

TaiShangMapGenerator

— Game Map Generator Based on On-chain Data

NonceGeek

2022 / 02

- Supported by 「WeLight」 -

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Quick Intro



Quick Intro

Repo:

https://github.com/WeLightProject/tai_shang_world_generator

Demo:

https://welightproject.github.io/tai_shang_world_generator/

NFT Contract:

<https://mumbai.polygonscan.com/address/0xc6C800250dc333B07fB4054f8575D8795756F697#contracts>

Contract Source Code:

<https://github.com/WeLightProject/tai-shang-world-generator/blob/main/contracts/mapNFT.sol>





Quick Intro

Normally, the metaverse projects nowadays is generate map by off-chain data source, just as same way as “minecraft”. Since both of the source data&generative way about the map are not public, and the generative algorithm is not working in web3 way. Users cannot generate a world like Sandbox by themselves, and the ownership of the world is still in the hands of Sandbox.

This project decided to start from this point, directly using the on-chain data (such as block data, tx-hash data) as the seed for the generation of abstract two-dimensional matrix map.

The Map can be:

1. Mint into NFT;
2. Using as a map in game projects and metaverse projects.



Quick Intro

Innovations of this project:

- **New perspective to look at blockchains** — Verifiable and self-growing distributed data;
- **The practice of Abstract NFT & Cold-media NFT:**
NFT only includes links to renderers + Users tell the story of the map;
- **The practice with NFT as character:** load character from NFTs on multi-chain as a character in Map!
- **Arweave + Traditional Blockchains:** Arweave stores stateless code (transformation rules) and assets. Traditional blockchains store data.



Quick Intro

I have a song for u-
C -----|---|
do ---J---|---|
---J---|---|
---J---|---|
-J-----|---|
J J

Oxycab#&#*@"&\$\$(Got it!

23876771

a_block

Rules:

Rule A ☒

Rule B ☐

GENERATE!

Token ID:

1

Contract ID:

1

VIEW!



Background



Background

This project focuses on a new perspective that blockchain is a verifiable self-growing distributed data source.

This kind of data source has the following characteristics:

- **Self-growing**

Data grows at a constant frequency. As a result, under determined rules, objects derived from metadata including area, treasure and NPCs grow at a constant speed!

- **Distributed**

Metadata is from the blockchain, so we do not need to worry about the risk of data being lost or tampered.

- **Verifiable**

All data is verifiable since they are on-chain metadata and transformation rules.

- **Free**

Reading blockchain data is free, so our data source is free!



Project Details



Project Details

On-chain Steps

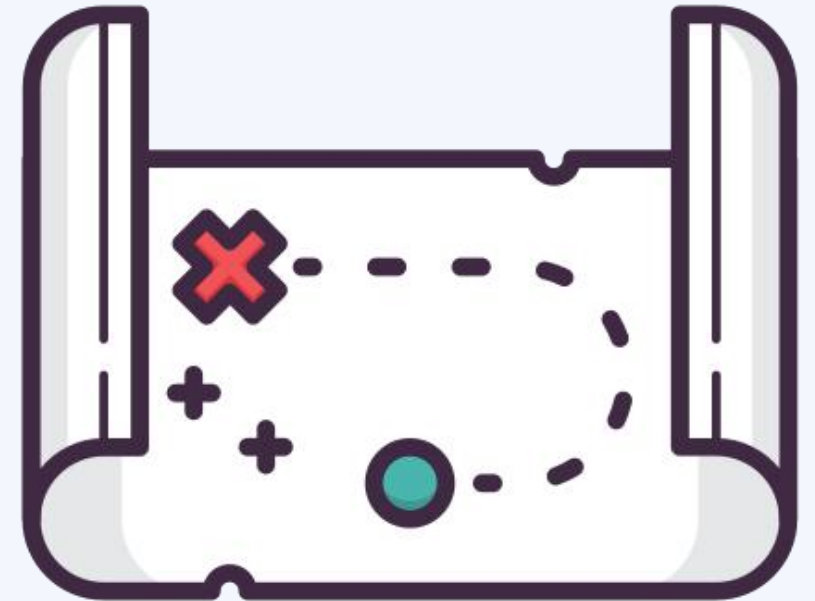
Step 0x01 Getting on-chain data

Step 0x02 Transform on-chain raw data according to on-chain rules to get the abstract maps

Step 0x03 Mint abstract maps into NFT

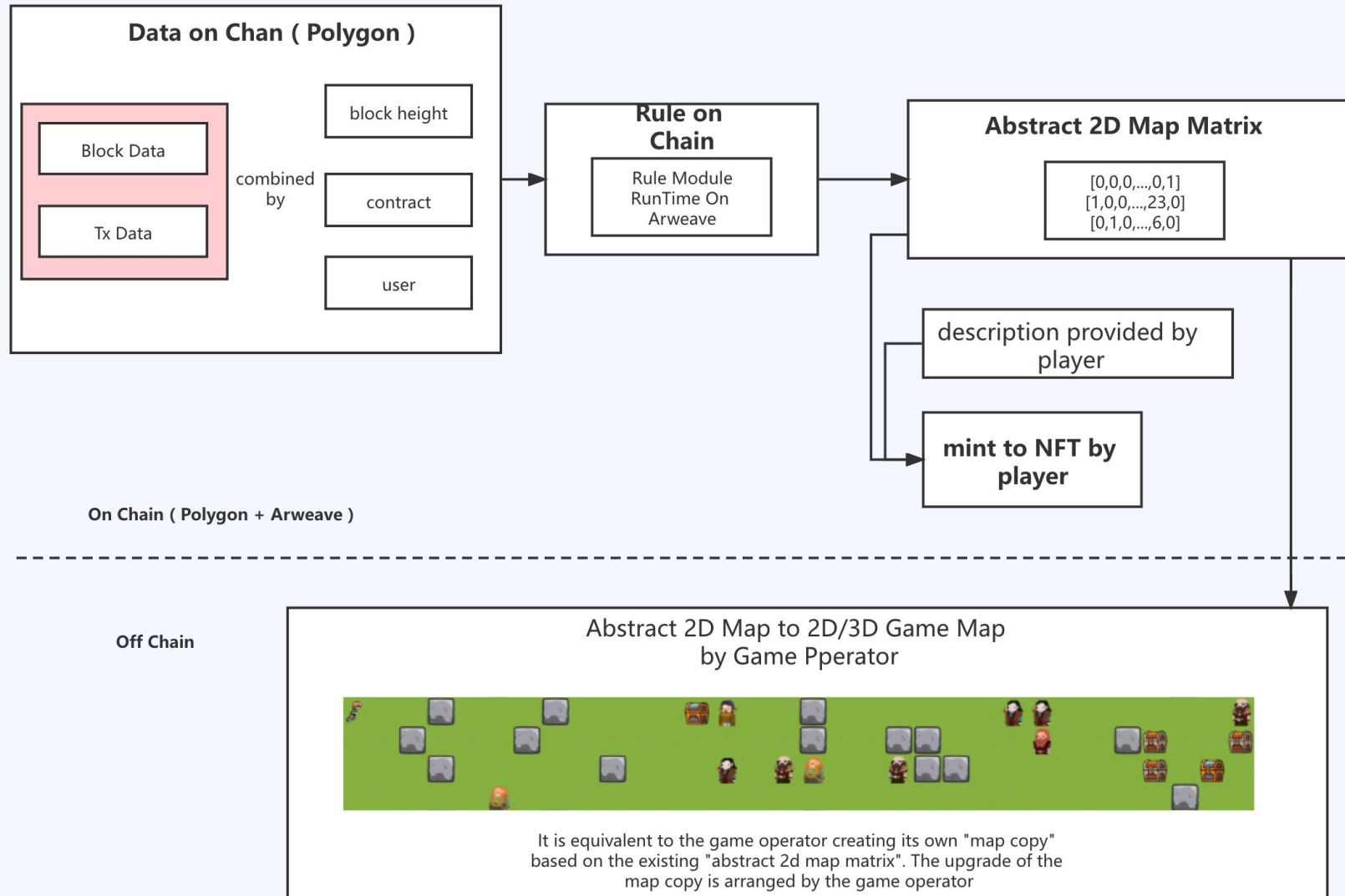
Off-chain Steps

Step 0x04 Render abstract maps into real maps

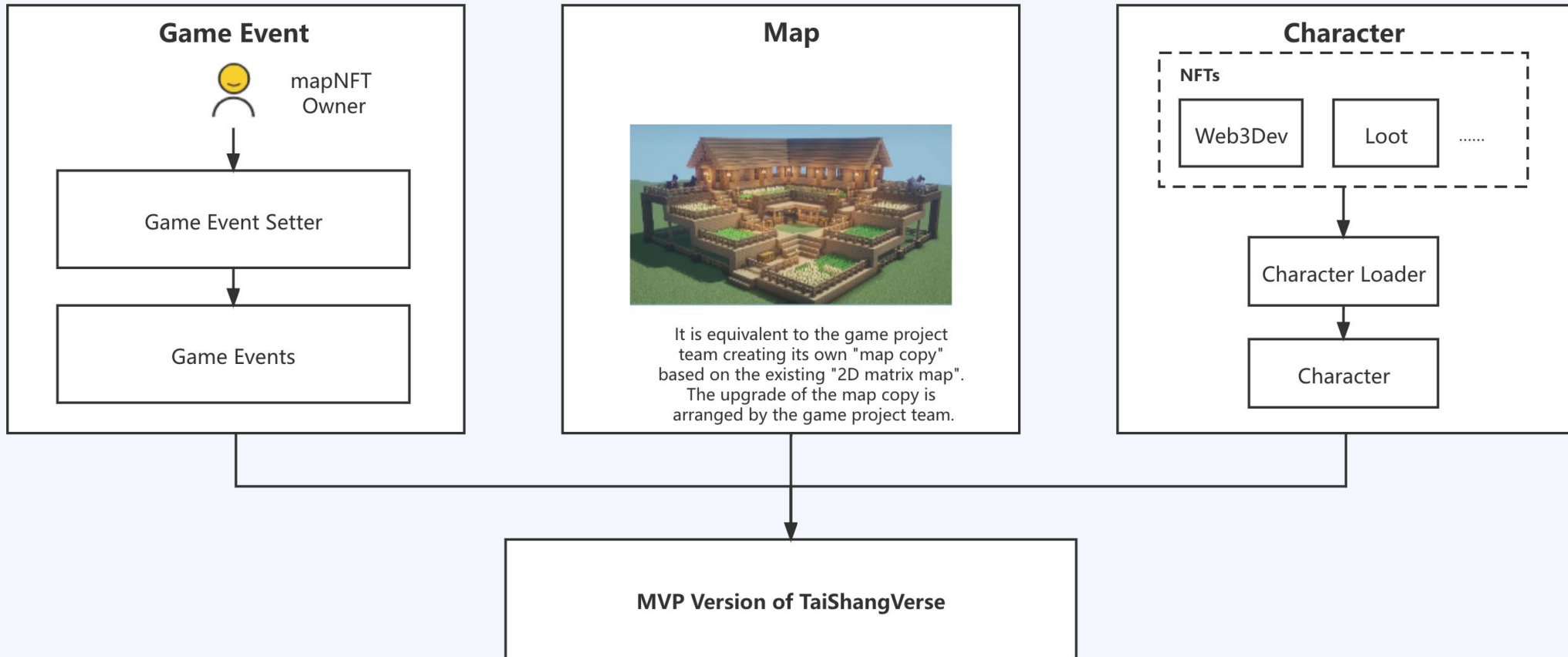




Project Details — Map Generator



Project Details — Character Loader





Scenarios



Scenarios

This project is mostly for NFT players and game project teams.

NFT players can be categorized into “experiencing players” , “crafting players” , and “trading players” . These three types can be overlapped, which means one player can be of one type or multiple types.





Scenarios——Player

- **Experiencing Player**

Experiencing players focus on the experience of gaming and networking in the game. For this type of player, exploring map and experiencing curated plots are more attractive.

- **Crafting Player**

Crafting players get excited when crafting and inventing. TaiShang World Generator brings three playing models that can be offered by game project teams:

- Stick Map NFT together to build a bigger map;
- Give story to NFT when minting NFT;
- Customize the rendering of map, as long as results and 2D abstract maps are consistent.

- **Trading Player**

For trading players, getting revenue from exchanging maps will make them satisfied.



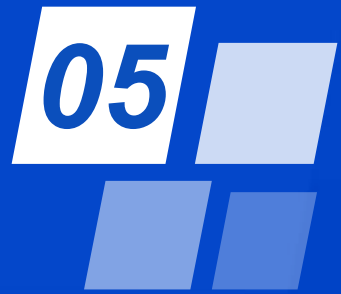
Scenarios——Game Project Team

For game project teams, TaiShang World Generator provides a crypto native way to generate the map and bring an initial group of player.

Game project teams can add new elements on the basis of the paradigm of this project:

- Purchase Map NFT for BD of the game;
- Let players provide Map NFT to build game economy;
- Only use open-source map generator if the game is not related to NFT.

Game project team can be creative and provide game rules and playing model, while NFT players can be the residents of TaiShang World to explore the different worlds designed by the game project teams.



Progress&Plan

Now, we have:

- 2D abstract matrix map based on on-chain data
- 2D game rendered on abstract matrix map
- Minting map and story into NFT
- Add NFT as Character
- Load Event for treasures and NPC;



TaiShang World Generator will be the infrastructure for TaiShang Metaverse.

Short term goal:

- Continue developing TaiShang Map Generator;
- Display existing Tokens;
- Realize composing Maps into a larger Map;

Long term goal:

We will build TaiShang Metaverse on the basis of TaiShang World Generator and other open source projects. We will attract users and developers to TaiShang Metaverse, and also add blocks to the whole Metaverse ecosystem. The tai-shang-map-generator will host interesting activities by the noncegeek





Roadmap(Stage 1)

2022-Q1

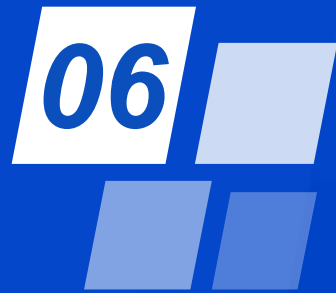
- Publish Contract to Polygon Network(**Done**)
- Release v1 for tai-shang-world-generator
- NonceGeek runs 3 events on tai-shang-world-generator

2022-Q2+Q3

- tai-shang-world-generator become a mature tool for web3devCamp
- Release v2 for tai-shang-world-generator
- Partners can run events on tai-shang-world-generator

2022-Q4

- tai-shang-world-generator release the server version on “Playlink”
- With the help of tai-shang-world-generator, TaiShangVerse takes shape



Team Members



Team Members

NonceGeek

Website: <https://noncegeek.com/#/>

Members: <https://noncegeek.com/#/buidlers>

Project Team: leeduckgo、msfew、ff、追忆似水年华、零月浅浅

NonceGeek is a distributed crypto native geek organization, focusing on “Cool-Oriented Programming”.



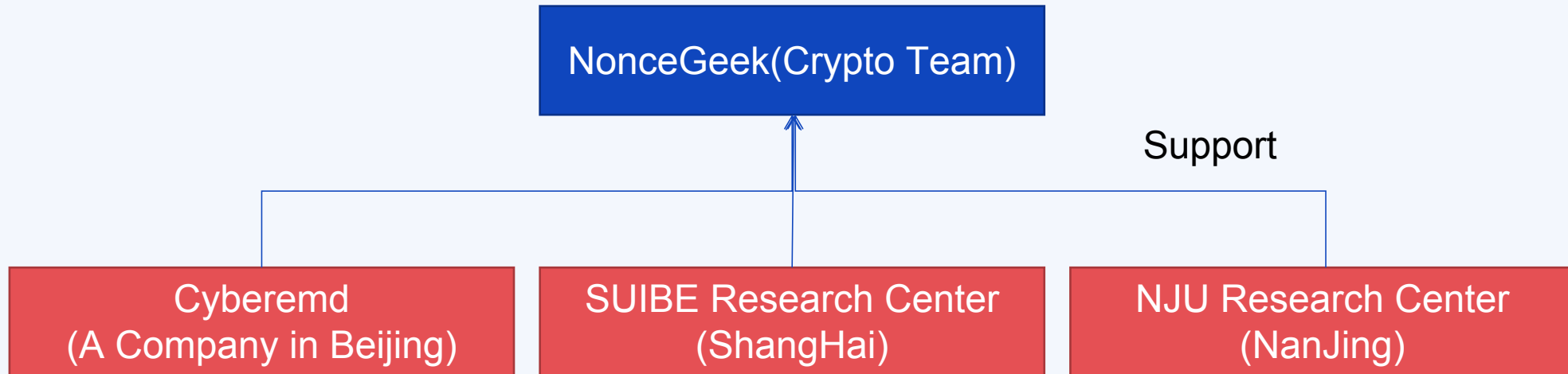


Our Teams

<https://noncegeek.com/#/buidlers>

Cool-oriented Developers.

Buidlers: Leeduckgo, Wangningbo, ff, Hewei, msfew, xiaoyue, Henry Liu, Yekai, Lekko, Ronger, CuimianMaster.....





Team Members

NonceGeek

Prizes won in Hackathon:

- Polkadot: 2021 Summer Hackathon 2nd Prize
- Wanxiang: 2021 Hackathon 2nd Prize, Moonbeam's Outstanding Prize
- Polygon: 2022 Web3GamingBootcamp CN 2nd Prize & WhiteMatrix Metaverse 1st Prize
(by TaiShangWorldGenerator)

Thanks !

my wechat↓

