

MATT FORTNOW • QUHARRISON TERRY

Foreword by KENDRICK NGUYEN, *CEO of Republic*

THE NFT HANDBOOK

HOW TO CREATE,
SELL AND BUY
NON-FUNGIBLE
TOKENS

SOON
TO BE A
FEATURE-LENGTH
DOCUSERIES
"THE NFT
REVOLUTION"

WILEY

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The NFT Handbook

How to Create, Sell and Buy Non-Fungible Tokens

Matt Fortnow

QuHarrison Terry

WILEY

Foreword

Great artists focus on one thing: their creations. Musicians spend months searching for perfect harmony or lyrics, architects belabor the most minute details on their building plans, and painters search for the ideal place for their last stroke.

But once they finish their masterpieces, successful artists must also figure out how to monetize them while likewise protecting their provenance and future value.

That's where the intermediary comes in. Content creators of all kinds, including musicians, podcasters, painters, writers, performers, directors, and composers, are typically forced to use an intermediary to share their creations with the world. Whether it's the art gallery, the music label, or the concert promoter, these functionaries all promise artists the ability to monetize their work in exchange for a healthy cut of the profits—and sometimes even ownership of the artist's work.

Although not all intermediaries are bad; some have made headlines in recent years for the underhanded deals they've struck with their clients. Taylor Swift has spoken out about the unfair contract she signed as a teenager and how her music was sold multiple times without her knowledge or consent. Musicians like Prince and Michael Jackson were known for feuding with their record labels, too.

In recent years, technology platforms like Spotify have offered some hope of disintermediation. However, as the platforms evolved, artists have learned that their economics have been reduced—not enhanced. So, it's no wonder that the creative community has long sought a way

to regain control—and ownership—of their valuable creative assets.

Enter the NFT, a tool that allows creators to bypass the intermediary altogether. Understanding how to harness NFT technology can put creators back in the driver's seat. At first glance, NFTs are shrouded in cryptocurrency jargon, scaring off anyone without a computer science degree, but they're relatively simple. They're a way for artists to embed a snippet of code into their works so that they can share them without fear of piracy and with the security that they will be paid directly by their supporters and fans in perpetuity. This gives them back control of their intellectual property with enhanced transparency while tracking and distributing payments to the creator for royalties and sales.

One of the most valuable parts of NFTs is the way that they allow a community to form and participate in supporting something in which they believe. In 2000, I went to my first concert in New York City to see one of my favorite bands, U2. Had they been selling NFTs that night, I might just be HODLing it for life.

Imagine having been one of the first 100 fans of U2 or having gone to a basement show and bought an NFT of a song from the next David Bowie before they blew up. The early supporters are rewarded, the artists are paid, and the community grows stronger.

It's clear now that NFTs are not only here to stay but that they stand to radically transform the creative and content industries. As a result, investing in this market is no longer a fringe idea but rather a core strategy for anybody who wants to participate in the creative economy in a meaningful way.

As an attorney who has devoted my professional career to understanding how to securitize and monetize assets in a compliant way, NFTs represent a tremendous opportunity for those who understand them.

The best time to get on the NFT bandwagon was in 2020, but the second-best time is right now. That's why I'm so excited that QuHarrison Terry and Matt Fortnow have decided to build this straightforward educational tool, opening up the possibilities of NFTs to the millions of people who make their living in creative fields. *The NFT Handbook* affords those creatives a real path to controlling their own destiny. This book is likely to become a bible for a brewing revolution.

It takes a visionary to see the future and to understand how to make it a reality. QuHarrison Terry is that visionary. He's also a businessman who began selling digital art online in 2014 and has seen firsthand how transformative this knowledge can be. Matt Fortnow has been at the forefront of the Internet revolution since his early days as an entrepreneur who built his first Internet company back in 1996, and he understands the bleeding edge of technology. Their combined experience and conviction about the future of NFTs speaks for itself. There are no two individuals more qualified to write this book.

As the CEO and cofounder of Republic, a company that also aims to demystify some of the financial world and to give people the power to invest in the future, we've gotten used to the criticism that comes with innovation. When we first started to apply traditional investment principles to crypto, some onlookers thought that we were out of our minds. Time and again, we have seen that what seems crazy today will seem normal tomorrow. (And we all wish we invested when things seemed crazy and out of favor.) The same can certainly be said for NFTs.

I cannot wait for the future that this book and this technology will bring us to. It's not if, but when.

Kendrick Nguyen
CEO and Co-founder of Republic

CHAPTER 1

Introduction to NFTs

By many accounts, Google was late to the search engine game. Founded in 1998, it was the 24th search engine to come onto the scene. What's Google 24th at now?

Larry Page and Sergey Brin, the cofounders of Google, focused on differentiating their search engine and creating a compelling product from the outset. Monetizing the search engine was an afterthought. Search engines are all about connecting people from a query to a destination. It's a game of understanding the user's intent. What do they want to find? Ideally, the engine gets it right on the first search result; otherwise, you're forcing the user to do the hard work of finding what they're looking for.

Google's revolutionary idea was *PageRank*, a ranking system that prioritized web pages by social proof. The more that other domains link to a web page, the higher it ranked on Google's search results because there was social proof from other users that it was a helpful resource. Google's indexing method was in stark contrast to other search engines, which ranked pages by analyzing the page's content for keyword density.

Backed by this superior theory of ranking the web's content, Google showed promise of having a better utility than any other search engine of the time. It also attracted the attention of computing pioneers. Before Google was even incorporated, it received its first investment of \$100,000 from Andy Bechtolsheim, cofounder of Sun Microsystems—a legend in the world of computing. Google rounded out this investment in 1998 with money from three other angel investors, including Amazon founder Jeff Bezos,

Stanford University computer science professor David Cheriton, and entrepreneur Ram Shriram.

Page and Brin were just a couple of smart kids from Stanford trying to solve a problem on the Internet. Their laser focus on creating a great product that understood the user's search intent was the utility that they brought to the world. The utility they made was enough to attract attention from some of the biggest names in tech. It wasn't until two years later that they would finally incorporate AdWords into their search engine and monetize their traffic.

We see a lot of similarities when comparing those early Internet days with early non-fungible tokens (NFTs). The vast majority of NFTs have no utility beyond investment speculation—in much the same way that Ask Jeeves and Yahoo Search were simply joining in on the action of search engines with no real differentiation. And because we're in the early days of NFTs, these directionless projects can get a lot of attention, even though there's no use case for them. However, as time passes, we'll see a greater focus on NFTs with utility—tokenized projects solving a problem or creating something unique for users. Those projects that lack a use case will miss out on the real money to be made a few years from now.

Take, for example, the Bored Ape Yacht Club. The founders have created 10,000 Bored Ape NFTs that act as membership cards into the Internet Yacht Club. Right now, this membership card gives you access to a digital bathroom where you can take a "pen" and draw, write, or graffiti on the walls every 15 minutes. It sounds insignificant, but it's a unique experience. They've carved out this digital environment reserved only for the Bored Ape NFT owners. Yes, the Bored Apes are collectibles in

essence. But it's the access and the utility that they provide that excites us for the future of this project.

Access might be the most significant use case of NFTs currently. In other words, to what does owning an NFT grant you access? We're surely going to see the utility of NFTs go way beyond this. Especially considering the wide variety and diversity of people getting into NFTs right now, there are so many exciting individuals with all types of ideas coming together to collaborate and create magical experiences.

Now is the time for experimentation, collaborating with others, and not working in a silo. This book is a product of two people experimenting with NFTs in their respective fields and starting a random conversation that ballooned into so much more.

QuHarrison Terry was working on selling the WorldStarHipHop Chain NFT and creating liquidity for pop culture-focused NFTs. Matt Fortnow created the official Three Stooges NFTs and contemplated how iconic intellectual property could exist as NFTs.

Let's rewind the tape back to the early Internet 1.0 days: 1995. Matt practiced entertainment law in New York City when a few fraternity brothers from Carnegie Mellon University recruited him to start an Internet company. They founded Commissioner.com, the Web's first fantasy sports service, which they sold to CBS SportsLine in 1999. Always looking to develop uses for new technologies, Matt got heavily involved in blockchain in 2015, virtual reality/augmented reality (VR/AR) in 2016, and NFTs in 2020. It's actually through the VR/AR connection that he met QuHarrison.

QuHarrison recalls:

“I got a call one day from a friend who said I had to talk with this Matt Fortnow guy. This was at the early peak of NFT hype in March 2021, so I was used to talking with many people about a lot of NFT ideas every day. The conversation took on a life of its own and went on for a couple of hours. We were just riffing about how NFTs were all about sales and liquidity, the possibilities of tokenizing IP and revenue streams, and just having a fun time sharing ideas. By the end of the conversation, we were like, ‘Yeah, we need to write a book on this.’ And that’s how a marketer and an attorney-turned entrepreneur came to write a book on NFTs. Literally a chance conversation around this shared culture of NFTs. And I think that’s the beauty of this space right now. At the precipice of any new technology, it’s prime for collaborations between people of different backgrounds.”

It may feel like you’re late to NFTs. But you’re actually early in the grand scheme of things because we just haven’t seen all the use cases of this technology yet. For reference, there were only about 130,000 active users on OpenSea, the largest NFT marketplace, in August 2021. With more than four billion people who have access to the Internet worldwide, we’re nowhere near the exciting times of NFTs.

If Page and Brin thought they were late to the Internet in 1998, we wouldn’t have the most effective and intuitive search engine that we have today. But they looked at the emerging Internet technologies around them and had a theory on how it could be done better. That’s where we are at with NFTs today.

Take the information in *The NFT Handbook* as a starting point for your NFT journey. We’ll take you through the history of NFTs to the basics of creating and collecting NFTs to marketing your NFTs, and much more. There are many people talking about NFTs and sharing their

thoughts, their strategies, and their ideas. Use this book as a launchpad to go out and learn more about what interests you about NFTs.

Equipped with what you've learned in this book, start connecting with people in the NFT ecosystem. There are many NFT communities on Twitter, Clubhouse, Discord, Instagram, and other Internet destinations with people just like you who want to connect and learn from each other. At this stage in the lifespan of NFTs, it pays to communicate, experiment, and collaborate. Ultimately in the canon of NFTs, we don't know whether the current NFT projects we're seeing will be more akin to Infoseek (one of the earliest search engines, not around today) or Google (late to the game but created a superior product that stands even stronger today).

We've also created TheNFThandbook.com with extensive resources and links. Since the NFT space is ever evolving, the website will feature ongoing updated information.

As we dive in, your first question may be, "What are NFTs?"

CHAPTER 2

What Are NFTs?

Even before you think about non-fungible tokens (NFTs), which in their most basic form are unique digital collectibles secured by the blockchain, you must understand how collectibles work. Perhaps the following eclectic Beanie Babies parable will clarify the erratic and eccentric psychology behind why we collect.

Why People Collect

Before NFTs, there were Beanie Babies...

From stamps to Civil War weapons to sneakers, people collect many different objects in various formats. So, it should come as no surprise that there is a market for collectibles in a digital form. Conceptually, it's confusing. But on the sheer basis of wanting to own a unique item that others do not have, digital collectibles vary little from their physical counterparts. Therefore, to understand why people collect NFTs, we'll draw a comparison to a physical collectible that took the world by storm in the 1990s: *Beanie Babies*.

From its inception in 1993, Ty Warner, the founder of Beanie Babies, built scarcity into his product. The plush toys were distributed in small quantities to small retailers, avoiding chain retailers and large orders altogether. Ty didn't want people to be able to find or buy every Beanie Baby they wanted.

The company kept the number of Beanie Babies in circulation secret. It "retired" the production of certain Beanie Babies to create more exclusivity. It intentionally let

misprints and faulty Beanie Babies through the cracks, which would become extra rare editions of the toys.

Around the same time as the Beanie Babies' rise in the public consciousness, eBay emerged and positioned itself as the online marketplace for buying and selling collectibles worldwide. It was a synergistic relationship that ballooned the resale value of Beanie Babies and validated eBay as a valuable tool for speculators in all collectibles markets.

Those lucky enough to get their hands on one of the retired \$5 plushies could, at minimum, see a two- or three-fold return by listing it on eBay. Some rarer misprints, such as the "Pinchers the Lobster" misprint as "Punchers the Lobster," yielded one collector more than \$10,000.

The Beanie Babies craze was in full swing toward the end of the 1990s. Robberies and even murders ensued over the pursuit of the plush toys. For example, at a Hallmark store in West Virginia in 1999, a security guard was shot and killed when tensions were high due to a late shipment of Beanie Babies.

Sane adults searched far and wide for the chance to get a single life-changing Beanie Baby. One set of divorcees battled over who got the Beanie Babies collection, believing it was the most valuable asset that the two had to divvy up.

Then in 1997, McDonald's got in on the craze with Ty Inc. Together they launched the Teenie Beanie product line in McDonald's Happy Meals and proceeded to sell 100 million of the mini plush toys in just 10 days.

Magazines, such as *Mary Beth's Beanie World*, which sold 650,000 copies a month at its height, published entire spreads on Beanie Babies, discussing their value as a speculative investment, which, with the right strategy, could yield more than enough to send a kid to college.

Just when Beanie Babies seemed to be a collectible that would carry on for decades, it all came crashing down. Talk of their overvaluation sparked an avalanche of Beanie Babies hoarders to list their toys on eBay, causing a significant oversupply. In turn, the price of Beanie Babies plummeted.

Seemingly overnight, people's collections of presumed valuable Beanie Babies became nearly worthless. The story of Chris Robinson Sr.—the man who spent more than \$100,000 on Beanie Babies for the speculative investment—became the symbol for the crushing defeat that this collectible market experienced.

The *Financial Times* aptly called Beanie Babies “the dot-com stock of the soccer mom world in the second half of the 1990s.” We don't draw this comparison to say that NFTs are doomed to the same fate as Beanie Babies, that is, a collectible bubble bound to burst. Instead, Beanie Babies provide an excellent look into the dynamics of why people collect.

The same basic principle that drove people to collect Beanie Babies drives people to collect NFTs: *scarcity*. Although other factors drive collectors to collect, such as investment, speculation, emotional connection, the fear of missing out (FOMO), and “the thrill of the hunt,” at the core of collecting is scarcity. No matter what we collect, we do so because there are a limited number of those things.

Could the NFT market crash? Anything is possible. But unlike Beanie Babies, NFTs provide real-world solutions to problems plaguing the art and collectibles markets, as we discuss in [Chapter 3](#), “Why NFTs Have Value.”

Now that we've addressed why people collect, whether it's physical or digital collectibles, let's dive into the topic at hand: NFTs.

What Exactly Are NFTs?

NFTs are generally known as a particular type of digital collectible, such as digital art from Beeple, a digital trading card from Rob Gronkowski, a short video from *Saturday Night Live*, a picture of fortune-telling Curly of The Three Stooges with an unlockable Curly-esque fortune, or one of the CryptoKitties. But what exactly are NFTs?

NFTs are unique items verified and secured by a blockchain, the same technology used for cryptocurrencies. An NFT provides authenticity of origin, ownership, uniqueness (scarcity), and permanence for any particular item. Let's break the term *non-fungible token* down a piece at a time.

Tokens

Let's start with the word *token*. According to [Dictionary.com](https://www.dictionary.com), one of the definitions of token is "a memento; souvenir; keepsake." Since NFTs are commonly known as digital collectibles, one might think the *token* in NFT is derived from this definition. Although it may apply (somewhat), the *token* in NFT is derived from something entirely different: the blockchain.

Some of you may be fretting, "Oh no, here comes the technical part. I just want to know what an NFT is." To understand completely what an NFT is, you need to learn a little about blockchain. We promise not to make it too complicated.

You've probably heard of Bitcoin and perhaps some other cryptocurrencies. According to Investopedia, a *cryptocurrency* is "a digital or virtual currency that is secured by cryptography." Just know that cryptocurrencies are digital currencies that exist on the Internet. You can buy and sell them for investment purposes, buy things with

them, or even stake them (essentially lending them to earn interest).

Whenever someone transacts with a cryptocurrency, whether buying, selling, transferring, staking, or purchasing something with cryptocurrency, that transaction must be verified. The verification process determines whether the sender has the amount of cryptocurrency being sent. This is what keeps a cryptocurrency secure and reliable.

When cryptocurrency transactions are verified, for example, with Bitcoin, the verification is conducted on a *group* of transactions, not a single transaction. This batch of cryptocurrency transactions is known as a *block*. Each block has a certain storage capacity. After the block is filled and the transactions have been confirmed, the block of transactions is then appended to the previously verified block, creating an ever-growing chain of blocks: a *blockchain*. The process repeats, and the blockchain grows longer and longer (see [Figure 2.1](#)).

So, the blockchain of a cryptocurrency is a list of all transactions (every single one) of that currency, going all the way back to the beginning of that cryptocurrency.

Every time someone buys or sells Bitcoin, buys something with Bitcoin, exchanges Bitcoin, or transfers Bitcoin, that transaction is listed on the Bitcoin blockchain. The number of daily Bitcoin transactions reached around 400,000 in January 2021, and Ethereum (the second largest cryptocurrency) was processed more than 1.1 million times per day ([Statista.com](#)). Think of a blockchain as an extremely long accounting ledger.

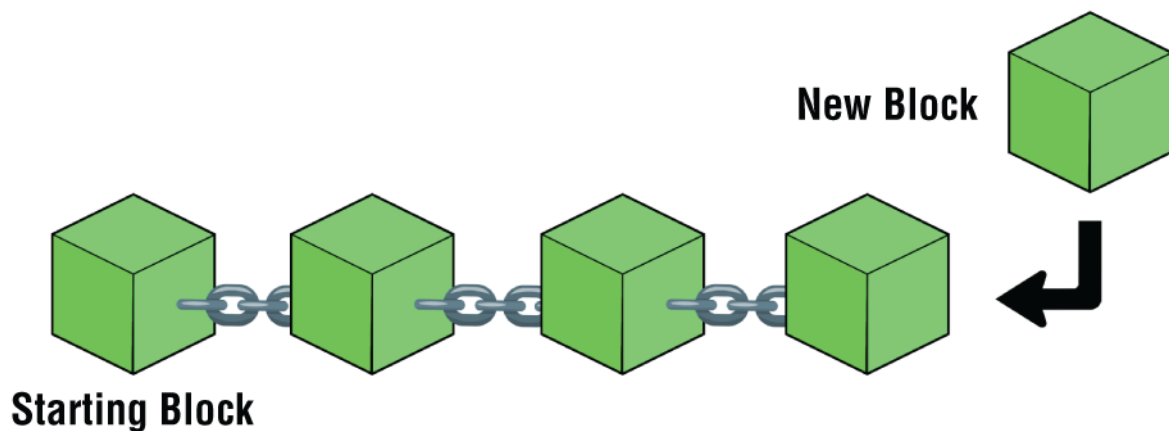


FIGURE 2.1 A blockchain

Coin vs. Token.

When speaking about certain cryptocurrencies, people often use the terms *coin* and *token* interchangeably. But that would be wrong because there is an important distinction.

Cryptocurrencies that are coins, such as Bitcoin, Litecoin, Dogecoin, and Ethereum, have their own respective blockchains. In contrast, tokens are cryptocurrencies that don't have their own blockchains. Instead, tokens utilize another coin's blockchain. For example, GameCredits (GAME) and SushiToken (SUSHI), among thousands of others, are tokens that use the Ethereum blockchain. Cryptocurrency tokens that exist on the Ethereum blockchain are also known as ERC20 tokens. *ERC20* is the Ethereum standard for creating cryptocurrency tokens.

GameCredits is an interesting case because it was initially a coin with its own blockchain. But to take advantage of the greater functionality that the Ethereum network offers, it switched to become an ERC20 token. So, now all GameCredits transactions (and all other ERC20 token transactions) are recorded on the Ethereum blockchain.

This is the reason why Ethereum processes so many transactions a day.

So, the *token* in NFT is a cryptocurrency token. An NFT exists on a blockchain. Currently, most NFTs are created on and live on the Ethereum blockchain. Some NFTs are created on and exist on WAX, the Binance Smart Chain, and some other blockchains.

Non-fungible

So, we've got the token part down. Now let's turn to *non-fungible*. What does *fungible* mean? According to [Dictionary.com](https://www.dictionary.com), fungible is an adjective that means "(especially of goods) being of such nature or kind as to be freely exchangeable or replaceable, in whole or in part, for another of like nature or kind." Let's start with some examples.

Dollars are fungible. If we give you a five-dollar bill and you give us back five one-dollar bills, the exchange value is equal. It doesn't matter which dollar bills you gave us. Say that you had a stack of one-dollar bills. You could give us any five of them, and it wouldn't matter. You could even Venmo us \$5. The fact is that dollars are entirely interchangeable.

Similarly, cryptocurrencies are fungible. If you send us a Bitcoin, we don't care what wallet it came from; a Bitcoin is a Bitcoin, just like a dollar is a dollar.

Even some goods or commodities (as the previous definition points out), such as barrels of oil, are considered fungible. It doesn't matter which barrels you send me. Any barrel of oil of the same grade would do.

Using the previous definition, it seems evident that non-fungible items can't be freely exchanged or replaced by similar items. For example, diamonds are non-fungible.

Each diamond is unique in size, color, clarity, and cut. If you bought a particular diamond, it would not be easily interchangeable with another diamond.

Likewise, NFTs are non-fungible. Each NFT is unique. You cannot freely exchange or replace one NFT for another.

But what makes each NFT unique? After all, isn't it easy to download, copy, and share images from the Internet? Yes, but you can take a photo (or preferably create an image) and *mint* that image into a token that exists on a blockchain. We use the term *mint* like minting a physical coin.

When cryptocurrency coins and tokens are created, they are minted. Usually, millions or even billions of coins or tokens are mined or minted for a particular cryptocurrency. Generally, a cryptocurrency has a circulating supply, the number of coins or tokens already minted, and a max (maximum) supply, the total number of coins that can be minted. The max supply amount is baked into the original code that created the cryptocurrency and cannot be altered.

Contrast this with a fiat currency, such as the U.S. dollar, the supply of which can be continually inflated by printing more dollars. As more dollars are printed, the value of each dollar decreases, assuming that the demand for dollars remains the same. Thus, there is no max supply of dollars or other fiat currencies.

Bitcoin has a max supply of 21,000,000 coins, whereas Uniswap (UNI), an ERC20 token, for example, has a max supply of 1,000,000,000 tokens. Each NFT functions like a cryptocurrency, but NFTs have a max supply of 1. That's what makes NFTs unique and non-fungible; they cannot be freely exchanged with something of like kind because there is nothing of like kind. Think of an NFT like an original

painting: there's only one. There can be copies of a painting or prints made, but there's only one original.

Even though we just said that an NFT has a max supply of 1, it is possible to mint an NFT with a supply greater than 1. For example, you could mint 100 “copies” of the same NFT. Technically, it's 1 NFT of 100 tokens. Each of the tokens could be exchangeable with the other tokens of the same NFT because they would be the same in every respect. Although these multitoken NFTs are considered NFTs, we would not technically refer to them as NFTs because they are fungible, albeit with a limited supply, but they are still fungible.

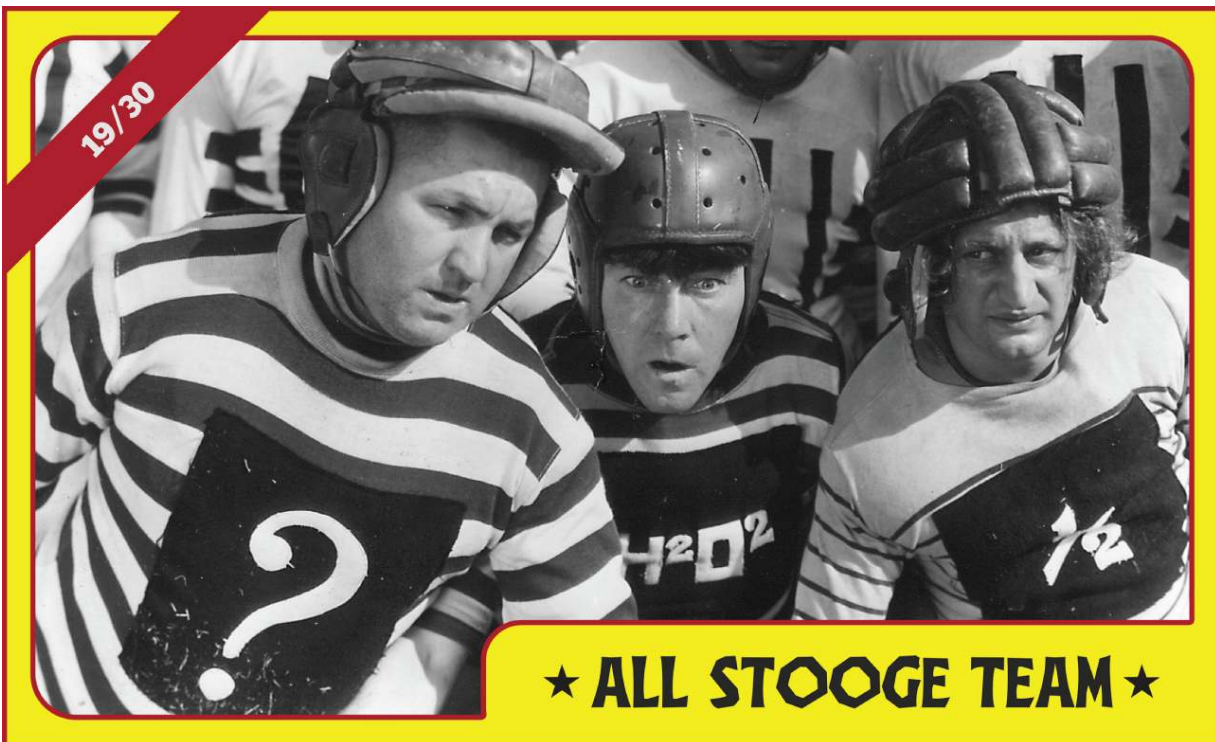


FIGURE 2.2 The Three Stooges “All Stoogie Team” NFT, #19 of 30

We need to distinguish between a multitoken NFT and a limited edition or series of NFTs of a particular design. For example, Rob Gronkowski issued four series of NFTs, the design of each series representing one of his football

championships. Each series has 87 (being the number of his jersey) editions, and each NFT is individually marked 1/87, all the way up to 87/87. Similarly, The Three Stooges NFT series “All Stooge Team” is an edition of 30 individually marked NFTs. [Figure 2.2](#) shows #19 in that series.

Albeit part of a series of 30, the NFT pictured in [Figure 2.2](#) is a unique token with a supply of 1, which indeed makes it an NFT. Similarly, each of Gronk’s NFTs are also unique NFTs.

One can make an analogy of such limited edition, individually marked NFTs to a series of prints of a painting that are also individually, sequentially marked. Whereas an analogy to the multitoken NFT could be a statue that is cast from a mold a limited number of times, and then the mold is broken. Each statue is an original, but also identical to the other statues from the mold. If each statue is sequentially marked, making each one unique, then this analogy would not be applicable in this case.

Edition numbers can have different valuations. With physical art prints, we generally assign the greatest value to the first edition of the print series, that is, edition 1 of 500. However, with NFTs, the driver of edition valuations can vary. For example, with the NBA Top Shots NFTs, it’s common for the edition number that matches the player’s jersey number in that specific NFT to be the most valuable edition. For LeBron James, edition #23 is often the most valuable, as is edition #77 with Luka Doncic or edition #11 with Kyrie Irving. Absent such an alternate value driver, edition 1 would likely achieve the highest value, like an art print.

Also, note that in the Rob Gronkowski and The Three Stooges NFT editions, each individually numbered NFT had

to be minted separately. In the case of a multitoken NFT, all of the tokens of that NFT are created in one minting.

Types of NFTs

Generally, when you think of NFTs, you think of digital art and collectibles. These are the NFTs that are getting all of the press, especially with some of the lofty sales prices. But there are several other types of popular NFTs as well, and we'll cover them all in this section.

Digital Art and Collectibles

Digital art is a relatively new form of art, which had its origins in the 1950s. When computers became ubiquitous in the 1980s and 1990s, the medium exploded. Artists not only create their art with digital tools, such as a computer or smartphone, but the digital nature of the art is the medium itself. The art exists only in a digital format. Sure, an image could be printed out, but true digital art is intended to remain digital.

Digital collectibles are similar to digital art in that they are created digitally with the intent to remain in digital format. However, collectibles generally have a specific popular theme to which they pertain. Examples again would be the Rob Gronkowski digital trading card NFTs and The Three Stooges NFTs. Of course, a significant amount of artistic creativity went into these collectibles, and they are digital art pieces in their own right. For example, the Gronk NFTs were illustrated by artist Black Madre, with creative direction by Gronk, and some of The Three Stooges NFTs were created by artist Patrick Shea.

But in addition to digital art pieces, the collectible value is the NFT's association with Gronk or The Three Stooges. Digital collectibles are like actual collectibles, such as

football cards, but exist only in digital format. Note that digital collectibles don't necessarily need to be digital art per se. A digital collectible could simply be a digitized photograph.

Digital art or collectibles could also be existing nondigital material with digital artistic elements added. For example, The Three Stooges NFT called "That's My Bitcoin!" is an existing photo with a digitally created Bitcoin digitally inserted (see [Figure 2.3](#)). This example happens to be obvious, given when the original photo was taken and the time that Bitcoin was created, but sometimes it's not so obvious.



[FIGURE 2.3](#) The Three Stooges "That's My Bitcoin!" NFT

Generally, digital art or collectible NFTs can take on one of the following forms:

- Images
- Videos
- Gifs
- Audio
- 3D models
- Books and prose

Images.

Many NFTs are just still images, such as one of the CryptoPunks or a Beeple creation. Images can include any type of photograph, whether taken digitally or digitized (scanned) into a digital format. Of course, images could be original works of art or, as discussed earlier, a combination of the two. There is absolutely no motion in a still image.

With NFTs, there is no limit on the size of the image or its resolution, although some NFT marketplaces may limit the size of the file that you may mint. Generally, you would want to provide images in high resolution, which would allow them to be displayed on larger screens.

An image can be either raster (sometimes referred to as *bitmap*) images or a vector graphic. Raster images, such as .jpg and .png , files are more common. These are images that are made up of tiny squares (pixels). The issue with raster images is that if you enlarge them (scale them up), you will lose image quality. Vector graphics on the other hand, such as .svg files, use mathematical equations to draw lines and curves (vector paths) between various points. The advantage of this is that the image can be scaled up to any size without losing image quality. Vector graphics file sizes are generally smaller too. The advantage