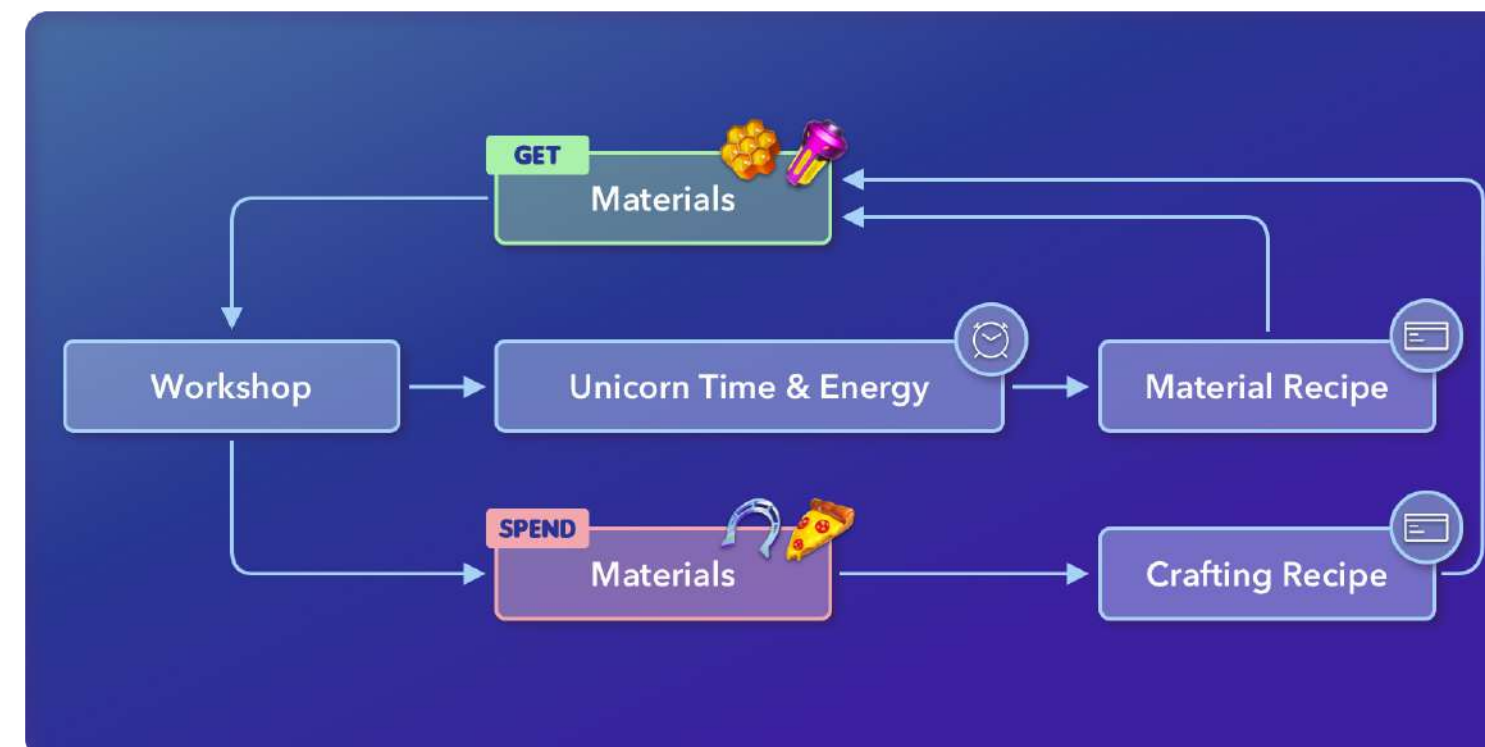
Workshop (Crafting)



In the Workshop, players can craft building materials and items like breeding and evolutionary boosters. Unicorns are necessary to begin crafting any unlocked recipe. Upgrading a Workshop unlocks higher-level crafting recipes.

The following recipe types are available at launch:

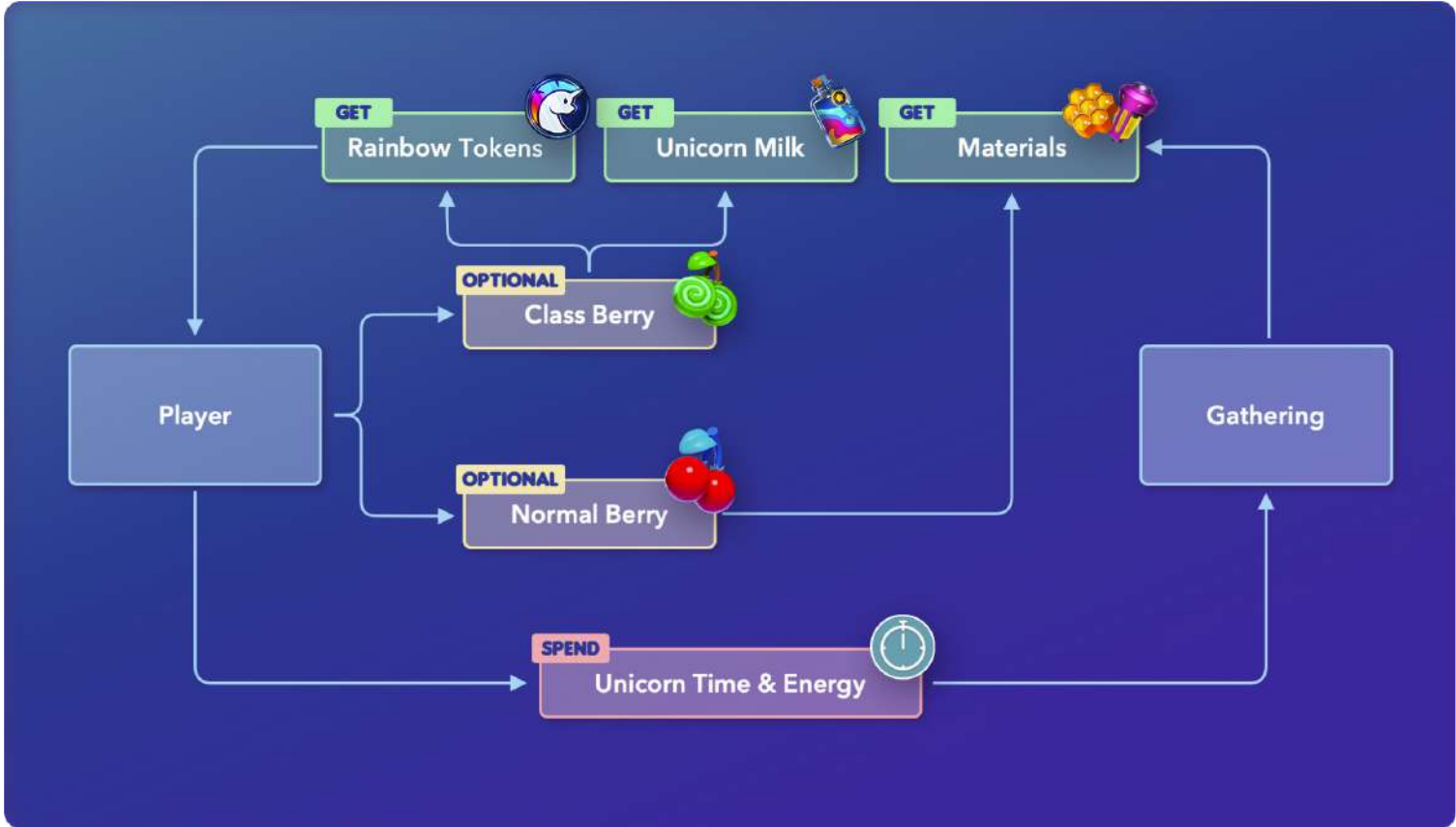
- Materials
- Hatching & evolution boosters



Gathering Cart (Quests)



Unicorns love to go on gathering quests! The cataclysm spread valuable material far and wide within the Unicorn Multiverse. Send out your Unicorns to search and recover. Gathering quests require a Unicorn with at least one energy. Players can not use their assigned Unicorn in other gameplay modes while the Unicorn is on a quest. Spending berries ensures a player's Unicorn doesn't get hungry while questing and leads to higher potential rewards. Eventually, the Unicorn will return from their quest with materials as well as a small chance of Unicorn Milk and Rainbow Tokens. At launch, the gathering cart will be very simple but we will expand it into a more robust questing system in future versions.



Nursery



The Nursery is where all the magic happens. Inside players breed Unicorns to produce new Unicorn eggs which can be hatched into baby Unicorns! Players can also evolve babies into adult Unicorns.

Breeding:

- Any two Unicorns who still have breeding points can be bred. The required cost is normal berries + UNIM & RBW.
- Optionally, players can spend class berries for a higher chance of producing the class they want.

Hatching:

- When an egg is ready — usually 24 hours after breeding — players can hatch it at any time. Gas fees will apply.
- Optionally, players can use a booster to improve the stats of their Unicorn. While not necessary, we highly recommend using it to maximize the chance a newborn inherits parts from its parents.

Evolution:

- Post cooldown, a player can choose to evolve their baby Unicorn into an adult.
- Optionally, players can use an evolutionary booster to roll for higher-quality stats. We highly recommend using these for those looking to maximize the stats of their Unicorn.

Jousting



Unicorns love entering Jousting Tournaments! These tournaments, coming later in 2022, will be live, and feature up to 32 unicorns competing in a series of bracketed matches where one Unicorn is victorious! Some events will be free while others will have entry fees payable in UNIM or RBW.

Jousting matches will be highly entertaining demonstrations of strength and speed. Core jousting stats are ultimately determined by inputting a Unicorn's base stats into an algorithm which outputs scores for top speed, acceleration, and endurance. Each match will be split into three (3) rounds, with the winner being determined by points or Unicorn knockout.

Each jousting round, Unicorns will charge at each other with these potential outcomes:

- **Miss** - Both Unicorns miss each other.
- **Glance** - One or both Unicorns strike a glancing blow.
- **Stagger** - One or both Unicorns stagger.
- **Knockdown** - One Unicorn is knocked down.
 - When a knockdown occurs a 10 second count timer begins. The Unicorn must stand up before time is up or a knockout is declared and the match is over!

If a round doesn't end in a knockout, the three judges will weigh in and issue a score based on several factors (strike quality being most important). Once the scoring phase is over, the next round begins. At the end of the third round, assuming no Unicorn is knocked out, the Unicorn with the highest aggregate score will be the winner.



Racing



Believe it or not but Crypto Unicorns also love to race!

Unicorn racing, also coming later in 2022, will feature different race tracks with unique attributes like class, distance, weather, and length designed to produce exciting events. The first races will feature eight Unicorns competing for the win. Unicorn Racing attracts a wide range of contestants given it tests every facet of their talents!

Smarter Unicorns are able to better pace themselves for distance races, stronger Unicorns are able to out-muscle their rivals in acceleration, tougher Unicorns can go longer without being winded, and fast Unicorns are... well, FAST! Players will be ranked based on how their Unicorns place. The higher the Unicorn ranks, the greater the rewards they'll receive. Racing will start with three genesis tracks controlled by the developer, but over time, tracks will be managed by the community.

Racing Stats:

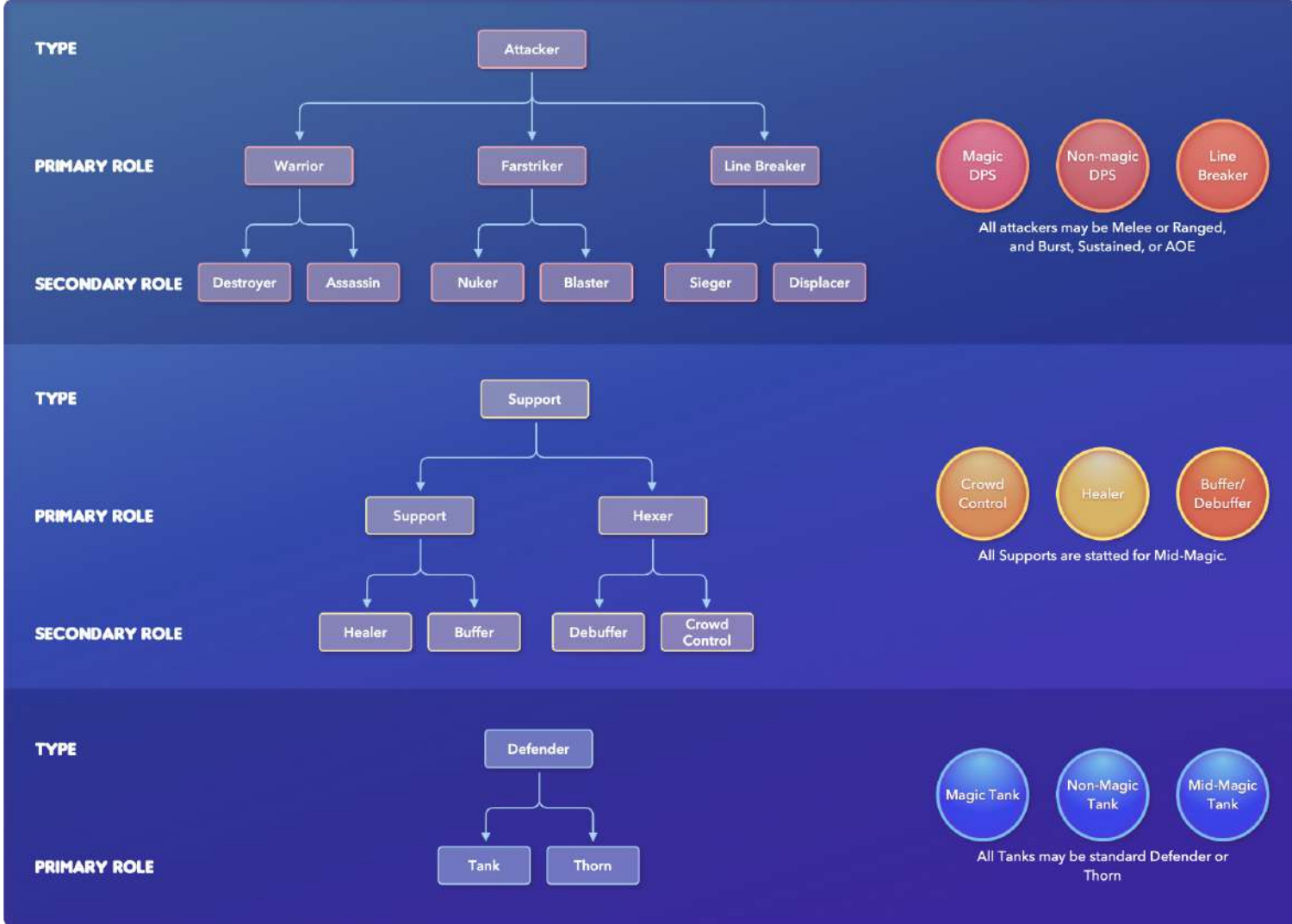
TOP SPEED		ACCELERATION		ENDURANCE INTERVAL	
DETERMINED BY:		DETERMINED BY:		DETERMINED BY:	
Endurance Score	Speed Score	Power Score	Speed Score	Endurance Score	Intelligence Score

Core racing stats are ultimately determined by combining a Unicorn's base stats to produce scores for Top Speed, Acceleration, and Endurance.

Battle Gameplay

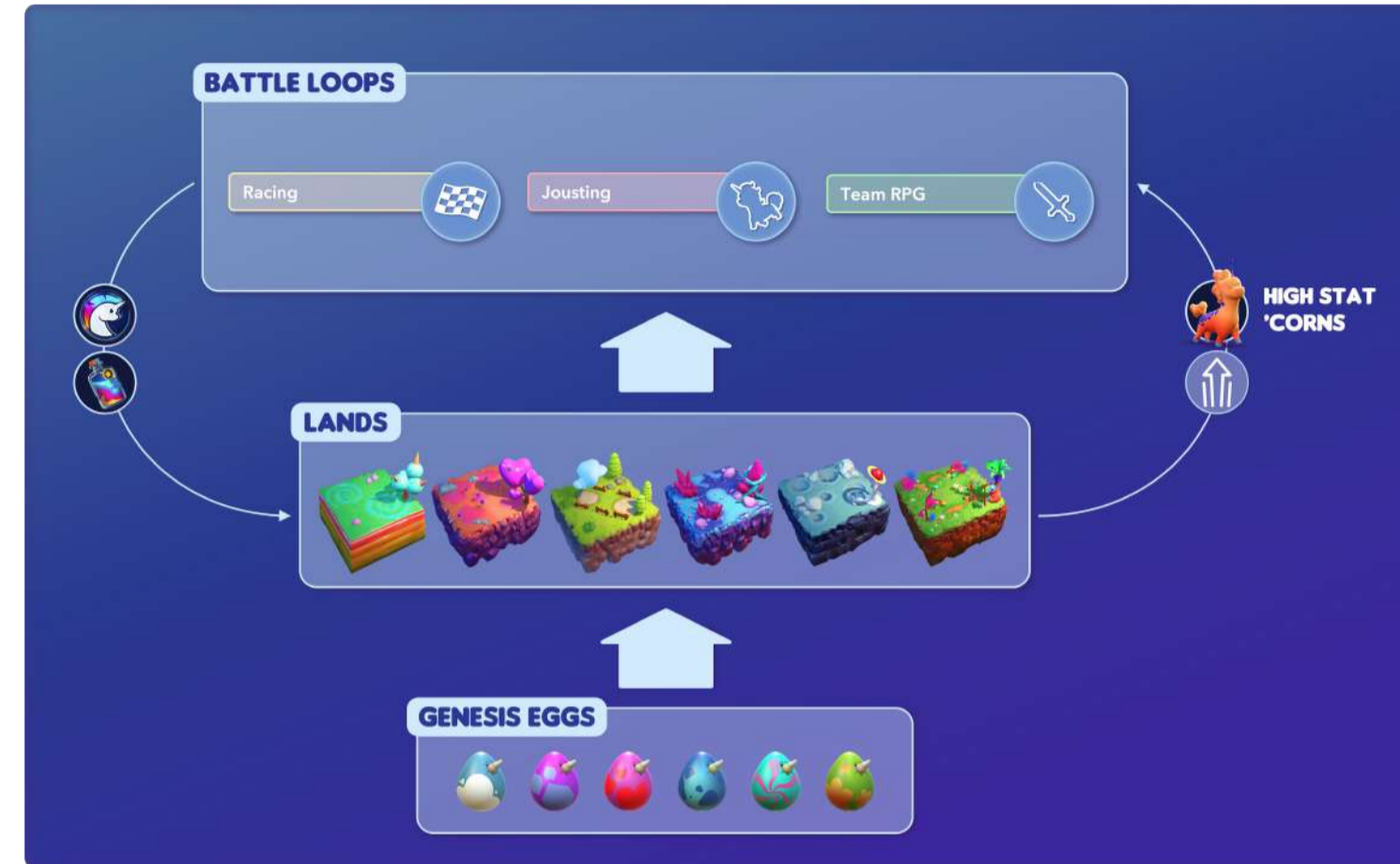


Everyone knows that Crypto Unicorns are always ready for Battle to protect their homeland! We are planning an epic team RPG game with both PvE and PvP elements for our third "battle loop". This game type is still under development and will launch in Q4 2022.



Game Assets & Economy Design

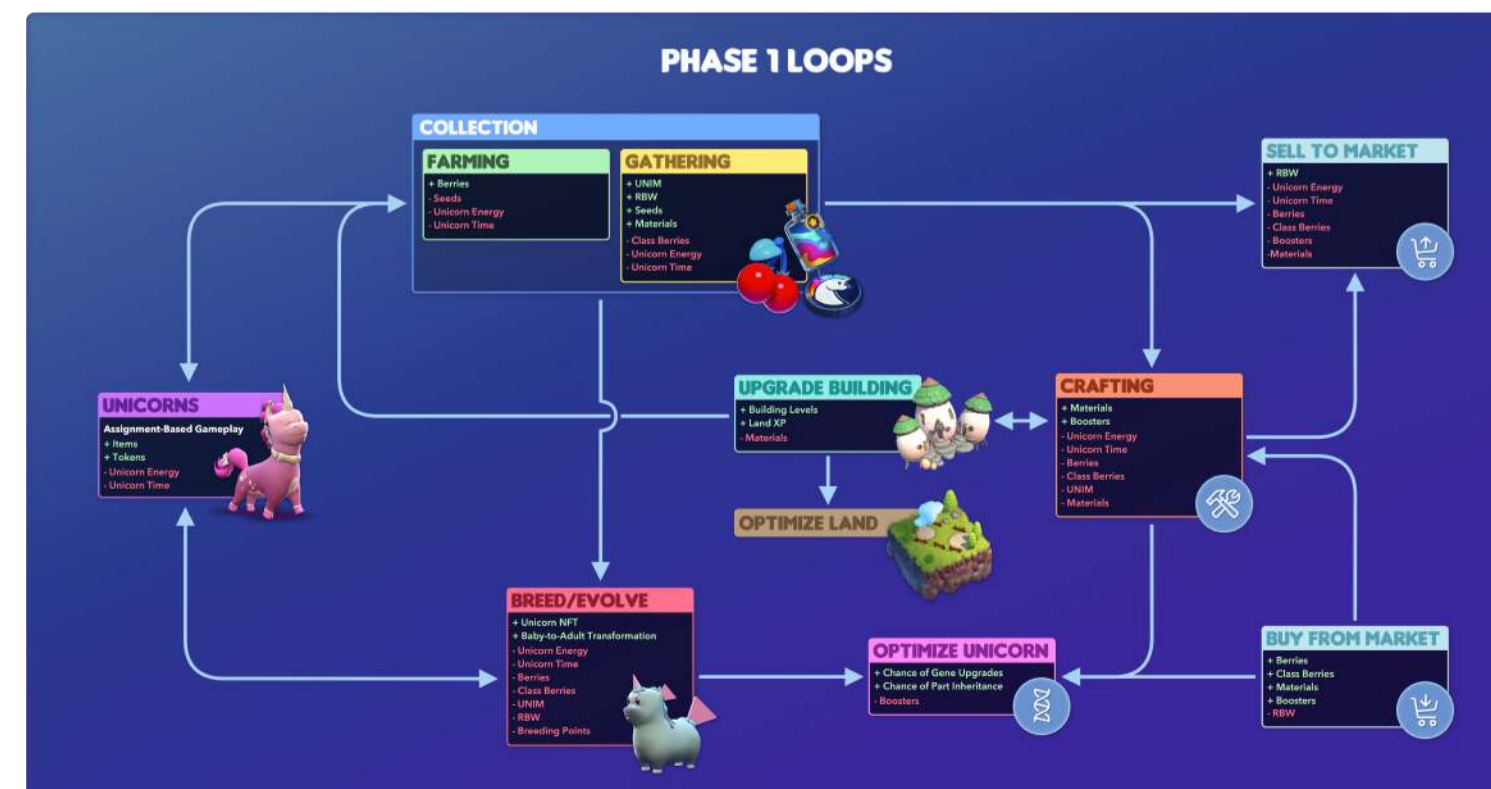
Designing a sustainable blockchain based game economy is a uniquely challenging problem. Because players can freely enter and exit the economy, we, as the game's developer, **must** *incept, grow, and manage a player run economy* for as long as the community believes we are the best stewards.



A sustainable economy needs both depth and breadth. This is one of the many reasons we chose farming as our core loop. As a result, Land becomes the engine of the Crypto Unicorns' economy.

- Players purchase Land to harvest and produce resources for the entire Crypto Unicorns economy.
 - Trading via the Rainbow Token marketplace favors highly collaborative gameplay.
 - There is plenty of extensible depth in these systems that will keep players optimizing for years to come.

Land also facilitates and enables the birth of new generations of Unicorns. The beauty of Land gameplay is that it does not care about the stats of a Unicorn. As players progress, their Land will need an increased number of Unicorns farming to maintain optimal production efficiency. Combine this with the battle loops which will always be hungry for high stat Unicorns and we have the makings of a long-term sustainable economy in which players are forced to specialize into the systems and gameplay loops they care most about. This is similar to how the IRL economy works.



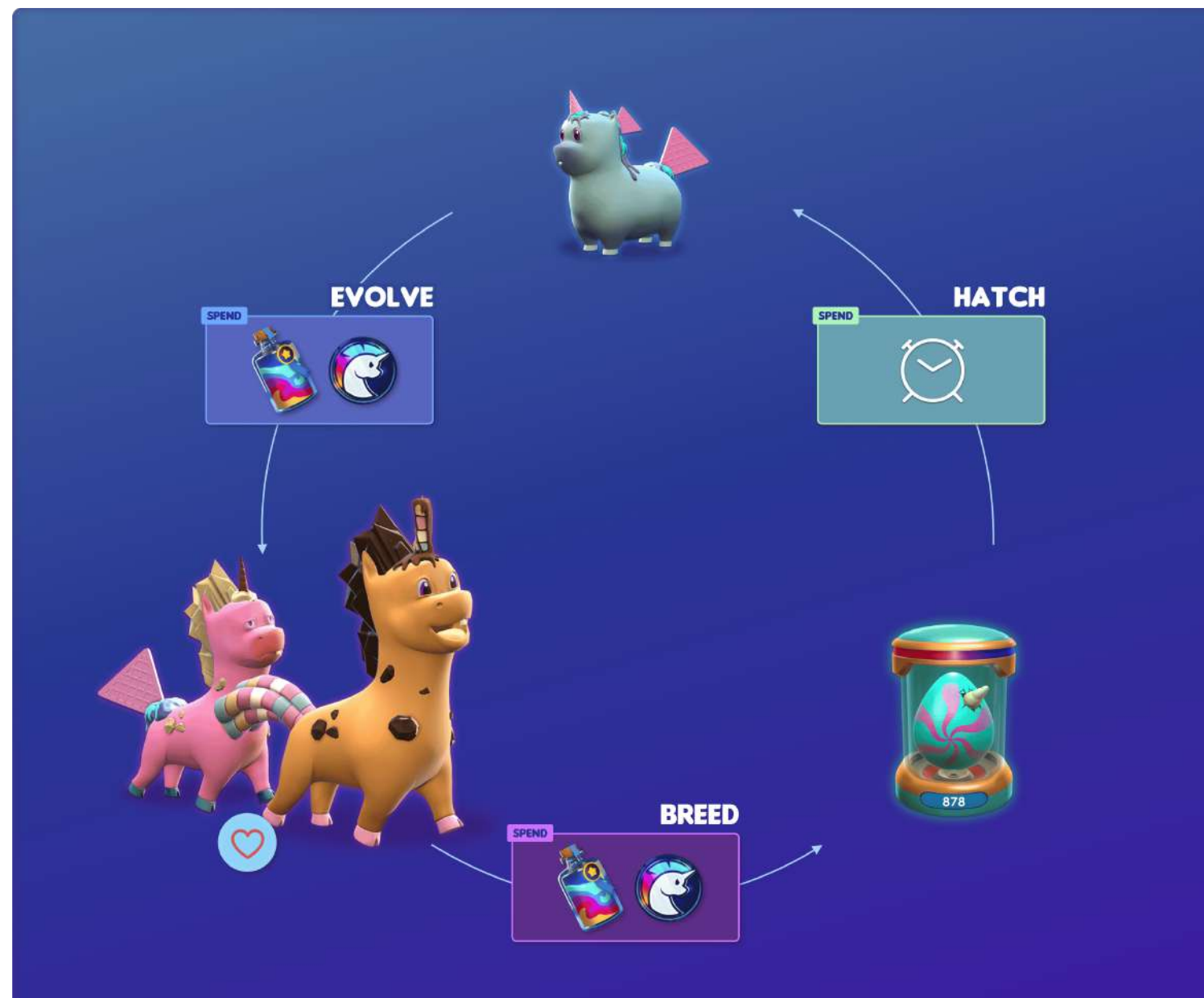
No team has a silver bullet when it comes to the complexity of economic systems design. We believe our initial design provides the foundation for a vibrant economy with various levers that will help us tune and balance the system as it grows.

Unicorn NFTs



During the summer of 2021, the Laguna Games team discovered 10,000 Genesis Unicorn eggs in a mysterious vault inside the dormant Unicorn Multiverse. Ancient writings on the vault walls indicated that these were the only store of Unicorn eggs and they were placed here during the Unicorn extinction event in hopes that one day the Unicorns could be reborn and retake their rightful place in the Unicorn Multiverse. On November 15, 2021, Laguna Games sold all 10,000 genesis eggs to early community members. These eggs form the foundation of the game economy.

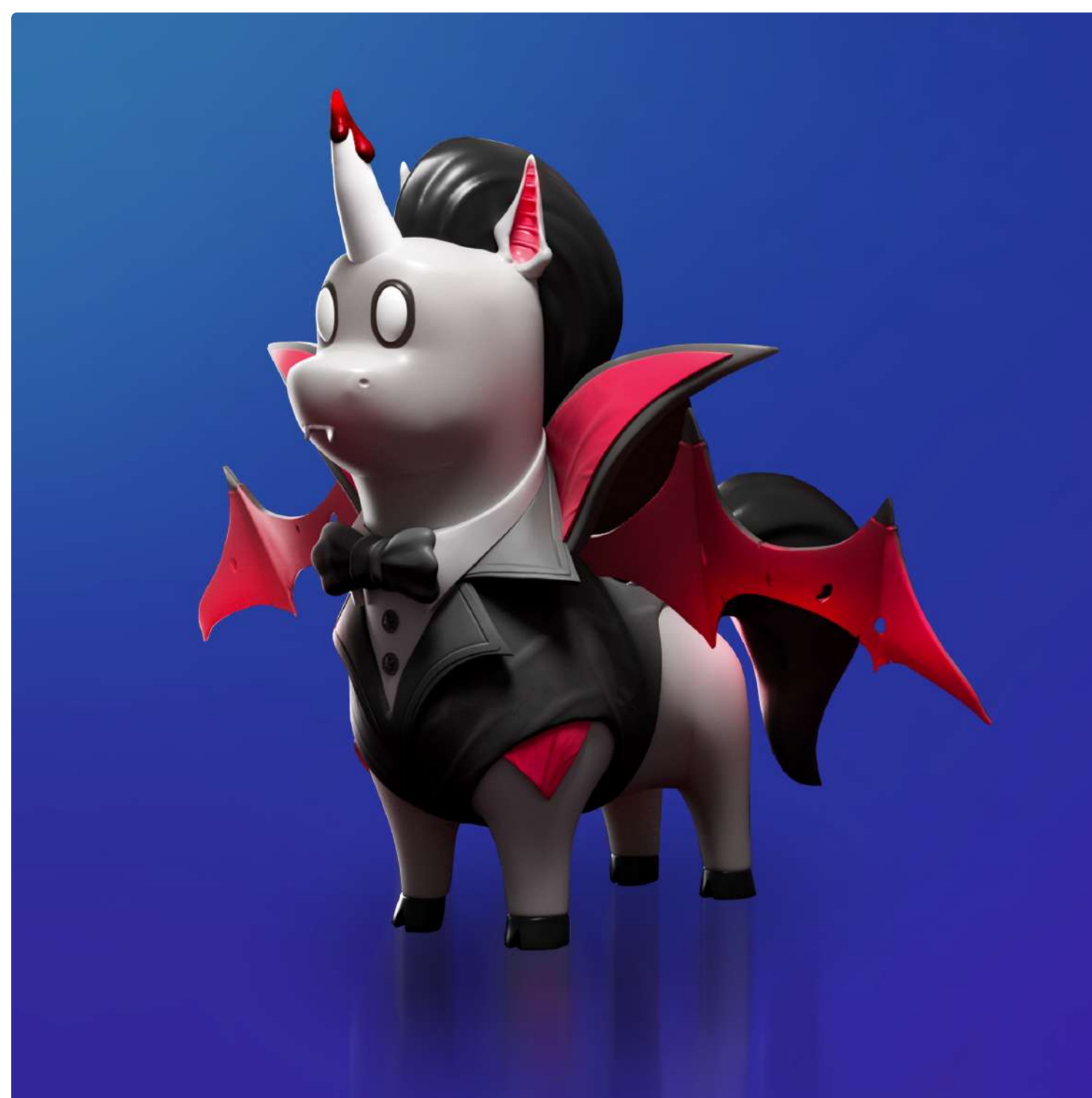
Many people don't know this but Unicorns are amazing and highly useful creatures. They start their lifecycle as eggs, hatch into babies, and eventually evolve into adults. As adults they are amazing farmers able to grow and craft everything needed to grow their Multiverse. Each Unicorn also has a unique set of skills, defined by their genes, that make them adept at battle loops like jousting and racing.



For the Unicorn Multiverse to grow and thrive, the original 10,000 Unicorns must breed. Players can breed Unicorns using Unicorn Milk, Rainbow Tokens, and Normal Berries. When breeding two adult Unicorns, each parent Unicorn's genes pass down to the newly-created Unicorn egg NFT. Each Unicorn can breed up to eight (8) times helping to control supply. We will also introduce a number of deflationary mechanisms over time to further control supply.

Limited Edition 1/1's:

We also found 99 Limited Edition experimental eggs that hatch into unique 1/1 Unicorns. Sadly the commercialization process required to bring these experimental eggs to life makes them sterile. We will likely tie these Unicorn eggs to prizes for winning events and community contests. 1/1 Unicorn's will generate stats using the same genetic algorithm as normal Unicorns and won't necessarily be OP. Like normal Unicorns, Limited Edition Unicorns start as eggs, hatch into babies, and can be evolved into adults. We expect to release these 99 limited edition Unicorns over time in tandem with partners globally.



Year 1 - Unicorn Utility:

- Planting Seeds & Harvesting Berries
- Crafting Materials & Items
- Gathering Quests
- Jousting
- Racing
- Team RPG
- Mini-Games
 - Dark Forest Act I
 - ...:)



There are nine total Unicorn Classes

Six Primary Classes

- Heart
- Cloud
- Flower
- Candy
- Crystal
- Moon

Three Hidden Classes

- Rainbow
- OmNom
- Star

Genes

Once hatched, a Unicorn's parts and genes define their unique genetic identity. Parts give each Unicorn their visual traits and the genes determine the stats/scores for each type of gameplay.

All Unicorns of one class start out with the same base stats. A Unicorn's genes transform those base stats into what they are when the Unicorn hatches. Better genes will result in higher stats. Each Unicorn has 6 parts and 18 total genes.

To determine a Unicorn's genes, we first determine the newborn Unicorn's parts. Parts that aren't inherited from a parent will be rolled. Once the parts are inherited and/or rolled, we roll 3 genes for each part.

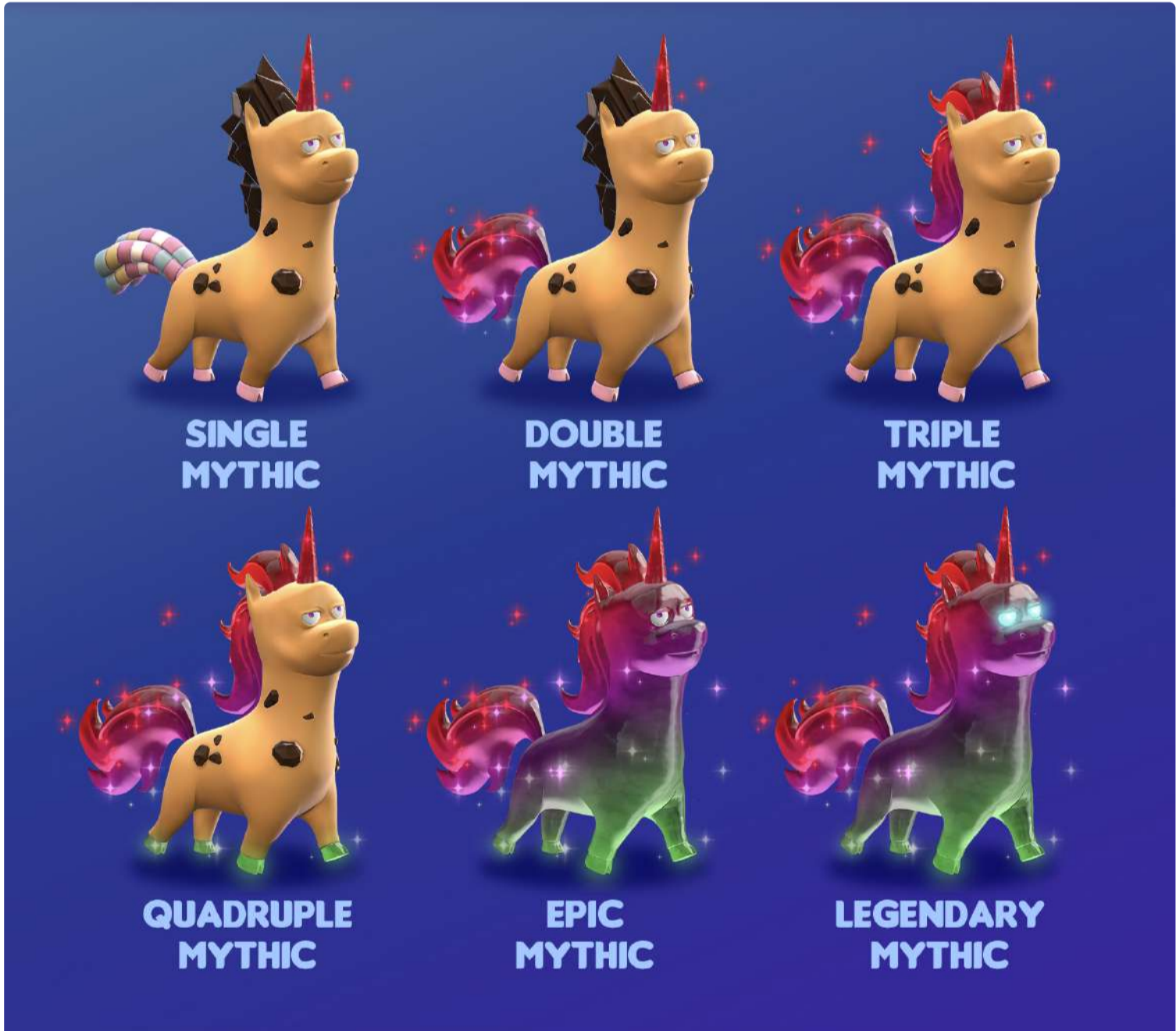
A part has three gene slots:

- **Major Gene Slot:** Genes in this slot have the highest chance of being upgraded through evolution.
- **Normal Gene Slot:** Genes in this slot have a lower chance of being upgraded through evolution than Major Genes Slot, but have a higher chance than genes in the Minor Gene Slot
- **Minor Gene Slot:** Genes in this slot have the lowest chance of being upgraded through evolution.

	Major Gene	Normal Gene	Minor Gene
Eyes/Expression	Gene Slot	Gene Slot	Gene Slot
Fur Pattern	Gene Slot	Gene Slot	Gene Slot
Horn	Gene Slot	Gene Slot	Gene Slot
Hooves	Gene Slot	Gene Slot	Gene Slot
Tail	Gene Slot	Gene Slot	Gene Slot
Mane	Gene Slot	Gene Slot	Gene Slot

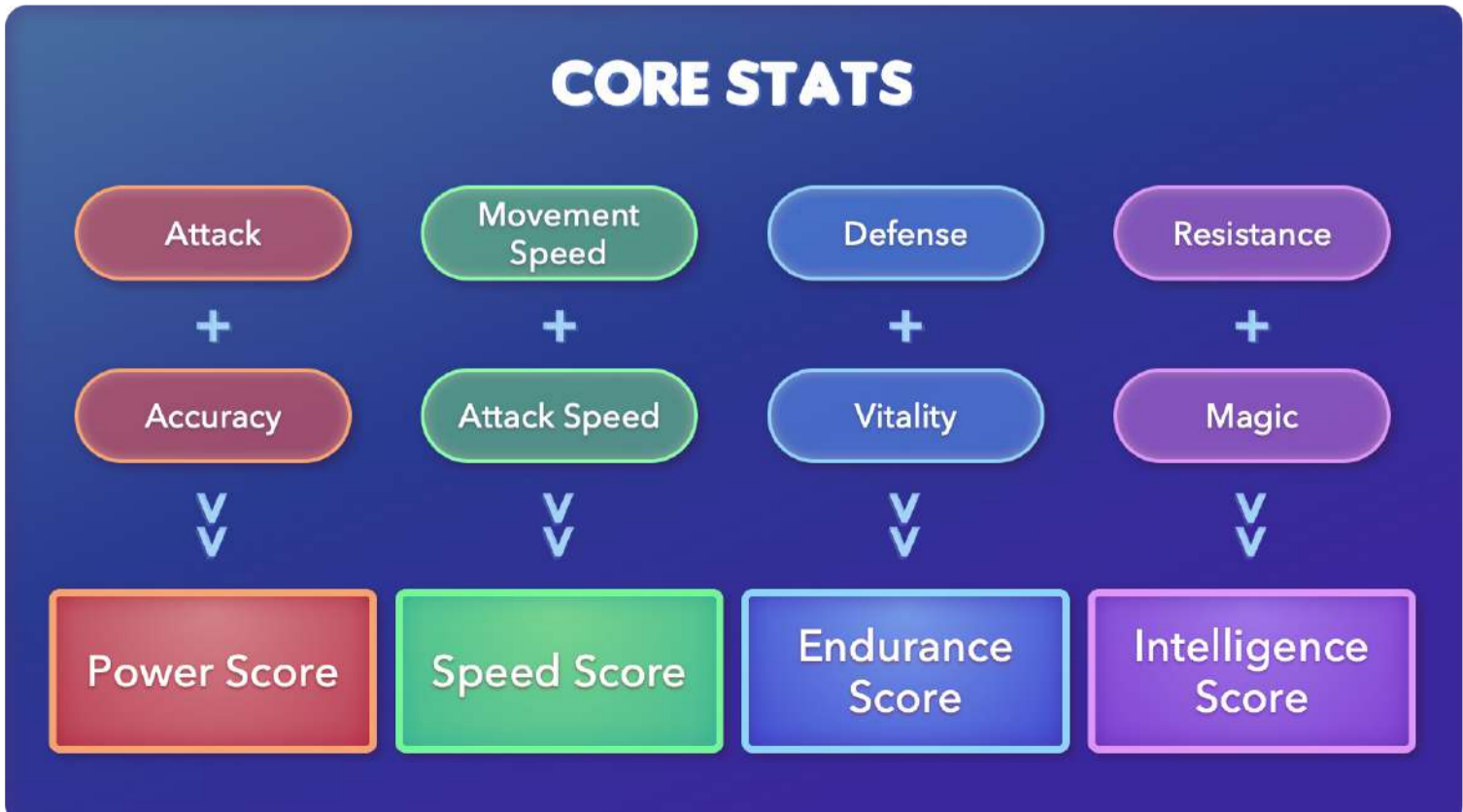
Mythic Parts:

The first Major Gene for Mythic Parts will use the Tier 3 of the Class Gene. It's extremely rare but Mythic Parts can be inherited through breeding.



Core Stats:

Every Unicorn has the following core stats which are used to produce scores for Power, Speed, Endurance, and Intelligence. By deriving scores from common core stats used across all Unicorns, we can use the same foundational stats across all types of gameplay. For example, Team RPG would use the Battle Stats themselves while Jousting and Racing would use the Scores.



Breeding

To breed Unicorns, the player must pay Unicorn Milk, Rainbow Tokens, and Normal Berries. Optionally, players can add Class Berries when breeding to affect the results. Each Class Berry used increases the odds that the newborn will be of the same class as the used berry.

Note: This only applies when the two parents aren't of the same class. Three Class Berries will be available for such breeds: One for each class of the parent, and one for the hidden class if applicable.



Without class berries there is an equal chance of each class.



Using class berries increases the chance of that class being produced.

Looking at the above example, if a player wanted to insure the resulting class was Crystal they would need to add Crystal Class Berries. Using Boosters when breeding also increases the chance of the parts of the parent of that class being passed down to the newborn. The higher tier of booster used, the greater the bonus chance of parts being passed down.

The chance of parts being passed down to the newborn can be improved using Breeding Boosters. Breeding Boosters are items that can be crafted in the Workshop. They can also be bought and sold in the \$RBW Marketplace. There are six tiers of Breeding Boosters. The higher the tier of Booster, the greater the chance of the parents passing down their parts to the newborn Unicorn.

Optimizing a Unicorn's stats will be a long journey of breeding Unicorns who have good genes, using Breeding Boosters to increase the chance of parts with those good genes being inherited by the newborn Unicorn. Then the baby Unicorn with inherited good genes has a chance to upgrade those genes further when the baby evolves into an adult. The adult Unicorn can then breed and try to pass down its parts to the newborn. Rinse and repeat.

Hatching

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Once breeding begins it takes roughly 24 hours to produce a new Unicorn Egg. Once the egg is ready, players can elect to hatch it anytime. Before the egg hatches, players can add a booster which they can craft using Materials and Class Berries.



	BOOSTER Tier 1	BOOSTER Tier 2	BOOSTER Tier 3	BOOSTER Tier 4	BOOSTER Tier 5	BOOSTER Tier 6
♥ Chance of inheriting part	+2% Chance of inheriting part	+5% Chance of inheriting part	+9% Chance of inheriting part	+14% Chance of inheriting part	+20% Chance of inheriting part	+35% Chance of inheriting part
★ Chance of gene upgrade	+1% Chance of gene upgrade	+3% Chance of gene upgrade	+6% Chance of gene upgrade	+10% Chance of gene upgrade	+15% Chance of gene upgrade	+25% Chance of gene upgrade

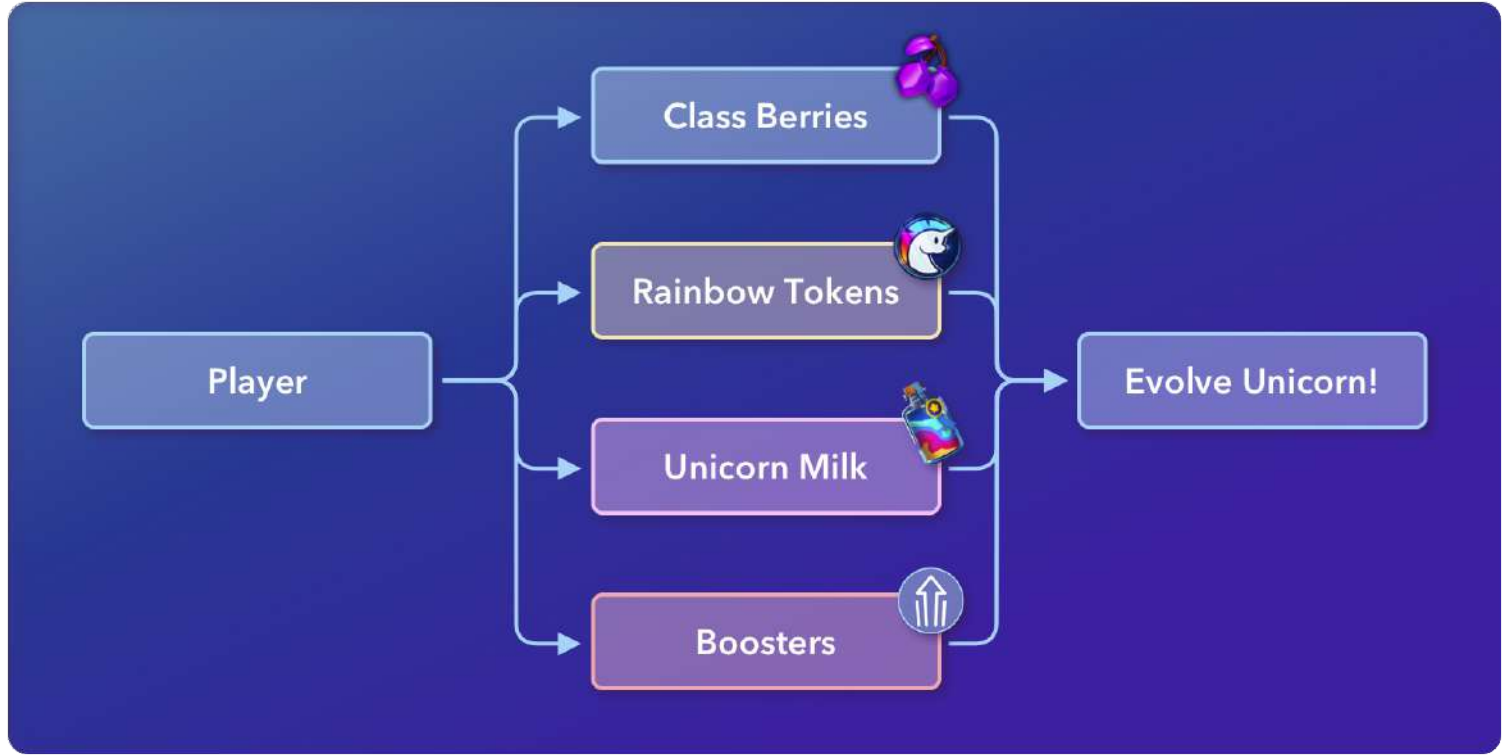
Evolution

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Players can evolve their Unicorns from their baby form whenever they wish. Unicorns will always keep their unique visual traits but Evolution gives a chance to roll to upgrade each of their 18 genes. Since only adult Unicorns can breed, we anticipate most players will evolve their unicorns into adults.



Unlike Breeding, Class Berries are necessary for evolution. To evolve a Unicorn, the Player needs to spend Class Berries of their Unicorn's class plus Rainbow Tokens and a small amount of Unicorn Milk.



Players need 100 class berries per Unicorn evolution. Additionally, players can use Evolution Boosters when evolving their Unicorns to increase the chance of upgrading Genes during evolution.

Evolution Flow:

1. Each Gene rolls to see if it upgrades during Evolution
 1. If Yes, the Gene will upgrade to a higher Rarity
 2. If No, the Gene will stay at its current Rarity
2. After the roll for Gene upgrades, the Unicorn's stats will increase to match the new rarities of the upgraded genes.
3. Then all 8 Unicorn Stats increase by 20%.
4. Next, each visual attribute or "part" asset is then upgraded to its next evolution stage.
5. After all rolls and upgrades are complete the Unicorn is evolved.

Land NFTs

As discussed, Land is the focal point for farming gameplay and represents the overall engine of the Unicorn economy.



There are three rarities of Land NFT; Common, Rare, and Mythic:

- **Common Land** comes in 9 different types (one for each Unicorn Class). When using a Unicorn of the same class as the Land, a player receives buffs making harvesting, gathering, and crafting more efficient.
- **Rare Land** comes in 3 different types (one for each class group). Rare land will provide buffs for any unicorn within an entire class group. This gives a player more optionality when looking to maximize their farming operation.
- **Mythic Land** comes in only 1 type and buffs all 9 classes! This type of land is by far the rarest and most valuable because it buffs all Unicorn class.

Total Land Supply

Following the launch of the game we will eventually allow players to purchase new plots of land. Ultimately, there will be a maximum limit to the total supply of each plot type:

- Common Plots: 900,000 Max Supply
- Rare Plots: 90,000 Max Supply
- Mythic Plots: 10,000 Total Supply

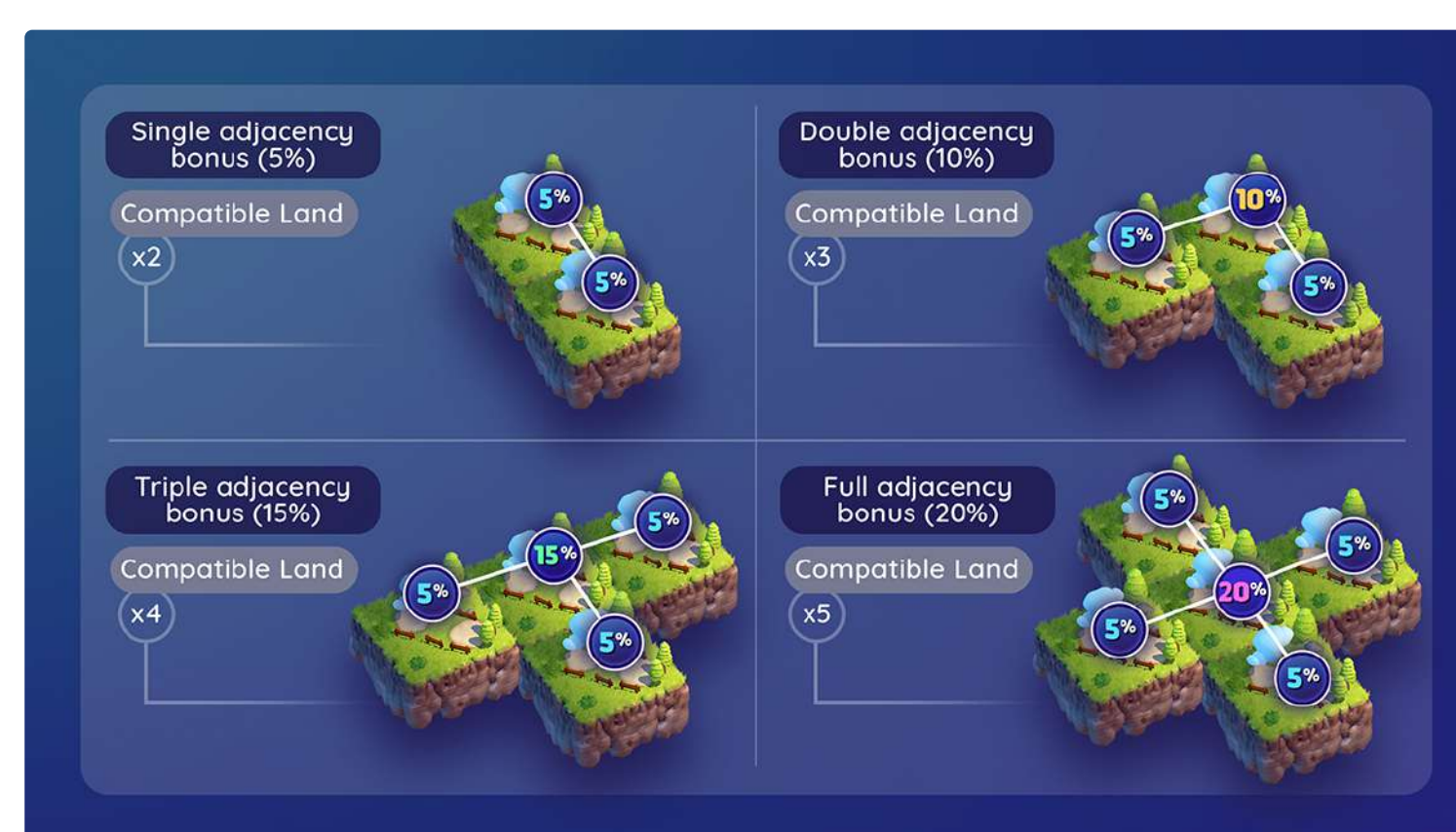
We expect players to purchase land based on their preferred class (or class group) of Unicorns enabling them to build an efficient and competitive farming operation. There are a variety of strategies including purchasing multiple Common plots or going after a Rare or Mythic plot.



Credit: Nowan#0264

Land Adjacency:

Players can stitch together Land NFTs to create shared adjacency bonuses.



Neighborhoods:

Unicorns are friendly and like lending a neighborly hand so in 2022, we will release a very exciting feature called Neighborhoods. Players will form Neighborhoods by bringing their land plots together with guildmates. This will allow people to optimize for shared adjacency bonuses to collectively maximize their productive output. We expect this highly social gameplay to form the basis for how we run live events with our community of Unicorn farmers.



Purchasing Land Post-Launch:

Sometime soon after the game launches, players will be able to purchase new lands at will. Purchasing land in this way will require both ETH as well as a Keystone item. Players can earn Keystones by crafting them in the Workshop or through event rewards. When land is purchased, the Keystone is consumed. Each type of Land has its own Keystone. The price of land sold after the pre-sales will be on a bonding curve. Each Land type will have its own bonding curve. This allows players to buy land without requiring us to arrange time-specific sales. In addition, we get a system whereby new land is minted naturally to meet incoming demand.

NFT Delegation



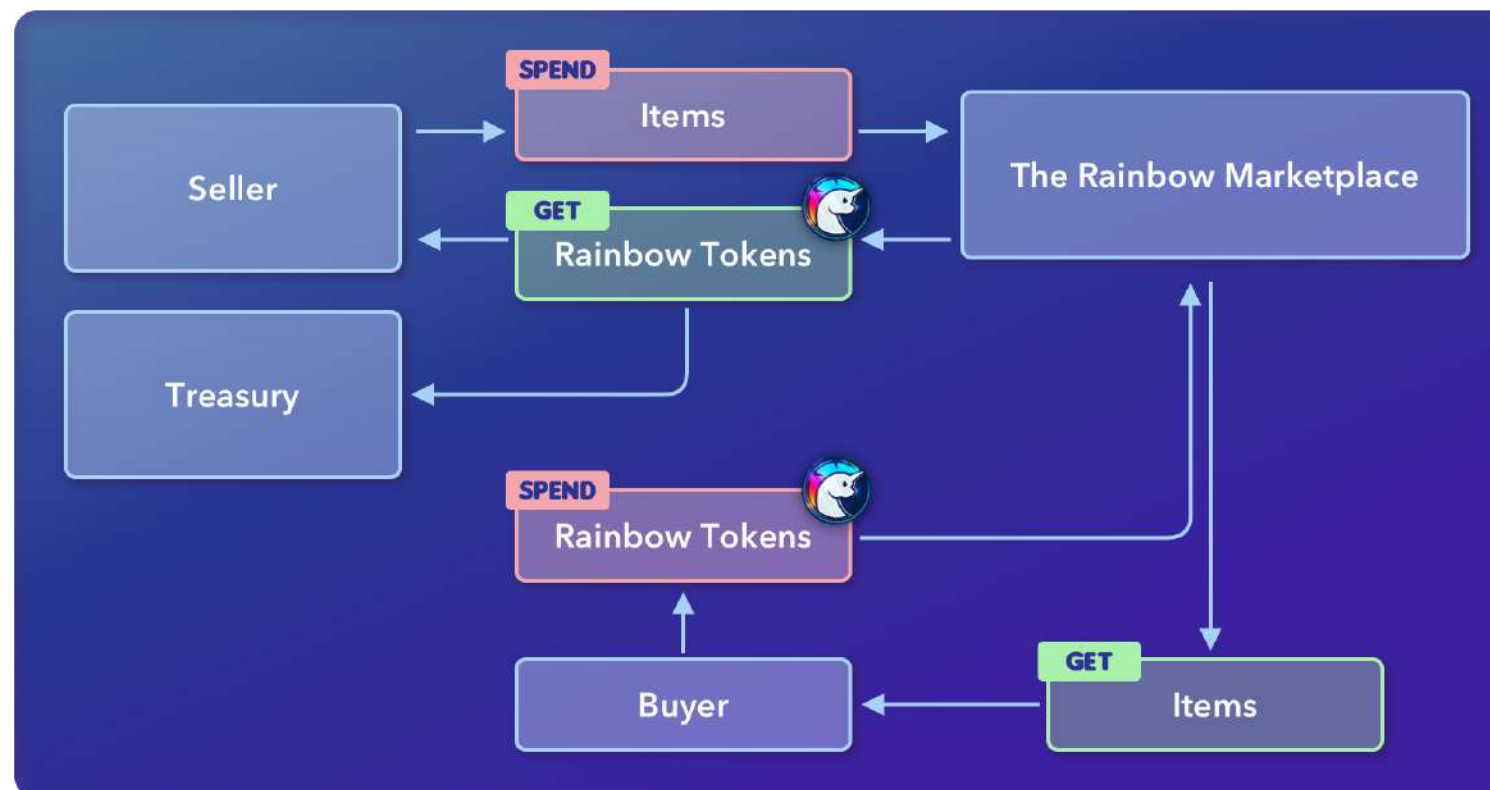
Many crypto-based games rely on a simple lending feature that enables the ecosystem of play & earn guilds. Traditional solutions create a lot of overhead for managers and aren't trustless for scholars. More recent projects have added lending marketplaces that allow anyone to lend out assets for predetermined rates. With Crypto Unicorns we intend to utilize a staking or delegate system which enables both the lending of assets as well as trustless revenue share (ie. automated payment flows).

We plan to implement this functionality shortly after MvP game launch.

Rainbow Marketplace



This feature is a form of light PvP at the center of our farming gameplay. Effectively players buy and sell berries, materials, and booster items for Rainbow Tokens via a real-time marketplace.



The RBW Marketplace leverages bonding curves as the pricing mechanism per bundle. Every time a player buys or sells a bundle the listing price is adjusted based on the underlying bonding curve.

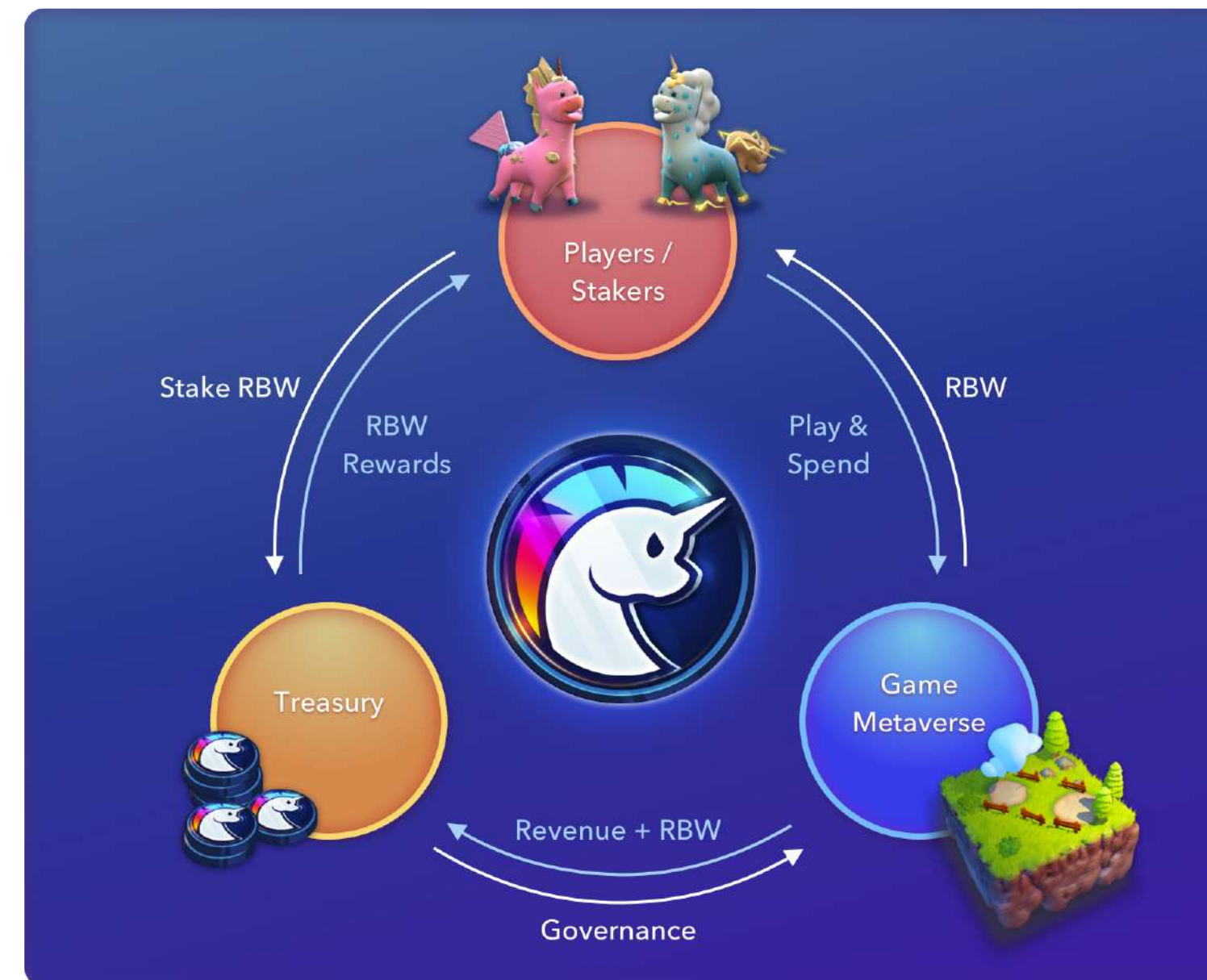
This is a peer-to-peer marketplace where each item has a bonding curve. Players can collectively influence the price of bundles (denominated in RBW) as they buy and sell. Each day there will be a new set of bundles listed in the marketplace allowing players to trade against each other.

Rainbow Token - \$RBW

Rainbow Tokens (RBW) are the primary value token for the Unicorn multiverse. Holders will be able to utilize these tokens in a variety of ways including;

- Stake to vote on DAO governance and earn staking rewards
- Purchase high-value boosters, items, and materials from the Rainbow Marketplace
- Breed and evolve Unicorns
- Pay entry fees for Jousting, Racing, and Battle Tournaments
- And much more to be announced...

The ultimate goal of RBW is to decentralize the ownership and governance of the Crypto Unicorns Treasury and IP.



Multi-Sig Wallet Treasury

Funds are secured by an industry-standard Gnosis multisig wallet. The Treasury wallet keys are held by 8 members of the Laguna Games team. Any transaction will require 5 of 8 signatures to execute. This helps to protect the project against hacks and malicious team members. We share the address below in the interest of absolute transparency with our community. Anyone can view transactions as they are submitted for approval and see the history of every past transaction.

[Treasury Address Polygon](#)

[Treasury Address Ethereum](#)

[Treasury Analytics \(ETH\)](#)

[Treasury Analytics \(POLY\)](#)

[RBW Vaults \(3/5 Multi-sig\) -](#)

[Play & Earn + Staking](#)

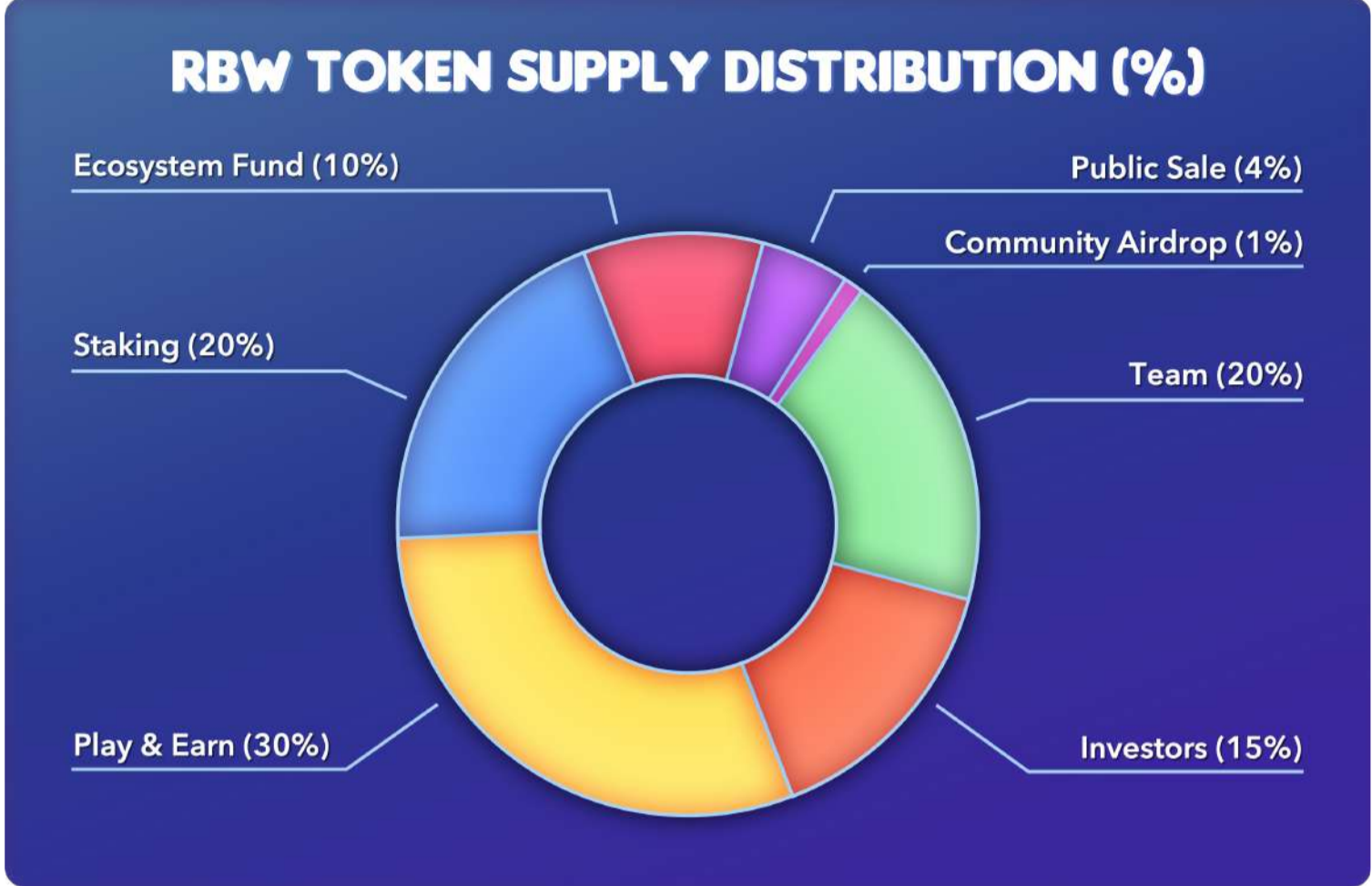
[Ecosystem Fund](#)

[Team & Investors](#)

Allocation and Unlock Schedule

Total Supply = 1,000,000,000

Initial Circulating Supply = 50,000,000



Category	Allocation	%	Notes
Play & Earn	300,000,000	30%	In-Game Rewards
Staking	200,000,000	20%	Token Staking Rew: + LP incentives
Team	200,000,000	20%	1 year lock + 2 year linear unlock
Ecosystem Fund	100,000,000	10%	Growth / Developm
Investors	150,000,000	15%	1 year lock + 2 year linear unlock
Public Sale	40,000,000	4%	Instant Unlock
Community Airdrop	10,000,000	1%	Instant Unlock
Total	1,000,000,000	100%	



Play & Earn



In Crypto Unicorns - Players will have several ways to Play and Earn including:

- Harvesting Class Berries and selling them on the market
- Gathering on Lands Crafting Breeding, Evolution, and Building Materials and selling them on the market
- Harvesting and crafting upgrade materials
- Entering race events
- Entering Jousting events and tournaments
- PvE and PvP Battle

Overview

Detailed Unlock Schedule

Token Amount	% of total supply	unlock schedule
300,000,000	30%	gradual unlock over ~5 years

Staking Rewards



We will be using RBW tokens to gradually transition Crypto Unicorns to a community-owned Decentralized Autonomous Organization or DAO. People can stake their RBW to participate in key governance decisions and earn rewards.

We've designed our staking mechanism to align rewards with long-term participation in governance. Additional details are in the governance section.

Lastly, we may incentivize liquidity providers through an LP token staking mechanic. This is still TBD and we are evaluating various strategies including the innovations around Protocol Owned Liquidity.

Overview	Detailed Unlock Schedule	
Token Amount	% of total supply	unlock schedule
200,000,000	20%	gradual unlock over ~5 years

Team



Laguna Games, Inc. is the development team behind Crypto Unicorns and should maintain an incentive to continue supporting and building indefinitely. The development team will receive 20% of the total token supply with a 1 year lock and a 24 month linear unlock.

Overview	Detailed Unlock Schedule	
Token Amount	% of total supply	unlock schedule
200,000,000	20%	1 year lock + 2 year linear unlock

Ecosystem Fund



Until the DAO is fully activated Laguna Games will directly manage the Ecosystem Fund. Its purpose is to further the development of Crypto Unicorns and foster community growth. Until control is passed to the community, Laguna Games will provide annual statements detailing the use of funds. Post integration with the voting dashboard the community will take over and begin voting directly on how the fund should be allocated. Our goal is for this to occur by the end of 2022.

We view the Ecosystem fund as an onboarding mechanism for new partners across a variety of areas including:

- Game Loop Development
 - Join us in building out new experiences for our player community.
- Growth Marketing
 - Help us spread Unicorn fever globally!
- Auxiliary Services
 - Public Analytics Dashboards
 - Unicorn Trading Marketplace
 - And much much more!

Overview	Detailed Unlock Schedule	
Token Amount	% of total supply	unlock schedule
100,000,000	10%	gradual unlock over ~5 years

Investors



Laguna Games raised \$5M in a private sale to strategic investors in Q3 2021. These investors purchased RBW at a de minimis price in exchange for fiat to fund the development of Crypto Unicorns as well as general operating costs.

All investors are subject to a 1-year lock followed by a 24 month linear unlock.

Overview	Detailed Unlock Schedule	
Token Amount	% of total supply	Unlock schedule
150,000,000	15%	1 year lock + 2 year linear unlock

Public Sale



On Feb. 28th, 2022 we will launch a Public Token Sale via the Copper Launch platform on Polygon. The structure of the sale leverages Balancer's Bootstrapped Liquidity Pool mechanism.

The Public Sale will include 40MM RBW tokens, but given the mechanics of a bootstrapping liquidity pool, the tokens will not sell out. We will reserve the remaining tokens for future financing and potential airdrops.

Overview

Token Amount	% of total supply	Unlock schedule
40,000,000	4%	Instant Unlock

Community Airdrop

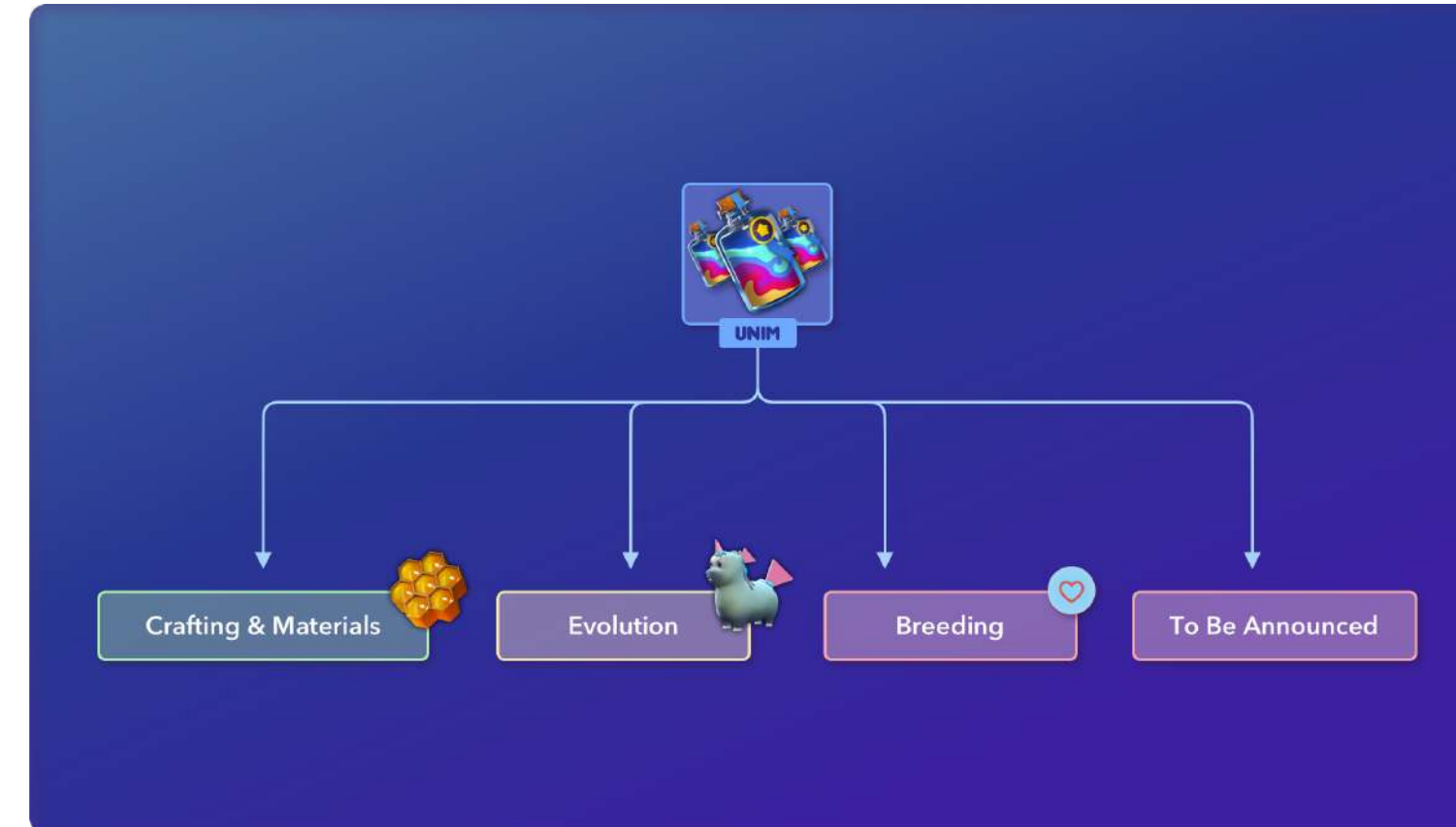


Shortly following our public sale we will airdrop one percent (1%) of the total supply — **10,000,000 RBW** — to loyal community members to give them a head start in the game!

Unicorn Milk (UNIM)

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UNIM is an ERC20 Token used to breed and evolve Unicorns as well as craft high-value items and boosters. Players earn this currency by competing in various events and tournaments. When it is used, it is burned and removed from the supply. We expect UNIM to function as the lifeblood of our economy and we will closely monitor its distribution to ensure long-term economic health.



Governance



Laguna Games, Inc. is committed to decentralizing Crypto Unicorns via the RBW governance token. This process will occur over the coming years as we distribute RBW to players and community members who can in turn stake RBW to participate in governance. As a result, Laguna Games' and our investors' ownership and control will gradually decline over time.

Component	Initial Design Choice
Treasury	Gnosis Safe
Governance	Gnosis Snapshot
Token	Rainbow Token (RBW)
Gnosis Safe Owner	Multisig
Gnosis Snapshot Owner	Multisig

Roadmap

- Phase 0 - Token Genesis
 - Launch of RBW via Public Sale
 - No Voting / Staking
- Phase 1 - Staking Launch
 - Staking Dashboard
- Phase 2 - Voting Launch
 - Voting System
- Phase 3 - DAO
 - Enhance governance control via the decentralization of smart contract upgrades.

With the launch of Phase 2 people who choose to stake their RBW can participate in key governance decisions and earn rewards. To incentivize long-term holders and people genuinely interested in furthering the Crypto Unicorn community we are leveraging a familiar voting lockup strategy seen in DeFi.

Players stake tokens according to various timelocks. The longer the staking period, the more sRBW (staked RBW) governance tokens they receive.

- **1 Month** - 1 RBW = 1.25 sRBW
- **3 Month** - 1 RBW = 1.75 sRBW
- **6 Month** - 1 RBW = 2.5 sRBW
- **12 Month** - 1 RBW = 4 sRBW

Staking rewards (RBW) are distributed to holders of sRBW daily. As a result, players with longer time horizons will earn more staking rewards and have an outsized vote on governance decisions. In order to build a generational IP, we must maximize long-term incentive alignment across all participants.

Important Note: The Team and Investor allocations are locked per the schedule outlined here. While locked we can stake and vote on governance decisions but will not earn staking rewards. Our tokens will be represented as "locked staked RBW" (lsRBW). We feel this is the fairest for our community members and puts us on the strongest path to decentralization.

Technology

:

Key Links:

- **Unicorn Diamond Contract**
 - [0xdC0479CC5BbA033B3e7De9F178607150B3AbCe1f](#)
- **Unicorn Farm Diamond Contract**
 - [0xA2a13cE1824F3916fC84C65e559391fc6674e6e8](#)
- **Unicorn Milk Diamond Contract**
 - [0x64060aB139Feaae7f06Ca4E63189D86aDEb51691](#)

Why Polygon:

Polygon is an entire ecosystem of scaling solutions built on top of the Ethereum Mainnet. When looking to select a protocol to launch on we wanted to find the solution that best aligned with our long term goals and maximized our flexibility overtime.

Polygon represents an internet of blockchains that sits on top of Ethereum. They took a [similar approach](#) to Cosmos but wisely chose not to directly compete as an L1. This in combination with their expansion into zkRollup technology as well as [Polygon Edge](#) give us plenty of options as developers to react to changing market conditions.

For example, it's likely we'll expand from Polygon's PoS network to either an EVM compatible zkRollup (Miden/Zero) or to an application specific side chain via Edge. This flexibility and variety of choice is another of the many reasons we believe in the long term viability of the Polygon ecosystem.

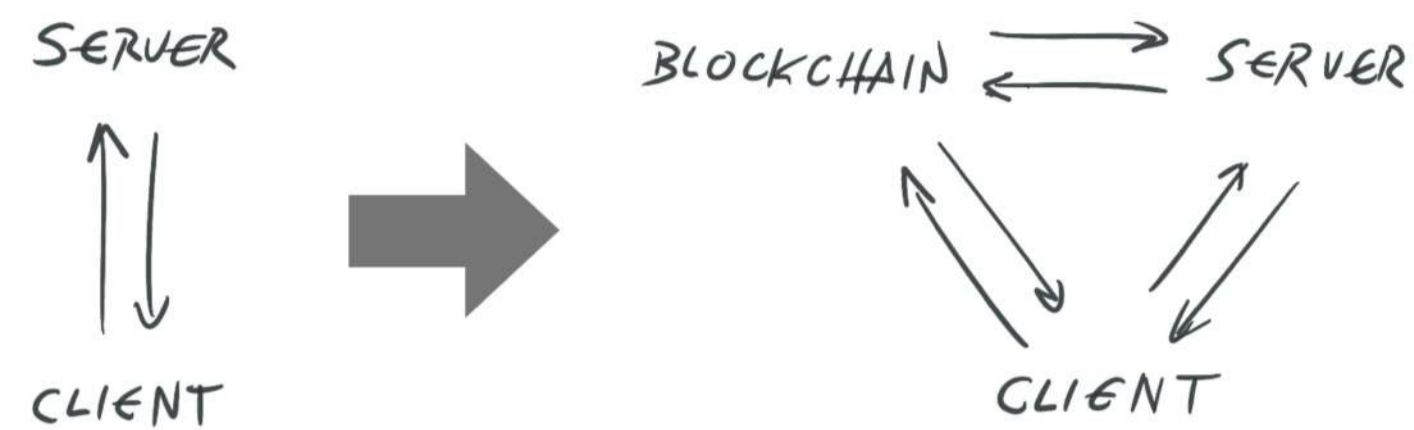
Server Signing

Goals:

- Keep value-critical computations (ex. breeding) on blockchain to ensure fairness and transparency.
- Prevent cheating from man-in-the-middle data injection attacks.
- Give players control over alterations/upgrades to the NFTs.
- Allow complex gameplay actions like spending cryptocurrency and soft currency “at the same time.”

Background Context:

In the past, games stored data and processed actions in two places; the client is the authority over player input, and the server is the authority over the recorded game-state. Crypto Unicorns introduces the blockchain as a third member of the system. With crypto-based games, data now needs to be replicated to two other parties.

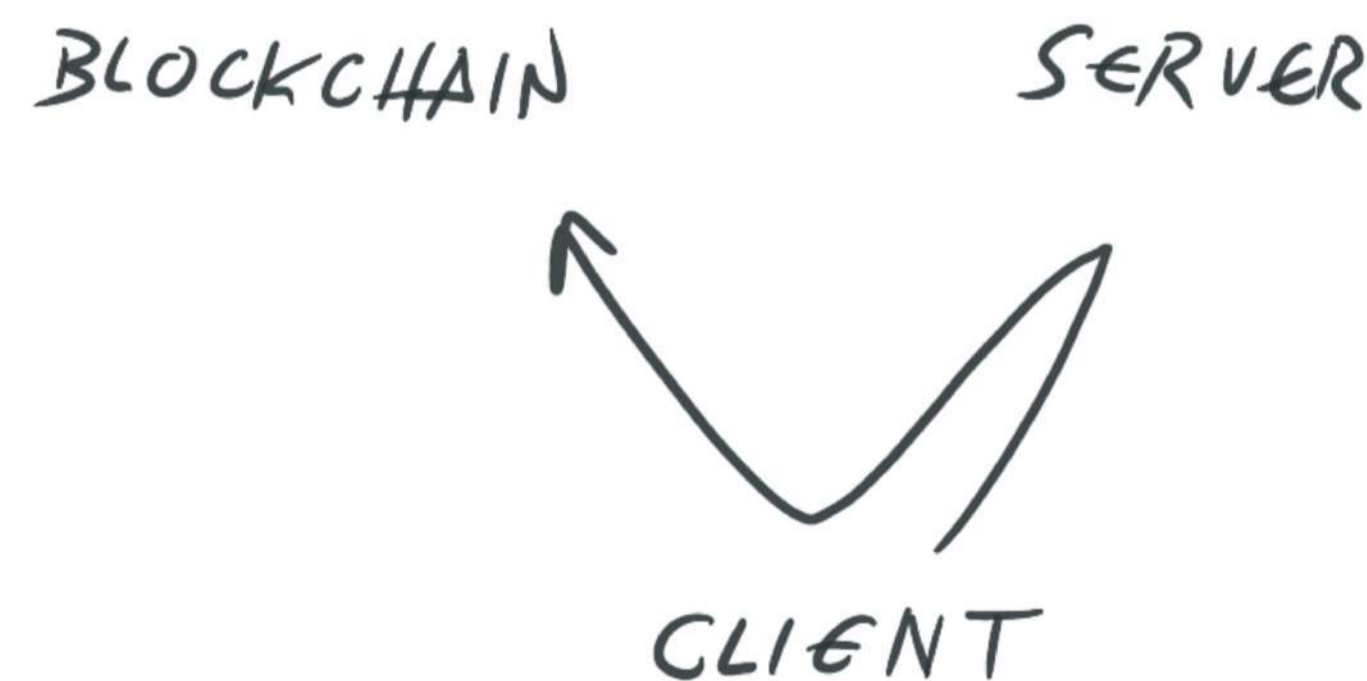


The blockchain introduces limitations that we need to account for:

- Smart contracts cannot “read” data from an API. The blockchain cannot make REST calls out to an endpoint. **The only stateful information the blockchain can access comes from function parameters or saved state from previous function parameters.**
- Every function call on the blockchain is deterministic for the block in which it is processed. Validators can re-run functions and the results will always be equal to the result which was officially written into the block. (This makes random numbers complicated.)
- Any RPC that mutates data on the blockchain is executed asynchronously. Putting a transaction into the queue does not guarantee that it will be processed or that it will succeed. Sometimes a transaction can take minutes or hours to resolve.
- The blockchain “calls out” by emitting subscribable events.
- Polygon writes new blocks about every 2 seconds, which causes frequent Uncle Blocks. The more confirmations added on top of our transaction, the less likely it will be orphaned. This leads to a grey area where a processed transaction may still be undone. We combat this by waiting for more confirmation blocks (20-80 blocks) before accepting transaction events.

Our Solution:

A generalized system/pattern that allows the player to call blockchain functions which include arguments that have been cryptographically signed by the server.



In the general case, the sequence of events will be:

1. A player takes an action which requires a blockchain transaction (state change) using data from the server.
2. The front-end sends this request to the game server.
3. The game server verifies the request, deducts any in-game resources being spent, and generates a payload for the blockchain.
4. The game server uses a private key to sign the payload.
5. The signed payload is returned to the client which adds it as an argument of the web3 function call.
6. The client prompts the player to sign the web3 transaction with their Metamask wallet and submit the transaction.
7. The smart contract uses the server's public key to verify that the payload is authentic before executing the transaction.
8. The smart contract emits an event letting any listeners (front end, back end, etc) know that the transaction finished.

NFT Airlock

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Goals:

- NFTs are always kept in the player's wallet (no staking or custody).
- NFTs inside the airlock can't be transferred/sold to another wallet.
- NFTs outside the airlock don't affect the game.
- NFT metadata is volatile inside the airlock and static outside the airlock.
- Locking and unlocking transactions are always performed by the player.

Background Context:

The data model for NFTs (both Unicorns and Land) is stored in three different storage locations. Each location is the "source of truth" for part of the NFT's record.

- **Polygon Blockchain:**
 - Ownership of NFTs
 - Data that persists when an NFT is sold or transferred between players.
 - The base information used to deserialize a Unicorn or Land: DNA, Class, Body Parts, etc.
 - Data that shows value (either money or time invested): rarity, level, breeding points, etc.
- **Arweave Metadata (JSON)**
 - Supplemental information to the NFT is stored on a second blockchain (Arweave Permaweb) which is optimized for permanent file storage. The json file is the source of truth for "content" such as the name and portrait image for an NFT.
 - Metadata follows the OpenSea Standard.
 - This data is largely for display purposes, so some duplicate data is cached. The main examples are Stats derived entirely from data on the NFT which require a complex calculation; Unicorn metadata saves the derived stats for easy reference on OpenSea and similar marketplaces.
 - The metadata json file is regenerated when something changes that needs to be visible on the marketplace, such as land leveling up, or egg hatching.
- **Game Server**
 - The game server owns volatile game state, such as cooldown timers, Unicorn energy, and Land positions in LOD2.
 - Storage on the server is fast and cheap to both read and write so the server may cache data from the other two stores for better performance.

On-Chain Mini Games



This launch encapsulated a bunch of our high-level goals for Crypto Unicorns including;

- This is a mini-game that is entirely on-chain and encapsulated into a smart contract.
- It was developed in collaboration with an external development team (shout out to our analytics partner Moonstream!).
- We see this as a template for many future collaborations in which we work with external development teams to add utility to our NFT assets.

Our plan is to build many more games like this in the future that give players fun experiences around the NFTs they own!

Team

Team

Laguna Games is a world class game development studio made up of 57 industry veterans from around the world. We are passionate about bringing daily moments of joy to our player community and seek to deliver high-quality entertainment on a massive scale. Our games are living worlds designed for real-time, large scale and highly social competition.



Key Team:

Aron Beierschmitt, Co-founder/CEO, [@aberschmitt](#)

- 10+ years of games experience @ Foundation Games, Beyond Games.
- 8 game titles including Lumi, Ravenwood Fair, Battle Strike Force
- Actively investing in crypto since 2017. Favorite projects: DCR, ETH, MATIC, OHM, CRV, CVX, TOKE, KLIMA, INDEX, MKR, SUSHI

Steven Garcia, Co-founder/CTO

- 10+ years games experience, on the developer side as well as tech & tools.
- GarageGames -> ngmoco -> DeNA -> Beyond Games
- Transformers Legends, Blood Brothers 2

Brian Akaka, CMO, [@brianakaka](#)

- 15 years in games, 5 months as a Pudgy Penguin.
- Freeverse -> Appular -> Anino
- Street Fighter 4, Monster Hunter, Talking Tomcat

Chris Bourdon, COO

- 15 years at Apple leading product marketing for macOS
- CEO of Upthere, sold to Western Digital

Rob Sampson, Technical Director

- 10+ years of games experience, 3+ years of Blockchain XP
- GarageGames -> Playdom -> Disney -> First Foundry
- Social City, Disney City Girl, ESPN College Town, Marvel Tactics

Beau Bateman, Art Director

- 8+ years of games experience.
- Naturalmotion -> Beyond Games
- My Horse, CSR Racing

Jeff Witt, Design Director

- 10+ years of F2P game design experience.
- Storm 8 (co-founder) -> Funzio (co-founder) -> GREE (Design Director)
- iMobsters, Kingdoms Live, Racing Live, World War, Crime City, Modern War, Kingdom Age

Dale Best, Studio Director, Laguna Games JHB

- 15 years of games experience
- Luma Arcade -> Beyond Games

Ria Lu, Studio Director, Laguna Games MNL

- 15 years of games experience
- Komikasi Games -> First Foundry
- Branded games for Coca-Cola, Nescafe, Jollibee

Jon Edwards, Client Lead

- 20+ years of software development experience, mostly in gaming.
- Spectrum Holobyte -> EA -> Activision -> Lumosity -> WB -> Beyond Games
- Trade Empires, X-Men, Skylanders, Amazing Spiderman, Harry Potter Wizards Unite

Andy Revak, Server Lead

- 7 years of development experience in gaming
- Gazillion -> Fogbank
- Marvel Heroes, Storyscape

Michael Williams, Senior Server Engineer

- 9+ years of software development experience
- Bex.io -> Walter.ai -> Phoenix Labs
- Dauntless

Trevor Lanz, Senior Client Engineer

- 20+ years of game development experience
- Dynamix -> GarageGames -> Gravity Bear -> Kabam -> Game Closure -> Beyond Games
- Starsiege, Battle Punks, Star Wars Uprising

For more information please check out our website - <https://laguna.games>

Appendix

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- NFT Rights & Ownership



Partners



We are backed by investors who believe in our mission and vision for building community-owned gaming experiences.



DELPHI DIGITAL

Transcend.



INFINITY
VENTURES
CRYPTO

POLYGON STUDIOS

We've partnered with several "PlayerDAOs" to forge long-term relationships with key players in the blockchain gaming space.



GUILDFI
PLAY X EARN



YGG
SEA



NFT Rights & Ownership

:

NFT Rights & Ownership -

1. You Own the NFT.

1. Each Crypto Unicorn is an NFT on the Ethereum blockchain. When you purchase an NFT, you own the underlying Crypto Unicorn, the Art, completely. Ownership of the NFT is mediated entirely by the Smart Contract and the Ethereum Network: at no point may we seize, freeze, or otherwise modify the ownership of any Crypto Unicorn.

2. Personal Use.

1. Subject to your continued compliance with these Terms, Laguna Games, Inc. grants you a worldwide, royalty-free license to use, copy, and display the purchased Art, along with any extensions that you choose to create or use, solely for the following purposes: (i) for your own personal, non-commercial use; (ii) as part of a marketplace that permits the purchase and sale of your Crypto Unicorn / NFT, provided that the marketplace cryptographically verifies each Crypto Unicorn owner's rights to display the Art for their Crypto Unicorn to ensure that only the actual owner can display the Art; or (iii) as part of a third party website or application that permits the inclusion, involvement, or participation of your Crypto Unicorn, provided that the website/application cryptographically verifies each Crypto Unicorn owner's rights to display the Art for their Crypto Unicorn to ensure that only the actual owner can display the Art, and provided that the Art is no longer visible once the owner of the Crypto Unicorn leaves the website/application.

3. Commercial Use.

1. Subject to your continued compliance with these Terms, Laguna Games, Inc. grants you an unlimited, worldwide license to use, copy, and display the purchased Art for the purpose of creating derivative works based upon the Art ("Commercial Use"). Examples of such Commercial Use would e.g. be the use of the Art to produce and sell merchandise products (T-Shirts etc.) displaying copies of the Art. For the sake of clarity, nothing in this Section will be deemed to restrict you from (i) owning or operating a marketplace that permits the use and sale of Crypto Unicorns generally, provided that the marketplace cryptographically verifies each Crypto Unicorn owner's rights to display the Art for their Crypto Unicorn to ensure that only the actual owner can display the Art; (ii) owning or operating a third party website or application that permits the inclusion, involvement, or participation of Crypto Unicorns generally, provided that the third party website or application cryptographically verifies each Crypto Unicorn