

ERC-20 Collateral Loan Service

: NFT Bond & One-to-one Transaction

ERC0-20 Token & Token Collateral Loan Service

ERC-20 Protocol

- Conventions that must be followed to prevent malicious use and enable fair use
 - Existence of essential functions that must be implemented, such as BalanceOf, Transfer
-

ERC-20 Tokens

- Cryptocurrency created for the smooth use of services operating on the Ethereum network

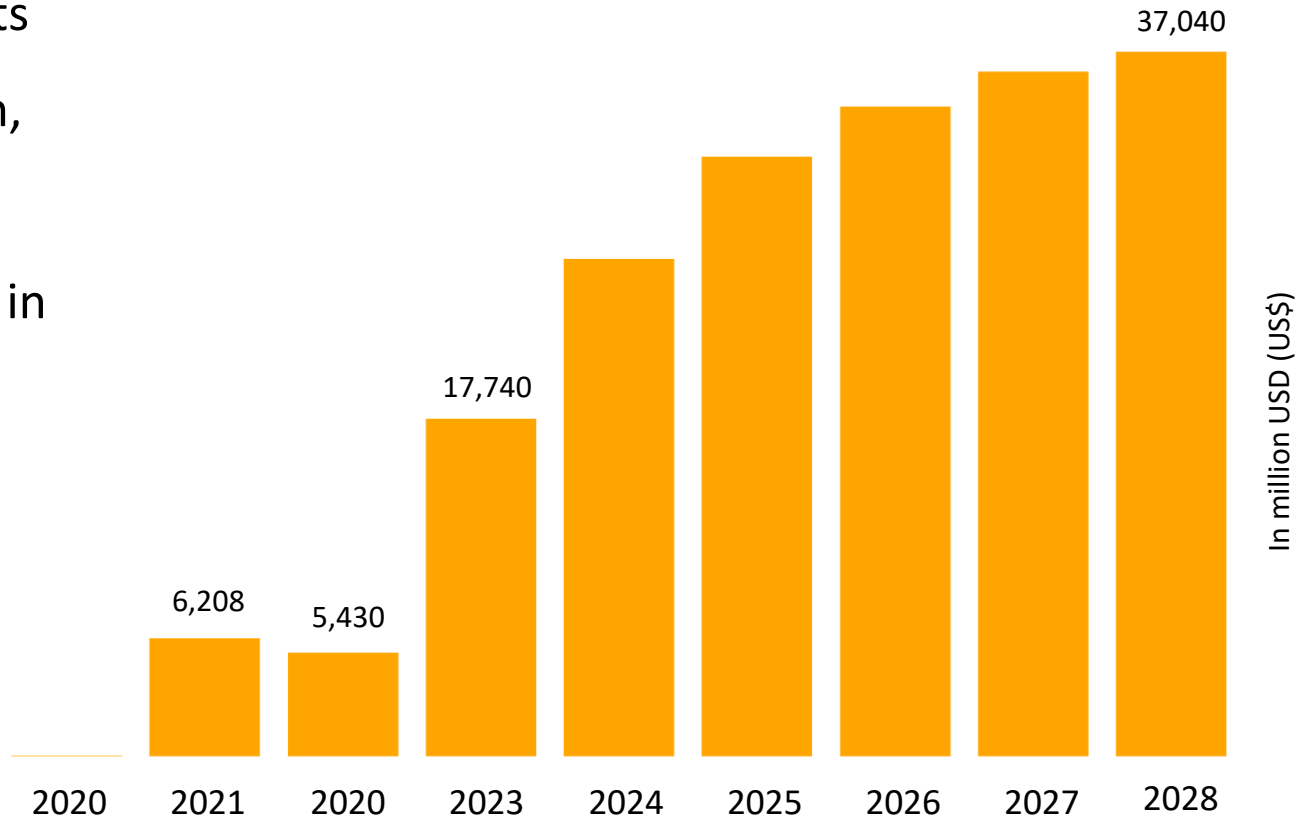


Token Collateral Loan Service

- Traditional loan services → Difficulty in evaluating individual creditworthiness due to decentralization
- Lending an amount of B tokens equivalent to, for example, 70% of the market price of A tokens, using A tokens as collateral

Market Size

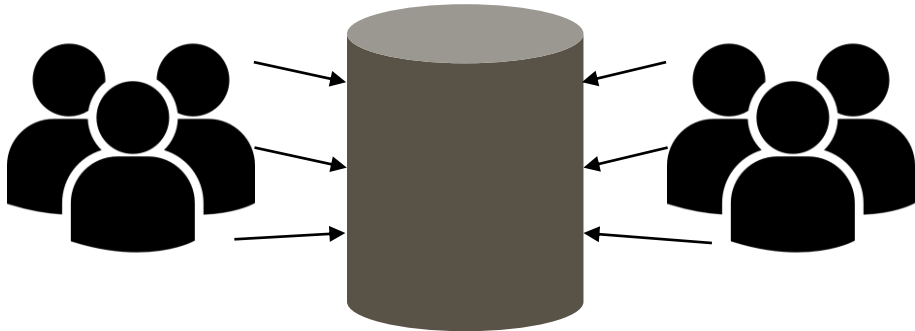
Decentralized finance (DeFi) markets are experiencing significant growth, driven by innovative blockchain technology and increasing interest in alternative financial solutions.



What's Different?

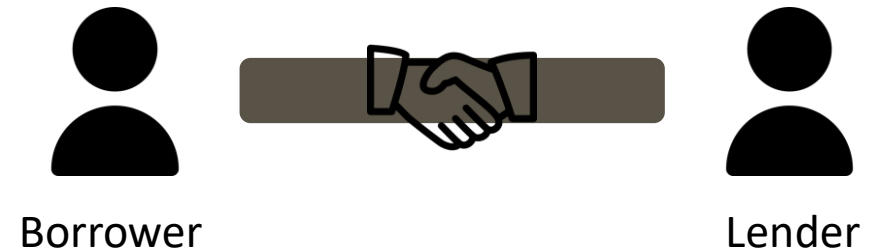
Conventional

- Pool-Based
- Some **Restrictions** on assets available within the service
- Deposit and loan interest rates according to the service algorithm
- Risk management through notification of the risk of liquidation of loan assets and implementation of liquidation



Ground-Breaking

- One-to-one Transaction Method
- Setting of loanable assets, loan interest rate, and period according to the **agreement** between the parties to the transaction
- Creation of Bond for the Lender upon loan execution



How Different?

- To **inevitably** conform to the loan conditions
- The **inconvenience** of individuals having to track assets that serve as collateral
- Some **Difficulties** in obtaining a loan for low liquidity assets

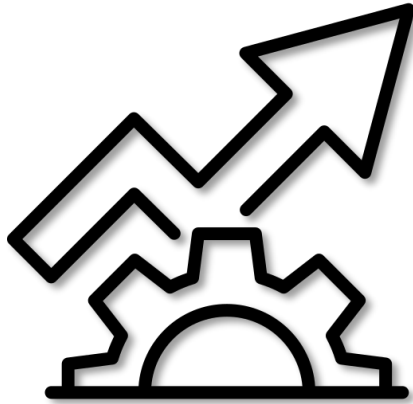


How Different?

- The **one-to-one** transaction that users are familiar with
- Users can set the desired loan conditions within appropriate criteria
- Minting **NFTs** as bonds

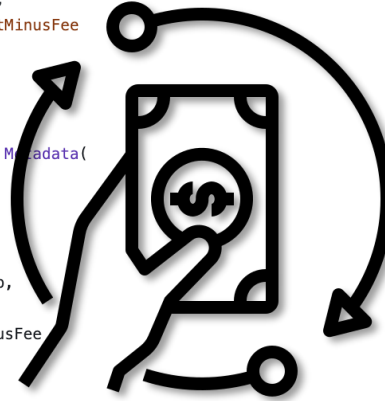


Achievements

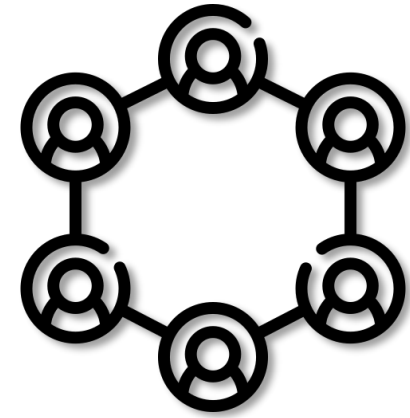


**Improving the accessibility
of the cryptocurrency
loan market**

```
function setMetadataAndmappingNFTWithMetadata(  
    uint256 _tokenId,  
    uint256 _proposalId,  
    address _borrower,  
    uint256 _amount,  
    uint256 _dueDate,  
    uint256 _contractTimestamp,  
    uint256 _interestRate,  
    uint256 _paybackAmountMinusFee  
)  
{  
    public  
    // add new mapping  
    mappedNFT[_tokenId] = Metadata(  
        _proposalId,  
        _borrower,  
        _amount,  
        _dueDate,  
        _contractTimestamp,  
        _interestRate,  
        _paybackAmountMinusFee  
    );  
}
```

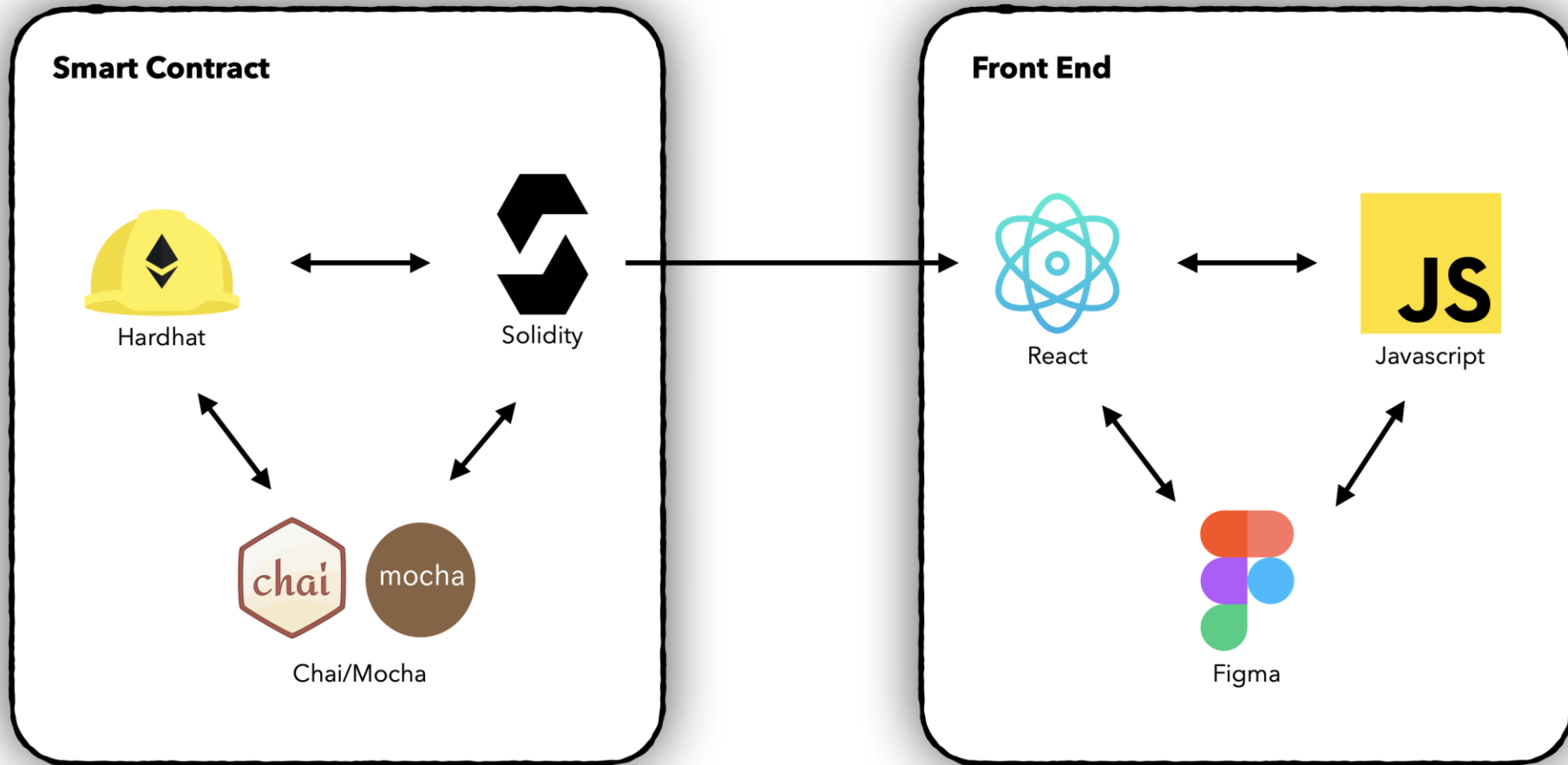


**Increasing Asset Liquidity
through Bonds**

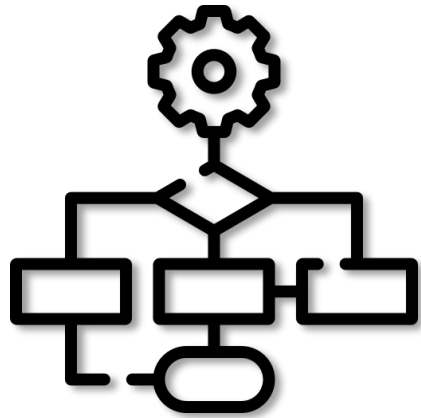


**Enhanced
Decentralization**

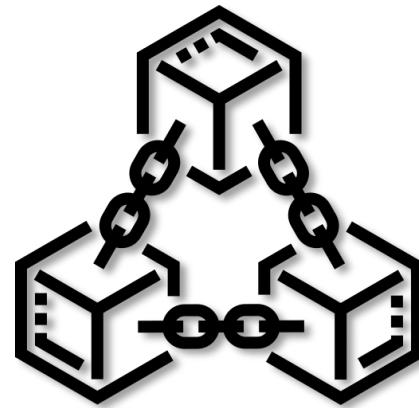
Technologies Used



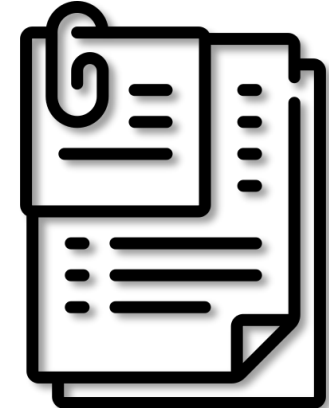
Development Process



**Model
Analysis & Design**



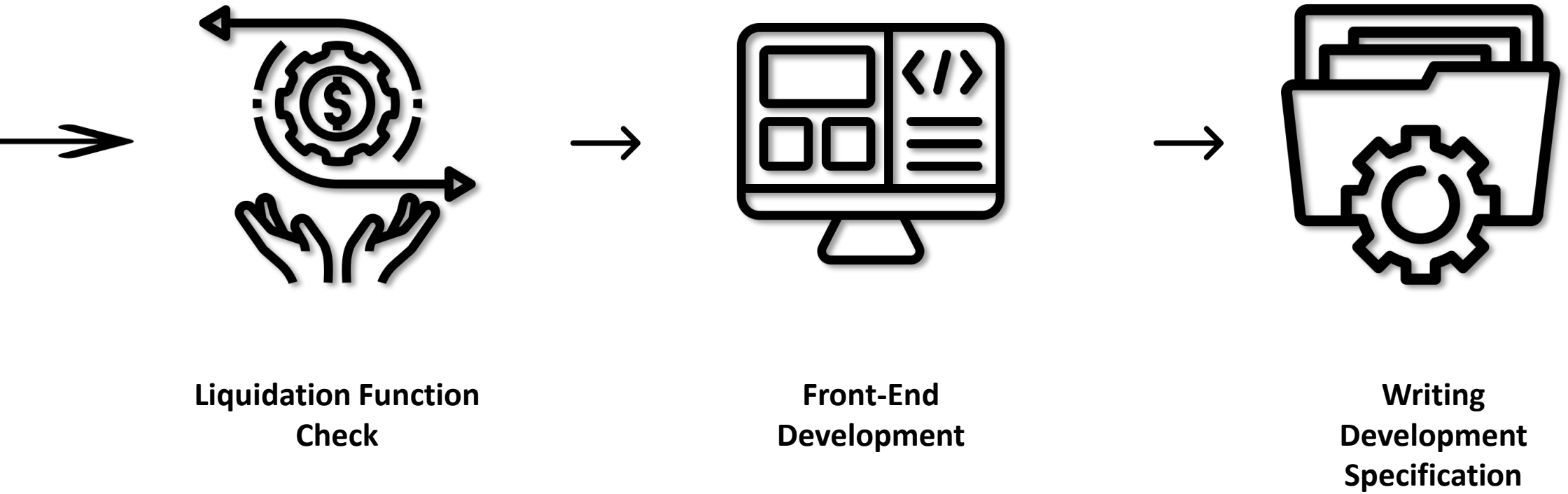
**Smart Contract
Development**



**Writing
Testing Codes**



Development Process

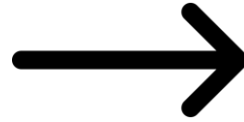


Scenario

Lender



User wishes to **diversify** the form of
asset holdings and **positions**



Lend Proposal



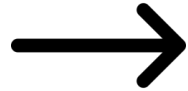
Propose a loan with the **conditions**
you **want** in the service

Scenario

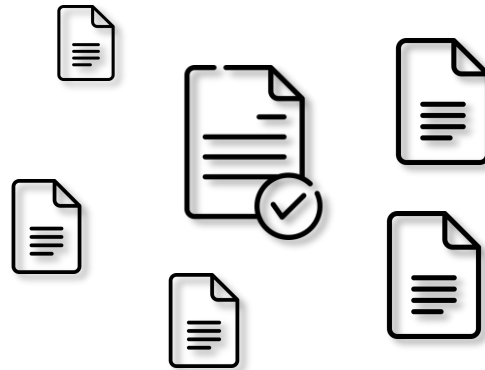
Borrower



User who wants to
lend assets



Lend Proposal List



Select from the loan **proposals**
posted on the service



Lend & Borrow



Loan Execution

Scenario

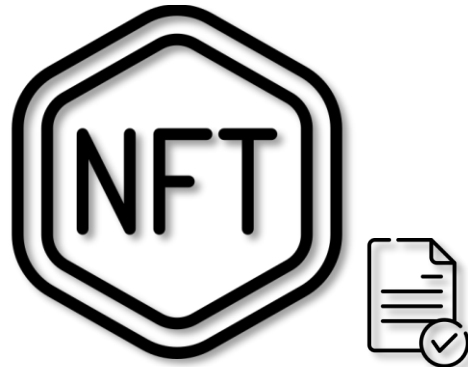
Lend & Borrow



Based on
loan contract details



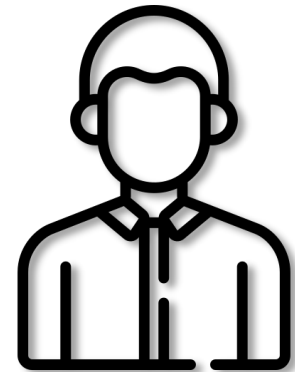
Minting NFT



Issue **bonds** in the form of **NFT**



Complete



Give to **Lender**