



precision
content

Non-fungible Content

NFTs and Content Management

Josh Anderson
June 2, 2022



Who I Am

- **Not a shill; unaffiliated with any NFT or crypto projects**
- **Involved with crypto since 2014**
- **Associate Information Architect at Precision Content**
- **Master of Information from the University of Toronto**





Agenda

- What are NFTs?
- Buying and selling NFTs
- Publishing NFT content
- IPFS and a new (old) paradigm for content
- Getting started

What are NFTs?

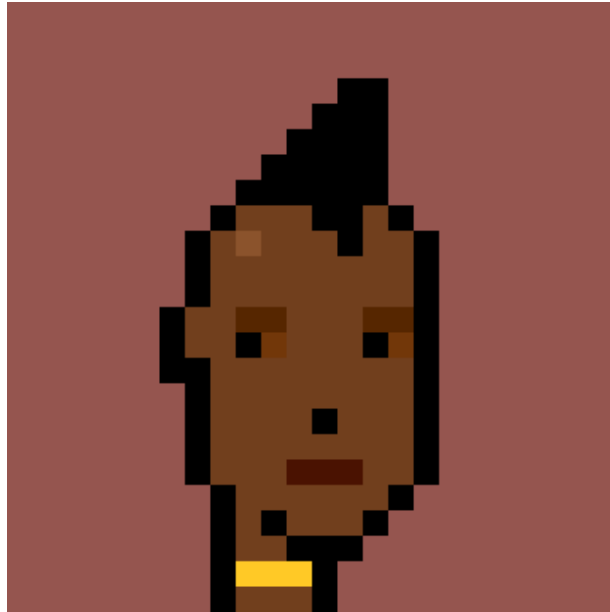


What is an NFT?

- Acronym for “non-fungible token”
- A unique and immutable token on a blockchain that references some data. This can be used to prove ownership of a digital asset.
- Common NFT asset classes include:
 - Digital art/collectibles
 - Name services
 - Gaming



Digital art/collectibles





Name services



jobs.eth



josh.eth



moonbucks

.WALLET

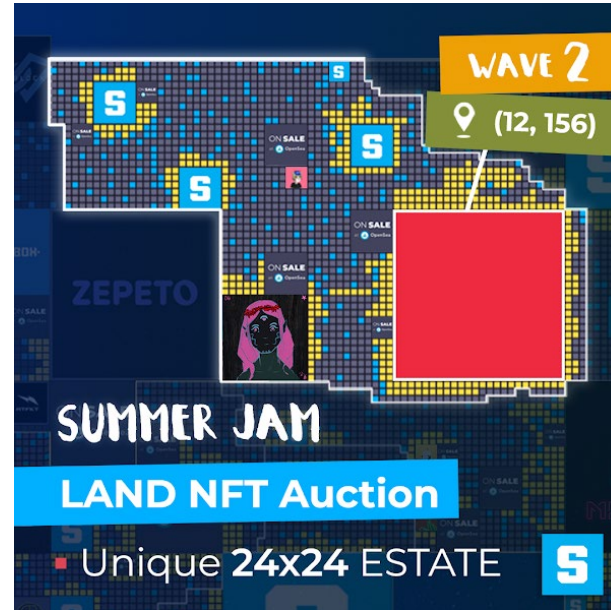
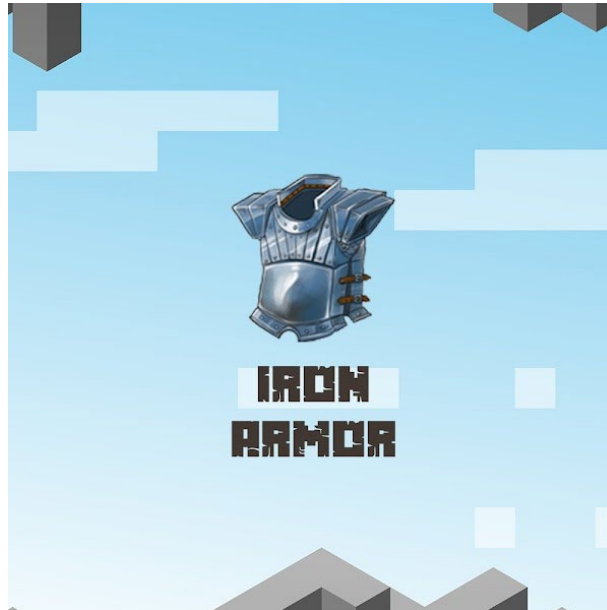
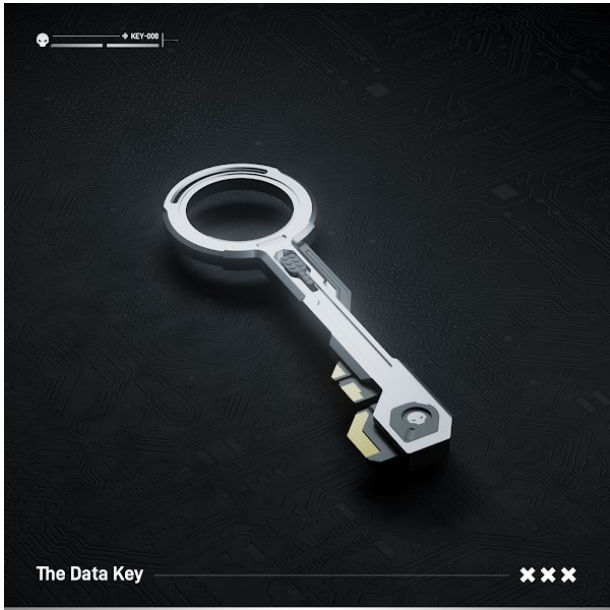


ukmotors

.CRYPTO



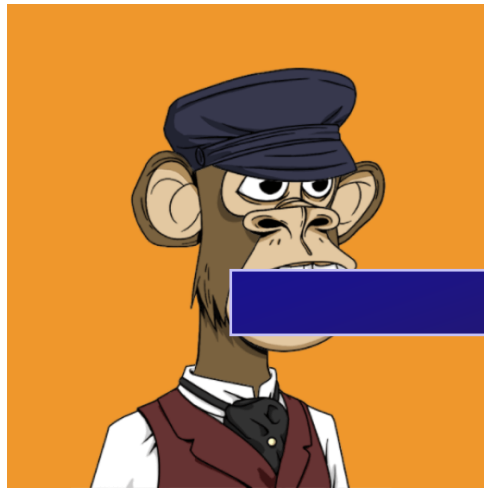
Gaming





The unbundling of media

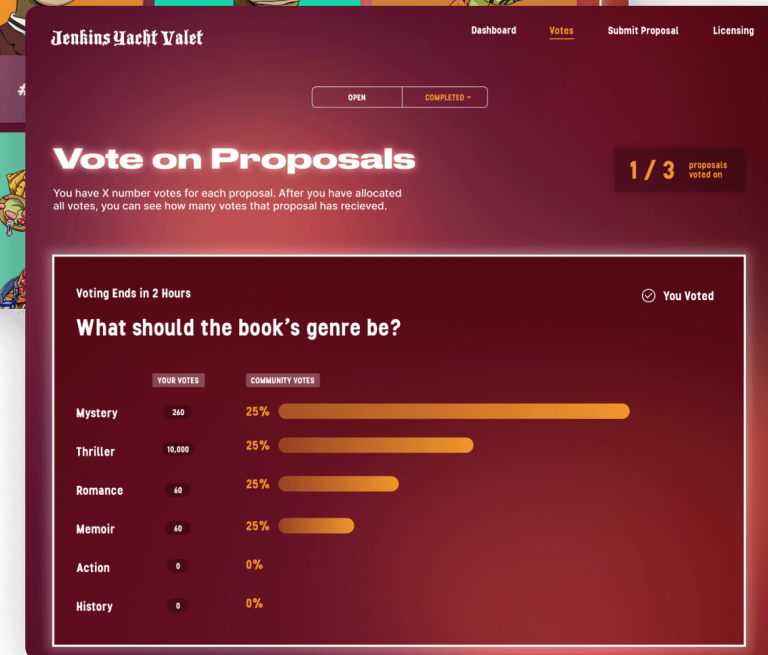
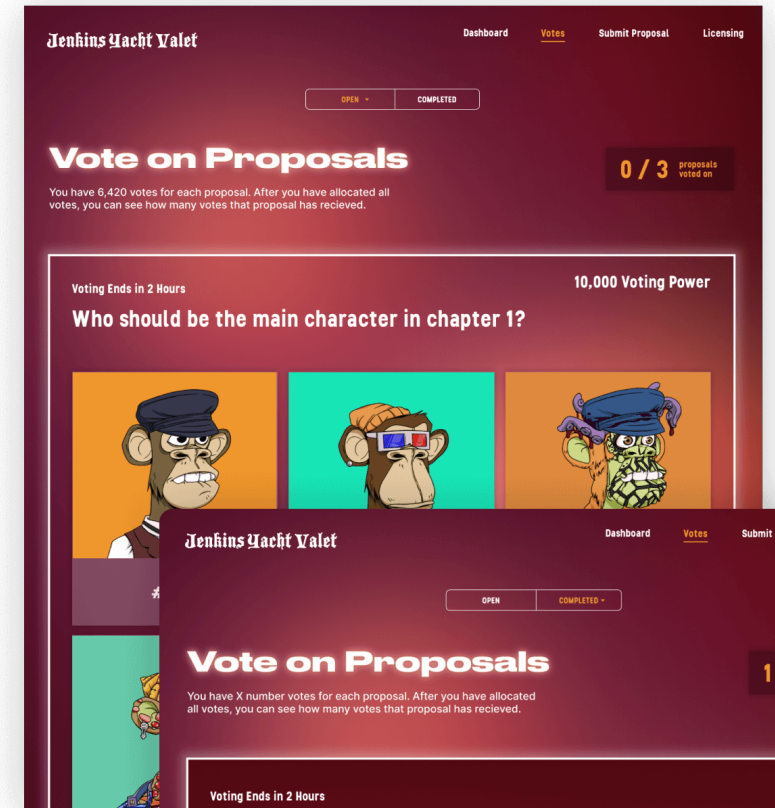
- Smaller, nimbler IP enables creative reintegration - “Legos” of composable media.



Bored Ape #1798



“Jenkins the Valet”





The unbundling of media

- Smaller, nimbler IP enables creative reintegration - “Legos” of composable media.

CryptoKitties

KittyVerse

KITTYRACE

0.0180

Bombard#0001

Gmeaw#00225



Creative NFT projects by writers

- *The Chaintale*
 - Buying the latest NFT in the series gives you the right to author the next installment
- *CPT-415*
 - Novel where each individual page is sold as an NFT
 - The next page of the novel becomes available when the previous page is sold
- *DECADE*
 - Avant-garde novel presented as a GIF of every page in order
 - Sold for 5 ETH (\$7,569.50 USD at the time)

DEC
ADE



Ways content authors can make money with NFTs

- Sell work directly as NFT(s)
- Encode royalties into NFT
- Allow audience to invest in creators. Investors get dividends on published work.
- Sell subscription access keys as NFTs



Not all NFTs grant copyright

- NFT ownership does not necessarily indicate copyright ownership
- It's up to creators to clearly state their terms
- There's no guarantee they'll follow through on their promise

OWNERSHIP

i. You Own the NFT. Each Bored Ape is an NFT on the Ethereum blockchain. When you purchase an NFT, you own the underlying Bored Ape, the Art, completely. Ownership of the NFT is mediated entirely by the Smart Contract and the Ethereum Network: at no point may we seize, freeze, or otherwise modify the ownership of any Bored Ape.

ii. Personal Use. Subject to your continued compliance with these Terms, Yuga Labs LLC grants you a worldwide, royalty-free license to use, copy, and display the purchased Art, along with any extensions that you choose to create or use, solely for the following purposes: (i) for your own personal, non-commercial use; (ii) as part of a marketplace that permits the purchase and sale of your Bored Ape / NFT, provided that the marketplace cryptographically verifies each Bored Ape owner's rights to display the Art for their Bored Ape to ensure that only the actual owner can display the Art; or (iii) as part of a third party website or application that permits the inclusion, involvement, or participation of your Bored Ape, provided that the website/application cryptographically verifies each Bored Ape owner's rights to display the Art for their Bored Ape to ensure that only the actual owner can display the Art, and provided that the Art is no longer visible once the owner of the Bored Ape leaves the website/application.

iii. Commercial Use. Subject to your continued compliance with these Terms, Yuga Labs LLC grants you an unlimited, worldwide license to use, copy, and display the purchased Art for the purpose of creating derivative works based upon the Art ("Commercial Use"). Examples of such Commercial Use would e.g. be the use of the Art to produce and sell merchandise products (T-Shirts etc.) displaying copies of the Art. For the sake of clarity, nothing in this Section will be deemed to restrict you from (i) owning or operating a marketplace that permits the use and sale of Bored Apes generally, provided that the marketplace cryptographically verifies each Bored Ape owner's rights to display the Art for their Bored Ape to ensure that only the actual owner can display the Art; (ii) owning or operating a third party website or application that permits the inclusion, involvement, or participation of Bored Apes generally, provided that the third party website or application cryptographically verifies each Bored Ape owner's rights to display the Art for their Bored Ape to ensure that only the actual owner can display the Art, and provided that the Art is no longer visible once the owner of the Purchased Bored Ape leaves the website/application; or (iii) earning revenue from any of the foregoing.



“Right-clickers”

the "right click saver"

i just right click saved this jpeg thanks, lmao.

no one
cares what
the
blockchain
says about
it



why would you pay
for this when you can
just download it ????

its mine now
too

loooooool you paid \$1m for this and
i just got it for free

"that was easy"

another one to add to my
collection





Right-clickers miss the point

“The more a file is shared and seen online, the more cultural value it accrues. Consider the mass production of posters and t-shirts of Warhol imagery. With increase in notoriety, the concept of owning the canonical work becomes more thrilling, and more a marker of social status.”

Jesse Walden, “NFTs Make the Internet Ownable”





NFTs = legitimacy

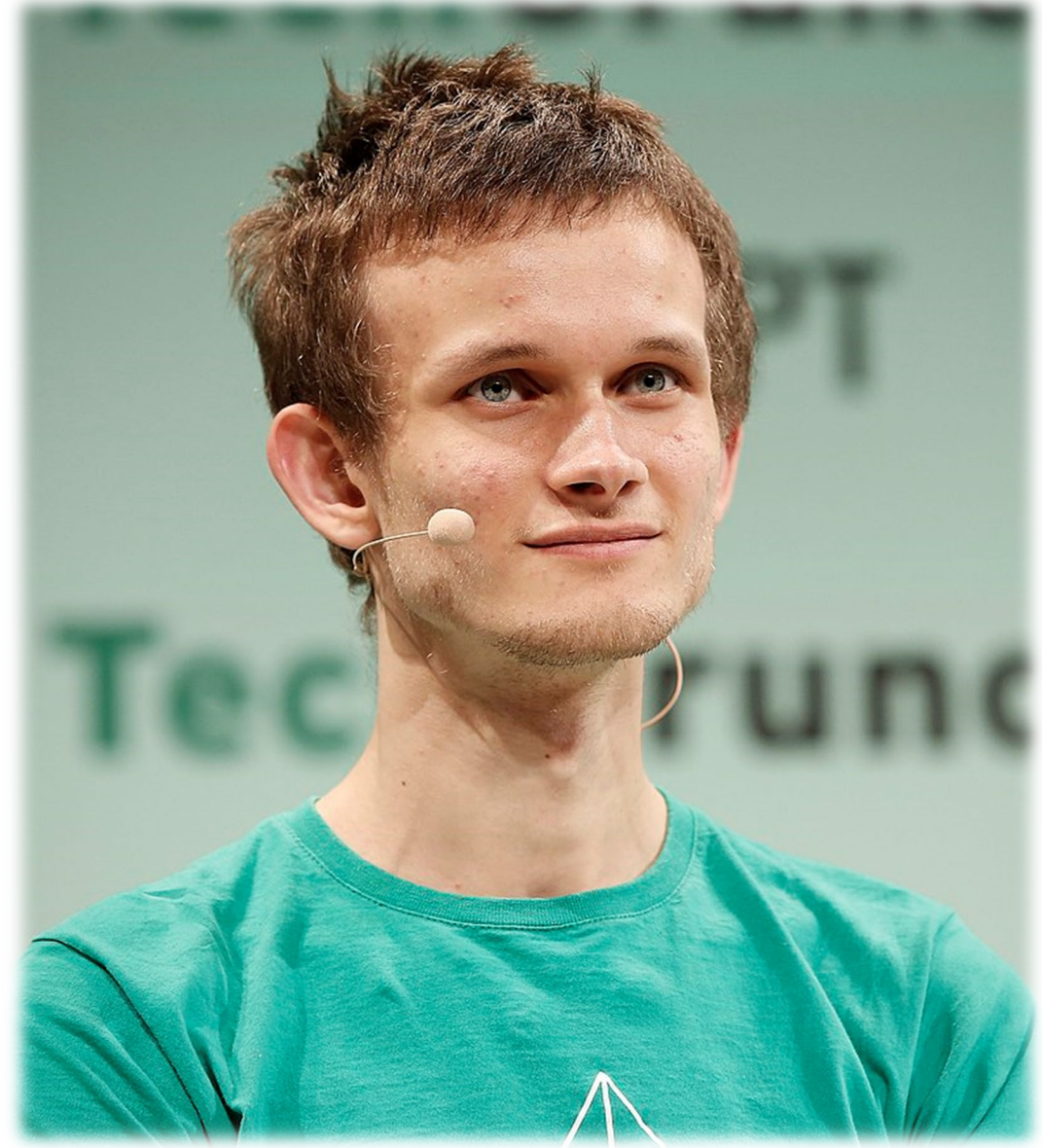
“Why is it that Elon Musk can sell an NFT of Elon Musk's tweet, but Jeff Bezos would have a much harder time doing the same?”

“Elon and Jeff have the same level of ability to screenshot Elon's tweet and stick it into an NFT dapp, so what's the difference?”

“To anyone who has even a basic intuitive understanding of human social psychology (or the fake art scene), the answer is obvious: Elon selling Elon's tweet is the real thing, and Jeff doing the same is not.

“Once again, millions of dollars of value are being controlled and allocated, not by individuals or cryptographic keys, but by **social conceptions of legitimacy.**”

Vitalik Buterin, “The Most Important Scarce Resource is Legitimacy”



Buying and selling NFTs



Buying an NFT

The screenshot shows an NFT listing for 'Okay Zuki Bears' on the OpenSea platform. The main listing area includes a description, creator information (F5EEC4), and property tabs for 'BACKGROUND', 'CLOTHES', and 'EYEWEAR'. A modal window titled 'Item Activity' is overlaid on the listing, displaying a table of recent transactions. The table has columns for Event, Price, From, To, and Date. The activities listed are: List (0.0005 ETH by Rigo, 2 days ago), Sale (0.0011 ETH from ChrisM187 to Rigo, 4 days ago), Transfer (from ChrisM187 to Rigo, 4 days ago), List (0.0011 ETH by ChrisM187, 4 days ago), and Minted (by NullAddress to ChrisM187, 4 days ago). To the right, a zoomed-in view of the 'Properties' section shows a trait: 'EYEWEAR Red Stripes Fac...' with a rarity of '2% have this trait'. Below that, a technical details panel lists: Contract Address (0x7c85...fd2c), Token ID (2622), Token Standard (ERC-721), Blockchain (Ethereum), and Creator Fees (7.5%).

Event	Price	From	To	Date
List	0.0005	Rigo		2 days ago
Sale	0.0011	ChrisM187	Rigo	4 days ago
Transfer		ChrisM187	Rigo	4 days ago
List	0.0011	ChrisM187		4 days ago
Minted		NullAddress	ChrisM187	4 days ago

Description
Created by F5EEC4

Properties


- EYEWEAR Red Stripes Fac...
2% have this trait

Contract Address: 0x7c85...fd2c
Token ID: 2622
Token Standard: ERC-721
Blockchain: Ethereum
Creator Fees: 7.5%




Buying an NFT

This is an unreviewed collection ×




Review this information to ensure it's what you want to buy. ⓘ

Collection name	Okay Zuki Bears
Creator	F5EEC4 (member since May 22, 2022)
Total sales	477 sales
Total volume	1.409 (\$2,543.58)
Social links	
Contract address	0x7c85...fd2c
Total items	5,555 items
Created date	5 days ago

[Show less](#)

I understand that OpenSea has not reviewed this collection and blockchain transactions are irreversible.

Complete checkout ×

Item  **0.0005**
\$0.86

Creator Fees: 7.5% ⓘ

Total **0.0005**
\$0.86

I agree to OpenSea's [Terms of Service](#)

[All Time Avg. Price](#)



MetaMask Notification

Ethereum Mainnet

Account 1 → 0x7f2...38E5

New address detected! Click here to add to your address book.

New gas experience ×
We've updated how gas fee estimation and customization works.
[Turn on Enhanced Gas Fee UI in Settings](#)

https://opensea.io

0x7f2...38E5 : ATOMIC MATCH_ ⓘ

0.00049
\$1.09

DETAILS DATA HEX

Estimated gas fee ⓘ \$39.20 **0.017611 ETH** EDIT

Site suggested
Likely in < 30 seconds **Max fee:** 0.02362775 ETH

Total \$40.29 **0.01810111 ETH**

Amount + gas fee **Max amount:** 0.02411775 ETH

ⓘ Insufficient funds.

Reject Confirm



MetaMask Notification

Ethereum Mainnet

Account 1 → 0x7f2...38E5

New address detected! Click here to add to your address book.

New gas experience ×
We've updated how gas fee estimation and customization works.
[Turn on Enhanced Gas Fee UI in Settings](#)

https://opensea.io

0x7f2...38E5 : ATOMIC MATCH_ ⓘ

0.00049
\$1.09

DETAILS DATA HEX

Estimated gas fee ⓘ \$26.62 **0.011971 ETH** EDIT

Site suggested
Likely in < 30 seconds **Max fee:** 0.01601359 ETH

Total \$27.71 **0.01246099 ETH**

Amount + gas fee **Max amount:** 0.01650359 ETH


Reject Confirm




Buying an NFT





Your purchase has processed! ✕

You just purchased Okay Zuki Bears #2622. It's been confirmed on the blockchain!



Status	Transaction Hash
 Complete	0xa303...df36

SHARE



Buying an NFT

The record of ownership now permanently lives on the Ethereum blockchain:

<https://etherscan.io/nft/0x7c85a9d12a7aabbcdcd52fee036e3e6c5155fd2c/2622>

The screenshot shows the Etherscan interface for the NFT 'OkayZukiBears #2622'. The page includes a search bar at the top, navigation links, and a 'Chat with Owner' button. The main content area features a placeholder image for the NFT and a table of details. Below this is an 'Item Activity' section with a table of transactions.

Txn Hash	Age	Action	Price	From	To
0xa30305ad08c467c69c...	6 mins ago	Sale	0.00049 ETH (\$0.86)	0x5bb0477646d0c3a6db...	0xb6f6f25b1b4e786a696...
0xc2e812e261bea69b01...	4 days 9 hrs ago	Transfer		0xb26e707ff5d87cd250f...	0x5bb0477646d0c3a6db...
0xd996097bd92caaed70...	4 days 10 hrs ago	Mint		0x000000000000000000...	0xb26e707ff5d87cd250f...



Selling an NFT

List item for sale

Type ⓘ

Fixed Price Timed Auction

Price ⓘ

\$875.96 Total

Duration

Sell as a bundle

Reserve for specific buyer
This item can be purchased as soon as it's listed.


[Fewer options ^](#)

Fees ⓘ

Service Fee	2.5%
Creator Fee	7.5%

[Complete listing](#)

Preview



Okay Zuki Bears
Okay Zuki Bears #2622 Price
0.5

Publishing NFT content



Block Protocol

Block Protocol

Block Hub Documentation Specification Log In Quick Start Guide

A POWERFUL NEW PROTOCOL FOR DEVELOPERS

Build and use interactive blocks connected to the world of structured data

An open standard for building and using **data-driven blocks**. Make your applications both human and machine-readable.

Read the Quickstart Guide

PERSON

Maria Mahani
Product engineer

In Progress + **Complete**

- Fix color contrast
Due Tuesday
- Implement sidebar
Due Friday
- Write tests
Completed today
- Review latest PRs
Completed today



Block Protocol

What do you mean by 'blocks'?

Blocks are individual pieces of content on the web – images, text, videos, checklists, and kanban boards are all examples of blocks.

You've seen these around the web. They're used in almost every modern web application

Text Block

What's a protocol

Protocols are standardized ways for two or more systems to communicate.

- Write tests
- Review latest PRs
- Read **The Big Short**
- Check the color contrast

Checklist Block



Image Block

DefinedTerm

name protocol

description Protocols are standardized ways for two or more systems to communicate.

numberOfItems 4

ListItem write tests

ListItem review latest PRs

ListItem read The Big Short

ListItem check color contrast

ItemList

caption a soft rainbow gradient

url <https://pics.rainbow.png>

thumbnail a soft rainbow gradient

associatedArticle <https://atlantic.com>

ImageObject



Block Protocol

- The Block Protocol is a new, in-progress protocol supported by the company Hash.ai
- It is easy to imagine a block that embeds NFTs
- Eventually entire websites may be cobbled together from a series of blocks

BLOCK HUB

Interactive, data-driven blocks to use in your projects

All open-source and free to use

The screenshot displays a grid of 12 different block components:

- Callout:** Framed text with customizable icon. Example text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed eiusmod tempor incididunt ut labore et dolore magna aliqua." Version: @hash 0.1.0
- Code:** Capture a code snippet. Example code:

```
card {
  background: var(--color-1);
}

card-with-alpha {
  background: hsl(var(--color-1) / 0.5);
}
```

 Version: @hash 0.1.0
- Divider:** Visually break up content on a page with dividing lines. Version: @hash 0.1.0
- Embed:** Embed external content. Example: "Paste a link to embeddable content" with a text input containing "https://example.com" and an "Embed" button. Works with PDFs, Google Drive, Maps, Figma documents, and more. Version: @hash 0.1.0
- Heading:** Section headings of varying size. Example: "H1 Heading" with "Lorem ipsum dolor sit amet." Version: @hash 0.1.0
- Image:** Insert an image. Example: "Upload a file or drag and drop" with a dashed box and "Enter image URL" and "Embed" buttons. Version: @hash 0.1.0
- Paragraph:** Just start writing. Example text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed eiusmod tempor incididunt ut labore et dolore magna aliqua." Version: @hash 0.1.0
- Person:** person block component. Example: "Maria Mahani" with a profile picture and contact information (minahani.com, mahani@inbox.com). Version: @hash 0.1.0
- Table:** Create a table for storing information in rows and columns. Example: "Engineering Candidates" table with columns for Name, Email, and Confirmed. Version: @hash 0.1.0



NFT Embeds

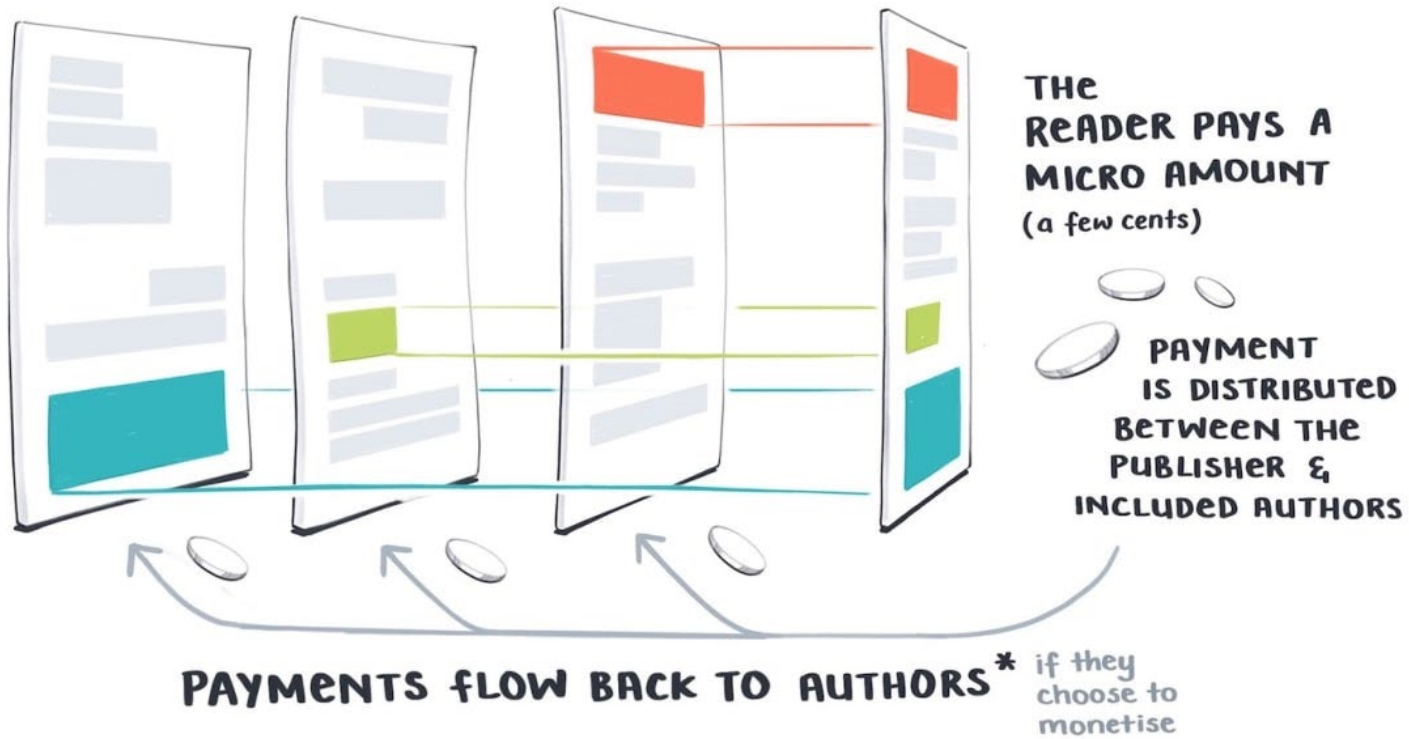
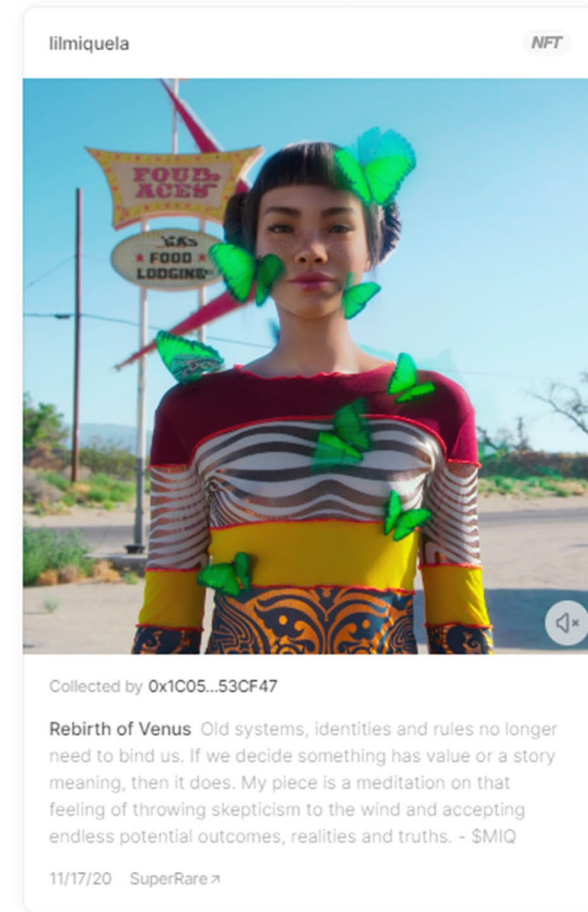


Illustration of transclusion/transcopyright by Maggie Appleton

NFT Embeds

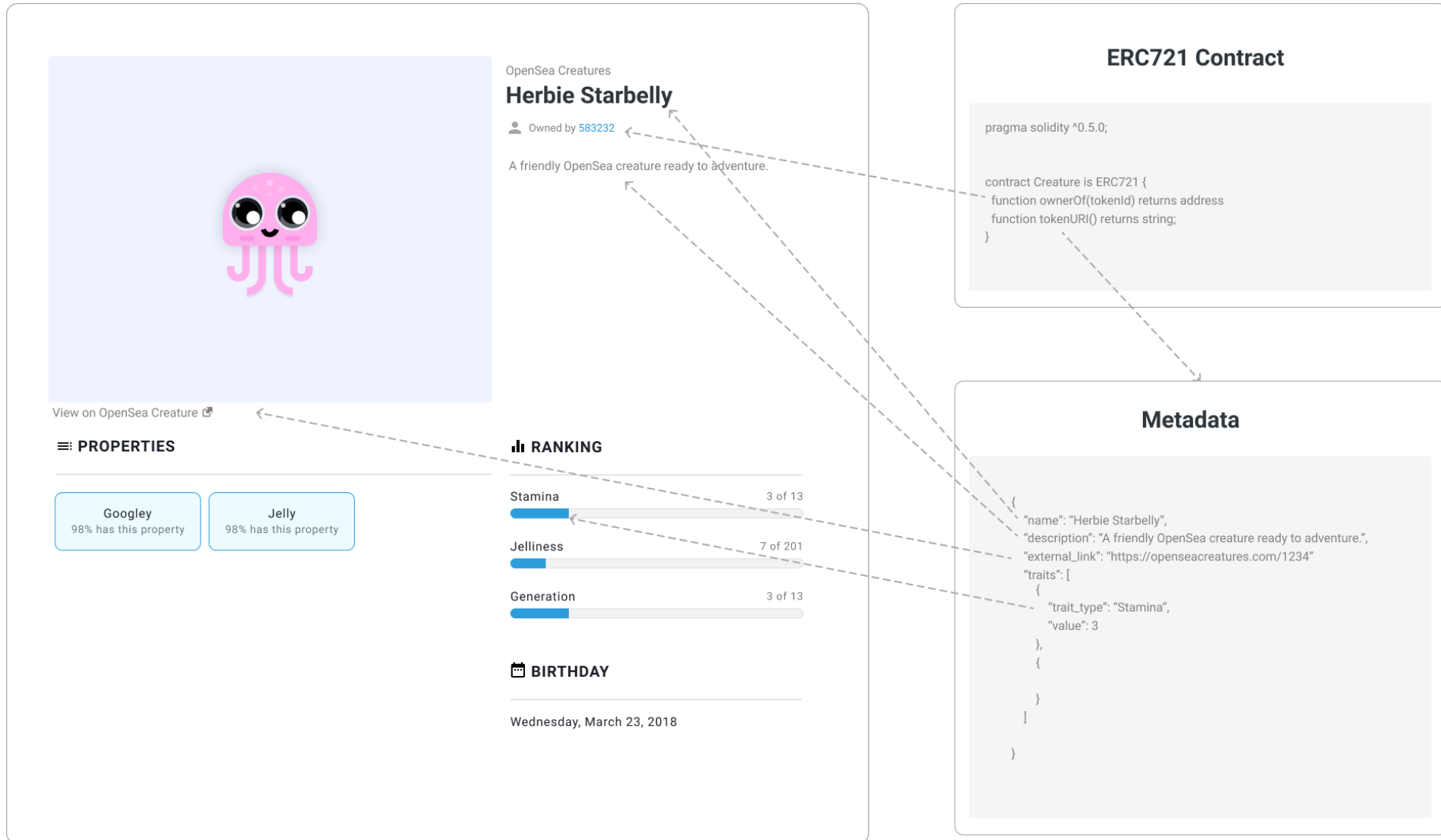
Embed an NFT by creating a link. Prefix the URL with the `ethereum://` protocol, followed by the `address/id`. Currently supports images, audio, video, and text embeds. Mirror currently supports EthBlock.art, Foundation, Rarible, SuperRare and Zora.

[NFT Example] (`ethereum://0xb932a70a57673d89f4acffbe830e8ed7f75fb9e0/16297`)





What is an NFT... *really?*





What I actually bought



```
{
  "name": "Okay Zuki Bears #2622",
  "image": "https://gateway.pinata.cloud/ipfs/QmPCnf9qasRYdhwc6xjL7m1gceVSA3ZUVrR5LvY6ZxuKEW/2622",
  "attributes": [
    {
      "trait_type": "Background",
      "value": "Smoke"
    },
    {
      "trait_type": "Fur",
      "value": "Blueprint"
    },
    {
      "trait_type": "Eyewear",
      "value": "Red Stripes Face Paint"
    },
    {
      "trait_type": "Hat", |
      "value": "Red Panda Beanie"
    },
    {
      "trait_type": "Clothes",
      "value": "Fur Coat"
    }
  ]
}
```

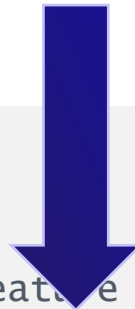
<https://opensea.mypinata.cloud/ipfs/QmW7dYNeXPpAQqa4zwUDCi9ebZ1q3oYUDyvqj5nrn75GBE/2622>



NFTs expose a problem with HTTP

```
{  
  "name": "Herbie Starbelly",  
  "description": "A friendly OpenSea creature ready to adventure",  
  "image": "https://storage.googleapis.com/opensea-prod.appspot.com/puffs/3.png"  
}
```

An HTTP URL, pointing to a location where the content is stored.



```
{  
  "name": "Herbie Starbelly",  
  "description": "A friendly OpenSea creature ready to adventure",  
  "image": "ipfs://QmTy8w65yBXgyfG2ZBg5TrfB2hPjrdQH3RCQFJGkARStJb"  
}
```

An IPFS URI, referencing a hash of the content.



HTTP vs. IPFS

	HTTP	IPFS
Full name	Hypertext Transfer Protocol	InterPlanetary File System
Approach	Client-server	Peer-to-peer
Links are...	liable to break.	permanent.
Changing the content...	has no effect on the URL.	completely changes the hash.
Data fetched from...	the host server.	the nearest peer that has a copy.
Addressing	Location-based	Content-based
Sample address	<code>https://storage.googleapis.com/opensea-prod.appspot.com/puffs/3.png</code>	<code>ipfs://QmTy8w65yBXgyfG2ZBg5TrfB2hPjrdQH3RCQFJGkARStJb</code>



IPFS more closely aligns with Gen Z's mental model of file storage

++ Posted by u/insight_culprit 3 months ago 5 2 4

15.6k When I heard gen z don't get file directories?! what? is it true?

--

how computer work

832 Comments Share Save Hide Report 97% Upvoted

THE BYTE.

9. 24. 21
by DAN ROBITZSKI
HARD SCIENCE

FEEL OLD?

GEN Z KIDS APPARENTLY DON'T UNDERSTAND HOW FILE SYSTEMS WORK

"THEY SEE IT LIKE ONE BUCKET, AND EVERYTHING'S IN THE BUCKET."

FUTURISM

Giant Bucket

Over the past few years, many professors have noticed an alarming trend among their students. Overall, members of Gen Z, even those studying technical scientific fields, seem to have a total misunderstanding of computer storage, *The Verge* reports, and many fail to conceptualize the concept of directories and folders filled with digital files.

IPFS and a new (old) paradigm for content



Ted Nelson

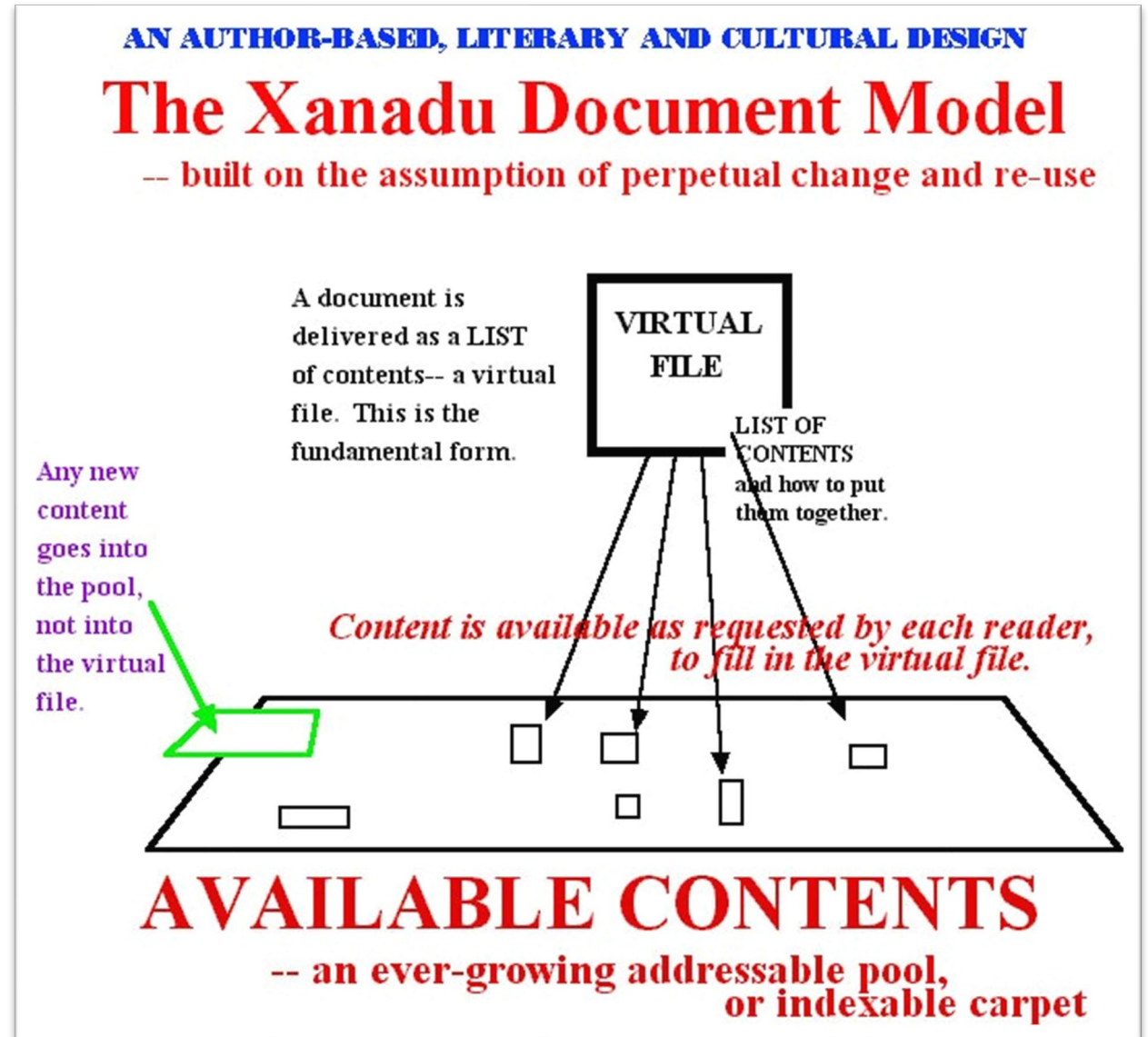
- Information technology pioneer
- Founded the first hypertext project, Project Xanadu®, in 1960
- Envisioned a “Docuverse” of interconnected electronic documents
- One of the inspirations for Tim Berners-Lee’s World Wide Web





Project Xanadu and the Docuverse

- Described by designer Maggie Appleton as a “universe of multi-linked, version-controlled nodes of remixable micro-content”
- Unique permanent addresses for immutable content
- Transclusion rather than linking
- Rightsholders of content attributed and paid via “transcopyright”





Micropayments for Web content

10.4.1 400 Bad Request

The request could not be understood by the server due to malformed syntax. The client SHOULD NOT repeat the request without modifications.

10.4.2 401 Unauthorized

The request requires user authentication. The response MUST include a WWW-Authenticate header field (section 14.47) containing a challenge applicable to the requested resource. The client MAY repeat the request with a suitable Authorization header field. If the 401 response contains the same challenge as the prior response, and the user agent has already attempted authentication at least once, then the user SHOULD be presented the entity that was returned in the response, which indicates that authorization has been refused for those credentials. If the 401 response contains the same challenge as the prior response, and the user agent has already attempted authentication at least once, then the user SHOULD be presented the entity that was returned in the response, which explains in "HTTP Authentication: Basic and Digest" authentication is explained in "HTTP Authentication: Basic and Digest".

10.4.3 402 Payment Required

This code is reserved for future use.



10.4.3 402 Payment Required

This code is reserved for future use.

10.4.4 403 Forbidden

The server understood the request, but is refusing to fulfill it. Authorization will not help and the request SHOULD NOT be repeated. If the request method was not HEAD and the server wishes to make public why the request has not been fulfilled, it SHOULD describe the reason for the refusal in the entity. If the server does not wish to make this information available to the client, the status code 404 (Not Found) can be used instead.

10.4.5 404 Not Found

The server has not found anything matching the Request-URI. No indication is given of whether the condition is temporary or permanent. The 410 (Gone) status code SHOULD be used if the server knows, through some internally configurable mechanism, that an old resource is permanently unavailable and has no forwarding address. This status code is commonly used when the server does not wish to reveal exactly why the request has been refused, or when no other response is applicable.

10.4.6 405 Method Not Allowed

The method specified in the Request-Line is not allowed for the resource identified by the Request-URI. The response MUST include an Allow header containing a list of valid methods for the requested resource.

10.4.7 406 Not Acceptable

A list of HTTP error codes from W3.org.



Early attempts at micropayments on the Web

- In 1999, IBM and Compaq pushed for a Web micropayment standard
 - They wanted hypertext markup for micropayment links
 - IBM proposed that the cursor would change to a dollar sign (\$) when users hovered over such content
- Micropayments never caught on, due in part to high credit card processing costs (\$0.45 fee for \$1 transaction)



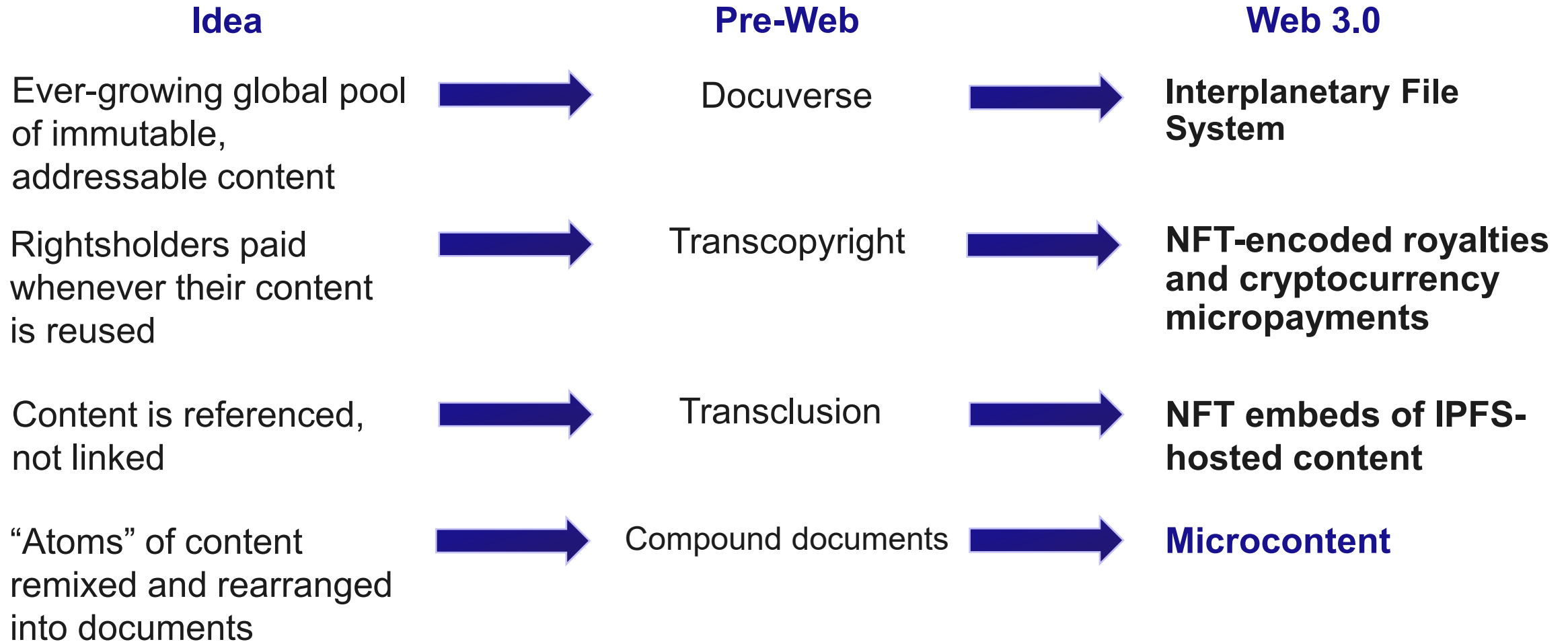
What's so great about micropayments, anyway?

- The idea was that micropayment revenues would let sites focus on quality content generation rather than advertising income
- Users can pay creators directly without needing to pay fees to (or trust) a third party. Potential for new business models.
- Royalty logic embedded in the content itself would ensure rightsholders are compensated no matter how the content is reused
- Micropayments were always envisioned as optional





Old paradigms for hypertext content are new again





Microcontent

Is content that is

- about one primary idea, fact, or concept
- easily scannable
- labelled for clear identification and meaning, and
- appropriately written and formatted for use anywhere and any time it is needed

It's not microcontent just because it's small.





Four principles of intelligent microcontent

1. Focus

Limit microcontent to a single subject.

2. Function

Classify microcontent to identify intended user response.

3. Structure

Use predictable patterns and language.

4. Context

Make microcontent easily relatable to other content.





NFT, IPFS, and Web 3.0 implications for content

- Content will be more transparent than ever
 - Previous versions of a piece of content will likely continue to exist in others' IPFS nodes.
 - Content-based addressing means changes won't go unnoticed.
 - Transclusion means the original context will always be readily accessible.
- The unbundling of media means your content will be remixed in ways you can't anticipate
 - But it's possible to collect micropayment royalties
 - New business models emerge
- More than anything, NFTs = legitimacy
 - Users may come to expect content to be cryptographically verified by its creator(s)
 - NFTs might be an antidote to deepfakes



Open questions

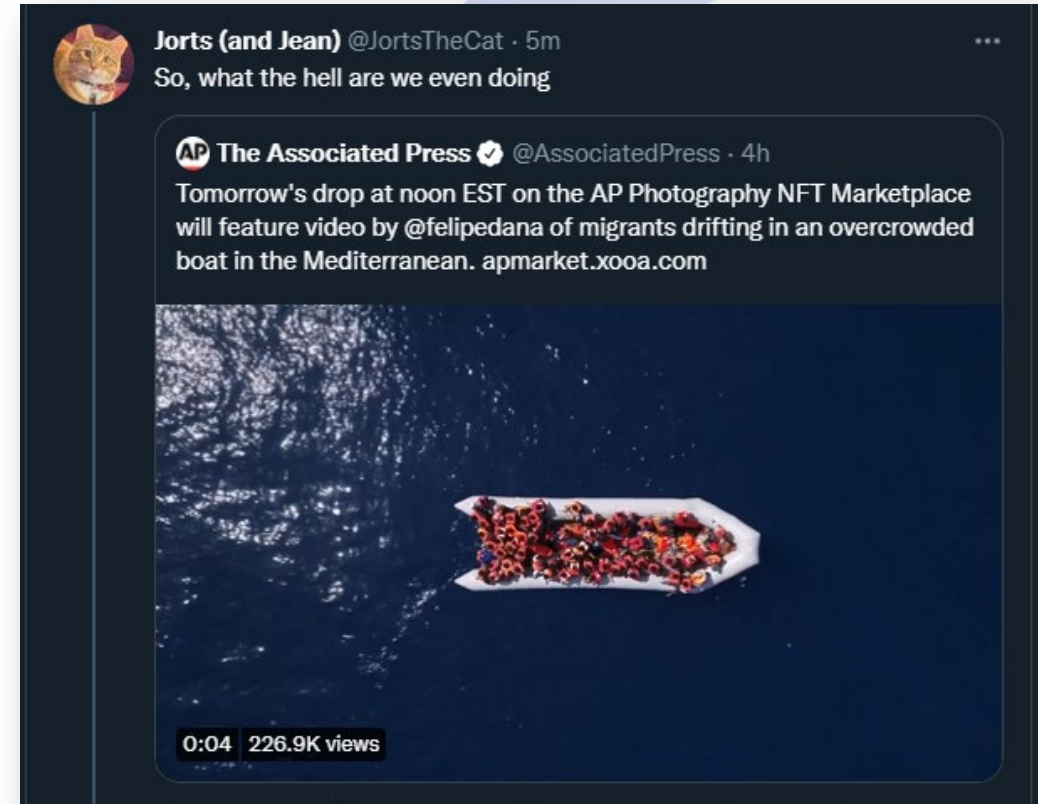
- How will blockchain UX be improved?
 - Currently they are slow and incredibly expensive to use
 - Sidechains or non-ETH coins may be superior
- To what extent will users come to expect NFT-enabled verification of content?
 - How much will users care that something digital is “legit”?
- How will we live up to the promise of decentralization?
 - OpenSea, Rarible, and other major NFT marketplaces and platforms are still centralized
 - They may eventually be turned into decentralized autonomous organizations (DAOs)
- What business models will be enabled by frictionless, peer-to-peer micropayments?
 - Will advertisement-based revenue models for written content become obsolete?
 - Royalties are not actually part of the ERC-721 specification
- How can we prevent blockchains from consuming absurd amounts of energy?
 - Proof-of-stake > proof-of-work





What should you do about all this?

- Embrace remix culture
 - Use microcontent architectures and writing standards so that your text-based content stays modular
- Cultivate your community
 - Community management roles may become more important than sales and marketing roles
- Don't rush. Continue learning.
 - NFTs are in their infancy
 - Many companies' forays into NFTs have been poorly received
 - Don't sell JPEGs; lay the foundations for community-driven platforms



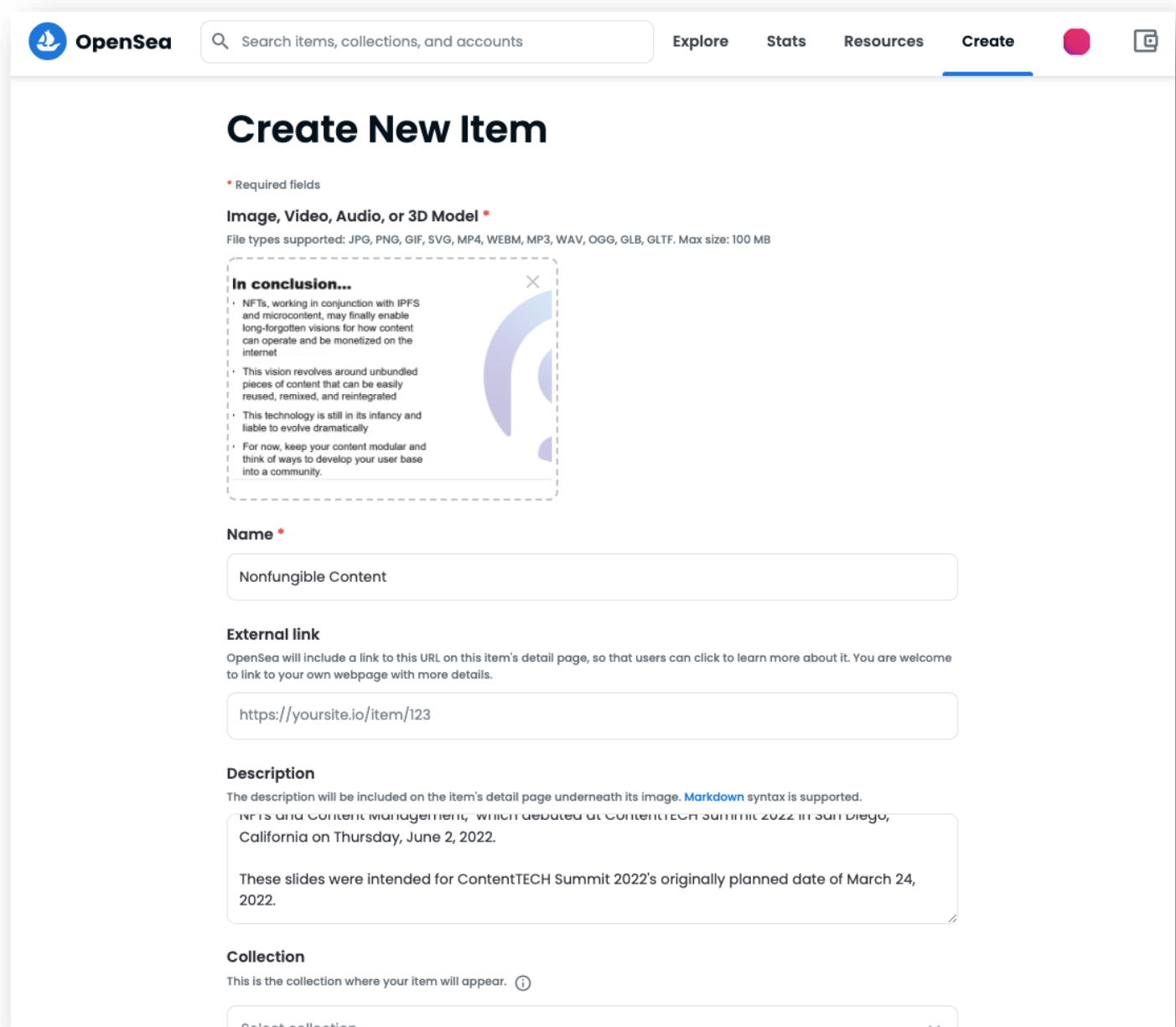


Getting started



Creating an NFT

- Go to <https://opensea.io>
- Connect your wallet (e.g., MetaMask)
- Click "Create"
- Upload file





Creating an NFT

- Name
- External link
- Description
- Collection
- Properties
- Levels
- Stats
- Unlockable content
- Explicit filter
- Supply
- Blockchain
- Freeze metadata

Collection
This is the collection where your item will appear. ⓘ

Select collection ▾

Properties ⓘ

Textual traits that show up as rectangles +

Levels ⓘ

Numerical traits that show as a progress bar +

Stats ⓘ

Numerical traits that just show as numbers +

Unlockable Content ⓘ

Include unlockable content that can only be revealed by the owner of the item.

Explicit & Sensitive Content ⓘ

Set this item as explicit and sensitive content ⓘ

Supply
The number of items that can be minted. No gas cost to you! ⓘ

1

Blockchain

Ethereum ▾

Freeze metadata ⓘ

Freezing your metadata will allow you to permanently lock and store all of this item's content in decentralized file storage.

To freeze your metadata, you must create your item first.

Create



My NFT

OpenSea Search items, collections, and accounts Explore Stats Resources Create

Josh Anderson's Presentations

Nonfungible Content

Owned by B6F6F2 3 views 1 favorite

Sale ends June 26, 2022 at 10:57pm GMT-4

Current price
0.0001 (\$0.18)

Buy now Make offer

Description

Created by B6F6F2

This NFT is an animated GIF created from the original slide deck for my talk, "Nonfungible Content: NFTs and Content Management," which debuted at ContentTECH Summit 2022 in San Diego, California on Thursday, June 2, 2022.

These slides were intended for ContentTECH Summit 2022's originally planned date of March 24, 2022.

About Josh Anderson's Presentations

Details

Price History

All Time

No item activity yet



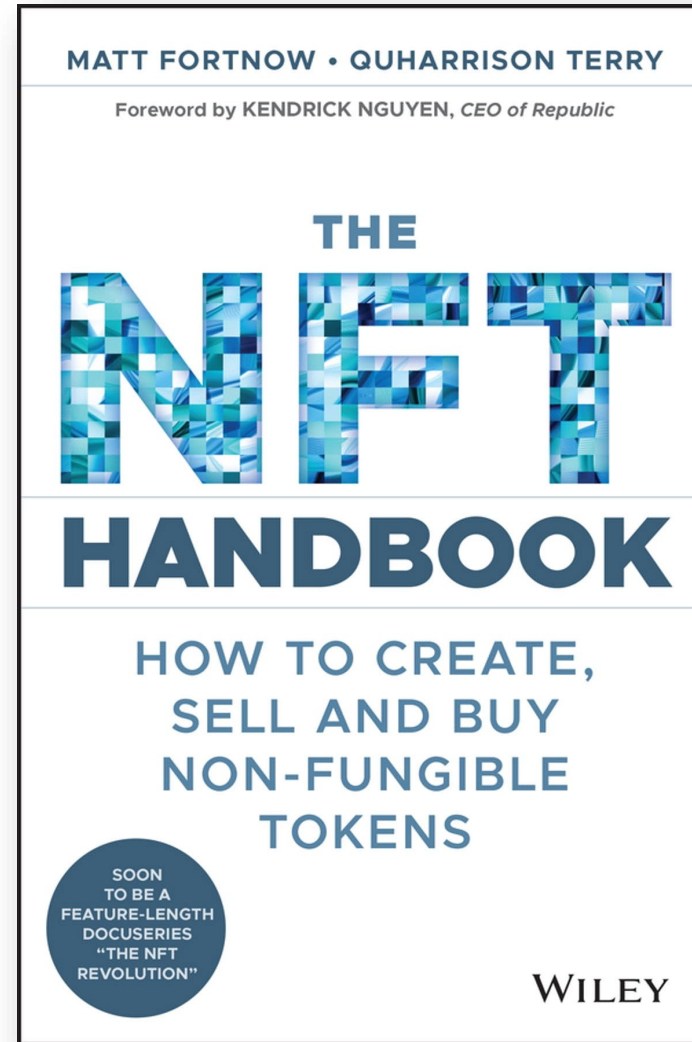
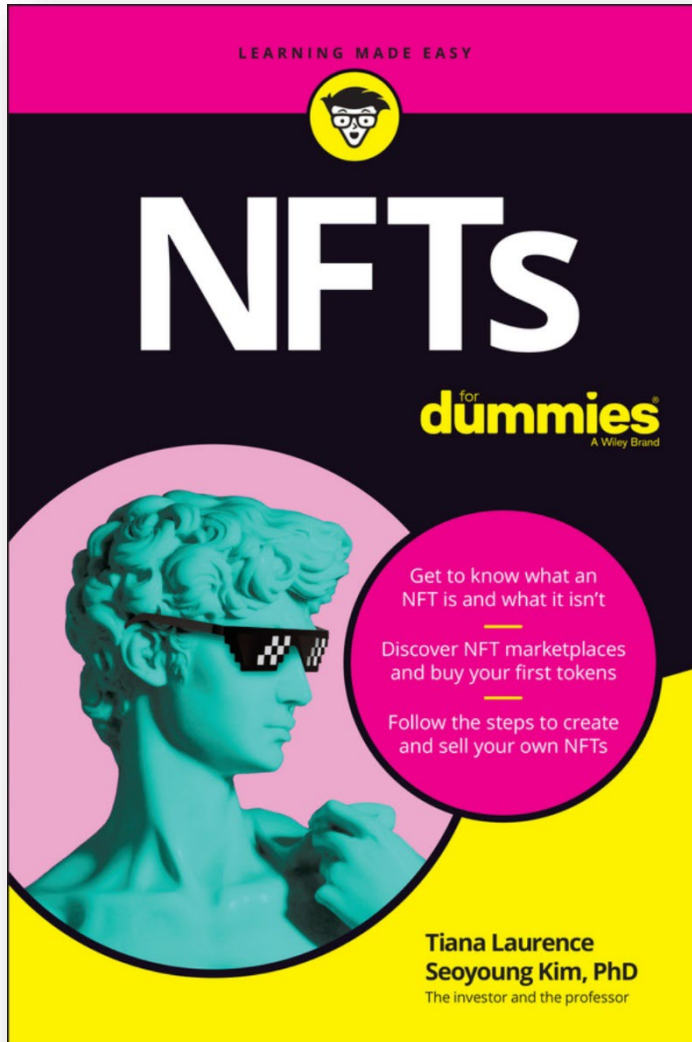
Only 0.0001 ETH (\$0.18)!

<https://tinyurl.com/ykrfajbm>

<https://opensea.io/assets/ethereum/0x495f947276749ce646f68ac8c248420045cb7b5e/82757255498936747970608740099525853203281817683865661120842699153106173689857>



Recommended NFT resources





Recommended NFT resources

CONCEPTS

- NFT basics
- Content addressing
- Content persistence
- Designing a minting app
- Managing NFTs 🚧
- Auditing NFTs 🚧

TUTORIALS

- First steps
- Build a minting service
- Lazy minting
- Mint with NFT.storage and Polygon
- Building a gallery app 🚧
- Using NFTs in games 🚧
- Building a Flow NFT pet store
- Mint ERC721 NFTs on Avalanche

REFERENCE

- Metadata schemas
- NFT marketplaces
- Recommended tools
- Featured NFT dev sites

Welcome to NFT School

What does it mean to own a piece of the internet? Can you sell a meme to the highest bidder? Is the metaverse finally happening? Let's find out together!

Welcome to NFT School, a collective of web developers and technology enthusiasts here to figure out what's going on with non-fungible tokens, or NFTs. In the past few years, NFTs have gone from a niche concern within the blockchain world to a cultural phenomenon that has captured the imagination of artists, technologists, and the mass media.

As builders, we'll be exploring NFTs from the technical side, taking them apart, and seeing how they work. We'll also take a look at some of the use cases for NFTs, so that we can help build new experiences around them.

We'll be building on a background of modern web development, with a focus on JavaScript. Along the way, we'll get familiar with the core technologies that make NFTs possible, like smart contracts and content-addressed storage. If you're a newcomer to the space and find yourself confused, we want to know about it! Please [open an issue](#) with any suggestions for how to make this content more accessible.

<https://nftschool.dev>

ProtoSchool

Interactive tutorials on decentralized web protocols

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Interactive Tutorials

Our self-guided interactive tutorials are designed to introduce you to decentralized web concepts, protocols, and tools. Select your topic and track your progress as you go, in a format that's right for you. Complete JavaScript code challenges right in your web browser or stick to our text-based or multiple-choice tutorials for a code-free experience.

[View All Tutorials](#) [Build a Tutorial](#)

Featured Tutorials

DWeb Concepts

Content Addressing on the Decentralized Web

Learn how hashing and content addressing enable verifiable data sharing with peers on the decentralized web.

IPLD

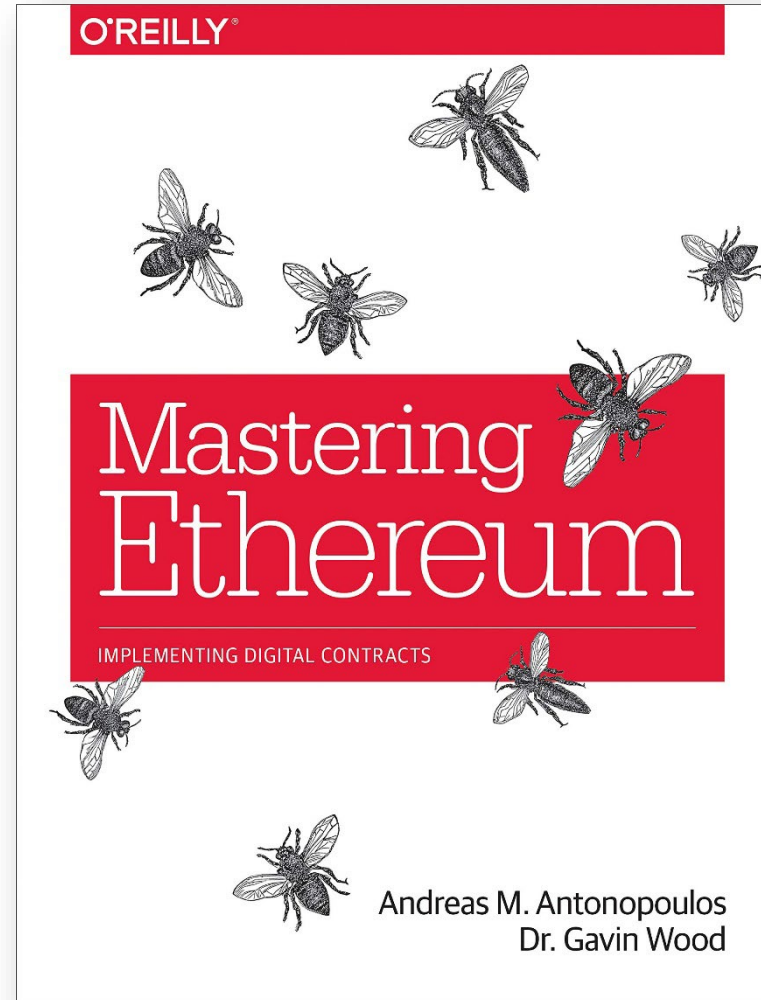
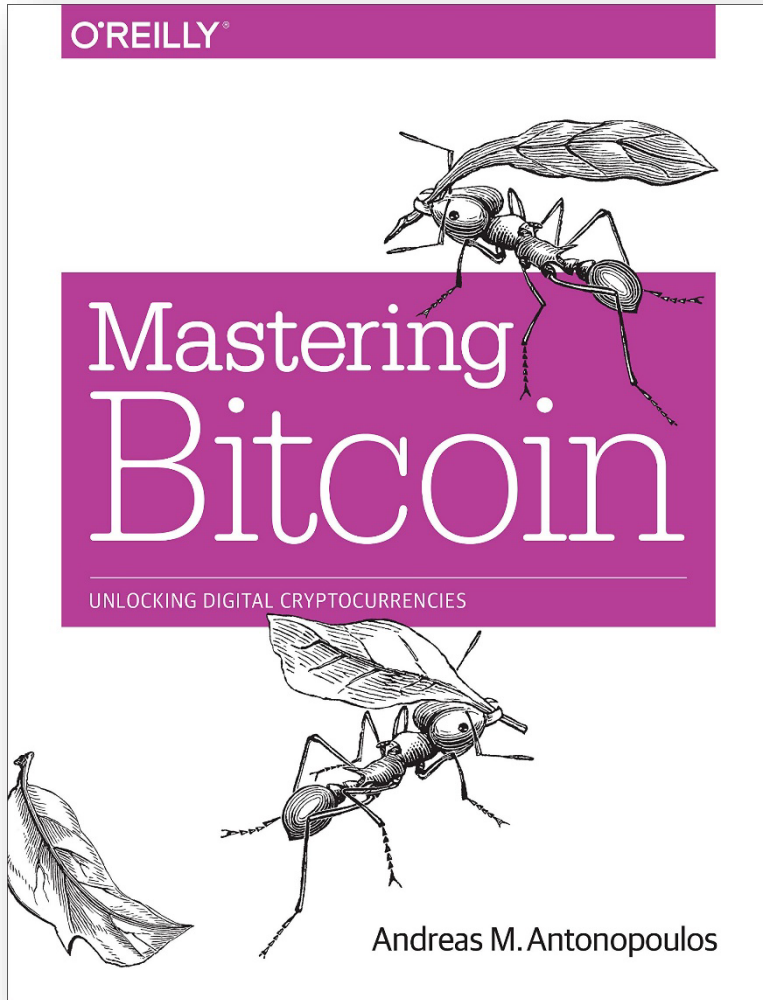
Merkle DAGs: Structuring Data for the Distributed Web

Learn how we can use CIDs to create content-addressable data structures for the distributed web!

<https://proto.school>

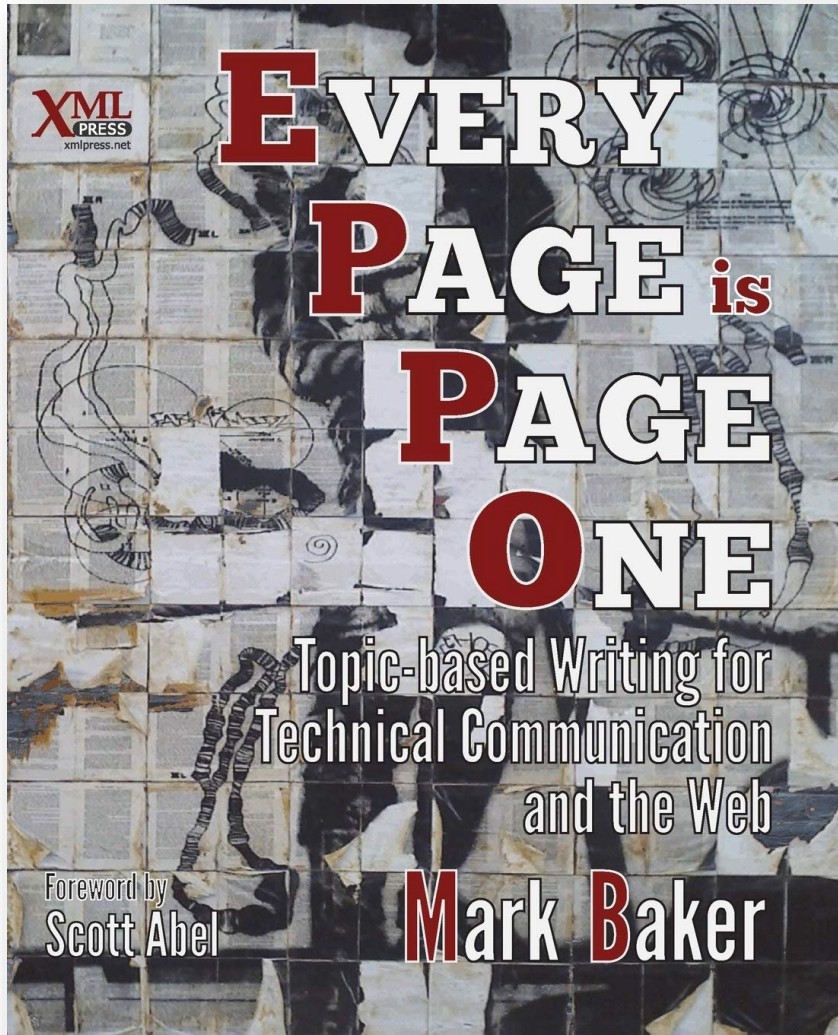


Recommended blockchain resources





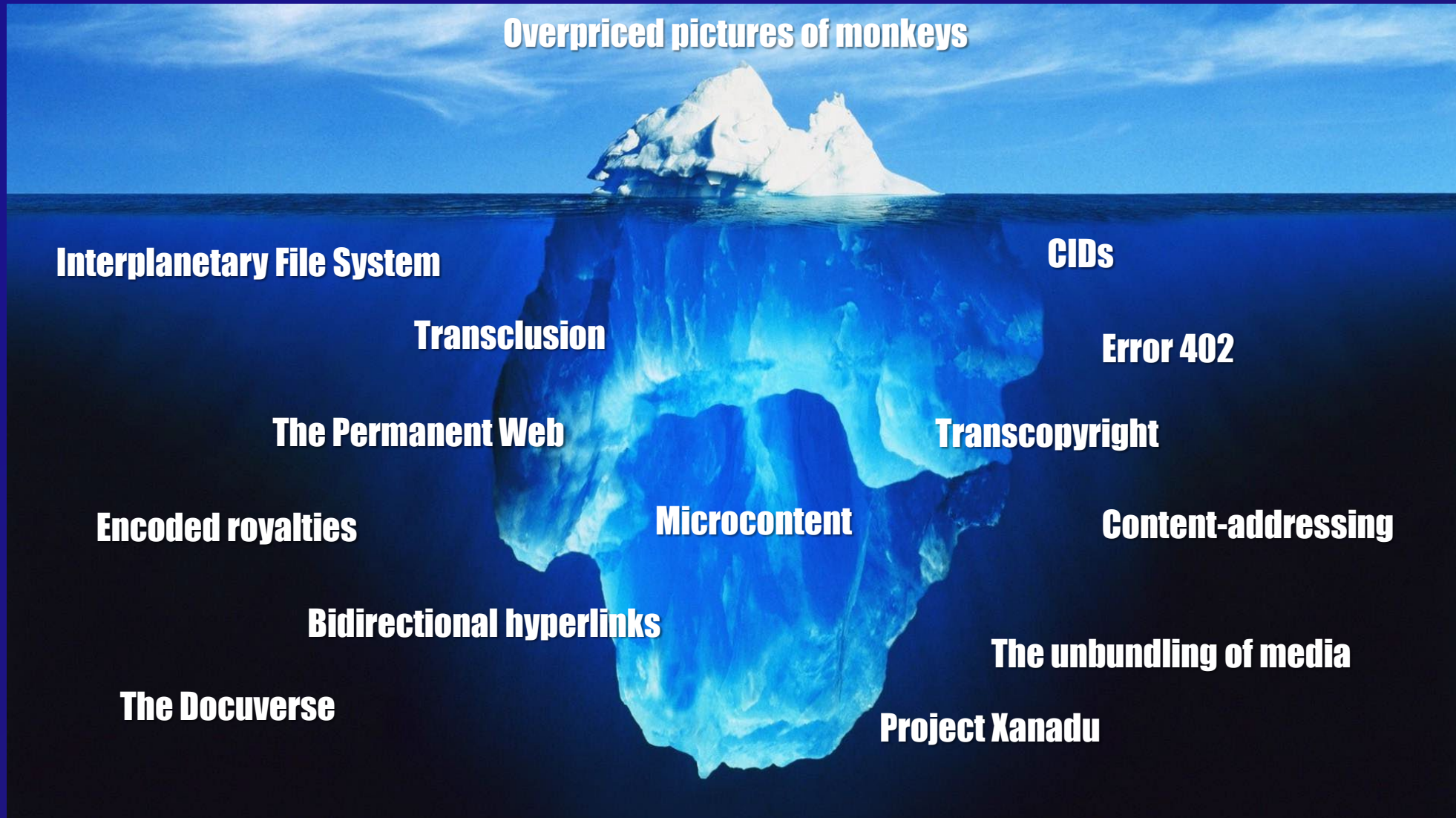
Recommended microcontent resources



<https://www.precisioncontent.com/presentations-recordings-catalog/>



In conclusion...





In conclusion...

- NFTs, working in conjunction with IPFS and microcontent, may finally enable long-forgotten visions for how content can operate and be monetized on the internet
- This vision revolves around unbundled pieces of content that can be easily reused, remixed, and reintegrated
- This technology is still in its infancy and liable to evolve dramatically
- For now, keep your content modular and think of ways to develop your user base into a community.





Thank You!

Are you ready to upgrade, transform, and future-enable your content?
Contact us and we'll show you what's possible.

precisioncontent.com | more-info@precisioncontent.com | 1 (647) 265-8500