ASSIGNMENT #5

CSBC1020 – Blockchain Applications for Industry

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1. How many properties have been tokenized by RealT? How do you know?

RealT offers range from large apartments in popular areas to affordable single family homes with high rental prices. Each property is refurbished and renewed, utilities verified and taxes sorted. Then it is rented to the appropriate tenant.

On their 1-year completion, RealT had 7 different properties tokenized in ERC20 tokens.

According to the updated RealT dashboard map (https://dashboard.realt.community/map), the approximate total number of properties that have been tokenized is somewhere around ~150 properties in various cities in the states of Ohio, Miami, Michigan, and Florida.

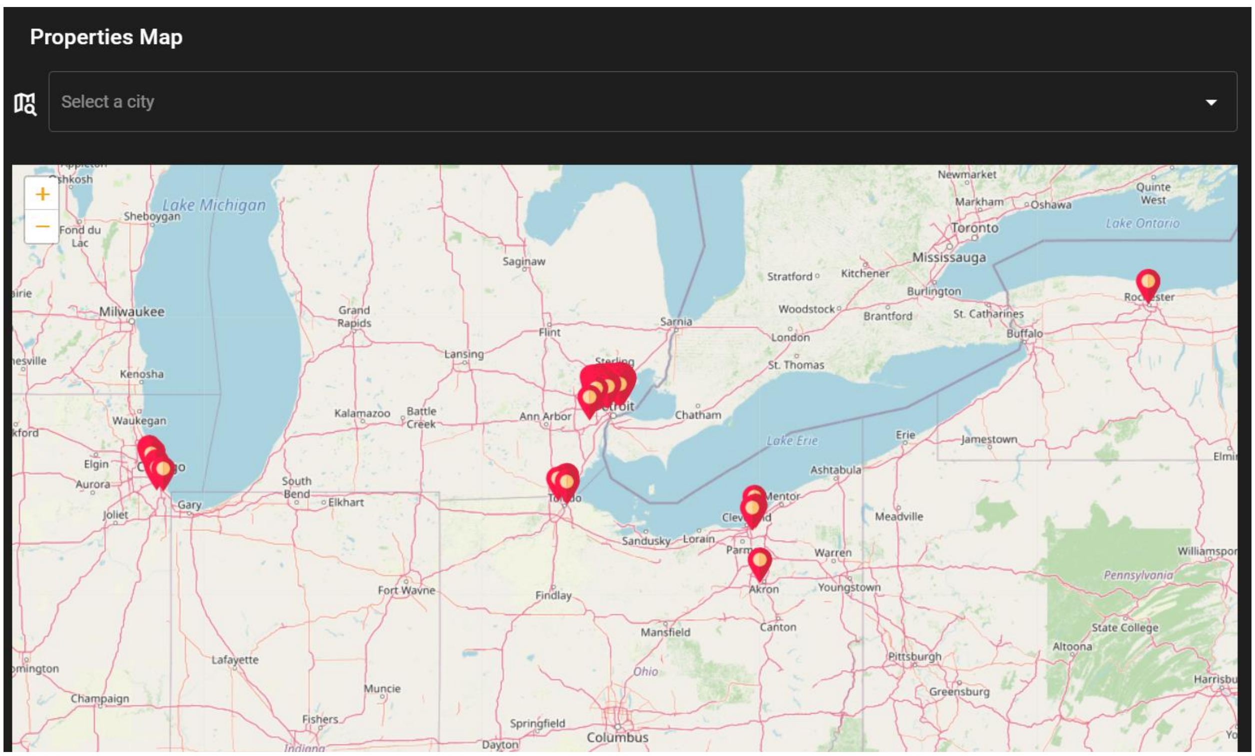

Figure: Screenshot of updated tokenized property map found at [RealT Community Dashboard Map](https://dashboard.realt.community/map).

2. If you have bought some RealT tokens on Uniswap, how do you know if those tokens are not a scam and your ownership of the underlying property is truly recognized by the US laws?

- The RealT network is deployed on the Ethereum public blockchain which is accessible to anyone. Decentralized exchanges such as Uniswap, IDEX can be utilized to acquire RealT tokens. If a RealT token is acquired through these exchanges, doubts may arise that these tokens could be unoriginal/scam as it is unconventional for real estate to be available as a digitalized token and there are extensive regulations around any legal asset.
- ***Tokenizing property under legal regulations:***

  To legally tokenize a property in RealT framework, RealToken LLC has been established in the US. This certificate allows unlimited segregation of membership interests, assets, and operations into independent series, where each series is treated as a separate entity. Each Series will purchase and own one discrete real estate asset. Distributed by RealTokens, its ownership gives an investor the ownership and specified governing rights over the Series, in turn giving real ownership over the discrete property.

  The digital tokens (RealTokens) each have a Unique Identification Number (UIN), that can be found on the block metadata on the Ethereum blockchain, and the Certificate of Formation of RealToken LLC. The legal documents (deeds) showing who owns the property, is also acquired by a Series. The Series is listed as the recorded owner of the property. Additionally, an affidavit will be filed stating the listed Series, with membership interest split into equal units, each with distinct UIN. The affidavit is a redundant mechanism linking the ownership of the deed to the membership interests of the Series. RealT also implements Know Your Customer(KYC) and Anti Money Laundering(AML) solutions to improve transparency.

  RealT system set certain targets to be fulfilled by each RealToken; to be recognized as a legal and traditional real estate asset. The characteristics a RealToken has to follow are:

  1. To enable legally-recognized ownership of a discrete real property asset, not an IOU of ownership.
  2. To be freely transferable to anyone, as any real estate property. Subject to applicable securities law transfer restrictions.
  3. To give token holders rights to all cash flows generated by the real property held by the Series
  4. To enable all rights and activities associated with traditional ownership, i.e. the right to access the property in question.

These mechanisms determine if any RealToken bought on exchanges like Uniswap are scams or legitimate assets. A RealToken must meet the conditions stated above, along with being vetted and linked to a Series, with UINs and relevant affidavits verified. We can confidently say that if the RealToken follows these protocols, it can be sufficient proof that the token is legitimate and it is recognized by US laws.

3. After graduating from university and finding a job, your friend Peter wants to save for the downpayment of a townhouse ($500,000) in Toronto. It will take him five years to save enough for the downpayment ($100,000). Would you recommend Peter to invest his saving in tokenized Toronto residential properties during these five years? Why or why not? Please discuss both the pros and cons of this recommendation.

- The advancement of humankind is interconnected with the growth and development of real estate industry. The value of real estate properties is continually peaking, and there is a severe imbalance in supply-demand of high-value properties. Along with this steep rise in value, it is simultaneously making it implausible for majority of investors to make meaningful investments in this industry.

  To simplify, investment in scaled up platforms like Real Estate requires outrageous amounts of capital these days. However, blockchain technology offers a powerful alternative to this outcome. The potential to digitize any real world asset will enable new mechanisms for controlling access to real estate previously unavailable to the average person.

Case: *Recommendation for investing in Tokenized Real Estate*

The case states that Peter will need at least 5 years of stable savings to just pay the down payment of the real estate asset. According to this calculation, it would take 25 years to pay off the whole property. That is a relatively long time for any return on investments. If Peter wants better but much more marginalized returns on his investments, he should certainly consider investing in tokenized real estate. It will enable Peter to possess fractional ownership of a property, and like the name suggests, it would cost a fraction of what he is hoping to invest. This means he can invest in multiple properties to maximize his returns.
There are a lot of unique advantages of tokenized assets that Peter could enjoy. Such as:

-**Liquidity through tokenization**: Tokenization will improve the levels of liquidity concerning real estate. Permissionless global access, asset fractionalization, instant settlement, and P2P transactions all play roles in benefiting the liquidity of assets. This unshackles the restriction of access to the real estate.

- **Transactability**: Digital Tokens that are exchanged on permissionless peer-to-peer networks with instant-settling provides a robust solution to the slow and tasking exchange process of real estate properties. It would reduce the 30-day avg exchange period to minutes'/seconds average.

-Access to Public Markets: The benefits of being deployed on public permissionless blockchain networks also include global access to markets. This broadens the investor pool and diversifies the types of investments made.

-**Access to Public Securities Markets:** Since these digitalized asset tokens are virtual manifestations of traditional limited liability company membership interests which, might be expected to appreciate in value. Such tokens are designed to have securities laws to represent the regulatory interests of relevant countries, subsequently legalizing the tokens in conventional terms.

-**Fractionalization**: Lastly, tokenized real estate allows fractional ownership of one property. This enables democratization of investment types. Average investors (Like Peter in this case) can allocate their capital into investments previously unattainable to them. This has powerful implications when it comes to adding liquidity to previously illiquid assets.

-**Low barrier-to-entry:** The high priced real estates are the single largest barrier-to-entry for the average investor. Unless the investor is able to pay for the property outright, these big investments only don't make financial sense. In tokenized assets, this issue is nonexistent as fractionalization is utilized to massively reduce the price of tokens. So they can invest without loans/additional financing.

Cons:

There are always potential risk factors involved in any sort of investment. Especially with cryptocurrencies, as the volatility of value comes into play. However, stablecoin cryptocurrencies offer much more safety for these asset tokenization networks.

-A few of the risks include operational, regulatory, market-based and technological challenges.

-As it all resides on one public chain, none of the transactions can be hidden.

-Market prices fluctuating might also impact the token prices heavily. The central government regulations aren't constant and changes might be difficult to engrain in the digital-token protocols.

-Besides all this, since the blockchain technology isn't yet widely accepted, any shortcomings of the system (if any) might affect the tokenization platformance.

To summarize, Real estate tokens are meant to be sound investments, but prospective buyers and investors should always understand that there is a possibility of losing their investments in such a nascent incentive.

References:

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