

# NFT-Fundamentals

Making an exclusive or rare ownable digital asset offers lots of possibilities for musicians, artists, painters, and of course gamers. NFT is a big enabler for individuals around the globe - but for many, it is hard to understand the possibilities and the limits of this new technology. In the following, I want to explain the fundamentals of NFTs.



## What is an NFT?

NFTs are Non-Fungible Tokens, unique digital collectibles with versatile use-cases. The idea is to own a piece of digital content that we can take with us wherever we go. This can be any text, picture, video, or even music in the form of an NFT generated mixtape. The underlying blockchain tracks the ownership records and provides transparency for the buyer and seller of the NFT.

NFTs are digital abstractions used to represent assets that are one of a kind.

## Why is it unique?

NFTs are one-of-a-kind, because the ownership gets registered through a smart contract on a distributed ledger.

## What can be done with NFTs?

The most common type of NFT is digital art. As virtual reality spaces become more popular, having digital art to display will become more common.

Creators have new ways of monetizing their work by receiving a cut of secondary sales - specified in the Smart Contract.

NFTs can have applications in the real world by acting as a **digital twin** or serving as tickets for events.

NFTs can also serve as **membership in a digital space** - and create an organic sense of community.

NFTs can be used as a **medium of exchange** for physical items in a digital world.

Avatars, In-Game items, skins, land, and houses are all unique digital Tokens, that can be showcased in digital worlds.}

**Play to Earn** games are models where users earn tokens while they are playing the game.

NFT-Rewards for actively playing gamers in form of **loots and Mystery Boxes**.

NFTs can also be used for Defi (Decentralized Finance Applications).

## What are the Unique Advantages of NFTs?

1-The Ownership can be easily verified with NFTs.

2-Fractional Ownership - Own a piece of your favorite artist.

3-Receive a percentage of the secondary sale in a completely automated way.

4-You can be 100% certain that the piece you are purchasing is in fact an original.

## What are the most common ledgers?

Ethereum has currently the most established ecosystem, but competitors like Solana, Cardano, Iota, and other chains are currently taking over the NFT-Space. Ethereum is still struggling with high gas fees this is why a lot of activity is also happening on so-called Layer 2 (L2). One of those networks is Polygon runs on top of Ethereum. It enables to lower transactions costs & reduces minting fees significantly. All of those chains enable creators to deploy their own smart contracts.

**Where is the NFT stored?**

The metadata of the NFT is stored on IPFS (Inter Planetary File System).

What gives an NFT value?

Sure - you can download the picture of Mona Lisa by Leonardo da Vinci. But does that mean that you own it?.

NFTs offer exciting opportunities for true digital ownership of assets. This enables a variety of new use cases and can reach from digital collectibles to tokenized physical assets. It enables global collaboration and new ways to monetize content as a creator. Think of it as the internet in the beginning of the 90s with one key difference: It truly belongs to the people.