Aptoscraft

-- Ultra-lightweight NFT Craft Protocol

-- Fully practice AIGC,UGC and DeveloperGC

rootMUD

2024 / 03

Important Links

Repo:

https://github.com/rootMUD/aptoscraft

dApp for Aptoscraft:

https://craft.rootmud.xyz

Smart Contract on Randomness Network:

https://explorer.aptoslabs.com/account/0xd6c5798538b1f92da226d1bebc3a32e510b207237d65bb6

5427f7db89fcfa0d3/modules/run/capy/generate_capy?network=randomnet

Game Example:

http://carft.rootmud.xyz/craft_example

Short Introduction

Ultra-lightweight NFT Craft protocol, fully practicing "AI-generatedcontent", "user-generated content" and "developer-generatedcontent"

Problem:

An universal NFT craft protocol is commonly needed by the variety of full-chain games.

Vision:

Creating a truly cross-game NFT ecosystem, it could be seem as an upgraded version of Loot NFT Ecosystem.

01

Background

Background

At present, "the potential of the Move language has not yet been tapped by full-chain game project devlopers."

think about it! On the basis of Move, the problems that exist in many EVM games are not problems at all:

- **How to make the game highly upgradeable? Agency contract?**

—— Move naturally has high-quality and high upgradeability

- **How to make games interoperable and connect them into an organic ecosystem?**

—— Move can do this naturally.

- **How to prevent players from having a bad gaming experience? Using zk technology?**

——The custodial wallet allows players to interact on the chain without being aware of it.

- **How to let Web2 players go through the complicated steps of buying coins and installing wallets to become gamers?**

——The Move chain wallet is an AA wallet with replaceable natural private keys. Web2 players can enter the game world

without any barriers by using the managed wallet operation.

02

Architechture

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The layered design allows protocol developers, NFT designers, and game developers to perform their respective duties.

Protocol Layer: providing abstract NFT types, stack /unstack/burn functions and 404 token conversion functions

NFT Layer: Provides the recipe book for converting Cells to game-specific NFTs

Game Layer: Implement the game logic

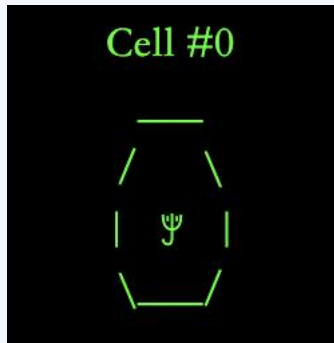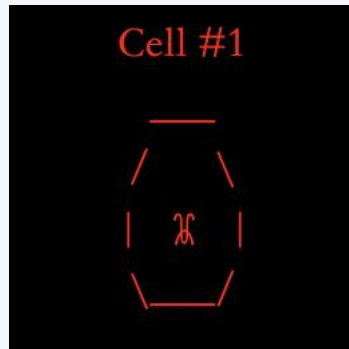03 Cells Design

Cells Design

Eight Different Types of Cells which are stackable
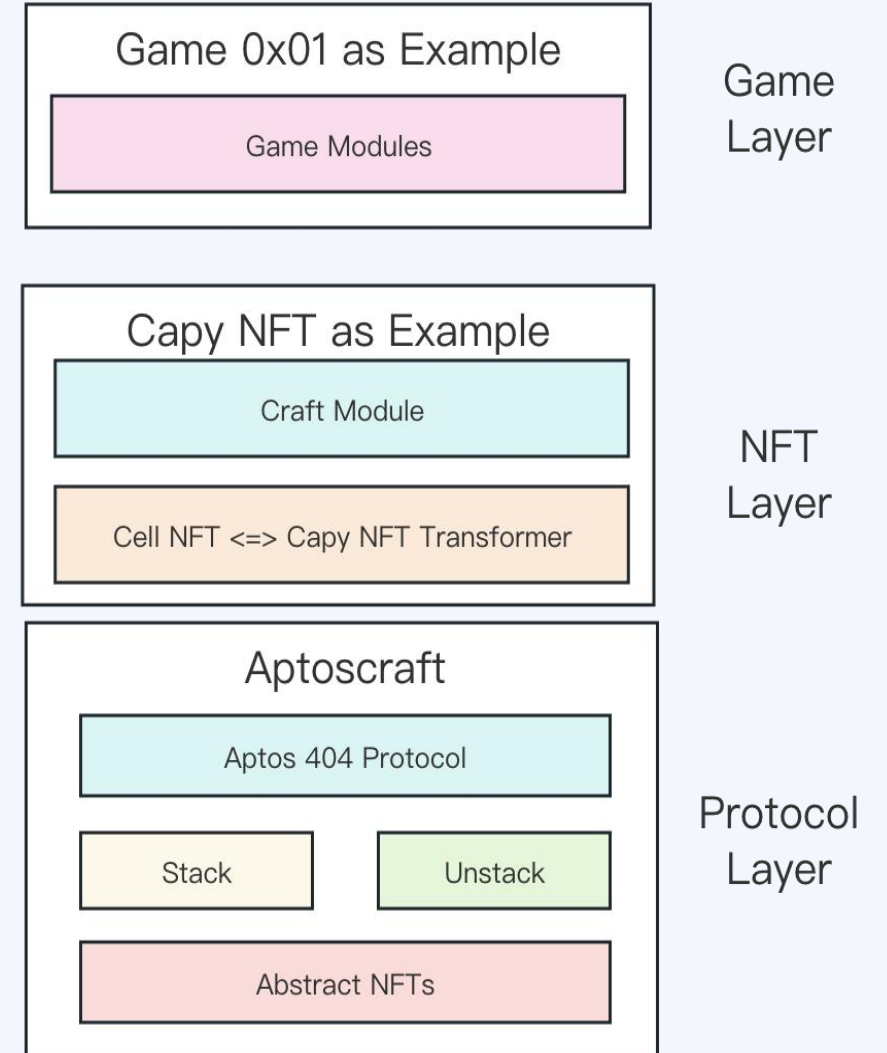
Capy-Capy: A Game Example

Capy-Capy: A Pokemonlike Game

Generate Voxel Capybara by the Cell NFTs!

Cell #0 + Cell #1 =

Capy-Capy: A Pokemonlike Game

Fight by Capybara!

05

The Most Important Features

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- **Composability of Aptos Smart Contracts:** Make full use of the composability of Aptos contracts to completely decouple protocol contracts, NFT contracts and game contracts.

- **Randomness:** Based on the Randomness feature, ensure the randomness of Cell NFT generation in Aptoscraft.

- **Move-based fully on-chain game:** Using lightweight game protocol as the starting point, explore the possibility of full-chain games based on Move.
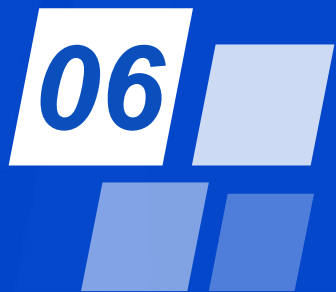
The Most Important Features

- **Project Completeness:**

The aptoscraft protocol layer and game demo have been finished already. The dApp and ecosystem will be improved next.

- **Future Potential:**

Let Aptos Be Great on the fully-on-chain gaming track!

Team

RootMUD

Created Time：2024

Slogan：Cool-oriented Programming.

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