

Chapter 10: Tokens.

The word “token” derives from the Old English “tācen,” meaning a sign or symbol.

The most obvious use of tokens is as digital private currencies.

Tokens can also serve different purposes like:

- **Currency:**

A token can serve as a form of currency, with a value determined through private trade.

- **Resource:**

A token can represent a resource earned or produced in a sharing economy or resource-sharing environment; for example, a storage or CPU token representing resources that can be shared over a network.

- **Asset:**

A token can represent ownership of an intrinsic or extrinsic, tangible or intangible asset; for example, gold, real estate, a car, oil, energy, MMOG items, etc.

- **Access:**

A token can represent access rights and grant access to a digital or physical property, such as a discussion forum, an exclusive website, a hotel room, or a rental car.

- **Equity:**

A token can represent shareholder equity in a digital organization (e.g., a DAO) or legal entity (e.g., a corporation).

- **Voting:**

A token can represent voting rights in a digital or legal system.

- **Collectible:**

A token can represent a digital collectible (e.g., CryptoPunks) or physical collectible (e.g., a painting).

- **Identity:**

A token can represent a digital identity (e.g., avatar) or legal identity (e.g., national ID).

- Attestation:

A token can represent a certification or attestation of fact by some authority or by a decentralized reputation system (e.g., marriage record, birth certificate, college degree).

- Utility:

A token can be used to access or pay for a service.

Tokens can also be used as Utility tokens or Equity tokens.

- Utility tokens:

Those where the use of the token is required to gain access to a service, application, or resource.

- Equity tokens:

Those that represent shares in the control or ownership of something, such as a startup.

The first token standard was introduced in 2015 as an ERC [Ethereum Request for Comments]. It was assigned issue #20 on GitHub and that was how ERC20 was born, this also moved on to be the EIP-20 [Ethereum Improvement Proposal].

ERC20 is a standard for fungible tokens, meaning that different units of an ERC20 token are interchangeable and have no unique properties.

They create an ERC20 token called Mastering Ethereum Token (MET).

ERC20 had some issues and some other token ERC proposals came into play to help:

- ERC223
- ERC777
- ERC721, also known as **deeds**.

We are also free to add to the functionality, functions that are not part of the standard.

"Separate the real long termed vision tokens from the ones riddled with fraud."