



ONE COIN

REALTY

Brought to you by these fine individuals: Pankaj Gautam, Adrian Lang Au, Haider Ali Khan,

Tyler Leonard, Michael Fiaani



https://github.com/pankaj1070/Project3_Real-Estate-NFT_Dapps

Executive **Summary**

One Coin-Realty “Click to Buy Real Estate”



At One Coin-Realty we strive to accelerate the process of buying and selling properties through the medium of smart contracts and tokenization. We streamline how investors/homeowners buy and sell high quality real estate assets, while increasing the returns for sellers. Our platform reduces the “friction” costs incurred by industry “middlemen”, in the escrow/selling process. Put simply, assets are safely transferred at the click of a button, while more money ends up in both the buyers and sellers decentralized wallets!

Our business cycle follows a 4-step process:

1. Convert real estate documents into a digital asset class
2. Mint the real estate asset into a registered NFT
3. Furnish the token with legal paperwork, sales details and technical descriptions
4. Connect the token to a crypto platform for selling (smart contracts)



Property Ownership **Blockchain Based Token**

There are no secrets here, the real estate industry is stuck in an archaic form of home ownership with regards to the transfer of assets, [this industry is prime for disruption!](#) Our App allows a smooth transfer through smart contracts, crypto currency, and NFT's.



List your property on our Full Stack App

Our team of coding experts will convert your property into a Non-Fungible Token. Which means this token is unique and cannot be reproduced or replaced!



Escrow Made Easy

Our Escrow smart contract securely deposits the down payment, hold on to the crypto until the process of approval occurs from all parties



Safely transfer your asset

Upon approval from the lender, inspector, appraiser and seller. The NFT/Asset is transferred from the seller's wallet to the buyers, as well as the crypto held in escrow to the appropriate parties.

The Development:

Our work flow



Real Estate Contract/ Mint NFT



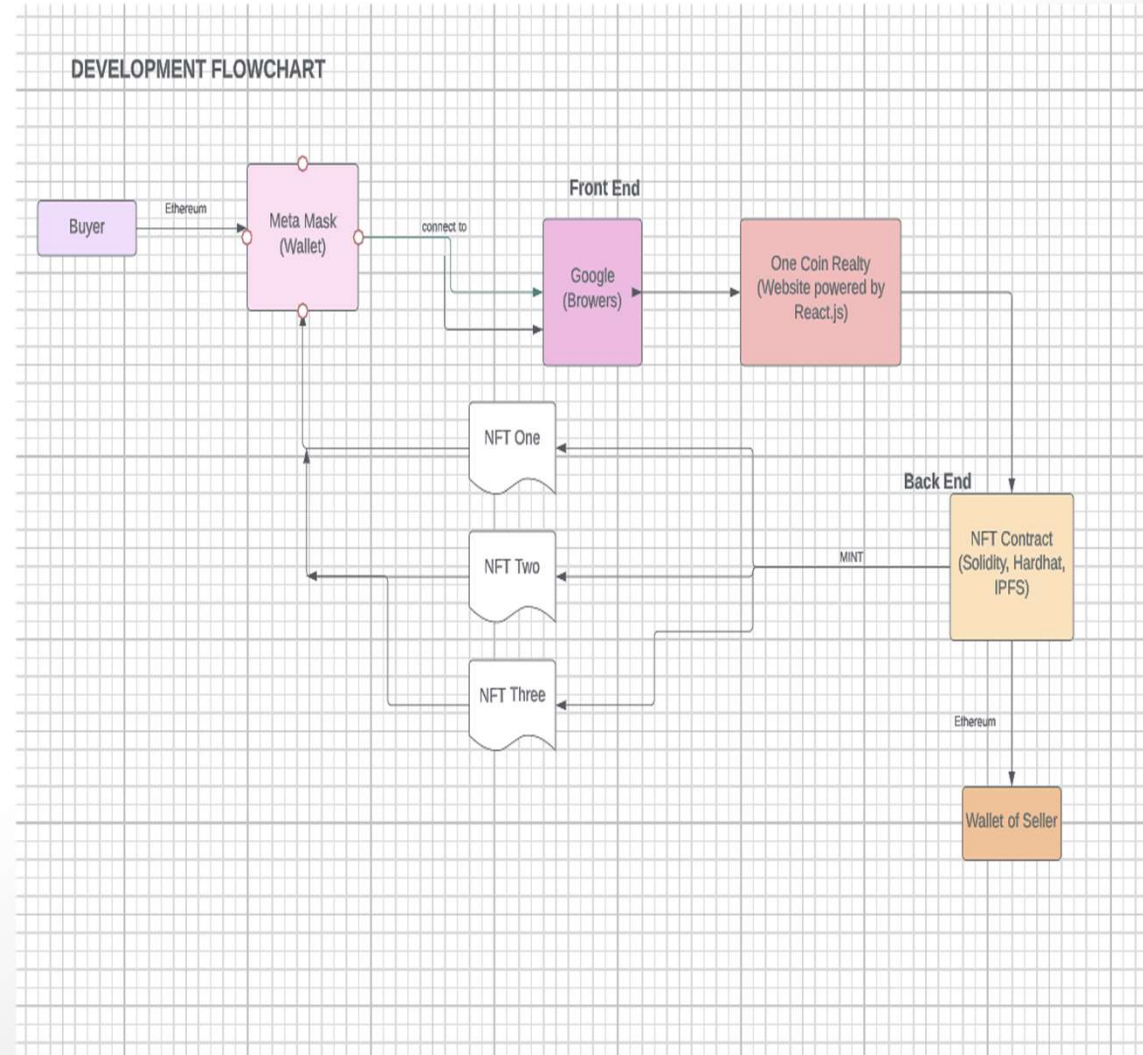
Escrow

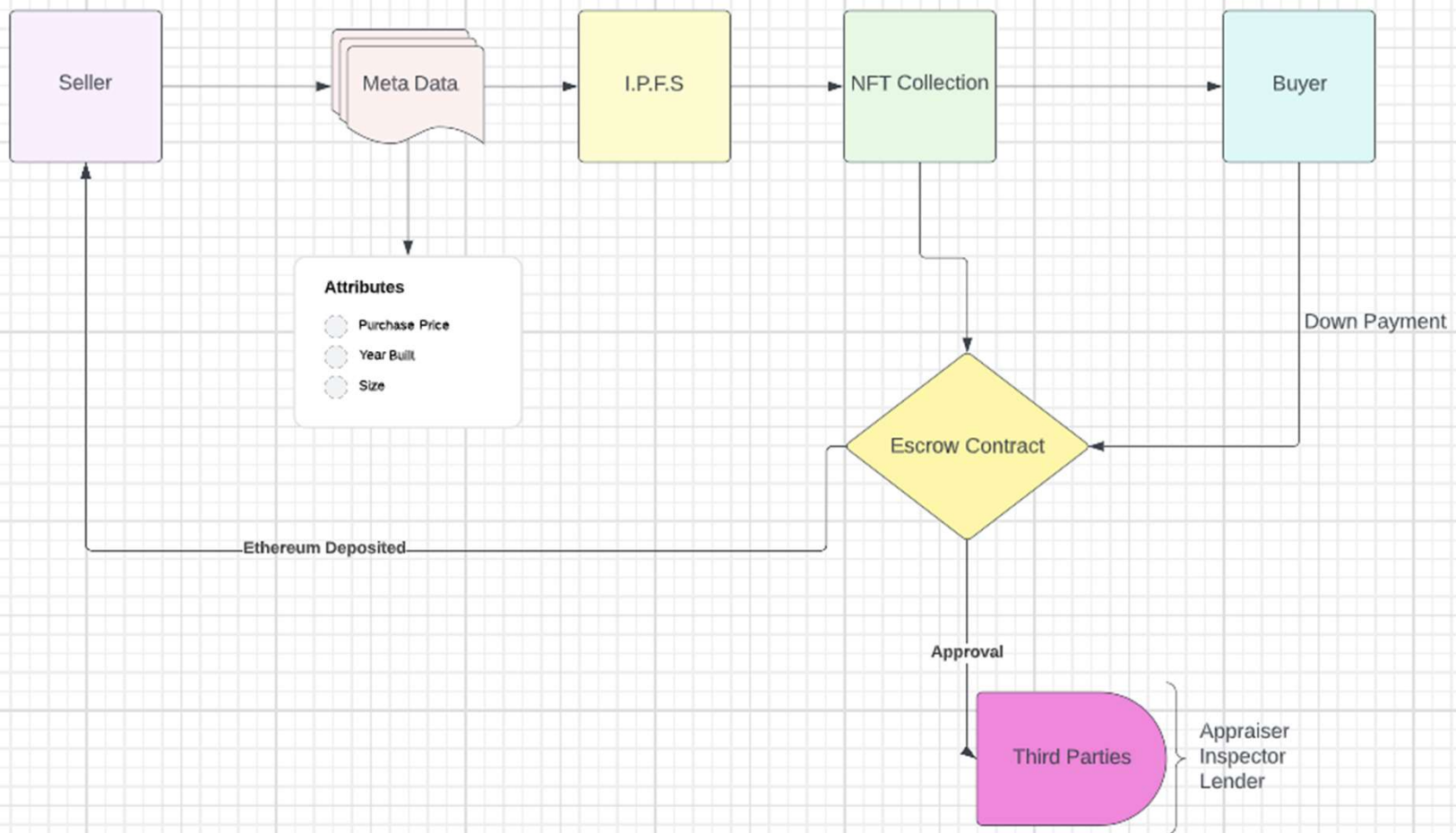


Approval from All Parties



Transferring Asset using Decentralized wallet





Our Smart Contracts ...a closer look

From Solidity, Open Zeppelin, Hardhat, Node JS to Ether JS, we used all applications at our disposal to connect our Contracts to React JS

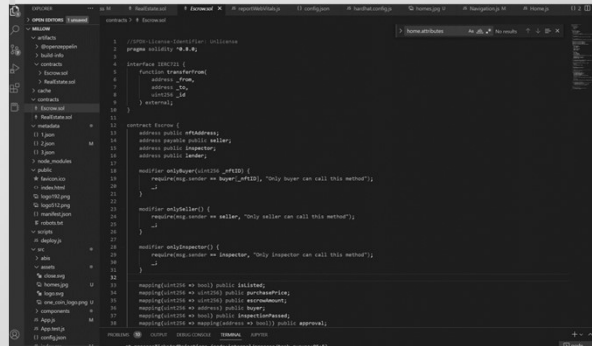


RealEstate.Sol

RealEstate.sol is our smart contract for our real estate NFT. Open Zeppelin libraries were imported and used to help create our NFT's. We used this smart contract to Mint from scratch.

Escrow.Sol

This Smart contract allows our sellers to list their properties, and allows buyers to put a down payment. The next step is approval from all of the interested parties – Lenders, appraisers etc... Once approved by all parties in the contract – the assets are then transferred



UX

(User Experience)

The most important aspect was the simplicity from a user's standpoint. All our customers need is Decentralized wallet, appropriate crypto or "ETH". This process is as simple as clicking you desired property.

Programs and Dependencies

For our App

From median neighbourhood real estate pricing to crime rate data collection, multiple factors were considered and investigated



Solidity

We used Solidity to create our Smart Contracts to govern the property, as well as facilitating the purchase with regards to sellers, inspectors, lenders, buyer ect....



IPFS

IPFS is a Protocol and file sharing peer to peer network for storing and sharing the data in a decentralized way. IPFS was used to store metadata and images.



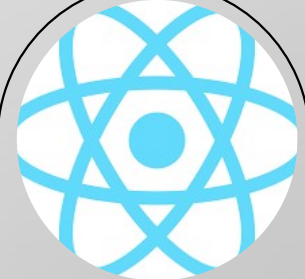
HardHat

Smart contract development framework. Our Ethereum sandbox that allows us to deploy our smart contracts and transfer "ETH" in a simulation environment,



MetaMask

Decentralized wallet for transfer of NFT and "ETH". Connecting to local HardHat Framework, so no real-world consequences.



React JS user interface

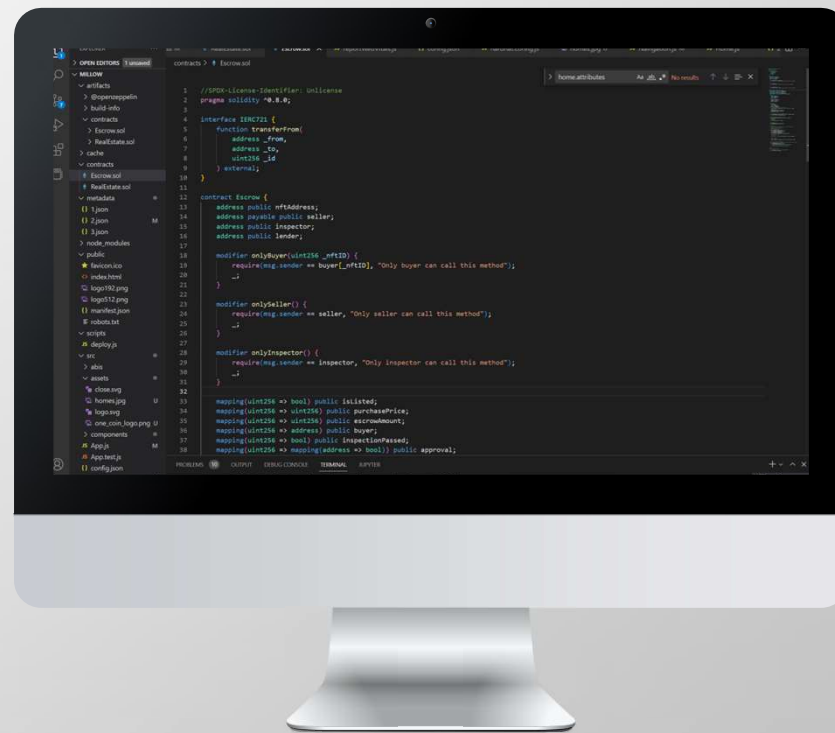
React JS was implemented to code our website and connect the Smart contracts and NFT so users can buy and sell properties all in one place. Ethers JS in Hardhat talks to React in JS

One-Coin Reality Demo

**Buy your
next home**

With just one click

Watch how easy it is to buy your next dream
home! Please enjoy this demo



Our Challenges and Our Break-thrus

If you use this site regularly the great business and would like to the best design professional help keep the site on the Internet.



Challenges

- Learning the Javascript and Hardhat languages
- Connecting the front-end to the back end
- Creating and Using IPFS program



Break-Throughs

- Connecting all applications and programs, and having all the scripts interacting
- Metamask – seeing the approvals and the app working for the first time was a major break thru for our team



What we could do with more time!

- Building a Tokenized Model for Rental Property and earning a Rental Income from Properties Integrating a Tax calculation tool into the website

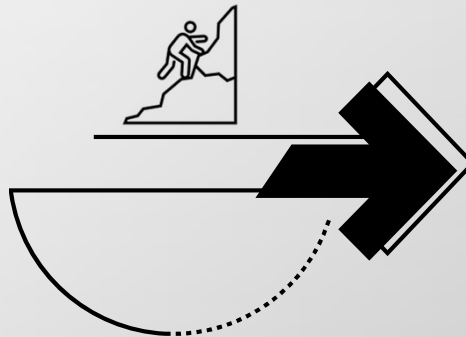
Advantages

Main Benefit:

Digital transactions are often susceptible to cyber fraud. By using blockchain and NFT technology, you can achieve higher levels of security and data integrity. This protects both buyers and sellers and makes it much easier to transfer assets without any problems.

How this is done:

Buyers can borrow against the NFT using decentralized finance (Defi) or traditional finance (tradFi) products on the blockchain, skipping the arduous due diligence required by most big banks taking out a mortgage



Benefits for Buyers:

Buyers are able to carry out significantly faster transactions, greatly reducing delay and uncertainty-related costs.

Benefits for Sellers:

Sellers are able to greatly increase business volume with faster transactions

Benefits for the Industry

Overall transfer of buying power from big corporations to individual buyers and sellers



NFTs in the Traditional Real Estate Industry

- In February 2022, the average cost of land was \$16,300; by June 2022, it had dropped to \$3,300, a decline of almost 80%.
- The top ten virtual world platforms have sold land worth \$1.9 billion.
- \$5 million was the highest Metaverse land sale price, and it took place in the little-known virtual environment TCG World.
- The 10 largest metaverses have 622,436 total land parcels.
- What does the Future Hold?
- Virtual real estate is estimated to reach \$1 billion at the end of 2022. BrandEssence Market Research is expecting the metaverse real estate market to grow at a compound annual rate of 31% from 2022 to 2028
- As the world is transitioning into a digital reality, it will not be surprising to see real estate auctioned directly inside trading platforms providers such as eToro and Saxo Bank.



Our takeaways and predictions

The future of real estate and Web 3.0 applications

Blockchain technology in the form of Web 3.0 will change the landscape of how people transfer partial or full ownership!

The future is liquid

Leveraging the technology will promote higher liquidity

01

Tokenization and fractional ownership

Tokenization will encourage partial investments/ownerships in real estate properties. More investors, lower barrier to market entry – until further regulations for definitions on accredited investors

02

New Industries overnight

New NFT minting, web development, and smart contract blockchain professional jobs will flood the market. In turn, antiquated, “friction” driven intermediators will have to change their skills to keep up with the oncoming wave.

03

Question Period