Decentralized Sports Betting

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Blockchain Technologies

Motivation

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Traditional sports betting platforms are centralized.

- Users have to trust a third party to correctly proceed with their assets according to a betting protocol.
- These protocols may be “unfair” to the users.

Motivation

Our idea: decentralize sports betting platforms

Challenges and Approaches

Challenges

- How does the betting protocol look like as a smart contract?
- How do we receive game results in a *decentral* manner?

Approach: betting protocol

We define a Bet as an agreement between exactly two players (`playerA`, `playerB`)

Approach: betting protocol

Figure 1: Create

Approach: betting protocol

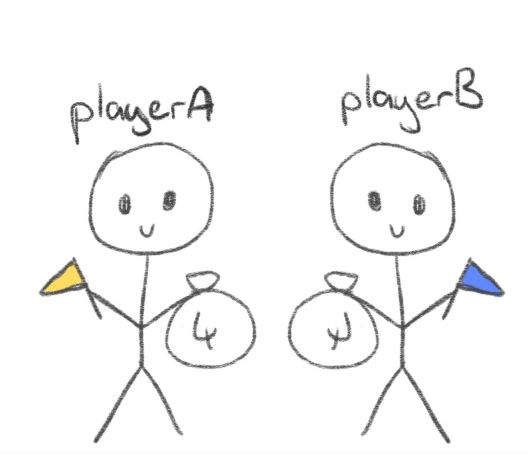

Figure 2: Join

Approach: betting protocol

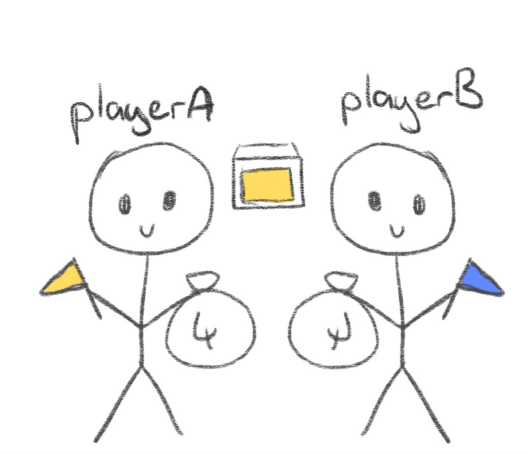

Figure 3: Update

Approach: betting protocol

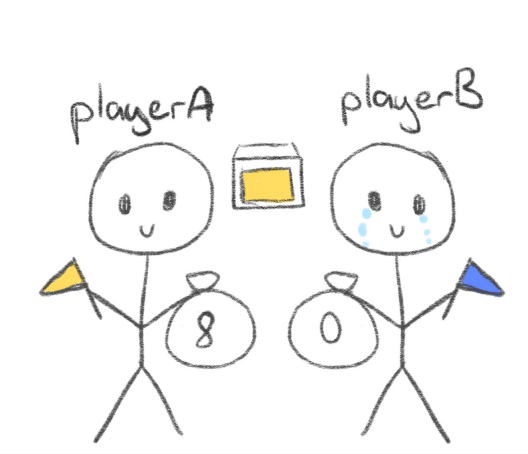

Figure 4: Finalize

Approach: external data sources

How do we receive game results in a *decentral* manner?

Approach: external data sources

How do we receive game results in a *decentral* manner?
It's the Oracle problem!

Approach: external data sources

Chainlink as the secure middleware between blockchain and real world

Approach: external data sources

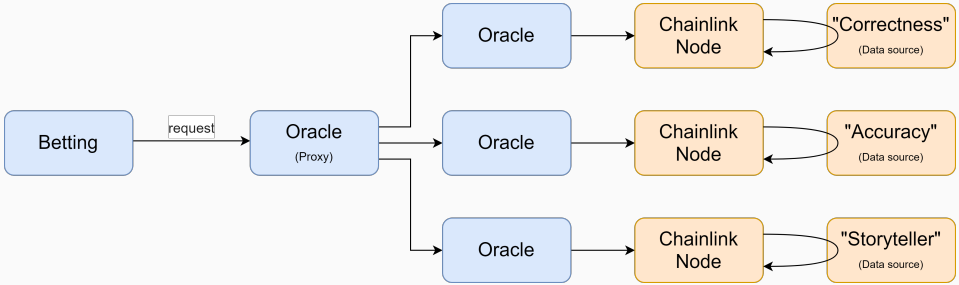

Figure 5: Requesting data using a decentralized oracle network

Demo

Approach: external data sources

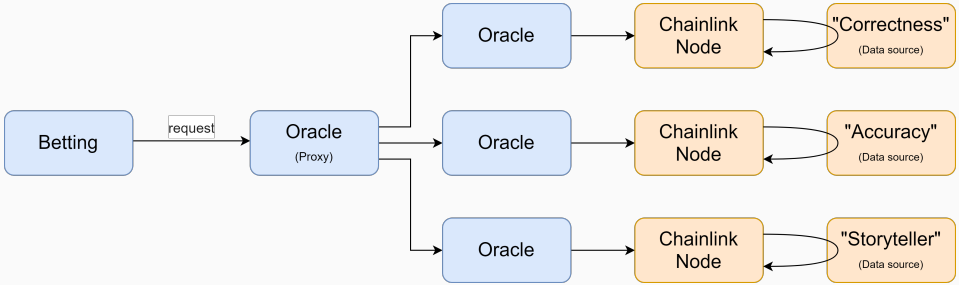

Figure 6: Requesting data using a decentralized oracle network

Hiccups and bugs

Hiccups and bugs

- Development workflow fundamentally different
- Lots of things to consider and remember in order to have something working
- Web3 library sometimes seems almost like a separate programming language
- MetaMask seems to struggle with blockchain resets