



# **GAME INTRODUCTION**





SolChicks is an online battle-royale style game with unique Play-to-Earn ("PvE") and pet elements at its core. Our ecosystem is strategically designed to be as interesting as Neopets but with greater detail and intricacy in our in-game systems. Players can participate in multiple ways, but most of the game will revolve around PvP battles where players will pit their skills with other players of similar skill level.

The key differentiating factor is that our game is NFT driven where the SolChick NFT acts as your avatar when playing the game. There will only be 10,000 unique "origin" SolChick NFTs at initial mint which endows their owners with play-to-earn (P2E) privileges. As the game expands, there will be further mints, though they will only grant limited privileges to distinguish them from the origins.

#### IN THIS MODEL OF GAMING, PLAYERS CAN EXPECT TO EARN AND GAIN REWARDS THROUGH:

#### 1) Earning SolCoins (our in game currency) that could be used in-game

a) To power up your Solchick and earn better rewards through higher MMR and participating in raids.

b) To purchase rare and powerful items from the marketplace which is generated from the game and reselling them for a profit.

2) Earning in game rewards which can be traded on real world exchanges.

- a) Shards of Love (\$SLC) through weekly pet happiness levels and winning battles which can be used to breed and sell SolChicks.
- b) Tomes of Power (\$SPOWER) and Tomes of Relearning (\$SLEARN) through battle and reselling them in marketplace.
- 3) Spending \$SLC and \$CHICKS to breed new SolChicks and selling them
- 4) Earning \$CHICKS tokens (which has governance rights) through weekly leaderboard / MMR rankings

While many of the mechanics and balance details are subject to iterations and changes before being implemented in the final game, this game paper should provide the reader with a good sense of where the team at SolChicks envision the game to be when it ultimately becomes playable.

## **GAMEPLAY OVERVIEW**

To play, players will need to have a Solana wallet such as Phantom or SolFlare with at least 1 SolChick NFT and connect them to the game client. Players will either use their selected SolChick NFT as their character avatar or pay 1 Sol to create a non-NFT version of a SolChick with no attributes and start a saved state (described below).

The objective of our game is to level the SolChick and this process is split into 4 distinct phases with level 60 being the highest level in the game.

Tutorial (levels 1-15) – This phase is designed to familiarize the player to the SolChick world and interface, as well as the pet and bonding mechanics such as happiness and hunger. The SolChick is still a baby and hence will not be able to participate in PvP battles until it reaches higher levels. This phase is relatively fast, and should last a week with normal play time. Players should come out of this phase with a good understanding of the bonding mechanics which will be used throughout the game.

Fledgling (levels 16-30) – This is an introduction to the PvP battle system and base skills of SolChicks. Players will be able to start queuing for PvP battles with other players and earn basic rewards and experience. Through these battles, players will learn and become adept in the battle mechanic.



#### **GAMEPLAY OVERVIEW**

Progression (levels 30-45) – At level 30, the Solchick will have obtained some of the base skills. Players will be able to do all out battles and earn MMR points which will determine their P2E rewards. This is the phase where players begin preparing for the end game through amassing resources and experience.

Endgame (levels 46-60) – These levels are where the full SolChicks end game content can be experienced. Players who have spent hours at the Progression phase will have learnt all the 40 base SolChick skills and are ready for the next challenge. Players who have reached the Endgame will be able to, amongst many options, minmax their characters through quests to unlock classes, mastery traits and other unique rewards, breed their SolChicks, and participate in raids and tournaments.



In order to not create a repetitive experience for the players, once the player has at least gone through the entire SolChick game cycle once (Reaching level 60 on one character), they will be able to "power level" new SolChick "alts" by spending Tomes of Power up to level 30 and skip into the Progression phase directly.

SolChicks is an NFT based game, and we encourage the trading and exchanging of SolChicks NFTs so that players will experience the breadth and depth that SolChicks offers. To this end, SolChicks has implemented the "saved states", which preserves the progress of each character independent of the NFT. This means that players can swap their current SolChick NFT characters for another and would not have to restart progress though not without some token SolCoin fee. Each player will have up to 10 slots of "saved states", each represents a saved game progress for an independent SolChick character. In other words, if a player purchases a SolChick NFT, they will only get the NFT and not the seller's stats, level, SolCoins etc.

Stats, skills, as well as progression (such as level, titles, and status etc) will be pegged to the saved states.

- Weapons, items, gems, and currency will follow the player account and can be used across all saved states.
- Trait upgrades (for NFT attributes) will be saved but locked unless the new NFT has the required trait and attributes.

# **HIGHLY CUSTOMISABLE CHARACTER SYSTEM**

SolChicks aims to be a game that will be easy to learn but difficult to master. In this regard, we have designed a highly customizable yet easy to understand character customization system which caters to a variety of play styles and is conducive to experimentation and metagame evolution.

# PRIMARY STATS

Primary stats play into the calculation of a Solchick's health, damage output and mitigation which determine a SolChick's overall effectiveness in battle.

STAMINA	Increases health pool and recovery speed.
STRENGTH	Increases physical damage, physical damage mitigation and health regeneration.
DEXTERITY	Increases dodge chance, reduces incoming spell and physical critical hit damage, increases spell and physical critical hit damage and attack speed.
INTELLIGENCE	Increases magical damage, magical damage mitigation,mana pool and mana regeneration.

At level 1, each SolChick saved state starts with a baseline of 6 stat points for each primary stat and will be further improved by the different attribute traits that the SolChick NFT attached to the saved state has. For every level, the saved state character will gain 3 stat points which can be allocated to any primary stat which the player desires. This player allocation is linked to the saved state.

To reset the allocated stat points (baseline and NFT trait points cannot be reallocated), players can use Tomes of Relearning (\$SLEARN) which are rewarded from PvP battles. Increasing number of \$SLEARN will be required for every successive stat point reset up to a cap (starting at 50 and increasing by 1.5x each time till a maximum of 3000).

## SECONDARY STATS

Secondary stats serve as further boosts to a SolChick's power level to give players an additional edge during battle. These stats will be improved either through NFT attributes or items and if synergized properly (eg. haste breakpoints), will change the way players play their character. Some secondary stats are as follows.

- Movement Speed
- Focus Resource Reduction For Skill Cast
- Haste Reduce Cooldowns For Skills

## CLASSES

- Spell Critical Chance
- Physical Critical Chance
- Resilience Reduces Incoming Critical Hit Chance And Damage

At level 45, the player can embark on quests to unlock class abilities for their SolChick. We aim to design classes in such a way that encourages players to experiment and play with as many classes as possible. Every SolChick can be attuned to any class as long as they have completed the required attunements and are allocated the required stat points needed for that class. For example, the Priest will require the player to complete a series of challenges (both PvE and PvP) as well as a minimum amount of strength and intelligence points. In addition, Tomes of Power are required to unlock classes and while all classes are available, each SolChick can only have 2 out of 6 classes available for PvP at any single time. Players can use Tomes of Relearning to free up class slots should they choose to change their SolChick's class.

We are extremely excited about classes and will look to share more as we flesh out the ideas for classes in more detail.

### MASTERY

Players who are looking for the ultimate min-maxing will find them in Masteries. Each Solchick will have access to 4 unlockable traits which can further add to the SolChick's power level. Mastery will be designed with a philosophy to be unique and fun compared to traditional stats (eg. Guaranteed critical hits if no critical hits have been landed for the last 7 attacks) and will be unlockable at level 60 through the completion of various objectives and spending resources such as Tomes of Power.

Masteries will not be immediately available until the later updates for the game and we will share more ideas once we understand the balancing through more beta testing.

# **BATTLE SYSTEM**

SolChicks will introduce a holistic and balanced battle system with NFT elements which aptly rewards player effort and skill. The battle system will be dynamic and skill based with an ever shifting metagame to keep things interesting. The game will track each player through the Matchmaking Rating (MMR) system where player MMR will improve on wins and completing objectives and vice versa.



To enter a PvP battle, the player will choose the "Enter Battle" option from their main screen which will then transfer them to the battle lobby where players can select their SolChick's class, equip up to 10 skills and items (consumables and equipment) to optimise their SolChick's chances of winning. Once done, players will enter into our matchmaking system and will battle against players of similar MMR to themselves. Game modes for the alpha launch are 1v1, 2v2, 3v3, and free-for-all deathmatch, although modes such as capture the flag, control point etc may be added in the future. A game is made up of 3 battles with each battle designed to typically last around 5 minutes with a maximum timer of 30 minutes where a draw will be declared. After a game has concluded, players will be rewarded with a loot box which contains items and in-game currency. The winning team gets a larger share of the overall loot. MMR will also be adjusted depending on the outcome of the battle.



Players can also, although not advised, flee from battle. However, fleeing from a battle will severely punish a player's MMR and also apply a cooldown between games which becomes progressively longer the more games fled from within 24 hours.

Raids will use a similar battle system to PvP battles except that players who have reached level 60 will band together against a raid boss, which will be intentionally designed to be challenging even for the most experienced players. The raid boss will have innovative mechanics which will push the boundaries of mixing and matching of skills and consumables in order to defeat them. Players will be rewarded with titles, rare and seasonal items, and other powerful artifacts should they best this challenge.

# SKILLS

SolChicks have access to an arsenal of skills at the player's disposal which can be used in PvP combat to achieve a variety of objectives. Skills can be learnt from various sources, such as leveling, books, class and other unique quests, or from upgrading NFT attributes and equipping certain items. All acquired skills will be tied to the saved state except for skills from NFT attributes which will be locked unless the character NFT has the required trait attributes.

Skills will be classified by utility (Offensive / Defensive / Technical / Ultimate). In SolChicks, skills have a base damage / mitigation / effect which are then calculated and compounded based on primary / secondary stats and other factors. While we are still in the early stages of balancing, we aim to make this as mathy and accurate as possible in order to reduce randomness in battle and foster a healthy environment for metagame evolution and experimentation.



#### Gameplay wise, skills will be either

- 1) Active cast on command (eg. Fireball, Omnistrike)
- 2) Trigger Effect triggered when conditions met (eg. Reincarnation)
- 3) Passive Passive effect (eg. Critical Strike, Auras)

To be able to use a skill in battle, a player must first equip the skill before the battle. Each Solchick starts with 5 skill slots at level 16 which eventually grows to 10 by level 45. Some skills may take up multiple slots depending on their power and balancing. A skill can only be equipped if the Solchick has met the requirements to use the skill (such as stats, level, class etc) and in some rare cases, even certain attributes / traits. Skills which have been equipped cannot be swapped out during battle. All skills will come with a cooldown so as to prevent button mashing. There will also be a global internal cooldown of 1s to balance out lag between players but at the same time preserve the dynamic nature of the battle. Further, skills will be designed and balanced such that extreme / instadeath combos will be minimized as much as possible to ensure an interactive and fun experience.

We will be releasing more details on skills and combat math closer to the launch of the Alpha game.



#### ITEMS

There is a wide variety of items in SolChicks. Items will serve a range of purposes, and will mostly be tradable on the marketplace.

## EQUIPMENT

The primary purpose for equipment is to boost primary and secondary stats of SolChicks and promote more varied styles of play with some equipment providing unique equip / on-use effects. The equipment system at SolChicks incorporates the attributes and traits of the SolChick NFTs with the more traditional equipment systems more commonly found in RPG games. Most equipment can be traded between players and we plan to have weapon NFTs in the near future.

At SolChicks, we believe equipment is not only an essential part of PvP but also has to look aesthetically pleasing. The key design philosophy of items is not to affect the appearance of the SolChick but to allow them to keep their traits and provide more complex itemisation while also making rare NFT traits desirable and consequently valuable. Equipment slots will cover the 5 main NFT attributes of helmet, eyewear, armour, boots, accessory but will also include a weapon slot and 3 gem slots. SolChicks can only equip items on empty attributes. Each piece of equipment will have certain requirements which include levels, stats or class to be equipped. Non-trait equipment will break after certain amounts of use.

Equipment slots corresponding to non-empty attributes will be locked with the trait-specific item and cannot be changed. Trait-specific items can be upgraded, and many offer different upgrade paths catered to different play styles. For example, for the Angel Halo trait, a player could upgrade it via the holy path, which provides increased spell and critical damage defense and once per battle resurrection at maximum level for players wishing to play a tank; or via the shadow path which provides increased spell critical strike damage and a unique skill - Shadow Burn for more burst damage builds. Aligning with the overall design philosophy of SolChicks to encourage player experimentation, these trait-specific items can be unforged with SolCoins to allow players to forge it via a new and different path to complement their newest builds. Trait-specific equipment are indestructible and will not break or disappear, however they will require SolCoins to repair after certain use. Furthermore, item sets can exist for different classes or traits which, if completed, can grant additional bonuses.

#### CONSUMABLES

To add a more strategic element to PvP battles, players can equip and use consumables. Consumables are, as the name suggests, limited use items which have powerful effects upon use. Types of consumables that can be used in combat include potions (health and mana recovery), boosters (for temporary power gain), elixirs (overall boosts to power level), bombs (damage / debuff), utility items (shield / teleports / curse etc). There are also consumables that can be used outside combat which affect the SolChicks such as books which could teach the SolChick new skills. Players will be able to collect consumables as they play the game and be able to trade and sell them on the market place.

We will be releasing more details on consumables closer to the launch of the Alpha game.

## COSMETICS

It is important to bring the aesthetic element to the game. The SolChicks art team is working tirelessly to bring high quality art and animation to the players. Players will be able to find or purchase different skins for their equipment to modify the looks of their SolChicks to one of their liking. We also plan to implement scrolls / runes which can modify how skills and effects look like for players.

#### OTHER

We plan to implement a smorgasbord of cool items for players to collect and trade. Items such as furniture and collectible cards within SolChicks are currently under development. We also plan to include toys and plushies for players to collect and use to play with their SolChicks and also a large selection of food to satisfy even the pickiest of SolChicks.

# SOLCHICKS EVOLUTION

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The game has a pet interface for players to interact with the SolChicks in a variety of ways. This is to increase the sense of ownership and bonding between the player and their SolChick character and will have actual gameplay implications.

#### FEEDING

Players can interact with their SolChick by feeding and playing with them. Although SolChicks can never theoretically starve to death, there are penalties if the Solchick is unfed for a period of time. Conversely, there will be benefits if the player keeps their Solchicks well fed.

	Battle?	Battle Effectiveness	Breeding	Proc Traits?	Experience Gain
Bloated	Yes	100%	No	n.a	100%
Well-Fed	Yes	110%	Yes	Yes	105%
Content	Yes	100%	Yes	Yes	100%
Hungry	Yes	95%	Yes	Yes	100%
Famished	Yes	80%	Yes	No	90%
Dying	No	n.a	No	n.a	75%

Players can feed their SolChicks food such as SolFeed and Lobster Bisque etc. which provide certain amounts of happiness and hunger points. Similar to real life, feeding is subject to diminishing marginal returns. In other words, food should be fed at regular intervals and not all at once to be most effective.

## HAPPINESS

Happiness is a crucial metric that players should keep track of as it is used to determine weekly rewards which include bonus experience, Shards of Love and crafting materials. The happier the SolChick is, the greater the rewards received. Players can increase their SolChick's happiness by feeding them with a variety of food, consistent play, winning PvP battles and not neglecting their SolChicks for more than 72 hours.

#### BREEDING

A player with two SolChicks save states of at least level 45 can begin the process of breeding a new SolChick. The breeding process involves selecting 2 SolChicks and breeding them by spending Shards of Love and paying a \$CHICKS fee. The overall fee for both Shards and \$CHICKS doubles each time a SolChick mates and will be calculated as a sum of the costs for each SolChick parent. It will take 7 days for an egg to hatch before it can be used. Additionally, each SolChick will be able to mate for a maximum of 7 times and they cannot mate with their own siblings or parents. There will not be any downtime between breeding and players are able to use the parent SolChicks for playing and breeding immediately.

The newborn SolChick will be minted with a chance to roll the trait of each parent 50% of the time regardless of mint rarity for each attribute. There are 2 exceptions to this rule, the unexpressed traits and recessive traits.

# **UNEXPRESSED TRAITS**

Some SolChicks have traits which are not expressed, known as "none" or "regular" traits. For these SolChicks, if they breed with another which also has the same unexpressed attributes, that there is a chance - equals to 2 times the probability of a "none" or "regular" trait occuring for that attribute - that their offspring's corresponding attribute will be rerolled into something better. This system incentivises demand for naked SolChicks as by breeding two SolChicks with no traits for the same attribute, there is a probability that their offspring will have an expressed trait for that particular attribute. For example, if both parent SolChicks have an unexpressed clothing attribute, their offspring will have a chance to have its clothing attribute be rolled into something better. In this case, the chance for the offspring to roll Pirate clothing would be 13.33%, which is split up by an 80% chance of proceing the unexpressed trait effect multiplied by 16.7% of rolling a Pirate trait, which is the original probability of 10% rebased on a total probability of 60% (100% - 40% chance of rolling naked).



# **RECESSIVE TRAITS**

If both parents have the same trait for a certain attribute, there is a chance that unknown rare recessive traits might be expressed as opposed to the dominant one. This means that there is value even in collecting SolChicks with similar traits when breeding in order to take advantage of recessive traits. The resulting trait will always be rarer than the parents'. For example, if both parents have the Mohawk hair and the recessive traits effect is triggered, the offspring will not reroll its head attribute into Reggae Hair (7%) or Afro Hair (7%) which has the same rarity as Mohawk Hair(7%). In this case, the chance of getting a Cowboy Hat from parents who both have Mohawk would be is 0.92%, which is split into a 7% chance of proceing the effect, multiplied by 13.2%, which is the original probability of rolling a Cowboy Hat of 5% rebased on the total probability of rolling a trait rarer than a Mohawk of 38% (100% minus 20% of none and 42% due to 6 traits of identical rarity)



#### Other clothing rarer than none

# GAME ECONOMY

Being a P2E game, it is critical for SolChicks to manage and plan the various intersecting economies in order to provide clear and powerful incentives for players, investors, and collectors alike.

# NFT ECONOMY

There will only be 10,000 mints of the SolChicks NFT, which would mean a maximum of 10,000 players being able to play at a given time initially. While breeding will slowly increase the number of Solchicks over time, it would, no doubt, be a slow process at first. Even if all origin Solchicks were breeding optimally, there would only be 5,000 breeds during the first round of breeding since it would require 2 SolChicks to create a new SolChick, but in practice we would expect it to be even less due to:

- The current breeding mechanism means the players will have to play the game twice till 2 Solchicks are at least level 45
- Further, as there are many semi-naked SolChicks, people will not want to spend money and shards etc to breed them unless they can take advantage of the Unexpressed Traits

As such we cannot rely solely on breeding to increase the population of players.

We have devised the below solutions to unlock player-capacity constraints while keeping the balance of the NFT economy by keeping the original 10,000 Solchicks scarce.

- When an NFT owner is not actively playing the game, they can stake their NFT on a marketplace to be borrowed by other players who are not NFT owners. These players will have their own playing account/profile (separate to the NFT owner's profile) and any income they earn in the game will be split with the NFT owner (at a rate to be determined by supply and demand for staking).
- Players can create unlimited new SolChicks (with no attributes) at a cost of 1 Sol to start playing the game, but these new NFTs will look slightly but visibly different from the origins, and cannot breed or be traded.

In addition, the original 10,000 NFTs will also grant in-game trait bonuses and value accrual to preserve collection value based on rarity and utility value in the Solchicks NFTs. There will also be a cost requirement to breed new SolChicks through the Shards of Love mechanism. This will ensure it would be increasingly expensive to breed new SolChicks to preserve scarcity.



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**Breeding Cost** 

**Breeding Requirements** 

**Exclusive Quests** 

Special Skills

CUCCO
LEGENDARY
0.10% CHANGE OF OCCURING
0.10%
30.0%
12.0%
112%
20.0%
Takes 20% Longer To Be Hungry
500 Shards, 2X Each Successive Time
Rare And Above
Yes
Access To Exclusive Rarity Skills

MYTHICAL	RARE
1.9 % CHANGE OF OCCURING	13% CHANGE OF OCCURING
1.9%	13%
7.5%	5.0%
2.0%	1.0%
103%	101%
15.0%	5.0%
Takes 10% Longer To Be Hungry	Takes 5% Longer To Be Hungry
50 Shards, 2X Each Successive Time	250 Shards, 2X Each Successive Time
Rare And Above	Nil
Yes	Nil
Access To Exclusive Rarity Skills	Nil

MYTHICA

350 Shards, 2X Ea

UNCOMMON
25% CHANGE OF OCCURING
25%
1.0%
0.3%
100%
1.0%
Nil
175 Shards, 2X Each Successive Time
Nil
Nil
Nil

COMMON 60% CHANGE
OF OCCURING
60%
-
a.
100%
Nil
175 Shards, 2X Each Successive Time
Nil
Nil
Nîl

# **GAME ECONOMY**



# SOLCHICKS METAVERSE

- Sources Players will participate in a rewarding game loop where they are rewarded both in-game and real world through play.
  - SolCoins SolCoins are purchased using Solana and cannot be converted back to cash. SolCoins are used in ingame interactions like purchasing items from NPC vendors and trading with other players in the marketplace. However, Tomes and Shards of Love are separate resources and cannot be bought and sold using SolCoins.
  - Loot Boxes Players are rewarded loot boxes from playing the game through completing objectives and quests and participating in PvP battles. Typically loot boxes will contain SolCoins, consumables, Tomes, Shards of Love, with a low chance of equipment and crafting materials. The quality of loot in the loot boxes will be determined based on player MMR.
  - SolCrystals SolCrystals will be awarded to high MMR players which have completed certain objectives (eg. do
    more than x damage in a single game / land the killing blow on all enemies). SolCrystals cannot be traded and
    are used to purchase rare weapons and cosmetic items from the marketplace from the game NPCs along with
    SolCoins.
  - Random finds Powerful consumables / weapons can only be found in higher MMR loot boxes or rare sale on the marketplace by game.

#### USES - AS MORE ITEMS ARE GENERATED THROUGH PLAY, THE GAME HAS MECHANISMS AND RESOURCE SINKS IN WHICH PLAYERS CAN MEANINGFULLY SPEND THEIR RESOURCES. CAREFUL MANAGEMENT IS ESSENTIAL IN ORDER TO BALANCE THE IN-GAME ECONOMY AND KEEP INFLATION IN CHECK.

- The game to generate and sell items on marketplace
- Equipment will break after certain amounts of use which prevents oversupply of equipment in the market as time goes on
- Increasing cost to repair trait-specific equipment
- Tomes / Shards of Love as increasing requirement over time / uses
- Crafting / upgrading / unforging equipment will require SolCoins and materials

# **MARKET PLACE**

- In addition to P2P sale, the marketplace will also be a place where the game will generate items for players to purchase as a money sink
- Unlimited amounts of common consumables / food etc are sold by the game at an auction style marketplace where
  prices reflect the demand of the particular consumable which could be purchase with SolCoins or Solana
- Unlimited amounts of basic / useable weapons sold by the game at an auction style marketplace where prices reflect the demand of the particular consumable which could be purchase with SolCoins or Solana
- Rare equipment and even equipment NFTs will be periodically released and sold in limited quantities and will require SolCrystals in addition to SolCoins to purchase
- Limited quantities of other powerful items such as books / scrolls which will be updated at certain intervals throughout the week / day / season
- Cosmetic items to be purchased with SolCrystals and SolCoins

#### **REAL WORLD**

Some items that will be airdropped as NFTs / alternative currencies include:

- Weapons / Gems as NFTs NFTs can come with different wear (80-100% = freshly forged. 50-79% = first blow. 30-49% = war hardened. 15-29% = cracked SolSteel. and 5-14% = SolFox Chew Toy) which will gimp their stats in game
- Tomes as tokens (tome of relearning / tome of power) investment in resources to help player save time and effort from having to start another saved state/ Tomes that are used will be burnt
- Shards of Love as tokens (used for breeding) investment to create more SolChicks to sell / play. Shards used for breeding will be burnt
- All Every week, you will be rewarded with additional Shards of Love based on how happy your Solchick is
- This would create an economy where more and more resources are being pumped in