

DeFi Bank - Project Outline

Why DeFi

Intro to DeFi in Action

Our model: the Scalable DeFi Bank (SDB)

SDB implementation Structure

The SDB in action - a live demo and walkthrough

Discussion, Thoughts, and What's Next

Why DeFi? - 1

Pros:

 Blockchain based - no dependence on central financial intermediaries (brokerages, exchanges, or banks) - efficiency and cost advantages

Smart contracts on blockchain (Typically Ethereum could be others as well) access to the masses, banking the unbankable

 Enables lending and/or borrowing funds, speculate on derivatives, trade crypto currencies, insure against risk, earn interest, etc.

Why DeFi? - 2

Cons:

Volatility, difficulty in uptake by the mainstream, etc.

Stats:

 From 2020 (Oct US\$ 11 billion) to 2021 (Jan US\$ 20.5 billion) there was a phenomenal growth in deposited assets in DeFi protocols.

 Seems the growth is only accelerating. DeFi Pulse estimates US\$ 100 billion is currently locked up in DeFi protocols like: AAVE, MAKER, UNISWAP, and many more.

Intro to DeFi in Action

- Digital wallets
- Decentralized Exchanges
- Ethereum Protocol
- Smart Contracts









Our model: the Scalable DeFi Bank (SDB) - 1



- 1. Based on *Ethereum* Blockchain
- 2. Easy to debug and error tracking: **Solidity, Remix**, and **Ganache**
- 3. Easy to Implement: **Remix** and **Ganache**
- 4. Easy to verify states and transactions: **Remix**, and **Ganache**













- 1. Robust and Simple Functionality
 - Implement certain limitations to ensure Robustness and Function
- 2. Extensible
 - Easy to implement a token (mint) to mediate interest + various others
- 3. Supports any number of accounts









SDB implementation Structure









Testing **fastForward**

Double deposits prohibited.

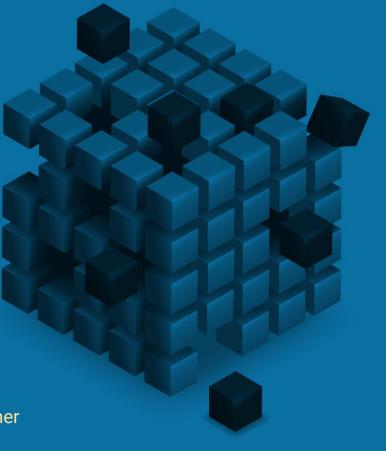
The SDB in Action - a Live Demo and Walkthrough

Steps Taken:

- 1. Deploy contract with first contract in ganache
- 2. Supply Ether to contract from deployer address for interest collateral
- 3. Use separate account to make a deposit into contract
- 4. Fast forward time by 300 days
- 5. Show change in balance and times
- 6. Withdraw deposit with interest

Discussion, Thoughts, and What's Next...

- Incorporate loan feature (was in production)
- Make multiple deposits
- Have different account tiers
- Ability to deposit different tokens
- Interest rewarded in native token instead of ether



References

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