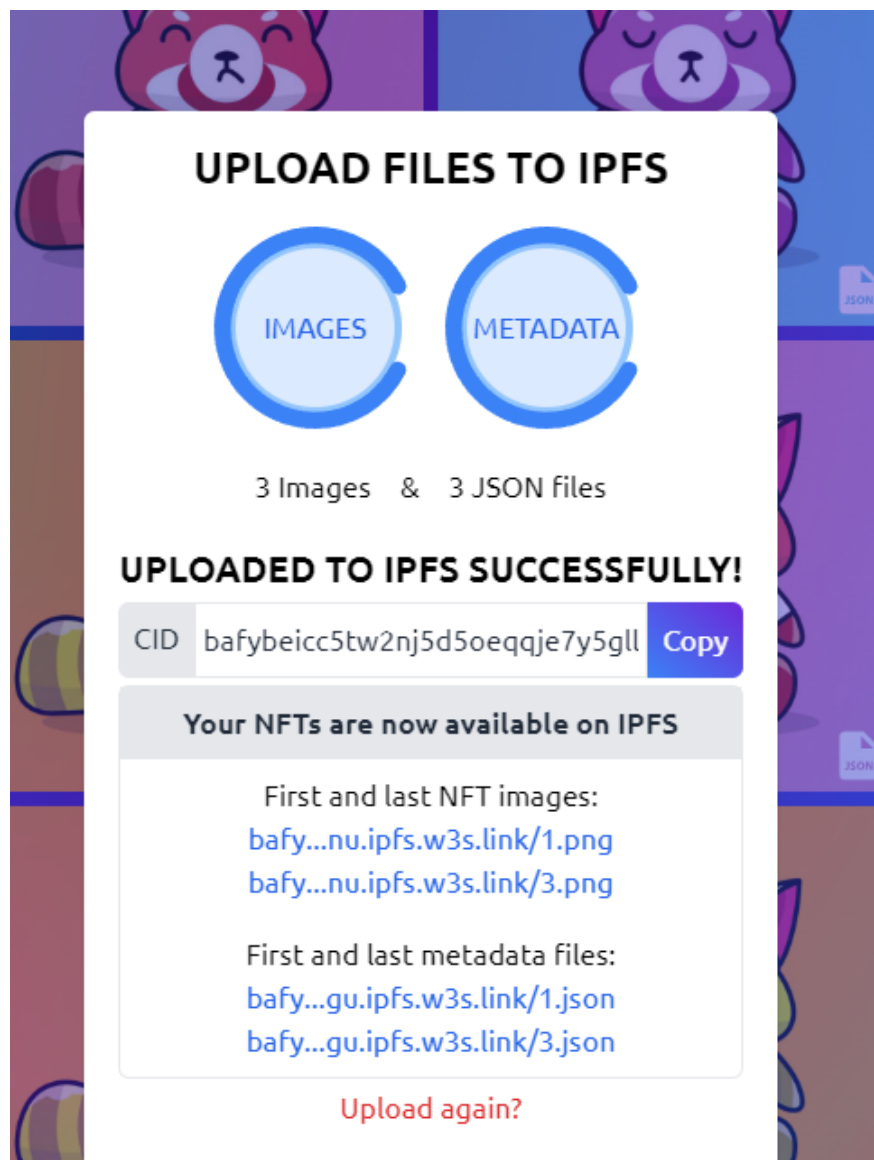


day31-nft

☰ 태그	
📅 날짜	@2022년 11월 15일

<https://www.genfty.com/> : nft 발행

로그인 후 make nft를 누른다. → 갯수가 많으면 비용이 드니 generate을 3으로 설정 후 nft 발행을 진행 한다.



카페

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.9;

import "@openzeppelin/contracts/token/ERC721/ERC721.sol";
import "@openzeppelin/contracts/token/ERC721/extensions/ERC721Enumerable.sol";
import "@openzeppelin/contracts/token/ERC721/extensions/ERC721URIStorage.sol";
import "@openzeppelin/contracts/access/Ownable.sol";
import "@openzeppelin/contracts/utils/Counters.sol";

contract MyToken is ERC721, ERC721Enumerable, ERC721URIStorage, Ownable {
    using Counters for Counters.Counter;

    Counters.Counter private _tokenIdCounter;

    constructor() ERC721("MyToken", "MTK") {}

    function safeMint(address to, string memory uri) public onlyOwner {
        uint256 tokenId = _tokenIdCounter.current();
        _tokenIdCounter.increment();
        _safeMint(to, tokenId);
        _setTokenURI(tokenId, uri);
    }

    // The following functions are overrides required by Solidity.

    function _beforeTokenTransfer(address from, address to, uint256 tokenId, uint256 batchSize)
        internal
        override(ERC721, ERC721Enumerable)
    {
        super._beforeTokenTransfer(from, to, tokenId, batchSize);
    }

    function _burn(uint256 tokenId) internal override(ERC721, ERC721URIStorage) {
        super._burn(tokenId);
    }

    function tokenURI(uint256 tokenId)
        public
        view
        override(ERC721, ERC721URIStorage)
        returns (string memory)
    {
        return super.tokenURI(tokenId);
    }

    function supportsInterface(bytes4 interfaceId)
        public
        view
        override(ERC721, ERC721Enumerable)
        returns (bool)
    {
        return super.supportsInterface(interfaceId);
    }
}
```

Remix IDE 접속 -> 위에 코드 복사 붙혀 넣기 → Compile NFT.sol 누르기 →
5번째 버튼에서 Injected provider - metamask 선택 → CONTRACT(MYtoken)

ENVIRONMENT

Injected Provider - MetaMask

Goerli (5) network

ACCOUNT

0xBa5...1f95C (0.385131603

GAS LIMIT

3000000

VALUE

0 Wei

CONTRACT (Compiled by Remix)

MyToken - contracts/NFT.sol

Deploy

☐ Publish to IPFS

OR

At Address

Load contract from Address

Transactions recorded 6

Deployed Contracts

Currently you have no contract instances to interact with.

```

1 // SPDX-License-Identifier: MIT
2 pragma solidity ^0.8.9;
3
4 import "@openzeppelin/contracts/token/ERC721/ERC721.sol";
5 import "@openzeppelin/contracts/token/ERC721/extensions/ERC721Enumerable.sol";
6 import "@openzeppelin/contracts/token/ERC721/extensions/ERC721URIStorage.sol";
7 import "@openzeppelin/contracts/access/Ownable.sol";
8 import "@openzeppelin/contracts/utils/Counters.sol";
9
10 contract MyToken is ERC721, ERC721Enumerable, ERC721URIStorage, Ownable {
11     using Counters for Counters.Counter;
12
13     Counters.Counter private _tokenIdCounter;
14
15     constructor() ERC721("Myhong", "NFT") {}
16
17     function safeMint(address to, string memory uri) public {
18         uint256 tokenId = _tokenIdCounter.current();
19         _tokenIdCounter.increment();
20         _safeMint(to, tokenId);
21         _setTokenURI(tokenId, uri);
22     }
23
24     // The following functions are overrides required by the interfaces
25
26     function _beforeTokenTransfer(address from, address to, uint256 tokenId)
27         internal
28         override(ERC721, ERC721Enumerable)
29     {
30         super._beforeTokenTransfer(from, to, tokenId);
31     }
32
33     function _burn(uint256 tokenId) internal override(ERC721, ERC721Enumerable) {
34         super._burn(tokenId);
35     }
36
37     function tokenURI(uint256 tokenId) public view override(ERC721, ERC721URIStorage) {
38         super.tokenURI(tokenId);
39     }

```

0 ☐ listen on all transactions Search with transaction

creation of MyToken errored: MetaMask Tx Signature: User denied transaction

metadata file 주소

<https://bafybeicc5tw2nj5d5oeqqje7y5gllk2k3raf363yekggqtw6rxi5oewlgu.ipfs.w3s.link/1.json>

<https://bafybeicc5tw2nj5d5oeqqje7y5gllk2k3raf363yekggqtw6rxi5oewlgu.ipfs.w3s.link/3.json>

NFT주소

<https://bafybeihpxfoiyikcj2mp77gzyxtvb3hygaqc4lakbyd6v745fqgqwdghnu.ipfs.w3s.link/1.png>

<https://bafybeihpxfoiyikcj2mp77gzyxtvb3hygaqc4lakbyd6v745fqgwcgdghnu.ipfs.w3s.link/3.png>

Overview Logs (1) State

[This is a Goerli Testnet transaction only]

Transaction Hash: 0xaeaba0b393f599d2ea28f6ed07a7a221a83c2403f990cfa8e72de96235e220e3

Status: Success

Block: 7955420 1 Block Confirmation

Timestamp: 9 secs ago (Nov-15-2022 03:07:48 AM +UTC)

From: 0xba502c767f3f5c25c26e8626e57a906b5141f95c

To: [Contract 0x3100a104d2180d7051dd77d740f794a1abbd17a7 Created]

Value: 0 Ether (\$0.00)

Transaction Fee: 0.16790651938946151 Ether (\$0.00)

Gas Price: 0.000000051504988302 Ether (51.504988302 Gwei)

[Click to see More](#)

A transaction is a cryptographically signed instruction from an account that changes the state of the blockchain. Block explorers track the details of all transactions in the network. Learn more about transactions in our Knowledge Base.

MYTOKEN AT 0X310...D17A7 (BLO)

Balance: 0 ETH

approve address to, uint256 tokenId

renounce...

safeMint

to: 0xBa502C767F3F5c25C26e8626e57a906b5141f95c

uri: https://bafybeihpxfoiyikcj2mp77gzyxtvb3hygaqc4lakbyd6v745fqgwcgdghnu.ipfs.w3s.link/3.png

CallData Parameters transact

safeMint - transact (not payable)

safeTransf... address from, address to, uint256

safeTransf... address from, address to, uint256

setApprov... address operator, bool approve

transferFr... address from, address to, uint256

```
14 constructor() {
15
16
17 function safeMint(
18     uint256 tokenId,
19     string memory uri,
20     address to,
21     uint256 tokenIdCounter,
22     bool approve) public {
23
24     // The following
25
26     function _beforeMint() internal {
27         super._beforeMint();
28     }
29
30     {
31         super._beforeMint();
32     }
33
34     function _burn(uint256 tokenId) internal {
35         super._burn(tokenId);
36     }
37 }
```

to - 내 메타 마스크 주소

url - 아까 발급한 nft 사진 json 주소

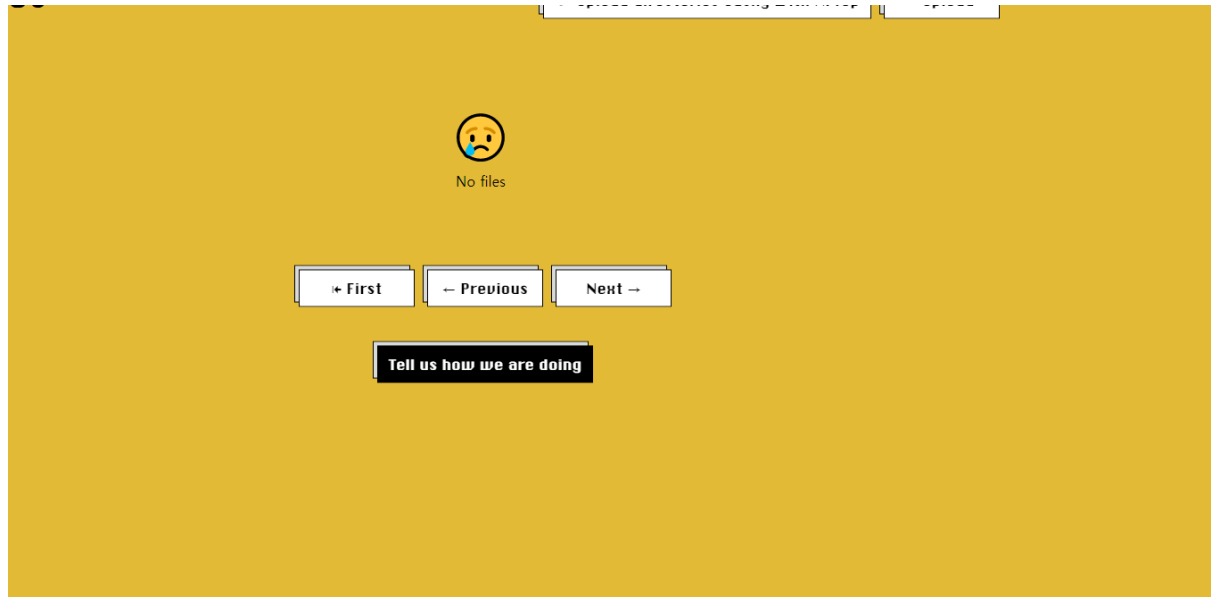
<https://testnets.opensea.io/assets/goerli/0x3100a104d2180d7051dd77d740f794a1abbd17a7/0>

opensea testnet에 접속해서 확인

주소 제대로 안넣으면 사진이 안뜬다.

잘 확인할것

<https://nft.storage/files/> :



node서버 + 리액트 클라이언트 연결

clientServer 폴더 생성

npx create-react-app client

명령어 입력 : yarn add nodemon --dev