WHITEPAPER

Summary

GamePlay

Deck structure and rules

The deck is composed of a minimum of 12 attack cards. After the 12 attack cards are selected by the player, he can select a max of 8 magic cards, for a total max of 20 cards per deck.

Soldier: max 12 cards

General: max 4 cards

Legendary: max 2 cards

Magic: max 8 cards

PS: Magics have to be limited by 2 of each category.

Cards			
Attack	**Defence**	**Movement**	**Mystic**
Archery	Paralysis	Jumper	Almighty
Voodoo	Devine Protection	Revolve	Poison
Sniper		Fierce Destruction	Shamanic Heal
Vampire		Miracle	Rescue
			Abracadabra

Essentially, the player can play a battle only with 12 Soldiers, without any general, legendary or magics.

First action of the game

1. Coin flip
   a. Host of the game will always be heads as the player that has joined the match will always be tails. The coin is flipped and the result is presented to both players. The winner makes the first move.
2. All soldiers from his deck are shown to the player, then he selects three Soldier cards to be placed at the board. The players will take turns to place each card on the board, facing down. After each player has placed 3 cards, the game begins.

The game begins

After all the cards are placed on the board, the player that has the highest numbers on the dice gets to play first. He then receives 3 cards from his deck(blind) into his hand, as well as receives one Node(mana). With that in place, he can analyze what he has in hand as well as what is already placed on the board to choose the best move according to his strategy.

How to get Nodes during the battle

1. Players will receive 1 Node per round
2. 1 node is necessary to summon 1 Soldier
3. 3 nodes are necessary to summon 1 General
4. 5 nodes are necessary to summon 1 Legendary
5. The amount of nodes needed for using the Magics are specified on the cards themselves
6. If the player defeats his opponent's card, he's rewarded with Nodes according to what card he defeated. Ex: 1 defeated soldier = 1 awarded node, 1 defeated general = 3 awarded nodes, 1 defeated legendary = 5 awarded nodes.

General rule for the battle

At the beginning of every turn, a player receives a card in his hand. If the hand is already full (has 6 cards), no card will be added.

The primary moves of the game are:
1. Player can place a card on the board (Only one card)
2. Players can Attack
3. Players can Move
4. Players can pass
5. Players can use a Magic

The "pass" can be only used before any of the other actions.

Combinations of those actions are also possible, except move and attack or attack and move.

How cards move on the board

A card can move on the board according to its arrows. The card will move from its original place to one empty slot that has the arrow pointing to.

PS: Movement can be adjusted according to the magic cards, always with the direction of the arrows.

Card Details

Attack cards have 6 basic attributes. **Mana Cost**, **Element**, **Attack Arrows**, **Attack Power**, **Health Points** and **Card Name**. Magic cards only have 2 basic attributes which are **Mana Cost** and **Magic Name**.

(*Attack Cards)*   (*Magic Cards)*
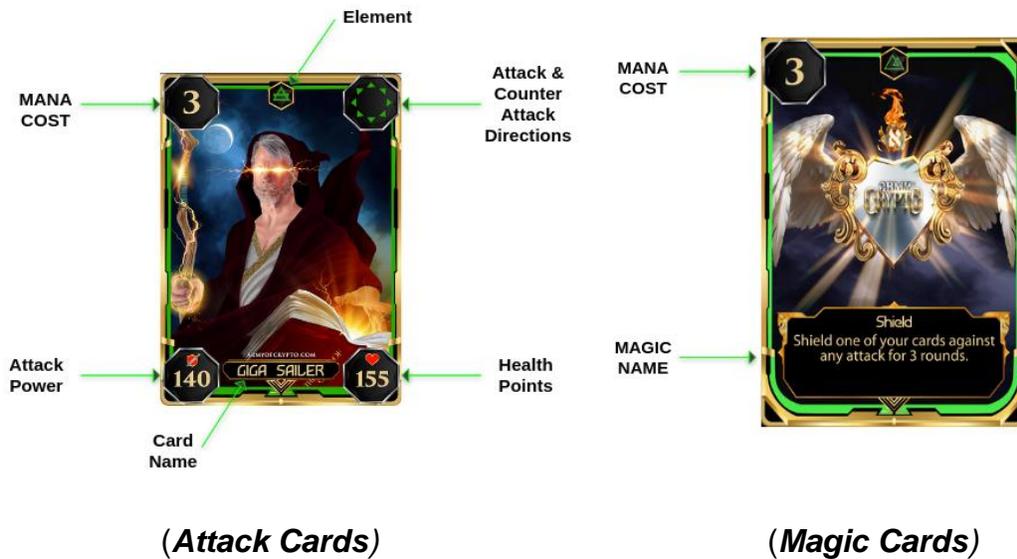
All cards in Army of Crypto will come in three(3) strength types, '**weak**', '**average**' and '**strong**'. Note, that each card's border color is based on the strength of the card. The system automatically generates a number for its color and will be randomly picked from a range in order to create that color. In the figure below, colors are picked using the HSL Color Model. The **H** represents '*Hue*', **S** represents '*Saturation*' and the **L** represents '*Lightness*'. This will allow each card to be unique in its own way, all with different colors. Below is a chart breaking down the strength categories:

	weak	average	strong
Soldiers:	H = 15 - 20 S = 70% - 80% L = 60% - 65%	H = 8 - 14 S = 81% - 89% L = 56% - 60%	H = 0 - 7 S = 90% - 100% L = 45% - 50%
Generals:	H = 80 - 100 S = 70% - 80% L = 60% - 65%	H = 101 - 119 S = 81% - 89% L = 56% - 60%	H = 120 - 130 S = 90% - 100% L = 40% - 45%
Legendary:			
Magic:	H = 55 - 58 S = 70% - 80% L = 60% - 65%	H = 59 - 62 S = 81% - 89% L = 56% - 60%	H = 63 - 65 S = 90% - 100% L = 50% - 55%
	H = 190-209 S = 70% - 80% L = 60% - 65%	H = 210-229 S = 81% - 89% L = 56%- 60%	H = 230 - 250 S = 90% - 100% L = 50% - 55%

Color
Indicating
Card Strength

Attack cards

➢ ***Soldier****:* The soldiers are the soul on the battlefield. These cards will be used as the first line of defense. The best form of defense is a strong attack. Soldiers come in three(3) strength categories, 'weak', 'average', 'strong'.

| (**Weak**) | (**Strong**) |

➢ ***General:*** Having a strong leader in battle can change the tide and ensure victory. The cards are the cornerstone on the battlefield and a Strong General can carry your entire Army. Generals come in three(3) strength categories, 'weak', 'average', 'strong'.

| (**Average**) | (**Strong**) |

➤ *Legendary:* These mighty arcane warriors appear in battle and strike fear in the hearts of the most valiant soldier. The power of the Onix Crystal has bestowed its blessing on these mighty warriors who intend to tear down the corrupt financial system. Legendaries come in three(3) strength categories, 'weak', 'average', 'strong'.

(*Weak*)   (*Strong*)

Magic cards

Cards can take more than one spell per round. Eg: If a card is Frozen, the player could protect that card with a Shield Magic.
Players can use as many magics they want as long as they have the required nodes.

Attack Magic Cards

- ➢ **Archery**: Allows the card to add extra arrows for a certain amount of rounds specified on the Magic card. The new arrows would allow that card to attack and/or move.

- ➢ **Voodoo:** Allow the cards that are located on the edge of the gameboard to attack across the board according to the arrows of the card.

- ➢ **Vampire:** *Sucks his opponent card's health, decreasing according to the % specified in each Vampire magic card, transferring the health points of your opponent to your card.*
  PS: The magic applies just once.

- ➢ **Sniper:** Allows to attack an opponent's card from 2 to 4 blocks away, depending on the power of the magic. Attacks can only be conducted according to the arrows of the card.
- ➢ PS: Users can use the attack magic to hit his opponent card and execute a regular attack on the card.

Defense Magic Cards

- ➢ **Paralysis:** Paralyze one of your opponent's cards from 1 to 3 rounds depending on the power of the card. A paralized card can't move nor attack.

- ➢ **Divine Protection:** Protect your card from the opponent's attack for X amount of rounds specified on the card itself.

- ➢ **Miracle:** If a player has a card that was Paralyzed by his opponent, he can choose to use Miracle to undo the spell. If the card is totally unparalyzed, the player would have the ability to play normally within that round.

- ➢ **Fierce Destruction:** Break a shield round of an opponent's card that is shielded, being able to attack and damage that card if all the shields were broken.

- ➢ **Arrow Cancel:** Cancel arrows from your opponent's card according to the directions specified on the magic card for a certain amount of rounds.

Movement Magic Cards

➢ **_Revolve:_** Rotate your card to a certain degree and certain amount of rounds according to the power of this magic.

➢ **_Jumper:_** Allow your card to jump to empty blocks on the board according to the arrows.

Mystic Magic Cards

➢ **_Rescue:_** Gives the player the ability to rescue one of his cards from the Chamber. Cards that have been rescued will come back to the game only with a certain % of their health and power, specified on each Rescue magic card. Once the card is brought back to the board, it also must enter sleeping mode for that round.

➢ **_Shamanic Heal:_** Heal your card, increasing its health by X amount of points.

➢ **_Poison:_** Poison your opponent's card, decreasing X amount of points from his health.

➢ **_Almighty:_** Power up your card by increasing your Power by X amount of points.

Summoning a card

Whenever a player summons a new card onto the board, they must expend the corresponding amount of Nodes required by the card. Upon summoning, the card enters a sleeping mode for one round. While in sleeping mode, the card is unable to move or launch attacks, but can still sustain damage from other cards already present on the board.

Attacks

Cards are capable of launching attacks against opponent's cards using their attack arrows. Attacks always take into account the power points of the attacking card and the life points of the targeted card. Even when a card has no arrows facing a particular direction to defend itself, these attributes remain applicable.

Counter attack

When a card attacks another card with a single arrow facing back, a counter attack is triggered. This results in both cards attacking each other simultaneously. As a result, both cards take damage based on their power and life points.

If, after the counter attack, both cards have 0 health points, they are both sent to the chamber. Additionally, both players are rewarded with nodes from the defeated card.

Passing rules

1. If a player receives the turn and:
   - Can't receive a new card (has a full hand)
   - Can't place a card on the board (all slots are used)
   - Can't move or attack with any of his cards on the board
   - Can't use any magic card
   - He doesn't sacrifice any of the cards in the hand
   - Decides to pass or the turn clock runs out,

   Then the system will take the pass as giving up, and the opponent will be declared as winner.
2. Players are allowed to pass their turns as long as they don't have 6 cards in hand. Once a player reaches the max amount of cards in the hand (6 cards), he is obligated to do some kind of action besides passing his turn.
   - If he can't do anything (as described in rule #1), passing manually or automatically will fall into rule #1.
   - If he can do something but decides to do nothing or the turn clock ends and inflicts an automatic pass, the flow will continue and will be subject to rule #3.
3. If any of both players have 3 consecutive passes, the match will be concluded and the winner will be decided as explained in the "Winning the battle" section below.

Sacrifice

Any card from the hand can be sacrificed (sent to the chamber) at any time. This would be useful if a player has the hand full (6 cards in it), has more cards off-hand and needs to make room to keep getting new cards.

Chamber

1. Cards will go to the Chamber once their Health is defeated.
2. Players are able to see the opponent's cards that are in the Chamber
3. Once Player rescues any card from the Chamber, it is still required for that card to sleep for one round.
4. Cards will be brought back into the board only when a magic card is used. Some of the cards that are coming back from the chamber will have decreased health and power, depending on the specification of the magic card.

Winning the battle

A player wins the battle when he defeats all his opponent's attack cards. The winning player will always have more "attack cards" than his opponent.

The total number of rounds per battle is 25. When all the rounds are completed, the cards that are remaining on the board will automatically battle against one another. The total sum of health and power of Player A's cards will battle against the total sum of health and power of Player B's card.
PS: the sum will be calculated based on the cards that are on the board, excluding any remaining cards in hands.

If after the final battle, both players defeat each other, then the match is considered tied and no NFT gets to be withdrawn. However, both players split Hertz rewards.

PS: The game log must be checked to determine if the game was played. If the game log concludes that this wasn't a real game, then no reward is given to the players and the match is canceled.

Play to Earn

The "Play to earn" mode will be subjected to the following rules:

Battle type distribution
Legendary Battle
Win = 200 Hertz, Loss= 100 Hertz
General Battle
Win = 140 Hertz, Loss = 70 Hertz
Soldier Battle
Win = 100 Hertz, Loss = 50 Hertz

1. The maximum amount of matches per day that players will be able to receive rewards is 10 matches. No rewards will be distributed after the 10th match during the same day.
2. A cooldown system will prevent players from repeatedly playing each other solely to collect rewards. Players will have the opportunity to engage in three consecutive matches against each other within a 6-hour time window.

PS: The game log must be checked to determine if the game was played. If the game log concludes that this wasn't a real game, then no reward is given to the players and the match is canceled.

Game Flow (Hosting a game)

Here you may find a visual representation of the process of a player that would like to host a game.

ARENA

FREE TO PLAY

BATTLE TYPE			NFT BETTING			HERTZ BETTING			TIME PER ROUND		
☐ SOLDIER BATTLE	☐ GENERAL BATTLE	☐ LEGENDARY BATTLE	☐ 0 NFT	☐ 1 NFT	☐ 2 NFT	☐ < 1,000	☐ < 5,000	☐ => 5,000	☐ 30 SEC	☐ 45 SEC	☐ 60 SEC

Privacy	Match name	Battle type	Soldiers	Generals	Legendaries	NFT betting	Shards betting	Round Time	Hosted by
	The Onix crew	General	9	3	-	1	5,000	60sec	Matt
	catch me if you can	Soldier	12	-	-	-	-	30sec	Odalis
🔒	pvp	Legendary	9	1	2	1	-	45sec	Lita
	brazilian fight	General	8	4	-	-	500	30sec	Rodrigo
🔒	get my NFT	Legendary	6	4	2	3	10,000	60sec	Sharath
	borrito	General	8	4	-	2	2,000	30sec	Alexandro
	The Onix crew	General	9	3	-	1	5,000	60sec	Matt
	catch me if you can	Soldier	12	-	-	-	-	30sec	Odalis
🔒	pvp	Legendary	9	1	2	1	-	45sec	Lita
	brazilian fight	General	8	4	-	-	500	30sec	Rodrigo
🔒	get my NFT	Legendary	6	4	2	3	10,000	60sec	Sharath
	borrito	General	8	4	-	2	2,000	30sec	Alexandro

BACK JOIN NEW

JHONNY BRAVO
36,900 HERTZ   #3
TWITTER MARKET CONDITION...

SELECT YOUR DECK

3	
135 132	

SELECT   PREVIEW

MR. BUREAU	CRYPTO WHALE	VITALITY	ALTCOIN DAILEE	THE DOGEFATHER	SATOSHI NAKAMOTO
135 132	53 42	207 195	135 132	189 199	200 200
ATTACK STRATEGY DECK	SOLDIER DECK	LEGENDARY DECK	CORNER CONQUERING DECK	GENERAL DECK	NAKAMOTO DECK

SELECTED DECK SUMMARY

SOLDIERS: 9
GENERALS: 3
LEGENDARIES: 0
MAGICS: 8

TOTAL CARDS: 20

NAME: _____

SETTING: ☑ PUBLIC   ☐ PRIVATE

PASSWORD: _____

HERTZ BET: _____

NFT BET   ☐ 0 NFT   ☐ 1 NFT   ☐ 2 NFT

ROUND TIME   ☐ 30 SEC   ☐ 45 SEC   ☐ 60 SEC

MAP SELECTION:

HEREFORD   CONSULATE   HOUSE

BACK   CONFIRM

JHONNY BRAVO
36,900 HERTZ   #3
TWITTER MARKET CONDITION...

MY DECK SUMMARY

1
CRYPTO WHALE
53   42
SOLDIERS DECK

CARDS OF YOUR DECK

SOLDIERS: 9   GENERALS: 3   LEGENDARIES: 0   MAGICS: 8

IMPORTANT NOTES

1) IF YOU CHOOSE TO BET 1 NFT OR MORE AND LOOSES THE MATCH, THE EQUIVALENT AMOUNT OF NFTS WILL BE BLINDED WITHDRAWN BY YOUR OPPONENT FROM YOUR DECK! THIS WILL CAUSE YOU TO LOOSE THE NFTS.

2) IN CASE OF INTERNET DISCONNECTION DURING THE BATTLE, PLAYERS HAVE 5 MINUTES TO RECONNECT TO THE MATCH. FAILING TO RECONNECT WOULD CASE THE PLAYER TO LOOSE THE GAME, THEREFORE LOOSING ANY NFT OR HERTZ AMOUNT THAT HAS AGREED IN THE BEGINNING OF THE GAME.

FOR MORE DETAILS, READ THE GAME DISCONNECTION POLICY.

☐ I AM AWARE OF THE RISK

BATTLE SUMMARY:

MATCH NAME: THE ONIX CREW

NFT BET: 1 NFT

HERTZ BET: 5,000

ROUND TIME: 45 SEC

BATTLE TYPE: GENERAL

MAP:

VOTES
○ 0

BACK   CONFIRM

	BATTLE	DECK	MARKETPLACE	COMMUNITY	SETTINGS	15:39	JHONNY BRAVO #3

BATTLE TYPE
☐ SOLDIER BATTLE ☐ GENERAL BATTLE ☐ LEGENDARY BATTLE

NFT BETTING
☐ 0 NFT ☐ 1 NFT ☐ 2 NFT

HERTZ BETTING
☐ < 1,000 ☐ < 5,000 ☐ => 5,000

TIME PER ROUND
☐ 30 SEC ☐ 45 SEC ☐ 60 SEC

Privacy	Match name	Battle type	Soldiers	Generals	Legendaries	NFT betting	Shards betting	Round Time	Hosted by
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🔒	get my NFT	Legendary	6	4	2	3	10,000	60sec	Sharath
	borrító	General	8	4	-	2	2,000	30sec	Alexandro

YOU'RE CURRENTLY HOSTING A GAME. THE MATCH WILL AUTOMATICALLY START ONCE ANOTHER PLAYER JOINS IT.

CANCEL   JOIN

Game Flow (Joining a game)

Here you may find a visual representation of the process of a player that would like to join a game.

The Battlefield

The battlefield will be made up of 13 octagon slots in which your cards will be placed throughout the battle. Initially, your cards in hand will appear in a rectangular shape and when placed on the board, the shape will change into an octagonal piece. The arrows you see on the top right hand corner of the card indicate the directions in which you can attack and counter-attack. Pay close attention to card placements as the wrong move can leave your card vulnerable to attack. Throughout the battle, you can chat with your opponent adding an extra layer of interaction. Refer to the "Gameplay" section above for a more detailed breakdown of the fight.

Free to Play Mode

Players would be allowed to play the "Free to Play Mode", where they won't be using NFTs. In this mode, the computer would generate a deck of weak/average/strong soldiers and weak magics. These cards are hosted in the server which allows them to battle other players in the same mode.

Details of Free to play mode:

1. Players don't use real NFTs to play a match in Free to play mode. Whenever a player enters a battle in this mode, he access cards that are randomly generated by the server, which allows them to play the match. PS: The players don't get to keep any cards after the matches. Therefore, every time a player enters a match, a new set of cards is given to him just for the period of the game.
2. Users are able to play the game with basic cards that aren't NFT, therefore they can't sell or upgrade any of the cards.
3. Users win 10 Hertz for each match they win.
4. Users that lose the game get 0 Hertz reward.
5. The Total daily rewards would be 50 Hertz. The players that wish to keep playing after getting 50 Hertz during the same day won't be rewarded anymore.
6. Users are allowed to do Hertz betting
7. Free to Play mode will be auto-join(These games won't be listed in the Lobby).
8. Once two players are ready to begin the battle, a message would be presented asking both of them if they wish to bet Hertz. If a player chooses to bet, the other player is notified and asked if he would like to match the same amount, raise or refuse the bet. His input will be presented to his opponent, who will confirm upon the answer received.

We would display Ads only for users that choose to play the Free to Play mode!

PS: The game log must be checked to determine if the game was played. If the game log concludes that this wasn't a real game, then no reward is given to the players and the match is canceled.

NFT Upgrades

Upgrade process

To have cards being upgraded within the game, it would be necessary to pay certain amounts of Hertz tokens that are only able to be acquired by playing the game or buying from the marketplace.

Once the user applies to have his card upgraded, the original card gets burned and a new card with the new attributes gets minted.
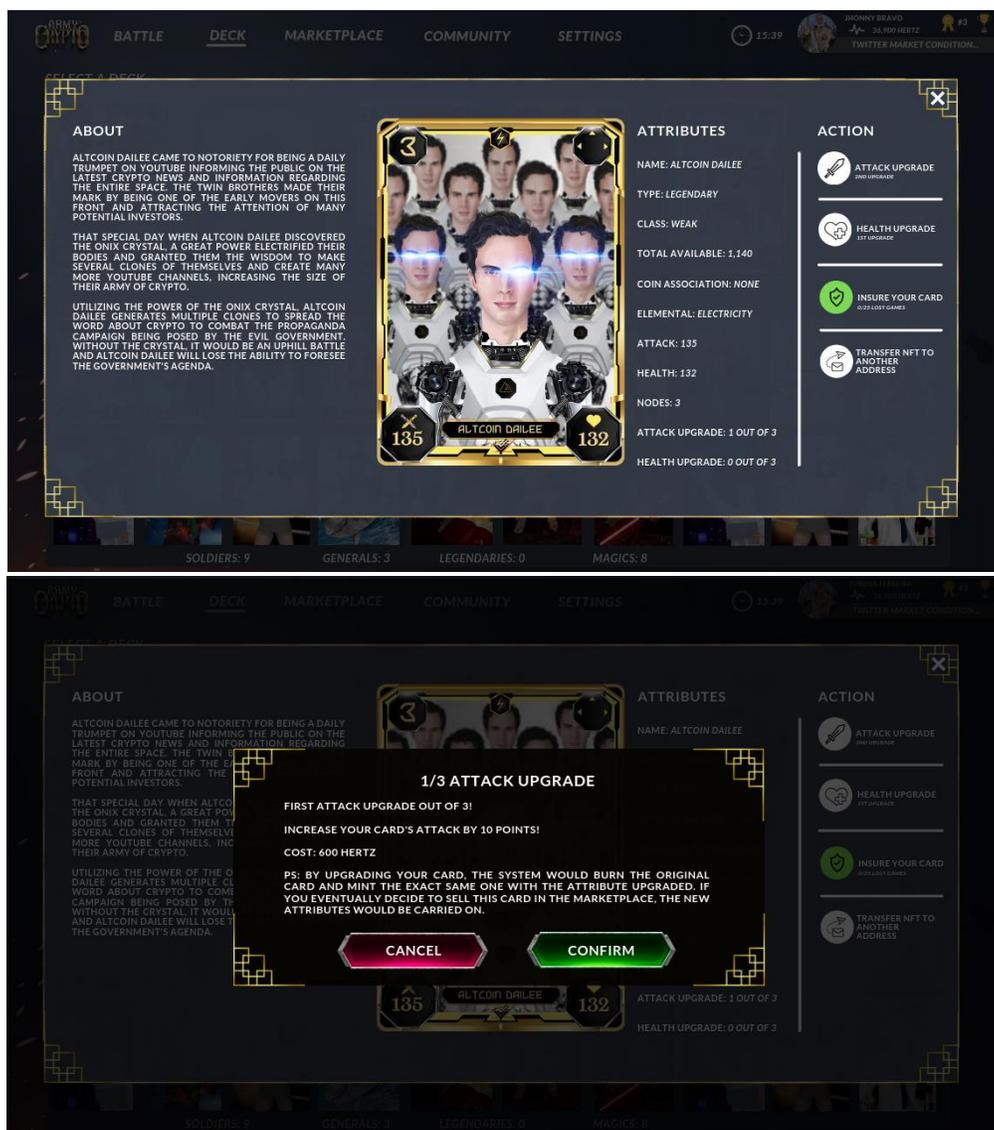
Follow the upgrade process, with the amount of Hertz respectively for each upgrade:

Soldiers

Cards Updagrade

	Hertz	Average match	Average time(h)	Days	Power upgrade	Health upgrade
Soldier						
1st upgrade	6,000.00	30	7.50	3	10	10
2nd upgrade	16,000.00	80	20.00	8	20	20
3rd upgrade	22,000.00	110	27.50	11	30	30
Total	44,000.00	220.00	55.00	22.00	60.00	60.00

■ Average match ━ Average time(h) ━ Days ━ Power upgrade ━ Health upgrade
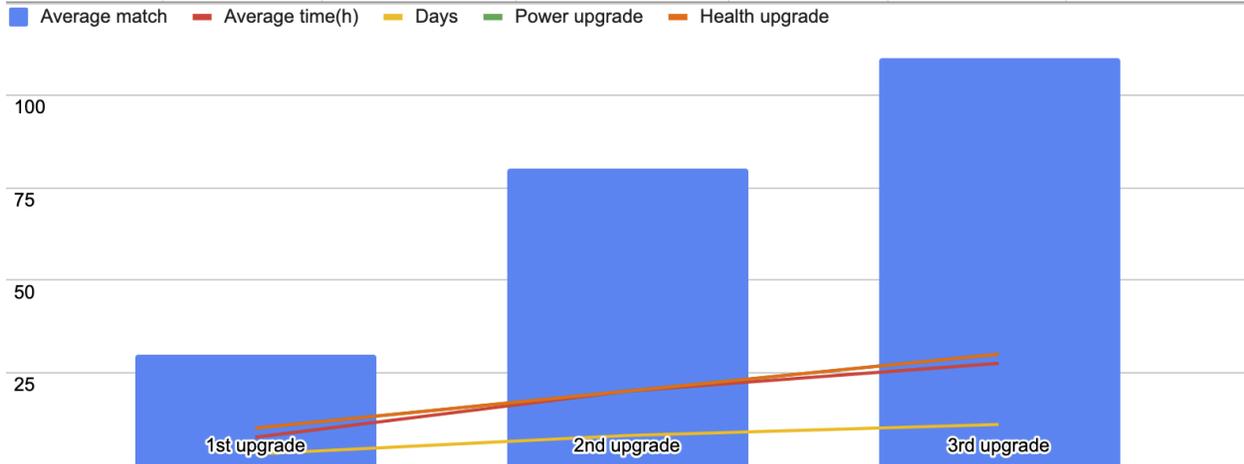
Users need to progressively upgrade the status of each card based on the 1st upgrade, 2nd upgrade and 3rd upgrade. Therefore, they must go through the 1st and the 2nd upgrade in order to enable the 3rd upgrade.

For each level of upgrade, users are able to choose if they would like to upgrade either the Power of the card or the Health.

Generals

General						
	Hertz	Average match	Average time	Days	Power upgrade	Health upgrade
1st upgrade	24,000.00	120	30.00	12	10	10
2nd upgrade	36,000.00	180	45.00	18	20	20
3rd upgrade	48,000.00	240	60.00	24	30	30
Total	108,000.00	540.00	135.00	54.00	60.00	60.00
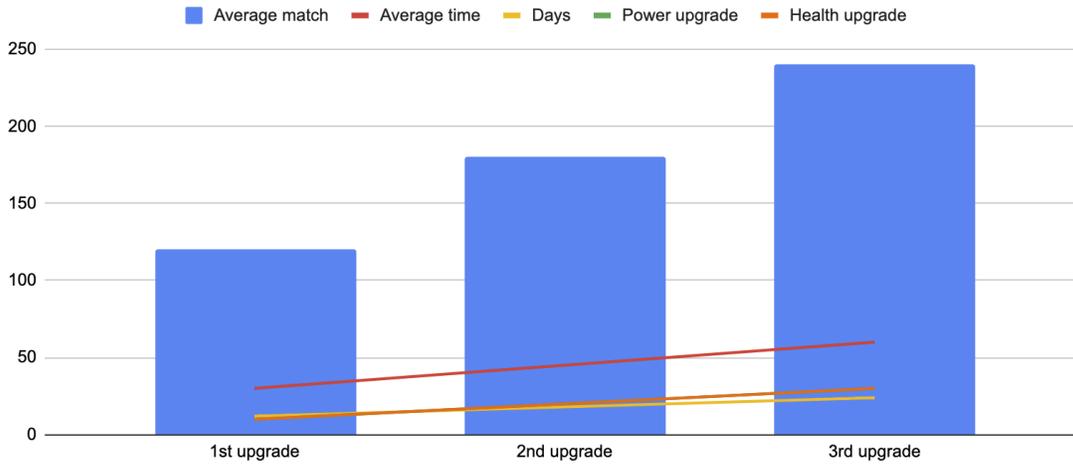
Legendaries

Legendary						
	Hertz	Average match	Average time	Days	Power upgrade	Health upgrade
1st upgrade	36,000.00	180	45.00	18	10	10
2nd upgrade	64,000.00	320	80.00	32	20	20
3rd upgrade	96,000.00	480	120.00	48	30	30
Total	196,000.00	980.00	245.00	98.00	60.00	60.00

24
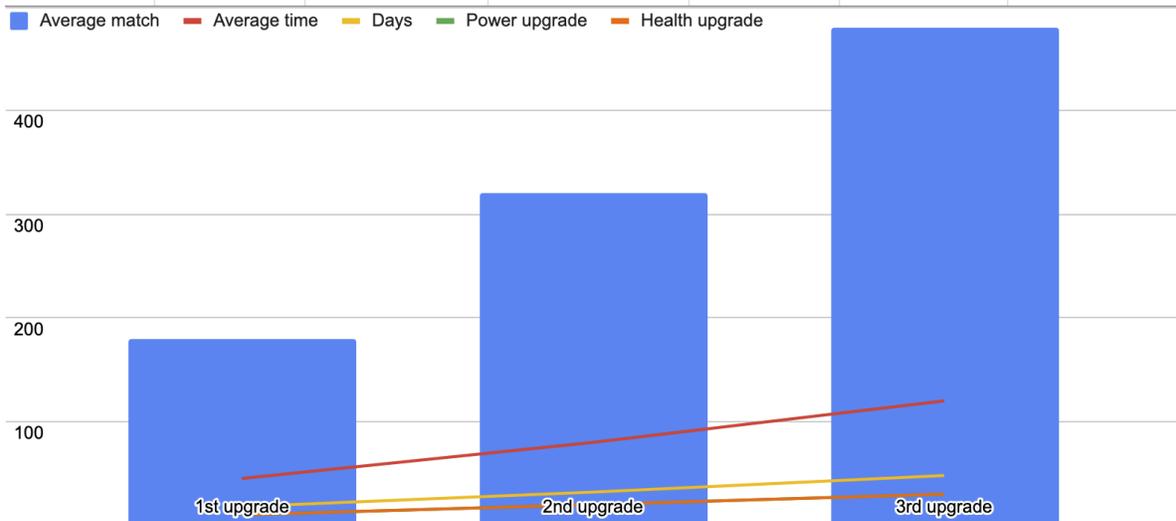
Number of NFTs Minted

All NFT card sets will have a fixed supply. Below is the total number of cards minted in the set.

Full AOC collection building progress table					
Character	Hierarchy	Weak	Average	Strong	Total
crypto-bear	soldier	16,700	14,550	7,750	39,000
crypto-bot	soldier	16,700	14,550	7,750	39,000
crypto-bull	soldier	16,700	14,550	7,750	39,000
crypto-dev	soldier	16,700	14,550	7,750	39,000
crypto-hacker	soldier	16,700	14,550	7,750	39,000
crypto-miner	soldier	16,700	14,550	7,750	39,000
crypto-whale	soldier	16,700	14,550	7,750	39,000
crypto-zen	soldier	16,700	14,550	7,750	39,000
diamond-hands1	soldier	16,700	14,550	7,750	39,000
fomo	soldier	16,700	14,550	7,750	39,000
fud	soldier	16,700	14,550	7,750	39,000
speculator	soldier	16,700	14,550	7,750	39,000
altcoin-dailee	general	9,900	5,664	3,756	19,320
andrenopoulos	general	9,900	5,664	3,756	19,320
bigboy	general	9,900	5,664	3,756	19,320
bitconneeect	general	9,900	5,664	3,756	19,320
giga-sailer	general	9,900	5,664	3,756	19,320
mcafee	general	9,900	5,664	3,756	19,320
mr.-bureau	general	9,900	5,664	3,756	19,320
pomp	general	9,900	5,664	3,756	19,320
rus-avatar	general	9,900	5,664	3,756	19,320
shark-cuban	general	9,900	5,664	3,756	19,320
akonaire	legendary	850	648	370	1,868
bitcoin-jesus	legendary	850	648	370	1,868
charldano	legendary	850	648	370	1,868
charlie-lee	legendary	850	648	370	1,868
cz	legendary	850	648	370	1,868
doge-father	legendary	850	648	370	1,868
oracle	legendary	850	648	370	1,868
ryan-wright	legendary	850	648	370	1,868
satoshi-nakamoto	legendary	850	648	370	1,868
shiba-inu	legendary	850	648	370	1,868
tordan-ferreira	legendary	850	648	370	1,868
unicorn	legendary	850	648	370	1,868
vitalien	legendary	850	648	370	1,868
archery	magic	8,620	5,220	1,280	15,120
arrow-cancel	magic	8,620	5,220	1,280	15,120
cross-attack	magic	8,620	5,220	1,280	15,120
freeze	magic	8,620	5,220	1,280	15,120
ice-break	magic	8,620	5,220	1,280	15,120
jumper	magic	8,620	5,220	1,280	15,120
poison	magic	8,620	5,220	1,280	15,120
power-up	magic	8,620	5,220	1,280	15,120
rescue	magic	8,620	5,220	1,280	15,120
rotation	magic	8,620	5,220	1,280	15,120
shamanic-heal	magic	8,620	5,220	1,280	15,120
shield	magic	8,620	5,220	1,280	15,120
shield-break	magic	8,620	5,220	1,280	15,120
sniper	magic	8,620	5,220	1,280	15,120
vampire	magic	8,620	5,220	1,280	15,120
	Totals	439,750	317,964	154,570	912,284

Connecting to a battle in the lobby

Privacy	Match name	Battle type	Soldiers	Generals	Legendaries	NFT betting	Shards betting	Round Time	Hosted by
	The Onix crew	General	9	3	-	1	5,000	60sec	Matt
	catch me if you can	Soldier	12	-	-	-	-	30sec	Odalis
🔒	pvp	Legendary	9	1	2	1	-	45sec	Lita
	brazilian fight	General	8	4	-	-	500	30sec	Rodrigo
🔒	get my NFT	Legendary	6	4	2	3	10,000	60sec	Sharath
	borrito	General	8	4	-	2	2,000	30sec	Alexandro
	The Onix crew	General	9	3	-	1	5,000	60sec	Matt
	catch me if you can	Soldier	12	-	-	-	-	30sec	Odalis
🔒	pvp	Legendary	9	1	2	1	-	45sec	Lita
	brazilian fight	General	8	4	-	-	500	30sec	Rodrigo
🔒	get my NFT	Legendary	6	4	2	3	10,000	60sec	Sharath
	borrito	General	8	4	-	2	2,000	30sec	Alexandro

YOU'RE CURRENTLY HOSTING A GAME. THE MATCH WILL AUTOMATICALLY START ONCE ANOTHER PLAYER JOINS IT.

Battle modes

➢ Soldier battles

Battles must be limited to the power of each player's deck in order to create balance. Thus, a deck with 12 soldiers (despite the fact if they are weak, average or strong), must match a battle with another player that has 12 soldiers. The number of Magic cards in the deck is irrelevant in this case, being from 0 to max of 8 cards.
Decks accepted: only soldiers and magics.

➢ General battles

If players have from 1 to 4 generals and no legendaries in their decks, they can participate in a general battle. Players are able to select from the lobby the battle they choose to play based on the quantity of generals that his opponent has.
In case a player with only 1 general in his deck chooses to play a battle that has 2 generals or more, a message would appear warning the player if he chooses to proceed. After his confirmation, the battle begins.
Decks accepted: with soldiers, generals and magics.

➢ Legendary battles

> If players have from 1 to 2 legendaries in their decks, they can participate in a legendary battle. Players are able to select from the lobby the battle they choose to play based on the quantity of legendaries that his opponent has.
> In case a player with only 1 legendary in his deck chooses to play a battle that has 2 legendaries or more, a message would appear warning the player if he chooses to proceed. After his confirmation, the battle begins.
> **Decks accepted:** all cards (soldiers, generals, legendaries and magics).

Turn time

Players that host the game are able to set the average time of each turn, being 30 sec (1 minute per round), 45 sec (1:30 minutes per round) or 60 sec (2 minutes per round).

NFT betting

While creating the battle, the player hosting the game is able to choose if he would like to battle betting one of his cards. For this battle mode, the player that wins the battle gets to blindly pick one of the opponent's cards for himself, which will be presented to him facing down. If the card picked has an Insurance attached, the winning player won't receive the card and the insurance of the card expires.

PS: The host of the game can choose to bet from 0 to 2 NFTs. The person joining the game must agree with the bet in order to proceed.

Hertz betting

While creating the battle, the player hosting the game is able to choose if he would like to battle betting Hertz. The amount of Hertz must be specified while creating the game. The opponent that joins this match must be willing to match the same amount of Hertz in order to proceed with that game. Upon confirmation, both players are brought to the board game and Player 2(joined the hosted match) is asked if he would like to raise the Hertz bet. If he denies, then the game proceeds normally with the original bet amount. If he chooses to raise the bet, the new amount is presented to player 1(host of the match) asking to confirm the new amount or if he wishes to raise again or deny the raise. If he denies, the game proceeds with the original bet amount. If he chooses to raise the bet, then again the new raised amount is sent to Player 2. At that stage, player 2 is only allowed to confirm the new amount or deny it.

Internet disconnection during the battle

Once two players choose to get into a match with the agreement of NFT betting, the loser of the battle must have one of his cards randomly withdrawn from the winner.
In case of disconnection during the battle, the following procedures will be applied:

1. Disconnected players will have a 5 minutes gap to get connected to resume the game. If connection isn't established within 5 minutes, the player doesn't get any Hertz rewards and loses one of his NFTs, which will be randomly withdrawn by his opponent. If a player successfully connects the game within 5 minutes and the other player is still connected, the game resumes normally.
2. The game will allow a max of two disconnections to happen from the same player. If the third disconnection happens, the player will be declassified, therefore losing one of his NFT, which also will be randomly picked by the opponent.
3. Once a disconnection happens, the player that is still connected can choose to wait for his opponent to resume the game(5 minutes max), or choose to cancel the match and go back to the lobby. In case the player chooses to cancel and go back to the lobby, he doesn't get any NFT nor Hertz rewards. However, if a connected player chooses to wait for his opponent but he doesn't successfully connect to the game, the connected player gets to withdraw one NFT from the disconnected player, but he isn't rewarded with Hertz.
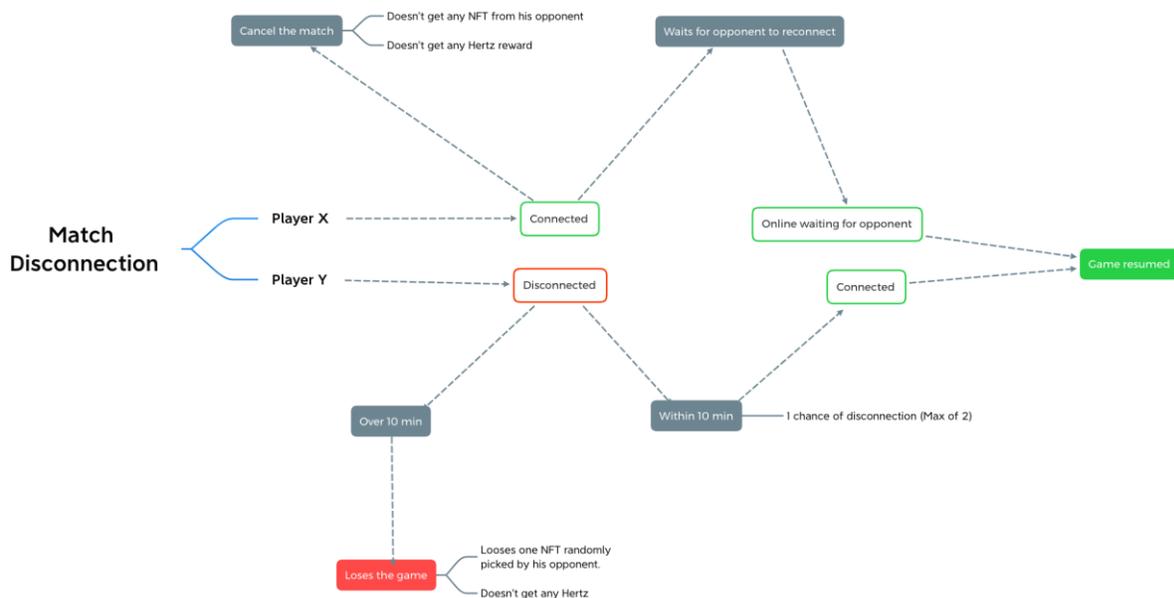
Important functions executed by the server

1. Send Hertz to the "buffer input" pool after card upgrade (Server)
2. Beginning of game (Server)
3. Everytime a card is defeated (Server)
4. End of game (Server)
5. Play to Earn (Server)
6. Give Hertz to Free to play mode users (Server)
7. Marketplace(Server)
8. Execution of the Burns from the Play to Earn pool (Server)
9. Card minting (Server)
10. Card upgrades (Server)

Insurance

Users are going to be able to buy Insurance in the game to "Secure" their cards. As their cards are backed up by AOC Insurance, players will join games knowing that even if they lose a battle, they wouldn't lose that NFT that has insurance(potentially his best NFTs).

Once the player loses a match and a card that has insurance gets picked up by his opponent during the blind withdrawal, the insurance of that card is used and it would no longer be valid for future matches. Each insurance purchased from the marketplace will protect a specific card for max of 25 lost games. The insurance expires after the 25th match lost with that specific card.

Players can always protect their cards with insurance by buying more from the marketplace.

PS: Insurance isn't an NFT, therefore it can't be traded in the marketplace by users.

Insurance cost:

Insurance

Soldier	Hertz	Insurance matches
Weak	12,000.00	
Average	32,000.00	25
Strong	44,000.00	

General	Hertz	Insurance match
Weak	48,000.00	
Average	72,000.00	25
Strong	96,000.00	

Legendary	Hertz	Insurance match
Weak	72,000.00	
Average	128,000.00	25
Strong	192,000.00	

Magics	Hertz	Insurance rounds
Weak	32,000.00	
Average	72,000.00	25
Strong	128,000.00	

Tokenomics

The governance coin in the game will be called Hertz. The purpose of having a token within the game is to allow users to enjoy play to earn features; use the coins for marketing, payment and community building; as well as to have it as a proof of concept model for future game developers that will join the Onix blockchain.
With such a model, they will be inspired to do something similar, increasing their desire to build and integrate their game with Onix technology.

The distribution of Hertz will be as following:

Hertz Tokenomics
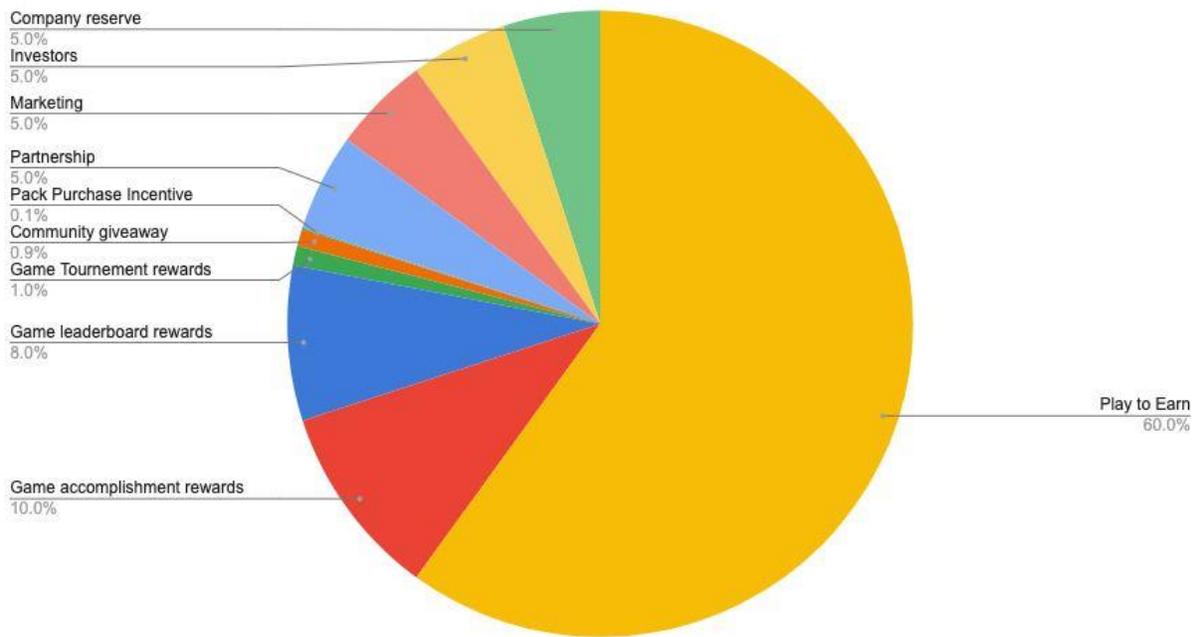
Max supply	100%	3,690,000,000
Play to Earn	60%	2,214,000,000
Game accomplishment rewards	10%	369,000,000
Game leaderboard rewards	8%	295,200,000
Game Tournement rewards	1%	36,900,000
Community giveaway	0.90%	33,210,000
Pack Purchase Incentive	0.10%	3,690,000
Partnership	5%	184,500,000
Marketing	5%	184,500,000
Investors	5%	184,500,000
Company reserve	5%	184,500,000
	100%	**3,690,000,000**

Play to Earn

The total amount of coins allocated in this pool is 2,214,000,000. These coins are designed to be used in the distribution through playing the game, including the Free to Play mode.

As users play the game and coins get in circulation, users are able to hold them, sell to Onix or use them to upgrade cards that they may have. As users upgrade their cards using Hertz, the game collects them into a new pool called "Buffer Input". In this pool, the system is able to track the movement of the coins and execute the burns according to the total amount entered in the buffer input pool. For each 7.69% of coins that enters the buffer input, a burn of 2.5% would be executed, removing these coins from circulation.

Play to Earn buffer input	100%	2,214,000,000
First collection of Hertz	7.69%	170,256,600
Second collection of Hertz	7.69%	170,256,600
Third collection of Hertz	7.69%	170,256,600
Fourth collection of Hertz	7.69%	170,256,600
Fifth collection of Hertz	7.69%	170,256,600
Sixth collection of Hertz	7.69%	170,256,600
Seventh collection of Hertz	7.69%	170,256,600
Eighth collection of Hertz	7.69%	170,256,600
Nineth collection of Hertz	7.69%	170,256,600
Tenth collection of Hertz	7.69%	170,256,600
Eleventh collection of Hertz	7.69%	170,256,600
Twelveth collection of Hertz	7.69%	170,256,600
Thirteenth collection of Hertz	7.72%	170,920,800
Total Hertz collected	100.00%	2,214,000,000
Total Hertz burned	32.50%	719,550,000
Final Supply in circulation		1,494,450,000

According to the model, the more popular the game becomes, the faster the burns take place.

The purpose of this Play to earn distribution model is to reward players that hold Hertz by burning a certain amount of coins every time we accomplish a milestone, thus raising the value of their holdings.

Play to Earn buffer input
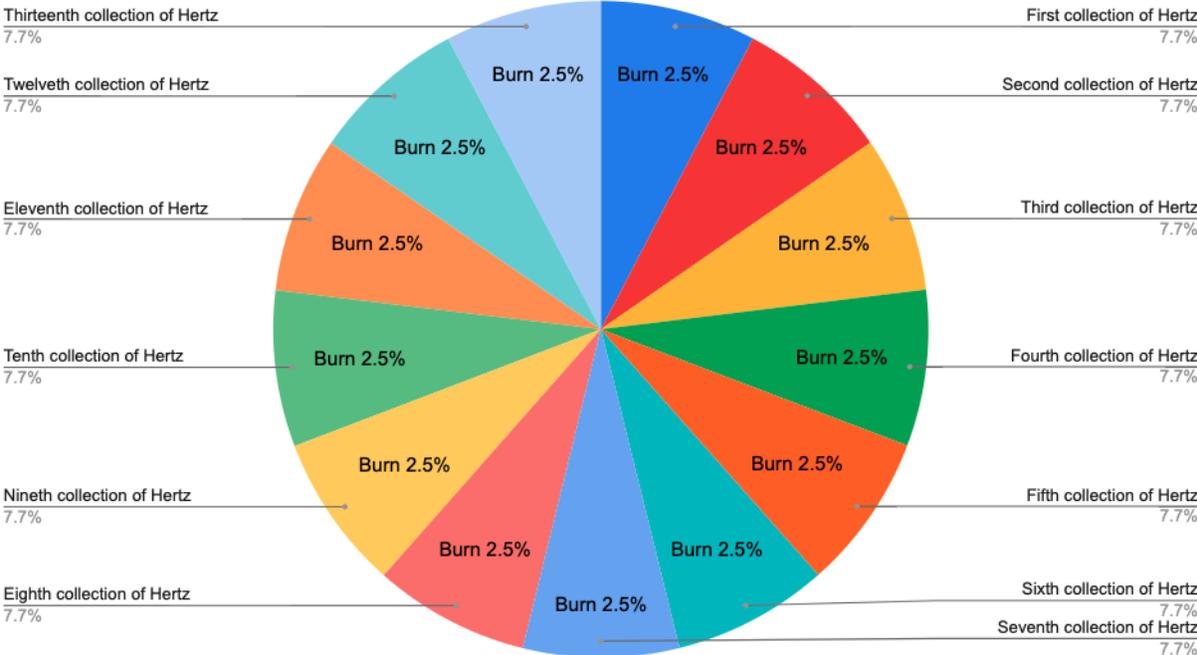
Game Accomplishment Rewards

These coins will be used to reward players that have 100% of the in-game accomplishments. The distribution will happen gradually as follows:

	%	Amount	Players	Amount per users
Game Accomplishment rewards	100%	369,000,000		
			Players	Amount per users
First distribution	11.11%	40,995,900	3	13,665,300
Second distribution	11.11%	40,995,900	9	4,555,100
Third distribution	11.11%	40,995,900	13	3,153,531
Fourth distribution	11.11%	40,995,900	33	1,242,300
Fifth distribution	11.11%	40,995,900	63	650,729
Sixth distribution	11.11%	40,995,900	93	440,816
Seventh distribution	11.11%	40,995,900	113	362,796
Eighth distribution	11.11%	40,995,900	133	308,240
Nineth distribution	11.12%	41,032,800	150	273,552
Total distribution	**100.00%**	**369,000,000**	610	

Game Leaderboard Rewards

These coins will be distributed to the top 13 positions on the leaderboard. The rewards will be distributed daily as long as they hold themselves in the position that allow them to get rewards. Distribution is set to pay rewards for 10 years, or 3650 days. Each epoch will last for 13 days. Every 13 days, the leaderboard will reset.

	%	Amount	Distribution time (Days)	Daily distribution	Total distribution per year
Game PVP Leaderboard rewards	100%	295,200,000			
First place	10.00%	29,520,000		10,110	3,690,000
Second place	9.00%	26,568,000		9,099	3,321,000
Third place	8.00%	23,616,000		8,088	2,952,000
Fourth place	7.50%	22,140,000		7,582	2,767,500
Fifth place	7.00%	20,664,000		7,077	2,583,000
Sixth place	6.50%	19,188,000		6,571	2,398,500
Seventh place	5.50%	16,236,000		5,560	2,029,500
Eighth place	4.50%	13,284,000		4,549	1,660,500
Nineth place	3.30%	9,741,600		3,336	1,217,700
Tenth place	2.60%	7,675,200		2,628	959,400
11th place	2.40%	7,084,800		2,426	885,600
12th place	2.20%	6,494,400		2,224	811,800
13th place	2.00%	5,904,000		2,022	738,000
14th place	1.95%	5756400		1,971	719,550
15th place	1.90%	5608800		1,921	701,100
16th place	1.85%	5461200		1,870	682,650
17th place	1.80%	5313600	2,920	1,820	664,200
18th place	1.75%	5166000		1,769	645,750
19th place	1.70%	5018400		1,719	627,300
20th place	1.65%	4870800		1,668	608,850
21st place	1.60%	4723200		1,618	590,400
22nd place	1.55%	4575600		1,567	571,950
23rd place	1.50%	4428000		1,516	553,500
24th place	1.45%	4280400		1,466	535,050
25th place	1.40%	4132800		1,415	516,600
26th place	1.35%	3985200		1,365	498,150
27th place	1.30%	3837600		1,314	479,700
28th place	1.25%	3690000		1,264	461,250
29th place	1.20%	3542400		1,213	442,800
30th place	1.15%	3394800		1,163	424,350
31st place	1.10%	3247200		1,112	405,900
32nd place	1.05%	3099600		1,062	387,450
33th place	1.00%	2952000		1,011	369,000
Total distribution	**100.00%**	**295,200,000**		**101,096**	**36,900,000**

Game Tournaments Rewards

These coins are going to be distributed gradually as tournaments are executed.
The first, second and third places are going to receive a nice reward for participating and winning the competition.
PS: Estimation of 3 tournaments per year.

	%	Amount	First place (%)	First place (Amount)	Second place (%)	Second place (Amount)	Third place (%)	Third place (Amount)
Game Tournement rewards	100%	36,900,000						
First competition	10.00%	3,690,000		1,660,500		1,107,000		922,500
Second competition	10.00%	3,690,000		1,660,500		1,107,000		922,500
Third competition	10.00%	3,690,000		1,660,500		1,107,000		922,500
Fouth competition	10.00%	3,690,000		1,660,500		1,107,000		922,500
Fifth competition	10.00%	3,690,000		1,660,500		1,107,000		922,500
Sixth competition	9.00%	3,321,000		1,494,450		996,300		830,250
Seventh competition	8.00%	2,952,000		1,328,400		885,600		738,000
Eighth competition	7.00%	2,583,000	45%	1,162,350	30%	774,900	25%	645,750
Nineth competition	6.00%	2,214,000		996,300		664,200		553,500
Tenth competition	5.00%	1,845,000		830,250		553,500		461,250
Eleventh competition	5.00%	1,845,000		830,250		553,500		461,250
Twelveth competition	4.00%	1,476,000		664,200		442,800		369,000
Thirteenth competition	3.00%	1,107,000		498,150		332,100		276,750
Fourteenth competition	2.00%	738,000		332,100		221,400		184,500
Fifteenth competition	1.00%	369,000		166,050		110,700		92,250
Total distribution	**100.00%**	**36,900,000**						

Community Giveaway

The coins allocated in this pool will be used to reward early supporters and those in the community that helps the project in various ways, including testing the game, finding major problems and reporting to the main team, guerilla marketing, community leaders, etc,..

Pack Purchase Incentive

These coins will be given to individuals who purchase Army of Crypto packs from the shop. The payments will be made automatically after successfully purchasing any of the packs available from the AOC team, with payments varying depending on the pack purchased. Below is a breakdown of the distribution:

	%	Amount	Distribution per pack purchased					
Pack Purchase Incentive	100%	3,690,000	Common pack		Rare Pack		Legendary Pack	
Amounts of packs to sell	100%	62,400	Hertz	Packs sold	Hertz	Packs sold	Hertz	Packs sold
First distribution	16%	590,400	287	1,440	328	360	820	72
Second distribution	15%	553,500	135	2,880	154	720	384	144
Third distribution	14%	516,600	75	4,800	86	1,200	215	240
Fourth distribution	13%	479,700	64	5,280	73	1,320	182	264
Fifth distribution	12%	442,800	54	5,760	62	1,440	154	288
Sixth distribution	11%	405,900	46	6,240	52	1,560	130	312
Seventh distribution	10%	369,000	38	6,720	44	1,680	110	336
Eighth distribution	6%	221,400	22	7,200	25	1,800	62	360
Nineth distribution	3%	110,700	10	7,680	12	1,920	29	384
Total distribution	**100%**	**3,690,000**	**2,583,000**	**48,000**	**738,000**	**12,000**	**369,000**	**2,400**

Partnership

The coins allocated in this pool will be used to firm partnerships with potential companies or projects that might drive value to Army of Crypto, bringing more users to our platform or creating more exposure.

Marketing

The coins allocated in this pool will be used for marketing purposes. If we decide to look for Social Media influencers, Youtubers, bloggers and ask them to help promote Army of Crypto, we would be paying them with Hertz coming from this pool.

Company Reserve

The coins allocated in this pool will be locked for 2 years. The purpose of these coins is to be used to execute action of expansion when the project is matured to a certain level.

Hertz Utilities

- Upgrade AOC cards
- Sell Hertz to Onix
- Hertz would allow players to buy AOC decks with discount
- Hold Hertz before the burns to become more valuable
- Purchase Insurance or other items in-game.
- Bet Hertz in a match
- Hertz whale badge
- Voting

Pack Sales

The "essential pack" and "ultimate pack" will be always available for users to buy from the marketplace. However, the "Legendary pack" would be available for purchases in indefinite dates as it is a more premium and expensive deck.

Number of rounds per battle

The total number of rounds in a battle can't be more than 25.
If players reach the end of 25 rounds but they still have cards on the board, the game would calculate the total amount of health and power of the remaining cards from player A and B, thus executing the final strike based on the total amount. With this final strike, the battle would finally have a winner.
PS: If both players are defeated with the last strike, they don't get to withdraw any NFT and they split the Hertz winning prize.

Twitter market condition

An API will be used to read information from Twitter, pulling the most trending coin of that day(coin that is related to any of the legendaries that we have available in our deck).

Example: If Ethereum is trending today, then the cards that are related to that coin(Vitalik) would have their attributes boosted. Their power and health would have an increased amount between 6 to 9%. The correct percentage would be randomly picked by the computer and the boosted attributes would last just for the period that the coin stays trending on Twitter.

This feature will be added later on in development after testing has been done on the feature.

Trophy achievements

Details of Trophy achievements can be found through this link:
Achievements

Top 100 Rank

In this section we would display a list of top 100 players based on how many winning games they have.

The information that we would show on the table would be as following:

Ranking #	Username	Wins	Loses	Tied	Total matches
1	John	490	55	15	560
2	Mark	430	40	22	492
3	Juan	422	42	19	483

As mentioned in the Tokenomics, players that occupy the top 33 positions will be rewarded daily in Hertz. The distribution will happen as following:

	%	Amount	Distribution time (Days)	Daily distribution	Total distribution per year
Game PVP Leaderboard rewards	100%	295,200,000			
First place	10.00%	29,520,000		10,110	3,690,000
Second place	9.00%	26,568,000		9,099	3,321,000
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Total distribution	**100.00%**	**295,200,000**		**101,096**	**36,900,000**

Disclaimer

Note that the whitepaper is only an initial plan for the Army of Crypto game. The Gameplay is subject to change as development continues and the team gathers feedback from the players. Features can be added that weren't in the initial plan and features can be removed if they are deemed to be causing issues to the players experience.