A Gaming Platform for Urbit

July 17, 2023

Zoltan Bende

~pandus-fadpun bendez95@protonmail.com **Chris Adams**

~hodreb-racdem chrisadams@startmail.com

Abstract

Web3 gaming has taken off in popularity with traditional game players over the last several years. This is due to the nature of players being able to play-to-earn (P2E) and more recently, play-to-own (P2O), their games and characteristics. While digital currencies and skins/powers/upgrades have existed in traditional games, they are locked into the specific game's walled garden, and players do not own their characters and the hard work used to acquire them.

We introduce a gaming platform on Urbit that seamlessly abstracts away the roadblocks in building and playing in the Web3 gaming world. We present a gaming DAO ownership model that aligns with the play-to-own ethos of Web3 gaming and the community of Urbit. We describe our composable and unique UI (Cosmos) to pull in desks and games into one user-defined interface.

Contents

§1 Introduction

- 1.1 Background
- 1.2 Cosmos UI

§2 Gaming Framework

- 2.1 Player Stories
- 2.2 Developer Stories
- 2.3 Champion NFTs
- 2.4 Collectives and Guilds

§3 Gaming DAO

- 3.1 Play/Develop-to-Own
- 3.2 Tokenomics

*** WIP, more detailed whitepaper will be expanded on ***

§1 Introduction

1.1 Background

In recent years, Web3 gaming with play-to-earn (P2E) and play-to-own (P2O) has grown tremendously and attracted traditional gamers. The gaming industry is estimated at 3 billion users worldwide with in-game purchases estimated at \$68 billion in 2023[1][2]. In the traditional gaming model, players can use digital currencies and buy mods/skins/powers, but only within the specific games' ecosystem. These have no value outside a games' ecosystem and players do not own their achievements.

With the advent of the Web3 gaming model, players can earn and own their skills and achievements with NFTs. These NFTs can be sold/transferred out of any game and the players have full ownership. It is estimated that Web3 gaming will onboard 100 million gamers over the next two years [3].

1.2 Cosmos UI

A customizable and personalized UI that displays different games, chat rooms, wallets, leaderboards and any application built on Urbit and pulling in Web2 data. This is continued work from our hackathon project, Collective, which won the best Defi integration into Urbit at the Encode Code x Urbit hackathon earlier this year. The idea is to enable a flexible and customizable user experience on one canvas. By dropping in our cosmos.js file into any desk, we can pull in that desk and its data to the user's front-end, enabling any developer to create games for our platform in webGL. We can potentially support Webassembly in the future for richer game experiences.

§2 Gaming Framework

2.1 Player Stories

In the traditional gaming world, players spend billions of dollars each year on in-game purchases that they do not own[4]. These games have walled gardens and

the players do not participate in the success of their game-play and the developer studios. A traditional player hears about Web3 gaming and the use of ownable characters, mods, skins that are tradable and movable outside of games and they want to be part of that ecosystem. While the play-to-earn model has been successful in some games, it has flaws in its design that may attract players with financial incentives, and not loyal gamers.

The player starts to see more games built around the play-to-own model, which creates long-term commitment and loyalty, plus potential upside in the success of the game and their hard work playing these types of games. Our gaming DAO framework also rewards and encourages players and developers to use the composability of Urbit for a meta-gaming platform. This gaming framework begins to attract traditional players to Web3 gaming and specifically a play-to-own community being built on Urbit.

2.2 Developer Stories

As a developer, the attractiveness of building on Urbit is enabling creators to develop and distribute faster applications and at lower DevOps cost. A developer who wants to build, fund and deploy a game would need a platform that provides these primitives. With our gaming framework, a developer could raise funds via specific "early backer" NFTs and our platform will allow easy integration with NFTs into games. Having a framework to integrate NFTs into their games and having ownership and upside of their efforts and in the gaming DAO are big advantages to building games on Urbit.

2.3 Champion NFTs

These NFTs encourage a meta-role playing game within the ecosystem. Players can mint characters, skills, skins, etc that can be reused in any games on the platform. They can compete with each other in specific games and/or different unrelated games. Having a leaderboard and contests with special NFT rewards will build a gaming community.

The Champion NFTs can establish an early moat for our gaming ecosystem, since only games on our platform can incorporate the Champion NFTs, along with game-specific NFTs. Developers will be able to create multiple virtual worlds similar to famous

games like World of Warcraft or Baldur's Gate, but these games would be part of larger virtual cities that would include spaces to meet people (gather.town style), trade items, form guilds and jump to the next adventure, as their characters.

2.4 Collectives and Guilds

Our framework will help players and developers spin up collectives, guilds and DAOs for game playing and game design. Incorporate the options to spin up a private gated room (%groups, %pongo) with a multi-sig wallet. Players within a certain game may need to team up and purchase specific NFTs, thus spinning up a Gaming Guild with a multi-sig wallet would be part of our framework. Game creators can spin up Creator Collectives with other developers to help build and fund their game ideas via the same mechanism.

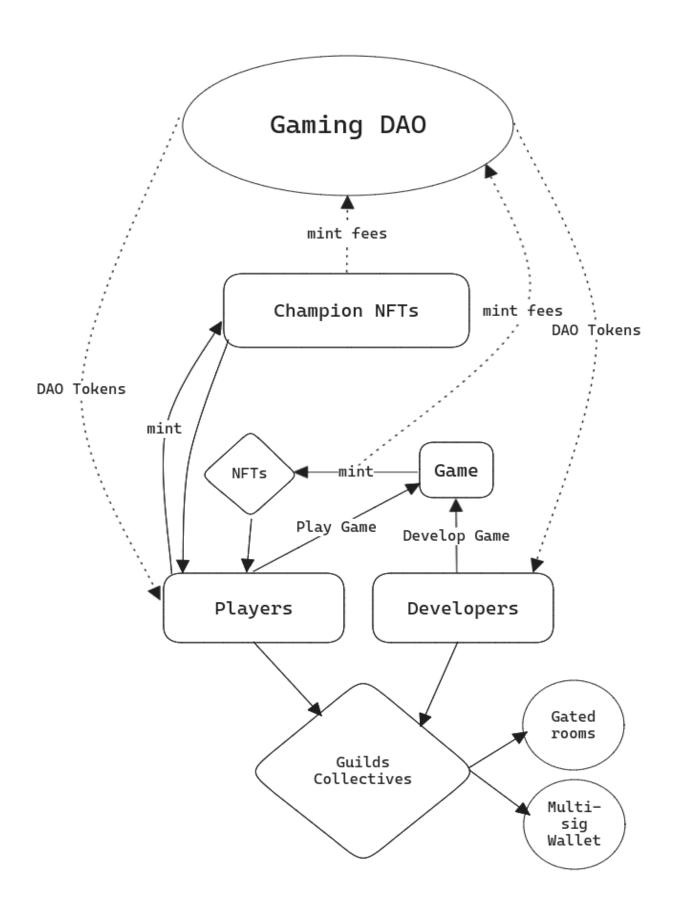
§3 Gaming DAO

3.1 Play/Develop-to-Own

The business model of our framework is a DAO structure that collects mints fees that also rewards players and developers with DAO tokens. Not only can players own their games and characteristics, they can participate with the developers and the gaming DAO on their success. Developers also receive DAO tokens on in-game NFT mints. This model builds a loyal community focused on longevity, with vested interest into the success of the platform and individual games.

3.2 Tokenomics

As players and developers mint NFTs, a small undetermined percentage of the mint fee will go to the Gaming DAO, with the rest going to the developers. All mint fees to the DAO treasury will result in DAO tokens to the players and developers who pay the mint fees. The DAO is adopting a true play/develop-to-own model in which everyone can participate in the upside of not only individual games and studios, but also the whole Gaming DAO ecosystem.



References

- [1] Jovanovic, B. (2023, May 25). Gamer Demographics: Facts about the most popular hobby. *Sirisha*. https://dataprot.net/statistics/gamer-demographics/
- [2] Statista. (2021, September 7). *Global in-game consumer spending market value 2020-2025*. https://www.statista.com/statistics/558952/in-game-consumer-spending-worldwide/
- [3] *TechCrunch is part of the Yahoo family of brands*. (2023, March 20). https://techcrunch.com/2023/03/20/polygon-immutable-web3-gaming/
- [4] Statista. (2021b, September 7). *Global in-game consumer spending market value 2020-2025*. https://www.statista.com/statistics/558952/in-game-consumer-spending-worldwide/