

Decentralized lending In Ethereum

By Edson Alcala



Course content

You will learn:

- How decentralized lending platforms work
- Main mechanisms and design considerations
- Architecture of a decentralized lending platform
- How to create a decentralized lending platform in Ethereum



Pre requisites

You will need

- Introduction to smart contracts course
- Introduction to tokens course

Decentralized lending

A quick introduction to decentralized lending in Ethereum

What is Decentralized lending?



What is lending?

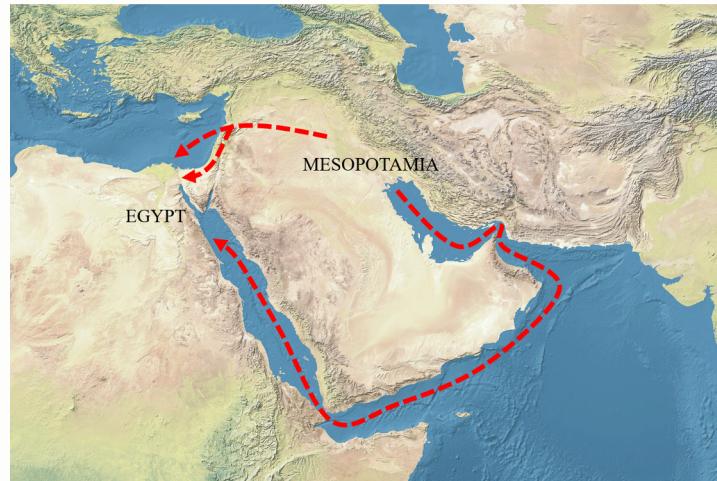
A person or organization gives you something,
like money, with the promise that you will pay back
at a **future date + interests**



Lending in ancient history

The first loan system existed ~4000 years ago
in Mesopotamia

The code of Hammurabi defined prices and interests
on silver loans



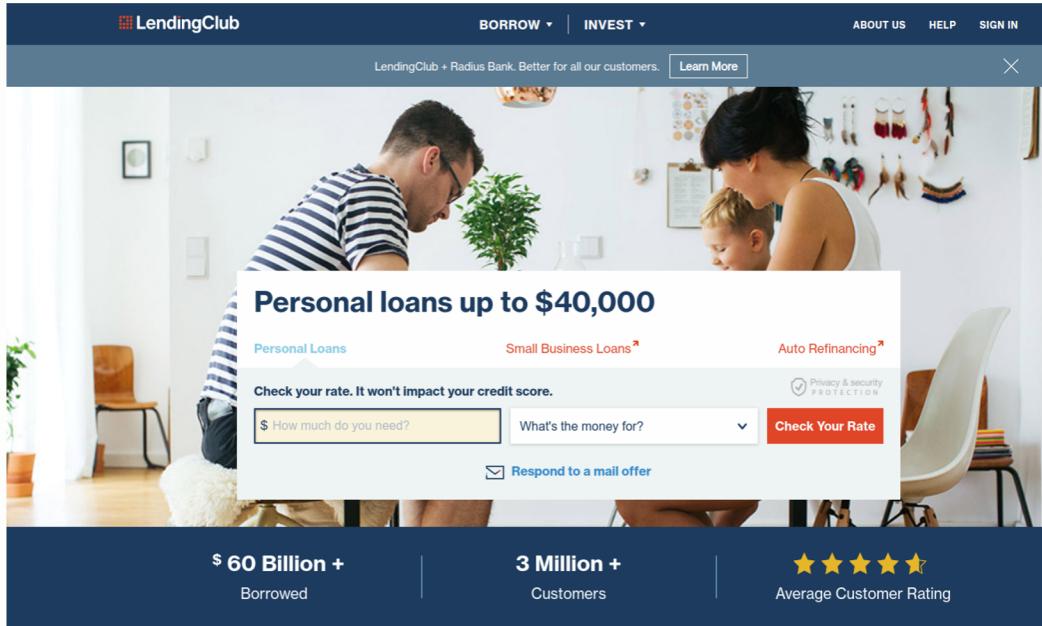
Traditional lending: Banks



Traditional lending: Banks



The internet era of lending: P2P



The screenshot shows the LendingClub website homepage. At the top, there's a dark blue header with the LendingClub logo, navigation links for 'BORROW' and 'INVEST', and links for 'ABOUT US', 'HELP', and 'SIGN IN'. A banner at the top of the main content area reads 'LendingClub + Radius Bank. Better for all our customers.' with a 'Learn More' button. Below this is a large photograph of a man, a woman, and a child in a home setting, looking at a laptop. Overlaid on this image is a white call-to-action box containing the text 'Personal loans up to \$40,000'. Inside this box are three categories: 'Personal Loans', 'Small Business Loans', and 'Auto Refinancing'. Below these categories is a section titled 'Check your rate. It won't impact your credit score.' with input fields for 'How much do you need?' and 'What's the money for?'. There's also a 'Check Your Rate' button and a link to 'Privacy & security PROTECTION'. At the bottom of the main content area, there's a dark blue footer bar with three pieces of information: '\$ 60 Billion + Borrowed', '3 Million + Customers', and 'Average Customer Rating' with a five-star icon.

How LendingClub works

Traditional or P2P = Centralized

Traditional or P2P = Centralized

- KYC

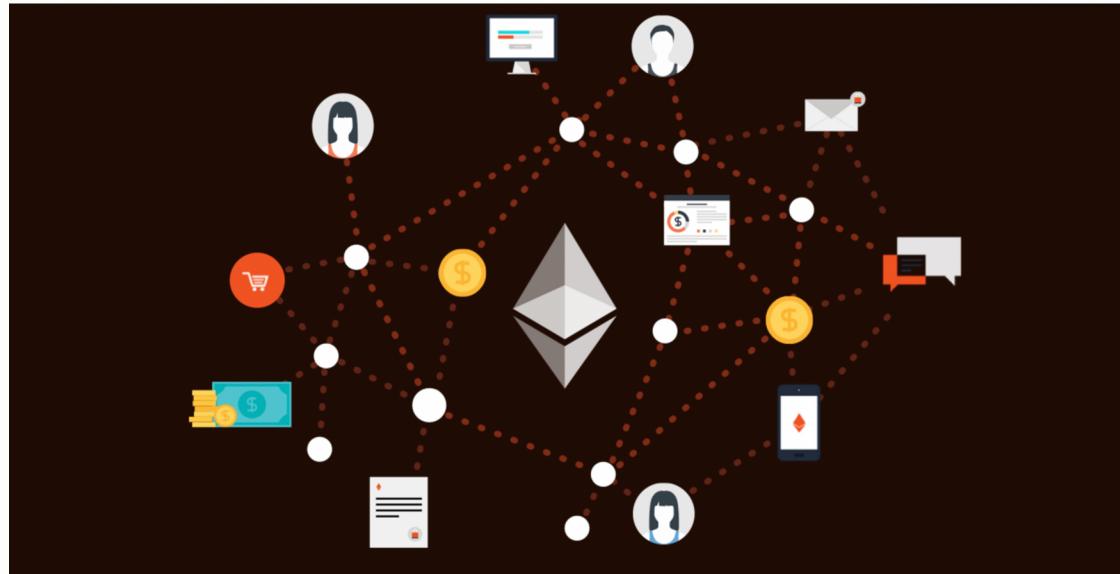
Traditional or P2P = Centralized

- KYC
- **Geographically limited**

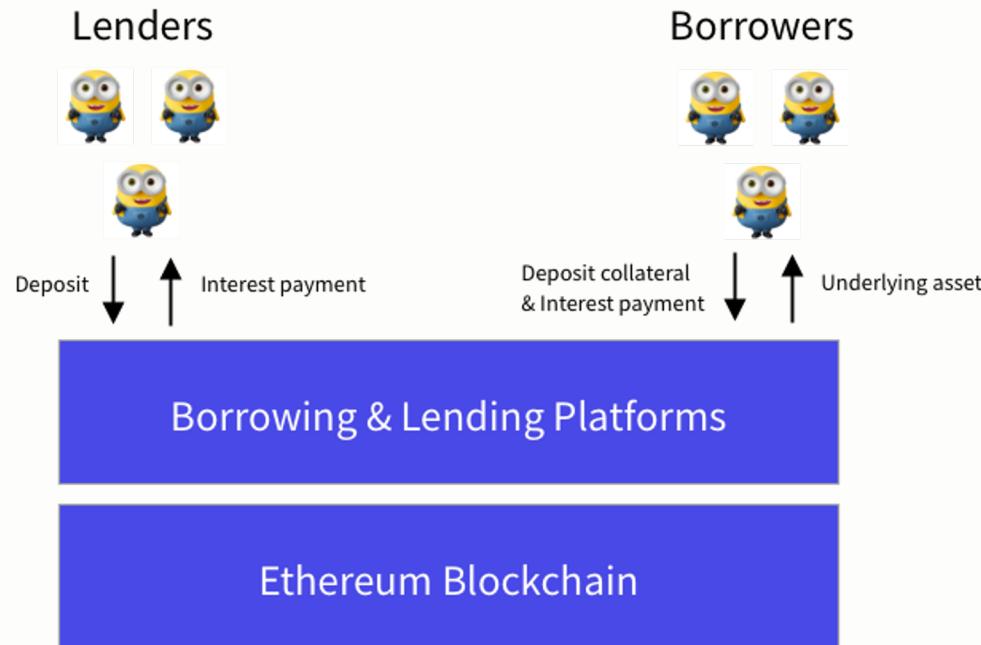
Traditional or P2P = Centralized

- KYC
- Geographically limited
- **A person or institution has to approve the loan**

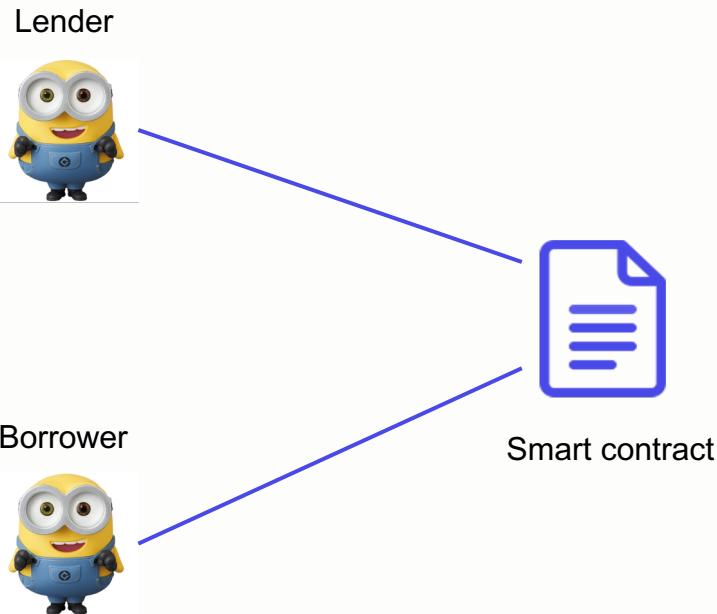
The time for decentralization



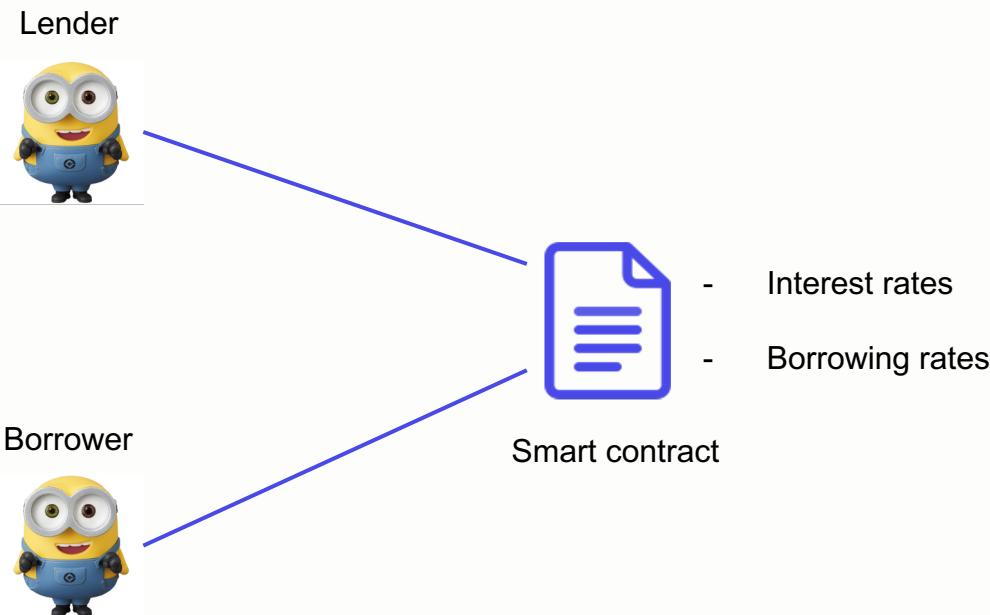
The time for decentralization



The time for decentralization



The time for decentralization



What is Decentralized lending?



What is Decentralized lending?

The activity where every person around the world can get a loan against their crypto assets without having to be approved by any central authority.

How it works?

I have 100 ETH

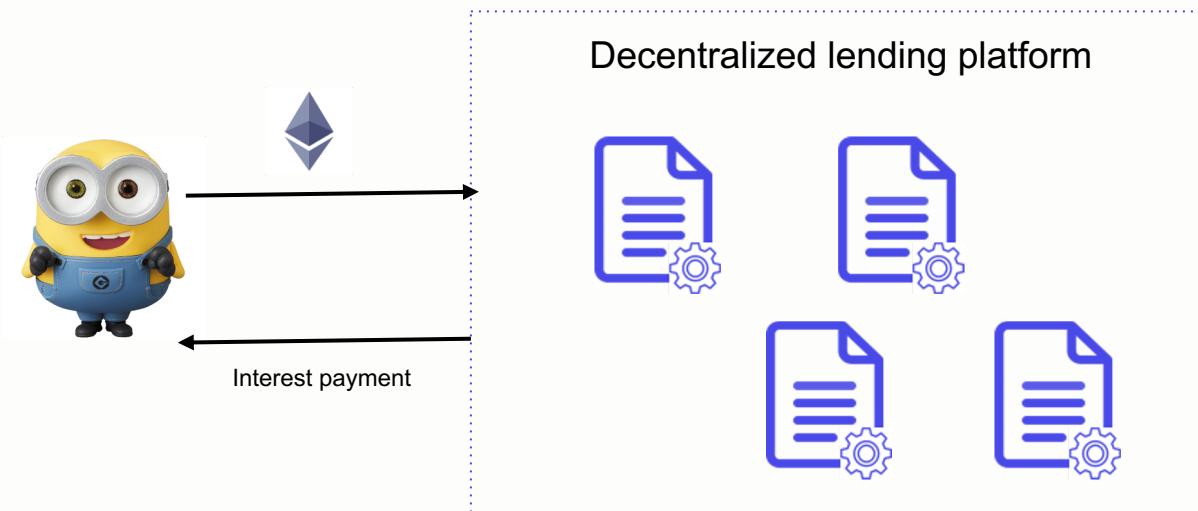


How it works?

But my ETH is not doing anything,
I'm just holding it, how can I put it
to work?



How it works?



How it works?

I have 100 ETH

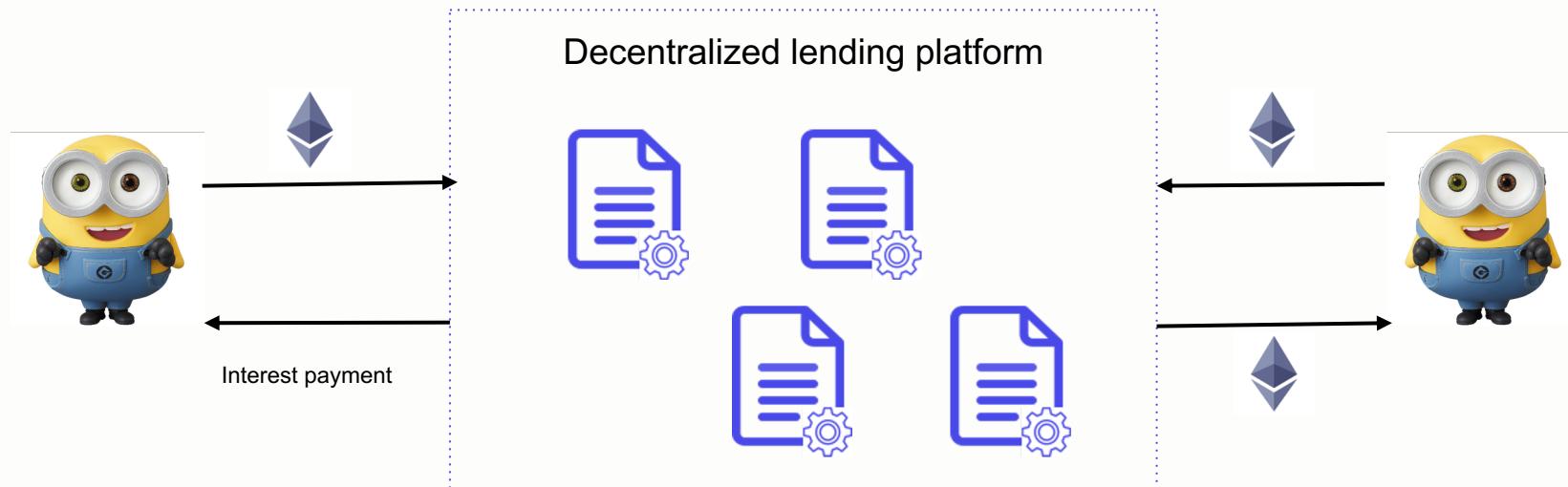


How it works?

I need money but I don't
want to get rid of my
Ether



How it works?



How it works?



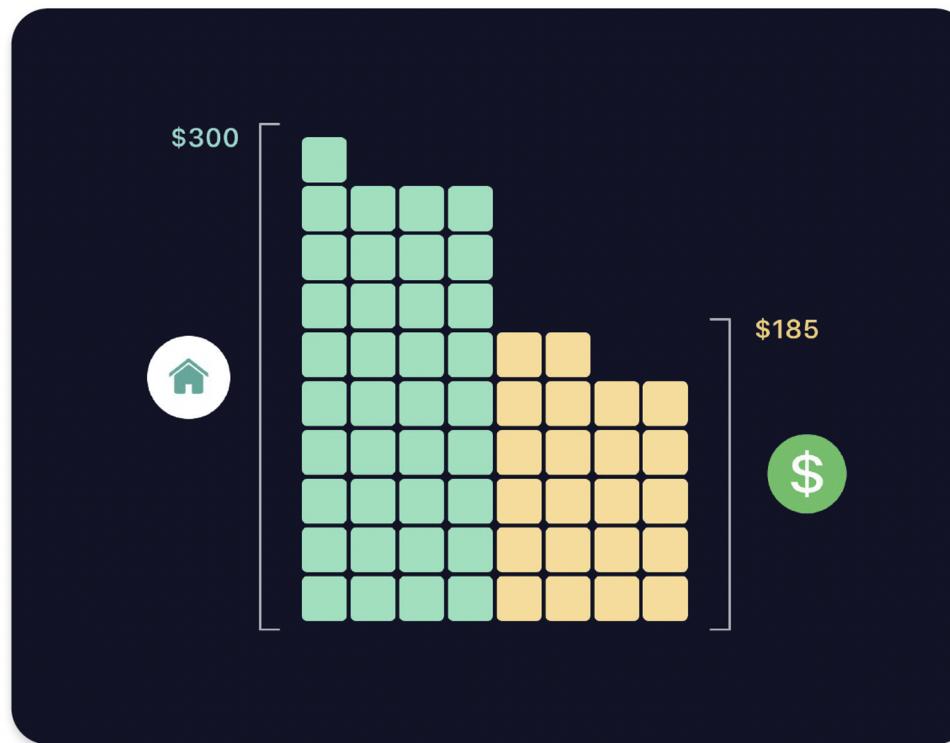
Types of Decentralized loans

- Collateralized
- Uncollateralized

Collateralized loans

- Borrowers need to put collateral to support their loan

Collateralized loans



Uncollateralized loans

- Borrowers don't require to put collateral to support their loan

Uncollateralized types

- Credit delegation
- Flash loans

Most used Decentralized lending platforms

- AAVE <https://aave.com/>
- Compound <https://compound.finance/>



Most used Decentralized lending platforms

Name	Chain	1d Change	7d Change	TVL ↓	Mcap/TVL
1 AAVE (AAVE)		+1.25%	-	\$16.77b	0.23974
2 Compound (COMP)		-1.20%	+9.84%	\$11.26b	0.1659

Thanks!

Do you have any questions?

hello@defi-academy.com

or

Join us in [Discord](#)

