Decentralized Sports Betting

Team PONZI={ Joel John, Roland Elias Walter Odorfer, Niklas Sprengel, Duy Minh Vo }

July 8, 2020

Blockchain Technologies

Motivation

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.

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?

We define a Bet as an agreement between exactly two players
(`playerA`, `playerB`)
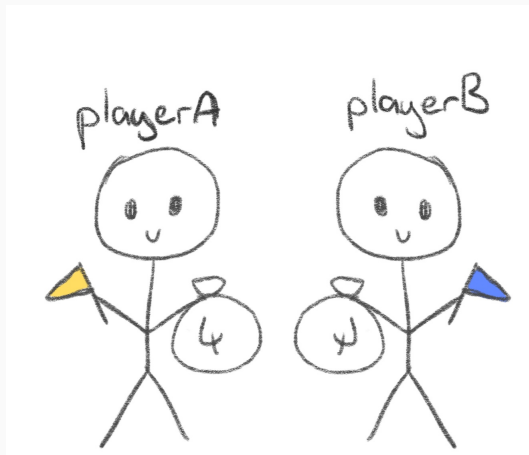
Figure 1: Create

Figure 2: Join

Figure 3: Update

Figure 4: Finalize

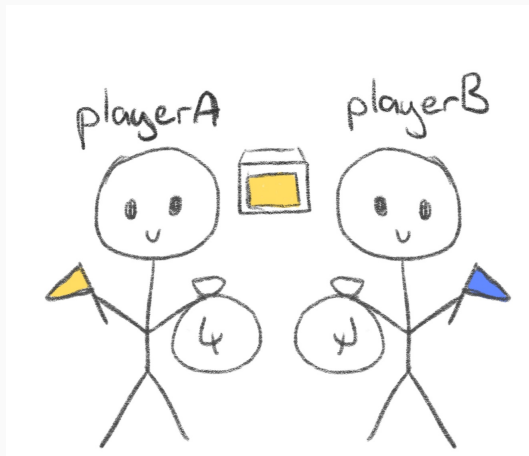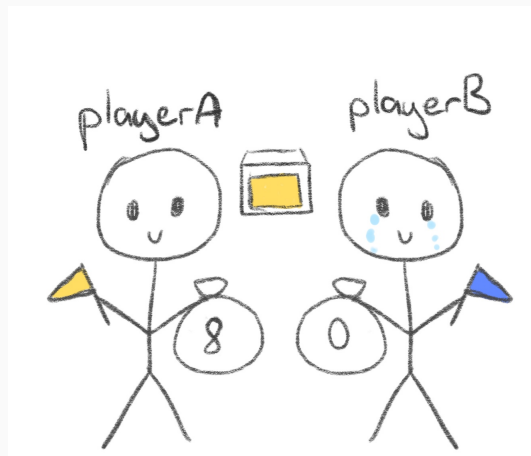## Approach: external data sources

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

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

Chainlink as the secure middleware between blockchain and real world
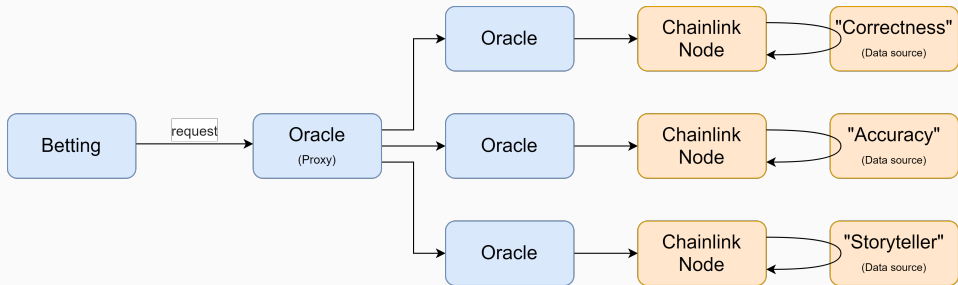
Figure 5: Requesting data using a decentralized oracle network

Demo

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
- Managing multiple services was frustrating at times (we ended up having 11 services running for the demo)