

Challenge Task

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Idea

- Simple election (first-past-the-post)
- Separate Registration & Voting phases
- Winner & Voters receive NFT
- Wrapper contract for election creation



Stack

Frontend

Angular & web3.js

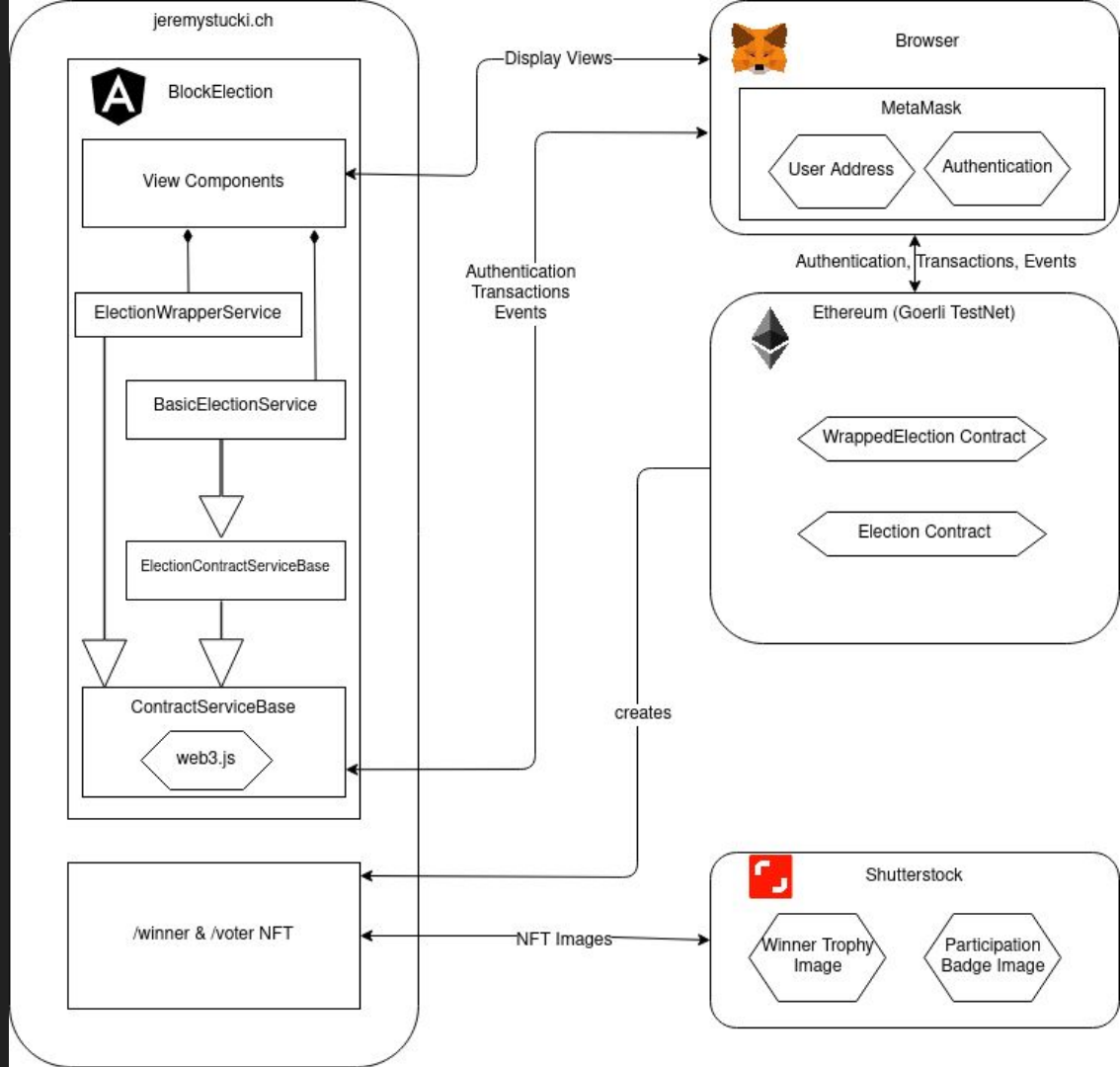


Backend

Ethereum



Architecture



Demo

blockchain-testat.jeremystucki.ch

Goerli-Testnet

Checklist

- ✓ A working prototype for your use-case
- ✓ Use latest stable releases of chosen libraries and frameworks
- ✓ Submission of a voting proposal, with previously known consequences and recipients (can be testnet)
- ✓ Onchain voting on proposal with at least 2 participants / identities (can be testnet)
- ✓ Successful vote needs to trigger something onchain. Can be an ERC20 or an NFT transfer (can be testnet)
- ✓ Voting status and process need to be shown in the frontend

Developer experience

- Git integration is lacking (Remix)
- Testnet-Faucets often don't work
- Solidity is painful to work with
 - Cannot iterate mappings
 - Cannot reset mappings
 - Default values instead of `Option<T>`
- Address/ABI-mismatch error in web3.js is not meaningful



```
from solidity:
TypeError: Unary operator delete cannot be applied to type mapping
--> contracts/election.sol:72:9:
72 |         delete voters;
    |         ^^^^^^^^^^^^^
```

Any questions?

Thank you