Abstract

ArenaSwap is a decentralized exchange platform built on BSC (Binance Smart Chain) that focuses on gamification of yield farming and gambling.

Our vision is to make DeFi and yield farming mainstream through gamification and storytelling, creating an ecosystem that supports the value of our token and NFTs.

We implement powerful deflationary mechanisms to safeguard the token value. Gamified gambling and an NFT collectible game are developed as part of the ecosystem to achieve this.

Introducion

Crypto investments are getting more exciting with DeFi, liquidity mining, yield farming, and NFTs. We are a team who strives to make DeFi fun and engaging. Yield farming can be so much more than just financial returns - isn't it possible to build something fun and funny around it?

Using storytelling, gamification, and the NFT ecosystem, we have created a DeFi and gambling mechanism while still maintaining the financial rewards of yield farming.

Furthermore, most DeFi projects and their tokens do not have a robust burning mechanism. As a result, financial returns decrease over time and the ecosystem becomes unsustainable. To ensure the health of the token ecosystem, we want to create a strong deflationary mechanism.

It is a journey we are looking forward to building with our community, to whom we will provide financial returns in the form of tokens and our NFT ecosystem.

Here are some major concepts you’ll see in the project:
DeFi stands for “decentralized finance,” which refers to a range of innovative financial technologies built on cryptography or blockchain to disrupt financial intermediaries. It offers loans, savings, and investments, among other things, through DeFi platforms. The decentralized exchange (DEX) is one of the essential DeFi applications requiring liquidity to make trading possible.

Liquidity mining is the process of obtaining tokens through giving liquidity - users can deposit their tokens on the platform, and in return, they get a cut of the fees. When it comes to yield farming, liquidity providers maximize yields by moving funds through different DeFi platforms.

PancakeSwap has replicated the success of UniSwap and SushiSwap on the Binance Smart Chain. Then, with the forking of PancakeSwap, emerging DeFi apps have enhanced governance and security, contributing to the continual growth of the ecosystem.

**NFT**

As the name suggests, non-fungible tokens are unique tokens that cannot be interchanged with anything else. They are considered a form of ownership, e.g., of a collectible card, artwork, or painting. Also included is a wide range of in-game items, as well as text, videos, and virtual land. Any form of digital assets can be bought and sold as an NFT in the market.

Innovative NFT projects introduce a few additional features that distinguish them from other NFTs. Hashmasks, for example, have a name changing token that allows users to change the name associated with the NFT.

**What needs to be changed?**

DeFi and yield farming applications are facing new challenges as they expand into the mainstream. The NFT market also faces similar difficulties.

We have identified the following problems and come up with plans to fix them:

**DeFi is not fun**

Right now, liquidity mining and yield farming are nothing more than pure investments. There is nothing sexy about it - it meets the liquidity providers’ expectations of financial returns, but nothing more. As such, many holders pull their liquidity once a certain amount of profit has been realized.
Some DeFi applications have introduced gambling, such as lottery systems and game wheels to make their projects more enjoyable, but users’ mindsets are still primarily based on financial gain, since these games aren't fun. These innovations have proven to be inadequate. On the other hand, casual games, which employ powerful gamification and storytelling, have been very well received by the mass market.

We believe DeFi projects can become more attractive by integrating casual gaming. Eventually, this will provide a competitive advantage over other DeFi projects and result in a substantial financial return.

**Weak deflation mechanism**

DeFi projects reward their yield farmers with tokens. Yet many DeFi projects don't have any token burning mechanism, and they have a never-ending supply of tokens. Both factors contribute to inflation in the long run, and high-yield farming cannot be sustained.

While initiatives like lotteries and NFT sales are in place, these usually don't convince token holders to spend much because they are too disconnected from the rest of the project. There are even games that are licensed from third-party companies and are completely unoriginal. It's hard to see how this kind of undifferentiated burning mechanism can create new token demand and decrease total token supply in the long term.

It's time to redesign the burning mechanism so it's more appealing to token holders.

**No value creation For NFTs**

Most DeFi projects sell NFTs as part of their collectibles. One of the core values of NFTs is scarcity, but this is not enough to guarantee long-term demand. There's not much substance to many NFTs, so their price is low, and they're not as popular in the secondary market.

In addition to scarcity, there are lots of ways to raise an NFT's value. Typical examples include gaming NFTs, which allow users to own items that enhance their gaming experience. However, many DeFi projects can't create value for their NFT collectibles unless they have a sophisticated and engaging game mechanism.

Our goal is to create an ecosystem that supports the values of our NFTs, one that is organically built around the theme. In the game, NFTs unlock exclusive privileges and perks for their owners. In addition, NFT owners will be able to share in the gains from the project’s gambling pool. This will produce long-term value for our NFT owners and stimulate secondary market demand for our NFTs.

**Low community engagement**

Every project’s success depends on how it’s adopted and how much support it gets from the community. Most DeFi projects have a weak sense of community, as they are mostly
concerned with token price. Further, the current gambling system, like the lottery, is largely unidirectional, with players interacting only with the system, not with the rest of the community.

It's crucial to foster interaction among players, so they feel like they're part of the community. In our minds, a good gambling system is something people emotionally connect with and talk about rather than just bet on. In addition, the project should give back to its community, especially by providing more incentives to active players in the pot.

**Security issues**

Rug pulling is a major headache for DeFi project investors. That's when a developer pulls out tokens on purpose by using hidden code in the contract. This results in the loss of investments and causes trust issues among investors.

Another aspect of safety is hacks and minting cases, in which attackers mint tokens and dump them on the market through technical glitches in the token’s smart contract. This is due to the development team's negligence when it comes to smart contract design.

We have removed the code that enables rug pulling from our contracts and appointed auditors to examine them. Also, our development team has solid experience developing smart contracts and will have intensive code review to avoid future issues before any deployment.

**What We Offer**

Since we have observed the trends in DeFi and yield farming, we believe that gamification of gambling and gaming are revolutionary to the status quo. We're going to give users a game world in which they can play, collect, explore, and get paid for their passion.

The Arena is the core concept to achieve what we want to do. The Arena is made up of two parts:

**Gamified Gambling & Major Gladiators**

Major Gladiators are prominent figures in the same way that sports stars are, with a unique character design and storyline. Users can wager on Major Gladiators’ battles and collect their Victory NFTs to share in the prize winnings.

**NFT Collectible Game & Minor Gladiators**

Minor Gladiators come in the form of NFT and are owned exclusively by players. Minor Gladiators have his/her DNA, and they can be equipped with items NFTs such as weapons, armor, and magic props. Minor Gladiators can also engage in PvP battles with other players'
Minor Gladiators. And they can fight in multiple themed battlefields with various opponents in different fighting styles through arena challenge tours.

**The Arena, Major Gladiators and gamified gambling**

Gamification systems, such as the lottery & wheel in DeFi projects, should be redesigned to make them more engaging. Below you’ll find a description of our gameplay:

**Content-based Gamification**

We will introduce backstories and characters to our gambling system. For each side, we put together a team of legendary gladiators.

Each gladiator has a unique character design, background story, relationship with other gladiators, and mission in the arena, as well as a distinctive combat style. These factors affect their chances of winning and create variety in battles.

A gladiator's story is also developed based on battle results, so the narrative context grows along with the character and his/her battle record.

**Major Gladiators & Arena Battle**

Gladiator battles are scheduled regularly and available for betting. Users can bet with their tokens on a gladiator and make a contribution to the pot.

In a gladiator battle, there are three gladiators, one each from the Red, Black, & Green team. Red & Black team - The winner of the last match stays and an opponent is randomly selected from another team’s roster. Green team is randomly selected from the roster.
• A major gladiator’s chances of winning are between 20 and 85%.
• There’s only a 4% chance that the green team’s gladiator will win.
• Gladiators’ chances of winning are determined by a number of factors, including their level, arcane element, arena setting, and randomness.

A random number will be assigned to each gladiator in every battle. Gladiators can have alternative states (eg. Berserks), and this will change their level and arcane element if they get a certain fighter number. A very rare Victory NFT will be created if they win the battle.

**Betting on Major Gladiators**

Only one of the gladiators will win. 90% of the pool goes to the people who bet on the winning gladiator and are rewarded based on their contributions.

A lucky bettor who placed a bet on the winning gladiator will receive a Victory NFT with a unique winning number (we’ll talk about Victory NFT in the next few sections).

If the green team gladiator wins, which is highly unlikely, the jackpot is divided among contributors who bet on the green team.

• 4% of the pot is burned
• 3% of the pot goes toward the jackpot
• 3% of the pot will be shared by owners of the winning gladiator’s NFT

**Roster of Major Gladiators**

Initially, the red and black teams will have 3 to 4 gladiators each, and the green team will have 2 or 3 (just for fun). Our cooperating game artists will bring the gladiators to life.
Growth of Major Gladiators

Gladiators begin at levels 1 to 3 and gain experience points as they fight.

As a gladiator gains experience points, he or she will level up. Level has a major effect on the outcome of a battle.

Retirement of Major Gladiators

In the event a gladiator wins ten times or loses three times consecutively, the NFT owners of the gladiator’s opponent decide if the gladiator will retire and be removed from the game.

Retired gladiators are sent to Valhalla or Limbo, depending on whether they won or lost. Both instances will stop new Victory NFT issuance, effectively capping the supply of circulating NFTs. The circulating NFTs of retired gladiators may become more valuable as a result.

A new gladiator will replace each one withdrawn via initial gladiator offering.

NFT collection ecosystem for Major Gladiators

In the event that a gladiator wins, a Victory NFT will be given to his/her supporters in a weighted random draw. We’re making an item that combines gambling and collectibles. Besides its role as an iconic collectible, this NFT also entitles the owner to share in the prize winnings of a gladiator battle.
In this way, we create substantial financial value for our NFT holders, while at the same time allowing the NFTs to serve as an excellent collectible of users’ favorite virtual gladiators.

**Major Gladiator Victory NFTs**

All users who bet on the winning gladiator may enter a weighted random draw for a chance to win the gladiator’s Victory NFT. The chance of receiving a reward is proportional to one’s contribution to the pot.

Every Victory NFT is assigned a unique serial number for victory, which is associated with the winning record. Some Victory NFTs come with a unique card face, as they have a special serial number. More rarely, a few limited editions may be burned and redeemed as a 3D-printed figure.

**Prize sharing among Victory NFT owners**

New and existing Victory NFT owners of a winning gladiator share 3% of the pot.

**IGO (Initial Gladiator Offering)**

Besides earning a Victory NFT by betting in the Arena, users can also participate in the Initial Gladiator Offering (IGO) to gain access to the first batch of NFTs representing Major Gladiators.

An IGO allows users to purchase NFTs of gladiator candidates at a relatively low cost before they appear on the roster. Owners of IGO NFT Major Gladiators enjoy the same privileges as Victory NFT owners, such as voting and sharing in the Major Gladiators’ prize winnings.

Once a certain number of gladiator candidate NFTs are sold, the IGO sale ends, and the gladiator candidate will be added to the roster and can begin winning prizes for its NFT owners.

Additionally, a lucky user will receive a limited edition IGO NFT at the end of the IGO. A user who purchases an IGO NFT for a Major Gladiator will receive an IGO NFT with a unique serial number. At the end of the IGO sale, the IGO NFT with the specific serial number will convert to limited editions based on a random mechanism on-chain. As a limited-edition IGO NFT, the limited edition is rarer and more valuable than the standard IGO NFT.

The price of an IGO NFT varies with the timing of purchase -- early purchases are more affordable, whereas later purchases are more expensive.
Community Engagement

Pro wrestling or boxing, for instance, where drama-filled stories are performed to build tension and fuel discussion around the battle, are examples of the sort of community engagement we will replicate. We are creating an Arena Gaming Universe (AGU) to build a community in which players can talk about each battle, as well as discuss the gladiators’ stories.

The arena news bot is an idea we have extended from the price bot. To support the community discussed above, we want to create a Telegram bot and a channel to automatically announce the latest updates on the results of every battle in the Arena, as well as any newly opened betting opportunities.

Community members can instantly learn whether their supported gladiators have a battle coming up. This will improve user engagement and stickiness, and ultimately contribute to a more active betting pool.
NFT Collectible Game & Minor Gladiators

During Arena Gaming Universe (AGU) development, Major Gladiators’ stories will serve as a basis for the world’s setting. However, beyond betting on the battles of Major Gladiators, we know that our users ultimately want to create their own custom gladiators.

We will let users own their Minor Gladiators and game item NFTs in this section of the ecosystem. Minor gladiators are apprentices who have potential but do not become major gladiators (yet). While they cannot fight in the Arena of Major Gladiators, other battlefields are available for them and the players.

Your unique NFT gladiators & game item NFTs

Uniqueness is one of the core values of the NFT. Each Minor Gladiator NFT has its own unique DNA and a unique appearance. Some of the features in the DNA are rare and will create unique value for the NFT.

Minor Gladiators’ ability points, and the nature of their arcane and elemental powers, can also be boosted by equipping different NFT game items. These factors will determine the chance of winning in battle, and as a result, the game will have a fun and unpredictable dynamic.
Loot boxes & NFTs

Minor Gladiator NFTs and game item NFTs can be acquired by opening loot boxes. There are several ways to obtain loot boxes, such as through our stores, drops from the enemy during battles, or airdrop campaigns. Loot boxes can also be earned by staking tokens. The more a user stakes, the more loot boxes he/she can unlock.

The Pyramid Royale of Minor Gladiators

There are four types of game players. Some players seek competition with others. This is why we want to develop a battle system that can meet the bloodthirsty demands of such players.

The Pyramid Royale is a PvP battle royale game mode in which players and their Minor Gladiators can compete for the throne in the Pyramid Apex. The winner earns a prize by simply being the last gladiator standing for 60 seconds, while other players constantly spawn new gladiators and challenge the winner.

Gladiators in this game only have basic armor and weapons. Weapons come in three types, and each has an advantage over another. Gladiators can use one or two of these weapons or a shield to fight. But if their master wants to save tokens, they can carry just one weapon and leave the other hand empty.
Once a gladiator remains standing for 60 seconds and becomes the winner, one of the Pyramid guardians - like the boss at the end of a game level - will awaken. The winner can then challenge the Pyramid guardian or attempt escape.

The gladiator’s chances are slim, but if he wins, he will win the jackpot and an NFT. A special event will be triggered upon collecting all guardians’ NFTs.

**Gladiatorial Odyssey of Minor gladiator**

Alternatively, some players may instead want to discover the game world or get game achievements by completing missions.

We will design themed arenas, much like the Pokémon gyms. Players’ NFT gladiators will face off against NPCs in exotic stages and different fighting styles. There will be various thematic Arena challenges - monster hunts, chariot battles, combat re-enactments, naval battles, or maze escapes.

Tokens and game items NFTs will be awarded to players for Gladiatorial Odyssey challenges, and a big jackpot will be awarded to those at the top of the leaderboard for every stage.
Tokenomics

It's the tokenomics, stupid! We think the tokenomics vision is the heart of any project, and as we said in the problem section, we’ve got plans to deal with inflation in a DeFi ecosystem.

Digital gold & finite supply

Bitcoin’s value is boosted by its capped supply model. This is why it’s called "digital gold" - its financial system’s foundation is predictable and stable. We’ll regulate our token supply in the same way, by reducing the emission rate according to the size and growth determined by our tokenomics.

From finite to decreasing supply

Furthermore, we are building a decreasing supply model in the long run. Ultimately, we aim to have an ecosystem in which token burning exceeds token emission, leading to predictable deflation.

Because of this predictable deflation, even if we limit the emission rate to fulfill a decreasing supply policy, yield farming will still be highly profitable, since the token price will have solid support.

How do we do this?

To achieve this, we need to have very powerful deflationary and burning mechanics. As discussed in the feature sections, we will develop various robust use cases in our ecosystem. Each of them employs a unique burning mechanism to decrease overall token supply.

Overview of token utility and burning mechanics

1. The Arena & Major Gladiators
   - Bets on gladiators
     - 3% of the pot will be burned for every battle
     - 25% of the jackpot will be burned
   - Initial offering of Major Gladiator NFTs
     - 85% of the raised fund will be burned

2. The NFT Collectible Game & Minor Gladiators
   - Pyramid Royale
     - 25% of pot will be burned (to be confirmed)
• Gladiatorial Odyssey
  ○ 80% of entry fee will be burned (to be confirmed)
• Purchase loot boxes of Minor Gladiator NFTs and game item NFTs
  ○ 85% of the sales will be burned

3. Deposit fee

• The deposit fee for staking will be used to purchase ARENAs later.
• 75% of deposit fees will be used to buy back ARENA tokens and burn them.
• At the beginning of the ecosystem’s development, we will manually burn the transaction fee to stabilize the price in case of market dumps.

Token Summary

• Ticker: ARENA
• Token address: 0x2A17Dc11a1828725cdB318E0036ACF12727d27a2
• Chain: Binance Smart Chain (BEP-20)
• Capped Supply: 10,000,000
• The initial emission rate will be 1 ARENA per block
  ○ 90% will be emitted as a reward to the farming ecosystem
  ○ 10% will be sent to the developers’ addresses for marketing purposes, payout, and to fund future partnerships and strategic developments
• Initial mint will be 500,000 ARENA to the admin address to provide initial liquidity and for marketing purposes
Governance

Audit

We've reached out to TechRate for the audit, and after that, we are applying to Hacken and other audit providers. We're also trying to get certified by Certik, which is the most respected audit provider for the DeFi community.

In the future, we'll audit the contracts of our new features to ensure they're secure. This will ensure the code integrity and security of our smart contracts and give our community members the confidence they need to support us.

On-chain governance

We'll eventually migrate the project to an on-chain governance model to decide the project's direction.

On-chain governance is a way to manage and implement changes to smart contracts. The controls for initiating changes are coded into the smart contract, and the developer can propose changes through code updates. Each user has voting power based on how many ARENA tokens they own.
Growth strategy

Partnerships

Partnership is very important to us. We are looking for partnerships with other yield farms and DeFi projects that are as ambitious and trustworthy as we are.

By partnering with other DeFi platforms that understand the power of gaming, we can grow together and expand our interoperability within the NFT ecosystem. Example: We can create cross-game characters and items that can be used in both our arenas and our partner’s game.

Listing on crypto trackers and exchanges

We will also be listed on top trackers and exchanges for easy accessibility.
- DappRadar
- CoinGecko
- CoinMarketCap
- Bscscan

Airdrops and meme contests

As proven by existing projects, airdrops and meme contests are great marketing strategies. These allow us to gain more interested users and investors for our project.

Public relation

We’ll use different public relations techniques to make sure we’re seen. Our goal is to feature the project on top cryptocurrency news portals and blogs such as NewsBTC, BSC news, ICObench, Cointelegraph, etc. By doing this, we will promote our unique strategy and let the public know more about it.

Referral Program

Users can earn rewards by inviting friends to join the farm through this on-chain referral program. Every time a user refers to a friend, he/she earns 1% of their earnings forever. This can trigger the viral effect on referral and attract new investors via our project community’s connection.

YouTube marketing

The project could reach a million viewers through an influential YouTube channel and attract users and investors. For this reason, we'll search for YouTubers with good reputations in the crypto community and ask them to review the project.
Product Roadmap

Launch

- Exchange - AMM, yield farms & staking pools
- Harvest guardian
- Referral program

Apprentice stage (2-4 months)

- MVP of the Arena battle & betting pool for Major Gladiators
- MVP of Pyramid Royal for Minor Gladiators

Gladiator stage (4-6 months)

- MVP of Gladiatorial Odyssey for Minor Gladiators
- Victory NFT of Major Gladiators
- Loot boxes sale for Minor Gladiator NFTs & game item NFTs
- IGO(Initial Gladiator Offering) & more Major Gladiators (8-12)

Veteran stage (6-12 months)

- Many more new Major Gladiators (16-32)
- More new arenas in Gladiatorial Odyssey
- Stake to earn loot boxes

Grandmaster stage (12-24 months)

- More & more new Major Gladiators
- More & more new arenas in Gladiatorial Odyssey
- New features initiated from the project community

*MVP - Minimum Viable Product, is a product with enough features to attract early-adopter customers and validate a product idea early in the product development cycle
Our team

- 2 x Smart contract engineers
- 1 x Front-end web developer
- 1 x UI/UX designer
- 1 x Game writer
- 2 x Game artists
- 1 x Growth specialist
- 2 x Community managers

Find us

- Telegram: arenaswap
- Twitter: arenaswap
- Website: arenaswap.com