
A decentralised loaning system

— Team SideChannelAttack —

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What end-users care about



Why decentralised loans?

- Decentralisation wins on the collateral, capital, capacity and conditions front - provides more flexibility in these regards
- Removes the need of a middle man - no commission is eaten up
- More flexibility in providing loan interest rates - lenders can choose the interest rate they are comfortable with, leading to more choice for borrowers as well - a win-for-all system
- Increased amount of security, especially wrt national economies
- Anonymity is maintained while borrowing and lending

What does our current prototype achieve?

- Our current prototype is a basic model which consists of an entity that keeps track of how much money is in the system, and thus takes deposits and provides loans accordingly
- Users buy in using Ether, getting some of our **SGP tokens** - fully ERC-20 compliant! Token is regulated to maintain a value of approximately 1 USD
- Incentives for various parties: Lenders - They get some fixed interest rate on their deposit, incentivizing them to keep invested. Borrowers - They get liquid funds in return for collateral of SGP tokens.
- The amount of collateral that is required increases/reduces depending on the **credit score** of the borrower - a function of transactions completed and the amount of money held in the account

Functions and their uses

- Add_user : adds a new user to the system, assuming initial investment
- Get_balance : gets the current money in the system, and the loan amount pending to give to the system
- Add_money : an existing user can add money to their account. Any money that is added will earn an interest rate from thus on
- Remove_money : an existing user can remove money from their account. This withdraws the user's money from the system
- Borrow_money : an existing user can borrow money, by providing a collateral.
- Return_money : an existing user can return money (the borrow interest rate is high, so this is incentivized)

Future Work

- To make it even less centralised by connecting lenders directly with borrowers, on the lowest rate agreed upon
- To write a minting function, conforming to the **ERC-720** standard

Thank you!



Image from
<https://www.dreamstime.com/writing-note-showing-decentralization-key-business-photo-s-howcasing-block-chain-cryptocurrency-future-finances-folded-d-image133297405>