

# Decentralized lending In Ethereum

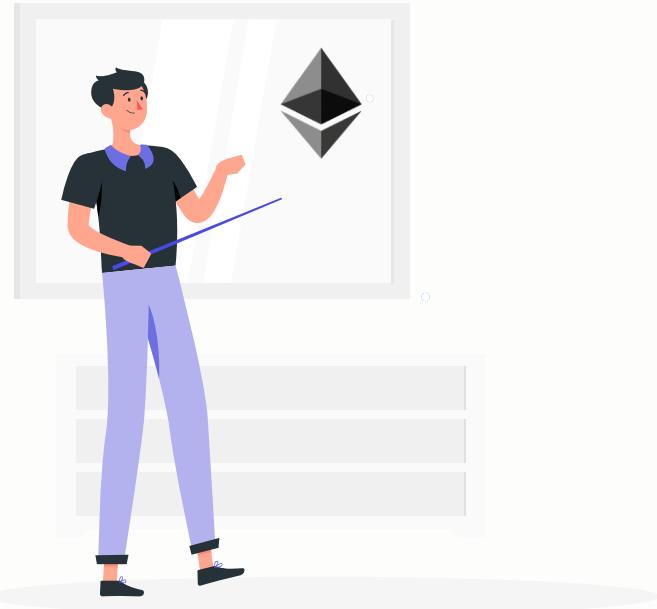
By Edson Alcala



# 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?

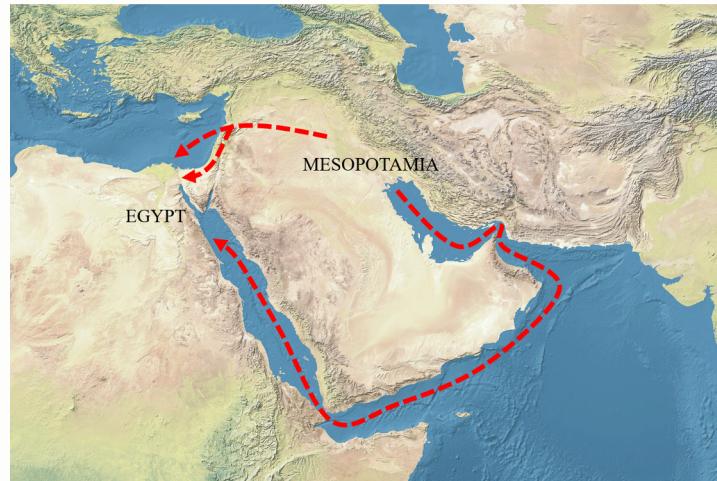
A person or organization gives you something,  
like money, with the promise that you will pay back  
at a **future date + interests**



# 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



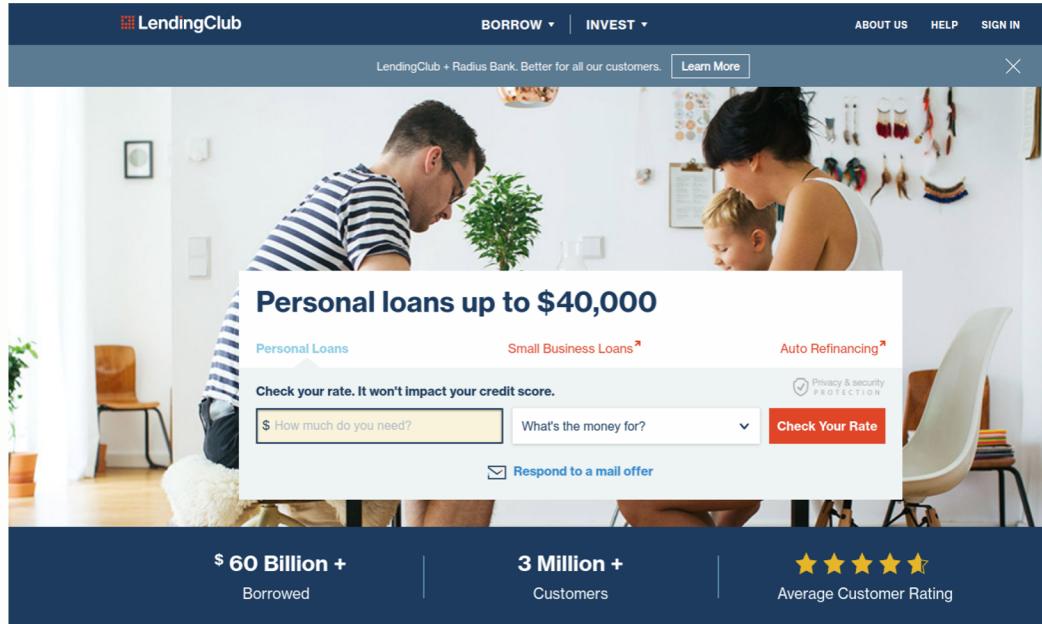
# Traditional lending: Banks



# 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 the 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 page, there are three summary statistics: '\$ 60 Billion +' borrowed, '3 Million +' customers, and a 'Average Customer Rating' of five stars.

**Personal loans up to \$40,000**

Personal Loans      Small Business Loans      Auto Refinancing

Check your rate. It won't impact your credit score.

\$ How much do you need?      What's the money for?      Check Your Rate

Privacy & security PROTECTION

**\$ 60 Billion +**  
Borrowed

**3 Million +**  
Customers

**Average Customer Rating**

How LendingClub works

Traditional or P2P = Centralized

# Traditional or P2P = Centralized

- **KYC**

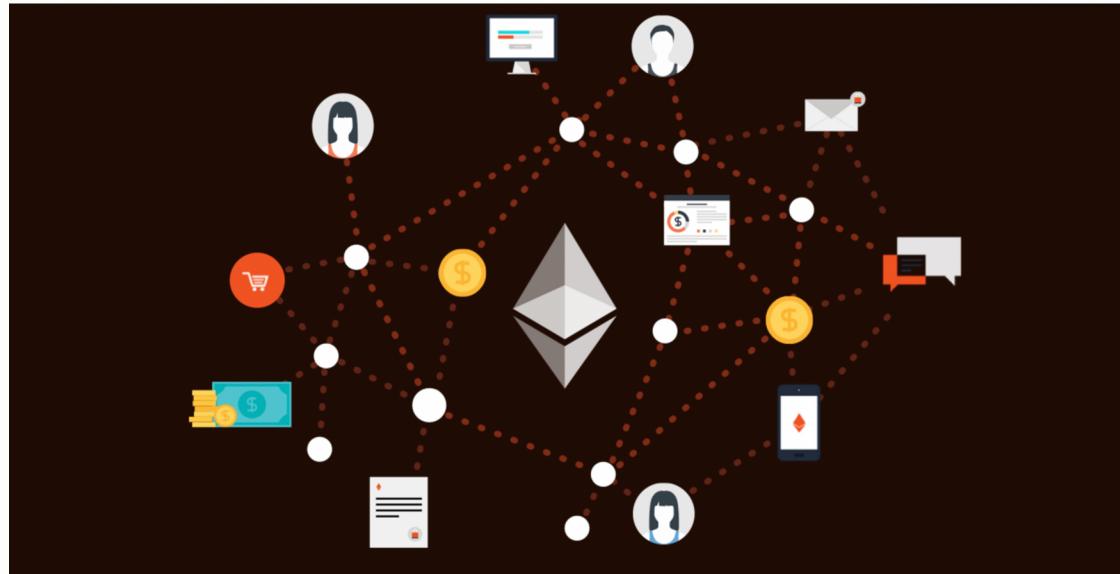
# Traditional or P2P = Centralized

- KYC
- **Geographically limited**

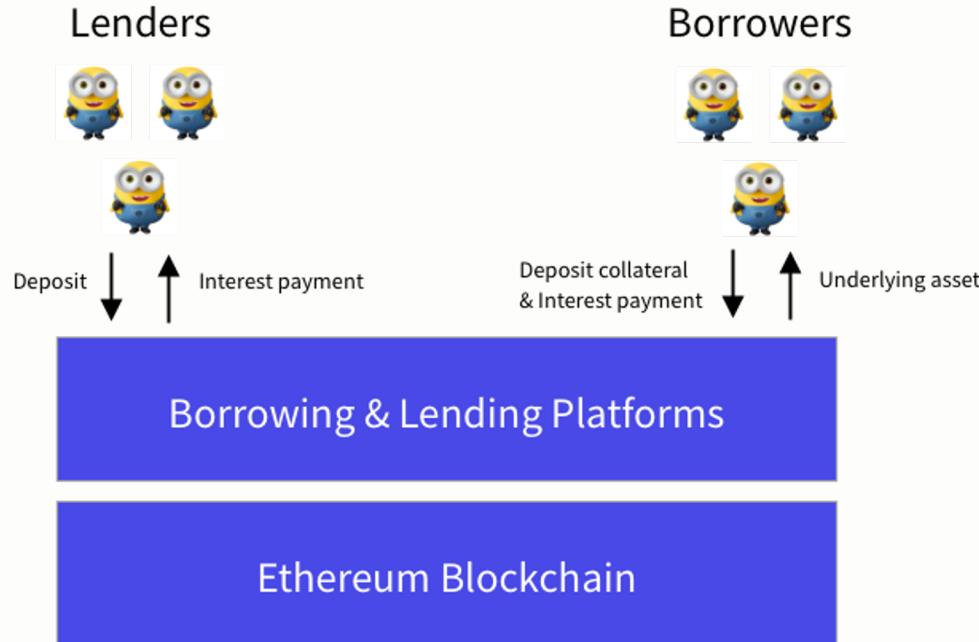
# Traditional or P2P = Centralized

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

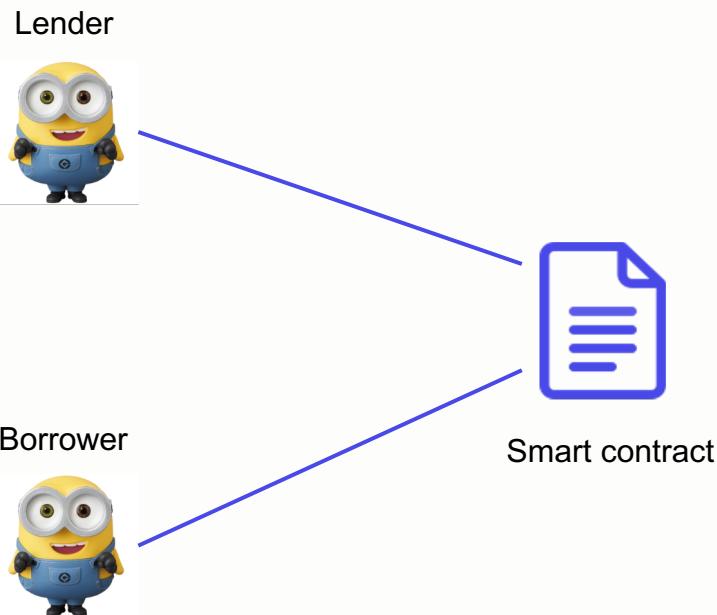
# The time for decentralization



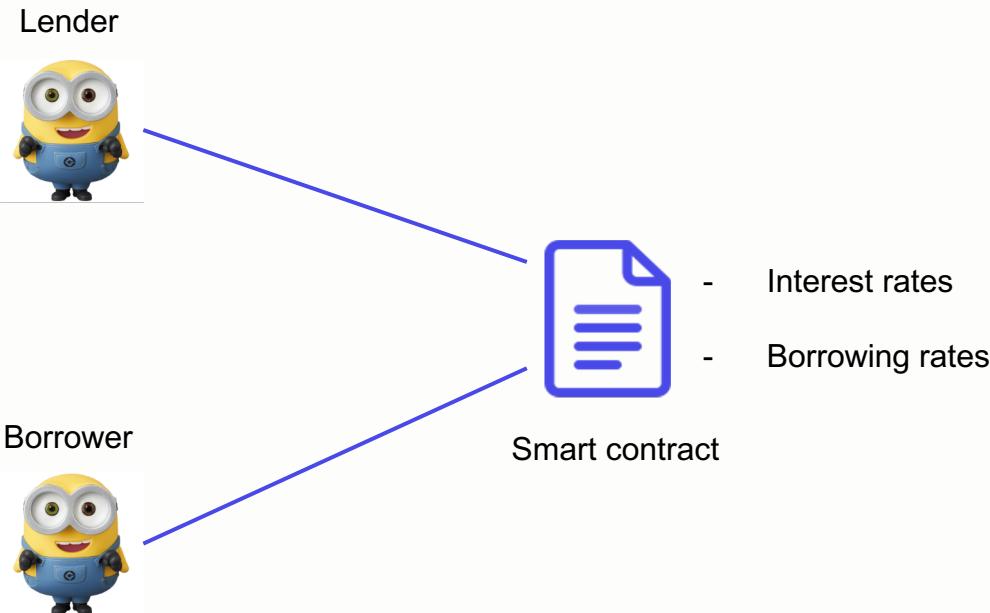
# The time for decentralization



# 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

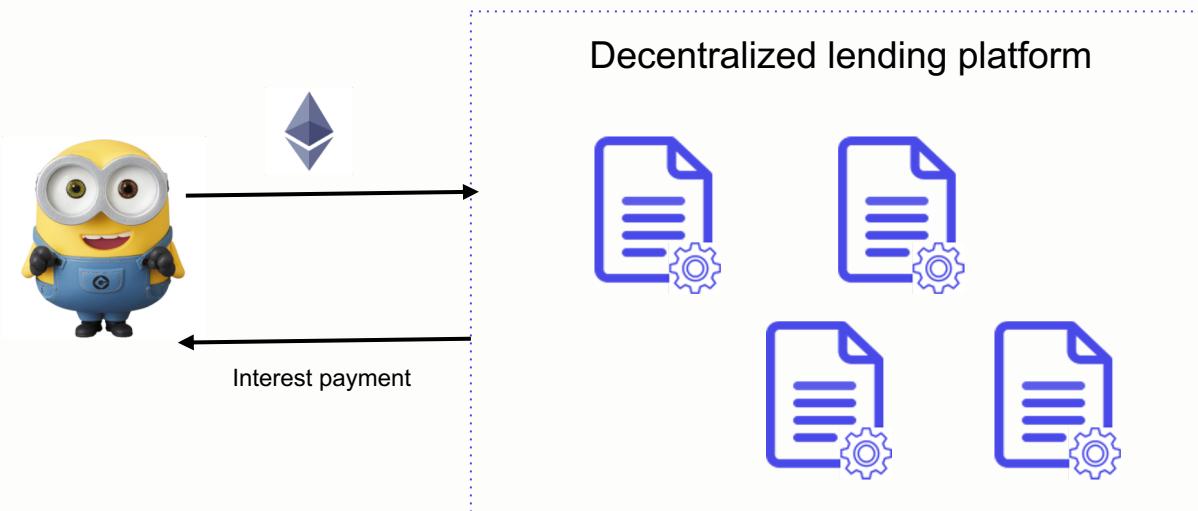


# How it works?

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?



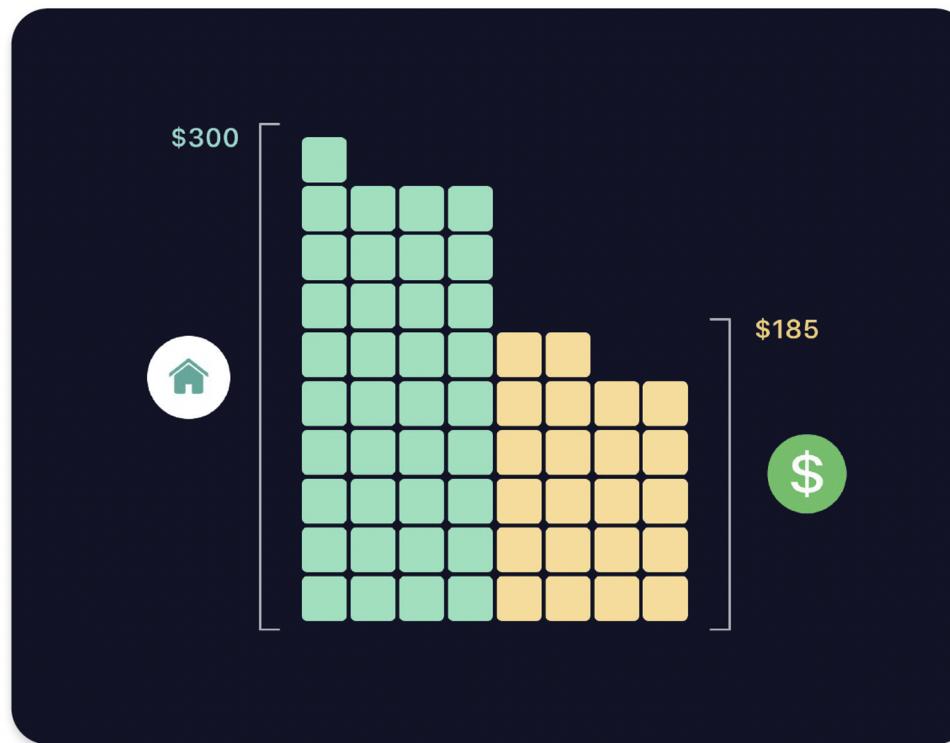
# Types of Decentralized loans

- 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

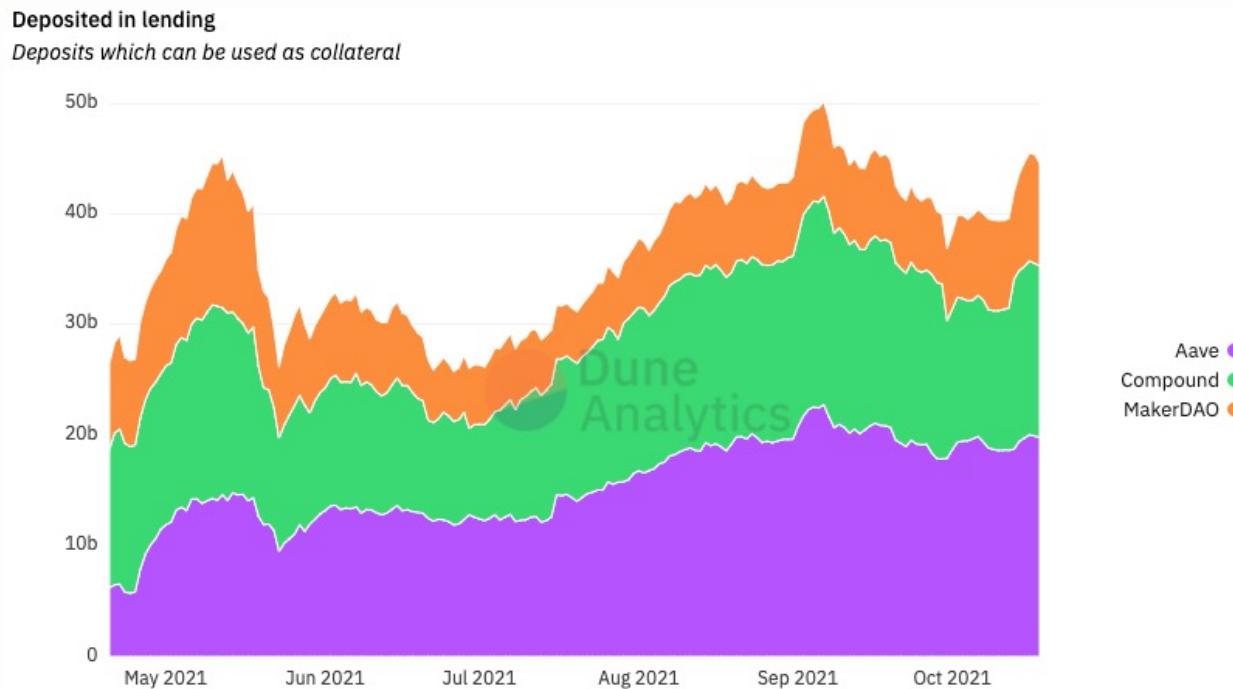
- AAVE <http://aave.com/>
- Compound <https://compound.finance/>



# 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

# Most used Decentralized lending platforms



# Thanks!

Do you have any questions?

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