

White paper

(draft version 0.1)

#### RETROBLOCK

Where the classics never die!

Marcio Moreno marcio@mobr.ai

Rafael Brandao rafael@mobr.ai

#### **Abstract**

RETROBLOCK is a pioneering GameFi platform merging nostalgia with innovation to promote vibrant gaming communities. Supported by Web3 technology, RETROBLOCK pushes the boundaries of retro gaming by ensuring transparency, decentralization, and autonomous prize distribution. The platform integrates smart contracts for tournament management, and there are plans to create a metaverse and NFTs for enhanced gaming experiences. Players will be able to engage in different gaming modes, including weekly and PVP tournaments in an immersive dystopian world. Governance mechanisms are also part of the roadmap, aiming to engage users to evolve the platform. With a strong team and a strategic vision, RETROBLOCK redefines retro-style gaming and creates a space where the classics never die. Join us on this exciting journey to reshape the gaming landscape.



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## 1 Introduction

The sprawling metropolis of Synth City is the federation capital of our dystopian world. A cacophony of chaos and innovation, where the divide between the haves and have-nots is stark and unforgiving. Mega-corporations reign supreme, their towering edifices looming over the cityscape as symbols of power and control. RETROBLOCK emerges as a beacon of light—a cyberspace sanctuary where the downtrodden are protected and can find solace and camaraderie amidst the chaos. Its neon-lit infrastructure echoes with the possibility of gathering tools and resources, or exchanging information in the timeless thrill of retro-style gaming. Here, in the heart of the city, a revolution is brewing—one that will change the fate of this dystopian world forever.

Welcome to RETROBLOCK, where the classics never die, and gaming can thrive in a vibrant community!

Imagine a revolutionary GameFi platform designed to reshape the world of retro-style gaming. We want to create an interactive space where players can seamlessly engage, compete, and earn rewards through gaming competitions.

### 1.1 Opportunity

The gaming community in general lacks seamless platforms for organizing competitions and fostering community engagement. Available solutions lack transparency and support for award distribution based on Web3 technologies. Setting up competitions with clear rules and autonomous prize distribution mechanisms is complex. On top of that, no GameFi solution is currently targeting competitions for retro-style game communities.

#### 1.2 The RETROBLOCK Platform

The RETROBLOCK GameFi platform offers end-to-end transparency and autonomous management through Web3 technologies. By integrating with blockchain, the platform ensures secure transactions and smart contract capabilities (see Section 2) for tournament management and prize distribution.

RETROBLOCK promotes in-game experiences and social engagement through different tournaments (see Section 3), that will be part of a multiplayer experience set in a dystopian world (see Section 4).

The platform offers both, adaptation of classic single-player games with a tournament-oriented twist, nostalgic and collective gaming experience. As well as, real-time multiplayer gaming experience, where players can create personalized competitions with instant prize distribution.

An NFT Marketplace and a metaverse will further enrich the gaming experience enabling users to engage with missions and social experience as well as acquire and use power-up NFTs with in-game features.

# 2 Technology

The platform comprises 3D environments that compose a virtual world that is in development using the Godot Engine. Currently, a virtual lobby and an NFT marketplace are being expanded to enrich our dystopian world. These environments are provided as executable packing modules that run on top of a WebAssembly middleware.

The platform is supported by Web3 technologies, aiming at transparency and safety for the community.

## 2.1 Virtual Lobby

Currently the platform encompasses a virtual lobby (see Figure 1), where users can check available games and tournaments, current rankings, acquire arcade tokens, set their preferences, and launch available games. This virtual lobby is a dystopian representation of classic arcade stores. In our roadmap, it will be expanded to serve as a cyberspace that will bring balance to a dystopian reality (details in Section 4).



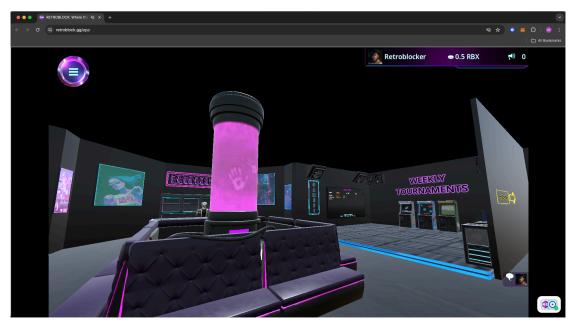


Figure 1: RETROBLOCK's Virtual Lobby.

Three modalities, Bronze, Silver, and Gold, are available in the Weekly Tournaments. By the end of the tournament deadline, the player with the highest score of the week wins the category reward.

PVP instant reward 1-match tournaments are also supported. Players can manage PVP rooms, defining the tournament participation fee, and who can join the room.

The initial collection of classic games is composed by: PvsP as a PVP remake of Pac-Man, Alien Invasion as a remake of Space Invaders, FreeCell, and Ne0hh1 as a remake of 0hh1.

#### 2.2 Web3

#### Blockchain

RETROBLOCK is currently deployed on the Base mainnet [3], which brings the usual perks of distributed ledgers, i.e. decentralization, immutability, transparency, security, among other benefits. In addition, the network aims at providing really cost-effective transactions. Low gas fees translate to reduced operational costs, making it economically feasible for a broader audience to enjoy the platform.

Our roadmap also foresees the integration of Coinbase's onramp features. This will simplify the process of converting fiat currency into cryptocurrencies, ultimately streamlining the onboarding process for newcomers to the digital asset space.

#### **Smart Contracts**

RETROBLOCK's smart contracts [2] are currently deployed on Base's mainnet. The smart contracts implement mechanisms to support managing the different types of tournaments and their rewards.

#### Wallets

Digital wallets serve as multifunctional hubs in RETROBLOCK, facilitating a seamless user experience by enabling various transactions, including paying for arcade tokens, participating in tournaments, and receiving rewards. Currently, we support EVM compatible wallets, and we recommend using Metamask or Coinbase Wallet.

## 3 Use Cases

RETROBLOCK targets a diverse audience of gamers, content creators, and enthusiasts seeking a collaborative and engaging retro-gaming experience. The platform offers various tournament configurations and in-game benefits, appealing to both casual players and competitive gamers.

Our roadmap includes a NFT marketplace and the metaverse as future extensions.

### 3.1 Gaming through Tournaments

The platform provides two types of tournament configurations, Weekly Tournaments and PVP Tournaments.

#### Weekly Tournaments

Weekly tournaments enable players to compete by acquiring an arcade token to different categories with increasing price tags and difficulty, and also increasing bonus rewards. Autonomous mechanisms designed as smart contracts support weekly tournaments in the three available categories: Bronze, Silver, and Gold. The highest score of the week takes the accumulated pot of the category.

#### **PVP Tournaments**

PVP tournaments comprise a space where players can create or join rooms to play against another player. The room creator can set details such as the tournament participation fee required to join the match, and which user(s) can join the room. Each player must contribute with the specified value to compete. As soon as the match is finished, the platform defines who is the winner and distributes the reward.

## 3.2 Tournament Organizers

Our roadmap foresees different types of tournament configurations, allowing tournament organizers to create a unique competition experience tailored to their preferences. Income

distribution details and possible configurations will be discussed among the community to meet their requirements and expectations.

#### 3.3 Content Creators

RETROBLOCK's design provides an API for integrating new games. We will offer content creators this integration API. Income distribution details and possible platform integrations will be discussed among the community to meet their requirements and expectations.

### 3.4 NFTs and Marketplace

NFT drops are planned to introduce collectors to the rich lore and characters of our dystopian world. We aim to deepen engagement and promote community interaction with these collections.

The integration of NFTs with the platform is a compelling use case. Through the ownership of NFTs, players may hold unique digital assets including artwork, in-game items, each imbued with distinct properties and scarcity.

In addition, we are expanding the current virtual lobby with an NFT marketplace gallery where users will be able to visualize available NFTs in 3D. This marketplace will allow the platform users to buy, sell, and trade NFTs directly on the platform.

#### 3.4 Metaverse

We intend to bring the multiplayer experience to another level with the designed cyberpunk metaverse (see Section 4). The metaverse will enable players to establish social connections, and be part of a vibrant virtual economy. NFTs will become emblematic representations of individual identity and status of players in the metaverse.

# 4 Ecosystem

## 4.1 The Dystopian World

The sprawling metropolis of Synth City is the federation capital of our dystopian world. In Synth City, towering skyscrapers cast long shadows over neon-lit streets teeming with life and activity. A cacophony of chaos and innovation, where the divide between the haves and have-nots is stark and unforgiving. Mega-corporations reign supreme, their towering edifices looming over the cityscape as symbols of power and control.

Beneath the gleaming facade of technological advancement lies a seething underbelly of corruption and oppression. The streets are ruled by ruthless gangs and shadowy syndicates, each vying for supremacy in the urban jungle. Surveillance drones patrol the skies, their watchful eyes scanning for any signs of dissent or rebellion.

Yet amidst the darkness, there are glimmers of hope. Underground resistance movements fight tirelessly to overthrow the oppressive regime and restore freedom to the people. Citizens work in the shadows, using their skills to expose the truth and undermine the machinations of the powerful. In this world, there are different archetypes, including Corporate Executives, Street Samurai, Hackers, Fixers, and others. Each archetype comes with its own set of abilities, skills.

In this dystopian society, RETROBLOCK emerges as a beacon of light—a cyberspace sanctuary where the downtrodden are protected and can find solace and camaraderie amidst the chaos. Its neon-lit infrastructure echoes with the possibility of finding tools and resources, or exchanging information in the timeless thrill of retro-style gaming. Here, in cyberspace, a revolution is brewing—one that will change the fate of this dystopian landscape forever.

Details about this dystopian world, and its archetypes can be found on <a href="https://retroblock.gg/synthcity">https://retroblock.gg/synthcity</a>.

### 4.2 Community Engagement Strategy

To succeed in the rich and complex GameFi landscape, we must first delve into the very essence of what sets this project apart—a convergence of immersive storytelling, different gameplay mechanics, including tournaments for classic games, and a vibrant community ethos.

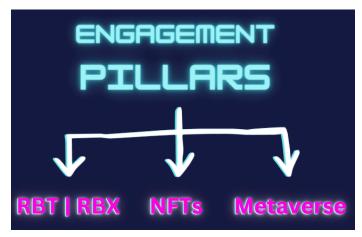


Figure 2: Engagement pillars in our community strategy.

The first pillar to our strategy (Figure 2) is the RETROBLOCK tokens (see Section 5.1) that will support community engagement. Bringing classic games, rewards, integration, customization as well as a governance system to the platform to promote a symbiotic relationship between creators, players, and collectors that brings a sense of belonging and ownership.

The second pillar of our strategy lies in the recognition of the platform's NFT unique selling proposition—the rich tapestry of archetypes that inhabit the digital realm of this dystopian world. Our NFT strategy will consider scarcity, utility, and collaboration to create an experience that goes beyond ownership. From the enigmatic Corporate Executives to the streetwise Hackers and the formidable Street Samurais, each archetype will be imbued with its own set of abilities, skills, and progression paths to multiplayer games in the metaverse.

Scarcity is the cornerstone of value in the world of NFTs, and our strategy will harness this principle to create limited edition NFTs that are coveted treasures within the ecosystem. These NFTs will not only grant advantages to players but will also serve as badges of honor for those who dare to challenge the status quo and defy the powers that be.

Utility is also key in our strategy, and our NFTs will unlock the full potential of this dystopian world. Whether it be enhancing gameplay mechanics, accessing special privileges within alliances, or unlocking hidden secrets scattered throughout the digital labyrinth, our NFTs will be one of the pillars of the dystopian world experience.

The third pillar is the metaverse to support an immersive experience where players can explore this dystopian world (see Section 4.1).

Our strategy will be focused on a steadfast commitment to long-term roadmap—continuously evolving, adapting, and expanding to meet the ever-changing needs and desires of our community.

## 5 RETROBLOCK Tokens

#### 5.1 Arcade tokens

Arcade tokens are the digital representation of the coins used in a coin-operated arcade machine. They do not have financial value in the real world and are used to participate in RETROBLOCK tournaments.

#### Prize distribution

For Weekly Tournaments, two thirds  $(\frac{2}{3})$  of each arcade token bought goes to the category reward pot of that specific game. At the end tournament deadline, the rewards of each game and category are distributed to the winners of the week. That is, the players who made the highest score. For PVP tournaments, winners get three fourths  $(\frac{3}{4})$  of the participation fees.

Currently, PVP tournaments rewards are automatically distributed upon the end of the match. The weekly tournaments reward distribution is manually triggered. In our roadmap, we plan to make this distribution autonomously, by using time-based triggers from oracles (e.g., Chainlink Upkeep).

#### 5.2 RBX

An exclusive in-platform token called RETROBLOCK eXperience (RBX). This token does not have financial value in the real-world, and relates to how active a player is on the platform. Players will earn RBX according to their participation and achievements. They will also be able to use RBX to buy specific NFTs and to evolve with in-game tools, buildings and characters.

### 5.3 \$RBT

One of the key steps in our roadmap is the release of RETROBLOCK's ERC-20 token, named \$RBT. Designed to fuel the vibrant gaming ecosystem within the RETROBLOCK platform, \$RBT will serve multiple functions, including facilitating transactions (e.g. buy arcade tokens, NFTs, etc.), and enabling governance mechanisms. See Section 5.3 for details about \$RBT tokenomics.

## 5.4 NFT Drop: Genesis

The Genesis NFT drop is another exciting milestone in the evolution of our gaming ecosystem. By introducing collectors to the rich lore and characters of our dystopian world, we aim to deepen engagement, promote community interaction, and provide an immersive gaming experience unlike any other.

The Genesis collection will comprise a diverse array of archetypes, each meticulously crafted to embody the spirit of our dystopian gaming metaverse. From Street Samurais to Hackers and Fixers, each archetype offers collectors a glimpse into the vibrant and dystopian world. In this first drop, each archetype will feature a stunning, handcrafted artwork collection with different traits and attributes.

NFTs owners will enjoy exclusive in-game benefits within the metaverse, enhancing the gaming experience and providing a competitive edge. Beyond their utility within the game, the NFTs will be valuable collectible assets that can be traded, sold, or displayed in virtual galleries.

# 6 \$RBT Tokenomics

The \$RBT tokenomics are designed to ensure the token's value within the RETROBLOCK ecosystem. In the future, the token will provide decentralized governance to the ecosystem, by enabling hodlers to make decentralized decisions in the ecosystem program. For instance, voting on new games to be integrated, the next collection and archetypes, or creating Requests for Proposals (RFPs). In addition, the \$RBT token will be the platform's currency, enabling users to buy arcade tokens, NFTs, in-game purchases, etc. Figure 3 presents the \$RBT token distribution.

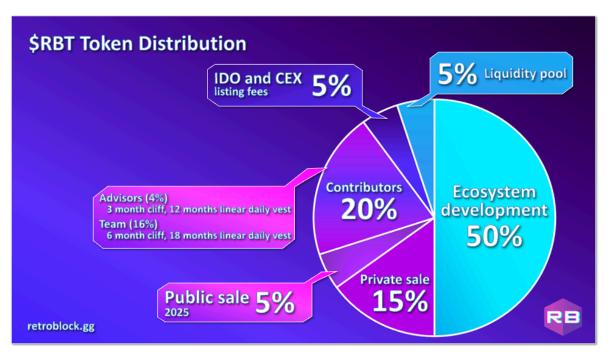


Figure 3: RBT Token Distribution.

The total supply of \$RBT tokens will be fixed, ensuring scarcity and value appreciation over time. The distribution of \$RBT tokens is strategically planned to enable a diverse and engaged community invested in the platform's success.

To maintain token scarcity and increase value over time, we intend to allocate a portion of the platform revenue to token buy back or burning mechanisms, reducing the circulating supply of \$RBT, positively impacting its price dynamics. This will be discussed among the community to meet their requirements and expectations.

# 7 Roadmap

Figure 4 presents our next main milestones. We just concluded a private beta testing of our platform on Base testnet. This phase allowed selected users to test the platform's functionality, provide feedback, and identify any bugs or issues before the public beta on mainnet.



Figure 4: Roadmap milestones.

In Q2.2024, we plan to launch a public beta version of RETROBLOCK on Base mainnet. This will allow a wider audience to access the platform's features, gather additional feedback,

and further refine the user experience. Also in Q2.2024, we intend to conduct our first NFT drop, releasing a collection of archetypes NFTs to the public, featuring exclusive digital artwork of our dystopian world.

In Q3.2024, we plan to onboard additional games onto the platform, expanding its content and offerings to users. In addition, we plan to conduct our second NFT drop, offering another collection of NFTs to the public, and to release the first public version of RETROBLOCK lobby.

In Q4.2024, we expect to release a private sale of RETROBLOCK token (\$RBT) to selected investors and strategic partners. This private sale phase will allow the project to raise funds and secure support from early backers before the token becomes available to the public.

Our plan is to conduct the platform's NFT Marketplace beta release in Q4.2024. This will allow our users to buy, sell, and trade NFTs directly on the platform. This marketplace beta phase may include features such as auctions, listings, and NFT management tools.

In Q1.2025, we plan to release a beta version of our metaverse expansion, offering an initial version of our dystopian world environment for the users to explore, interact, and engage with digital content and experiences.

In Q2.2025, we intend to conduct our first public sale of the \$RBT token, making it available for purchase by the general public. This public sale phase allows a broader audience to participate in the project and acquire the native token for use within the platform ecosystem.

## 8 Final Remarks

The idea for RETROBLOCK was born out of our love for cyberpunk literature and retro gaming, as well as a desire to bring a new dimension to gaming competitions through transparency, decentralization and the power provided by Web3. Our experience in academia, research, and the tech industry working with interactive multimedia and distributed systems provided the foundation to conceptualize and develop RETROBLOCK.

RETROBLOCK addresses key problems in the retro gaming communities. Firstly, it provides a seamless platform for organizing and participating in retro game competitions, solving the challenge of autonomous prize distribution using Web3 technology. Additionally, it fosters community engagement by offering a space for players, content creators, and enthusiasts to connect and collaborate. RETROBLOCK's integration with a metaverse and NFTs will add value by allowing users to experience multiple gaming modes, as well as explore, buy, sell, and trade unique in-game assets, creating a vibrant economy within the platform.

RETROBLOCK targets a diverse audience of gamers who appreciate retro-style gaming and are looking for a twist of modern, and engaging experience. It appeals to both casual players and competitive gamers who enjoy participating in immersive gaming or tournaments, while earning rewards. Additionally, RETROBLOCK attracts content creators, tournament organizers, and gaming enthusiasts who seek a collaborative environment.

Over the past months, we've achieved significant milestones to release the initial version of the platform. These initial results have fueled our passion and commitment to bring RETROBLOCK to life.

We are currently working on creating leaderboards for PVP games, better room management, and rollback on match withdraw. We are also working on partnerships to bring classic and new games to the platform and evolve the system to support mobile devices. There are also plans to create RETROBLOCK's support to tournament organizers, content creators and governance, devising a community-driven space where users can propose and vote on Requests for Proposals (RFPs), and on the future of the platform.

# References

- 1. RETROBLOCK website: https://retroblock.gg
- 2. RETROBLOCK smart contracts https://basescan.org/address/0x5dEaC602762362FE5f135FA5904351916053cF70
- 3. Base network: <a href="https://www.base.org/">https://www.base.org/</a>