

# Let's Make a Blockchain

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## More On

- [Reddit](#)

## Taipei Ethereum Meetup

- [Slack](#) (password: decentralized)
- [Meetup](#)
- [Wiki](#)

# Why

- Decentralized: No centralized management, free from censorship
- Immutable: Data on the chain exist forever, extremely hard to manipulate
- Transparent: Public to everyone

## What

- State machine

## Core

- Atomic events are called Transactions
- Transactions are wrapped into a Block
- The process of wrapping a block is called Mining

## P2P network

- Blocks are broadcasted to the network
- Blocks are collected and verified by each p2p node
- Blocks are appended to the Chain, thus the name Blockchain

## Consensus

- Chain from different nodes have different blocks, sometimes they fork
- The status when each chain has the same blocks is called Consensus
- There are different algorithms to achieve consensus. ex: PBFT / PoW / PoS

# Applications

- Bitcoin (Value transferring)
- Ethereum (Smart contract)
- Iota (Internet of things)

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# How

- Begin from Ethereum

## 3R: Read, Realize, Reproduce

1. Read white paper
2. Realize source code
3. Reproduce similar functionality



## Simblock

- Simple Blockchain Implementation
- Current status: only the core part is developed
- Need more contributors

Demo