# 217.https://stackoverflow.com/questions/72291272/what-sort-of-nft-data-is-stored-on-blockchain-and-what-sort-of-metadata-is-store

**T:**What sort of NFT data is stored on Blockchain and what sort of metadata is stored on database?

**Q:**I am going to develop a new nft marketplace but not sure what sort of data to be stored on chain.I think most data should be stored in a database and only owner infos could be stored on chain.

2 **Answer**

**A1:**Forget about databases when you are dealing with blockchain. The whole purpose of blockchain is immutability and decentralization. (in marketplace you might store user's information on database)  
  
When you create an nft, you do not store anything on blockchain related to content. You store the image on ipfs, create a JSON data to describe your nft attributes, and also store this JSON on ipfs using the image link. for example  
  
For example this is a json data stored on ipfs  
  
{ "name": "my new nft", "description": "random", // this image also stored on ipfs and its link is passed here "image": "https://gateway.pinata.cloud/ipfs/QmRs3FropRTZv4e6TPd9WsTFDbpHXRhaCuWivNhA2nSBos", "attributes": [ { "trait\_type": "attack", "value": "12" }, { "trait\_type": "health", "value": "12" }, { "trait\_type": "speed", "value": "23" } ]}  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
when you mint an NFT, you actually pass the URL of this json data to the contract mint function. An NFT structure for a marketplace can be like this:  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
struct NftItem{ uint tokenId; uint price; // creator and owner are not same. creator someone who minted. creator does not change address creator; // when someone purchase NFT, its not listed anymore bool isListed; }  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
Those nft's store in an array on blokchain. Also you need to create other data structres to store different information about the nft on blockchain.

**C1:**All NFT marketplaces manage NFTs with collections. I don't think collection infos don't store on blockchain. If I store NFT infos on a database like MySQL, it would be easier to filter. But there is a problem on syncronising on chain and off chain data. What is the best way to filter NFTs on smart contract code?All NFT marketplaces manage NFTs with collections. I don't think collection infos don't store on blockchain. If I store NFT infos on a database like MySQL, it would be easier to filter by name, traits .... What is the best way to filter NFTs on smart contract code?

**A2:**Historical data would be great to have as well.

**C1:**Historical data should be stored onchain or offchain?

**C2:**As it’s currently written, your answer is unclear. Please edit to add additional details that will help others understand how this addresses the question asked. You can find more information on how to write good answers in the help center.