











ARCHITECTURE DIAGRAM NOTATION

Upload design

After setting up account, a user can upload a CAD design. Files will be limited to two or three file formats. Uploaded CAD Files will be tested (via flight test software) to verify that they are printable prior to being accepted.

2 Vault

Files will be stored in a vault on or servers. The vault must have an extremely high level of security. Tokens do not contain CAD designs, only info about them.

3 Stream

On this version of the NFT Marketplace we will not be streaming CAD files to printing devices since 3dHoudini will be printing product manually (not using a network of third-party service providers).

4 CAD tokens

A CAD token is a non-fungible ERC721 token. We will create two types of CAD tokens, a "parent" and a "child" token (also known as sister tokens). Smart contracts and APIs will provide CAD tokens with their functionality, allowing them to act as a vehicles to buy, sell and trade CAD design files that can be redeemed to print.

5 Shopping/market

The NFT, or CAD token, should be adaptable to many network environments. Users should be able to sell, trade, Airdrop their CAD token on multiple peer-to-peer marketplaces. A user will also be able to sell CAD tokens via social media by linking to the CAD Parlor Store.

6 Wallet

We want to create our own CAD Parlor Wallet; however, it is best is our NFTs can be compatible with as many common wallets as possible.

Print/customize

A Buyer will "print" a token by clicking a button in their wallet. In this first version of the CAD Parlor Marketplace, the number of options will be limited. In future versions a Buyer will have more options to customize product and receive bids from manufacturers.

8 3dH Marketplace

In the Beta version of our NFT Marketplace we will be printing product manually (internally). Future versions will involve a complex system of smart contracts to connect and automate manufacturing between CAD Parlor and the 3dHoudini network of third-part service providers.

9 Smart Contracts – NFT

Smart contracts will define the NFT's functionality, including, how much it costs, how many times can it be printed or traded, trade commissions, profit sharing with the manufacturer, etc.

10 Smart Contracts - Print

When a Buyer chooses to "print" a token, smart contracts will control all aspects of manufacturing, shipping, including, how it is made, who can make it, equipment and materials requirements, etc.