WEB3 Micropayments

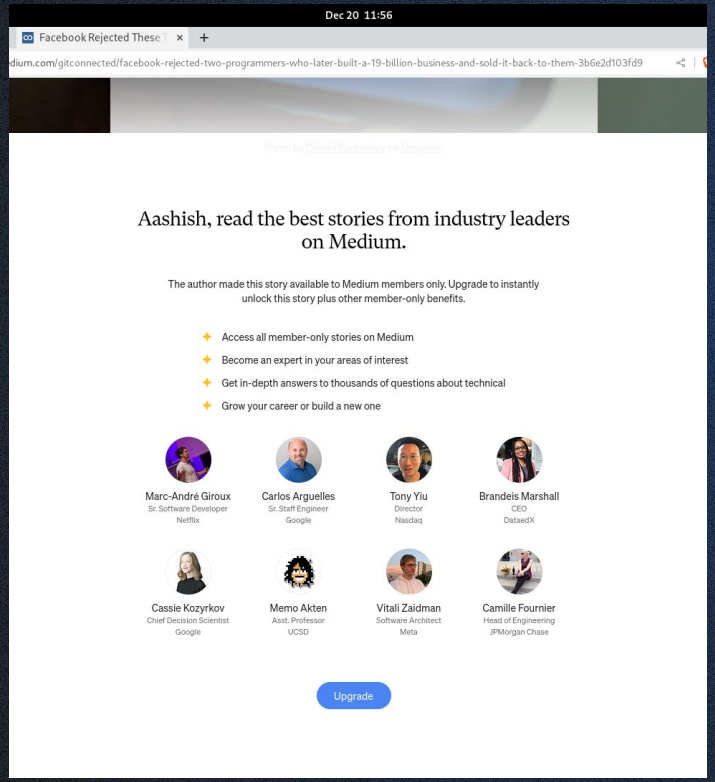
Exploring secure and efficient transaction

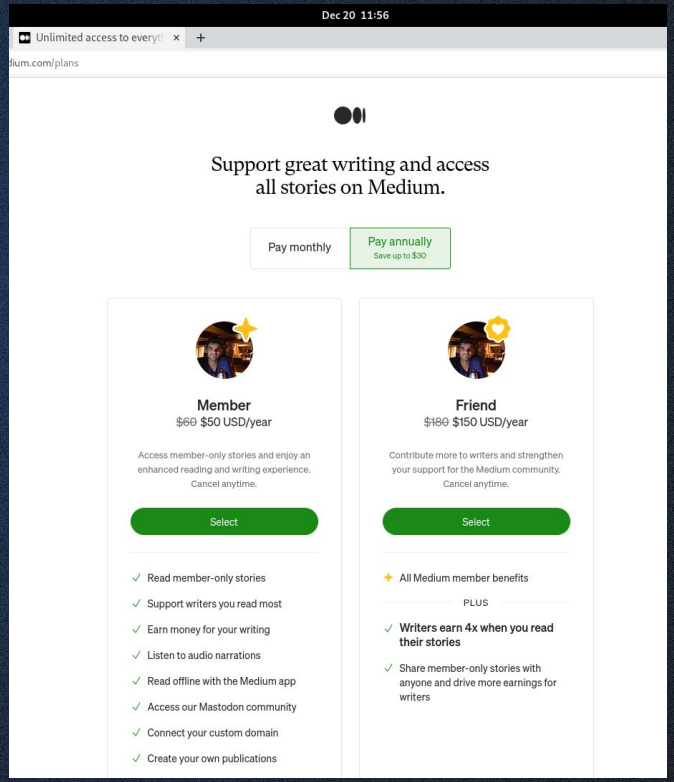
Team: HashChain
(Madhusree & Aashish)

µPay

PAY LESS! TRANSACT MORE!

Problem Statement





Problem Statement

Current Scenario

- **Monthly / Yearly subscription**
  - Pre-paid (User has to trust the merchant)
  - Post-paid (Merchant has to trust the user)
- **Advertisement**
  - Not user friendly
  - Users are irritated resulting in users losing interest
  - Waste of valuable time
  - Privacy concerns

Solution: Micropayments

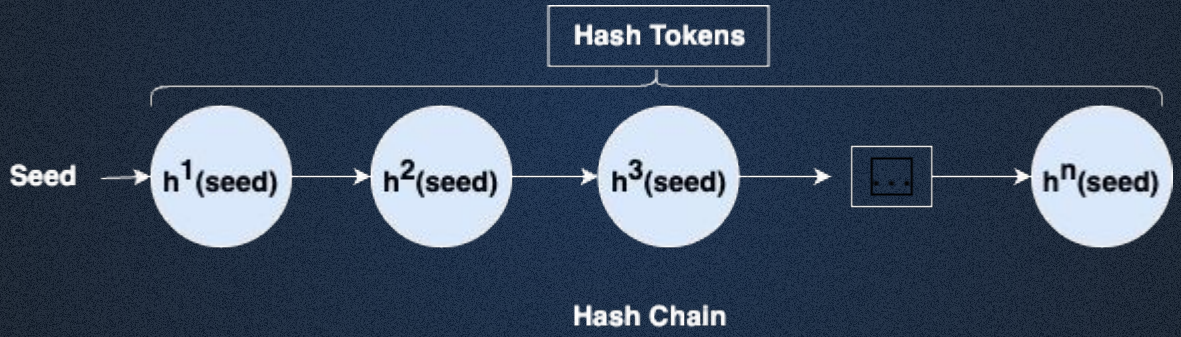
- A credit based micropayment scheme that utilizes chain of hash tokens to facilitate **secure** and **efficient** micropayments. Our scheme distributes amount based on last hash value received.

Target Users (web3):

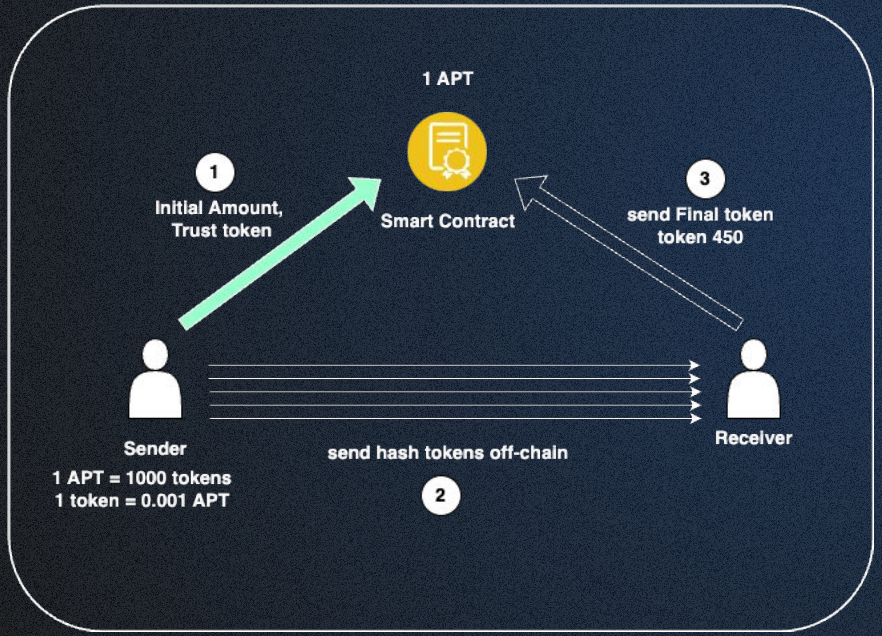
- **Online gamers**
- **Digital Content consumers**
  - Audio
  - Video
  - Article
  - News and so on.....

Paper: Rivest, R. L., & Shamir, A. (1996, April). PayWord and MicroMint: Two simple micropayment schemes.

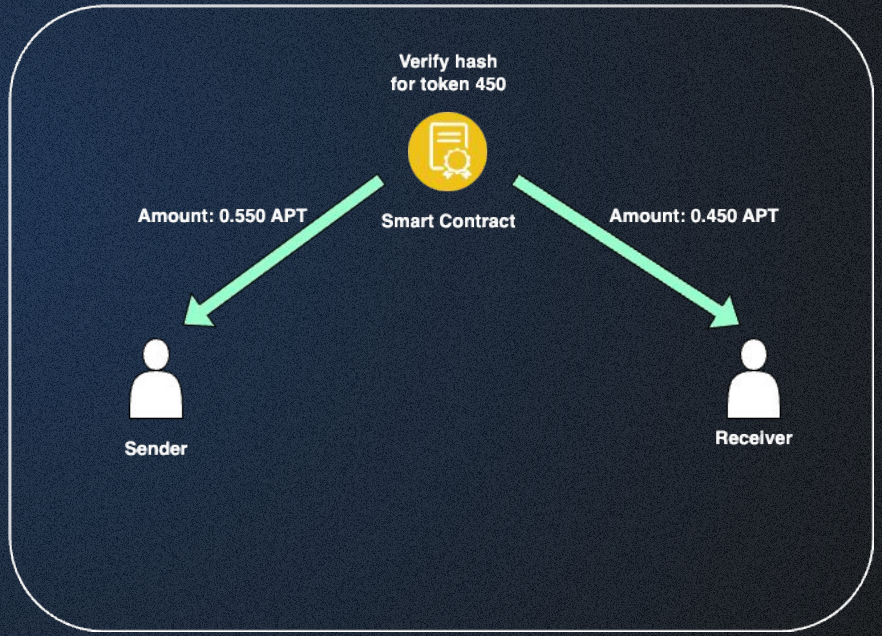
Hash chain ?



Micropayment Scheme



Payment



Redemption

Technical Merits

01 Unforgeability

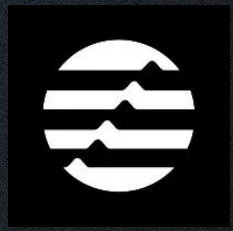
02 Efficient Tokenization

03 No Replay Attacks

Aptos Usage

01 Programmatic Payment Using Resource Account

02 Aptos Coin



Roadmap

Jan

Hash Verification Refinement, Integration Completion

Mar

Token Transfer Implementation, Optimization

May

Browser Extension Development, Seamless Integration

Jul

Documentation, API Development

Market

- Gaming Platforms for renting and in-game purchases
- Video creating platforms (e.g. chingari.io) for more efficient create, engage and earn incentivised program

LBRY

Chingari

LYNC

Demo Video

https://drive.google.com/drive/folders/18ieceR6LGy7IjMHSYE5rCxZVbr93bU9S?usp=sharing

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