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AEC Blockstarter 4.0 (4.2) – Group A

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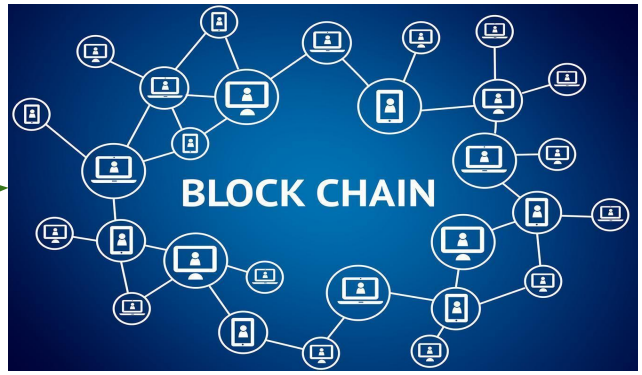
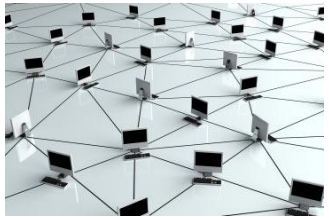
Motivation





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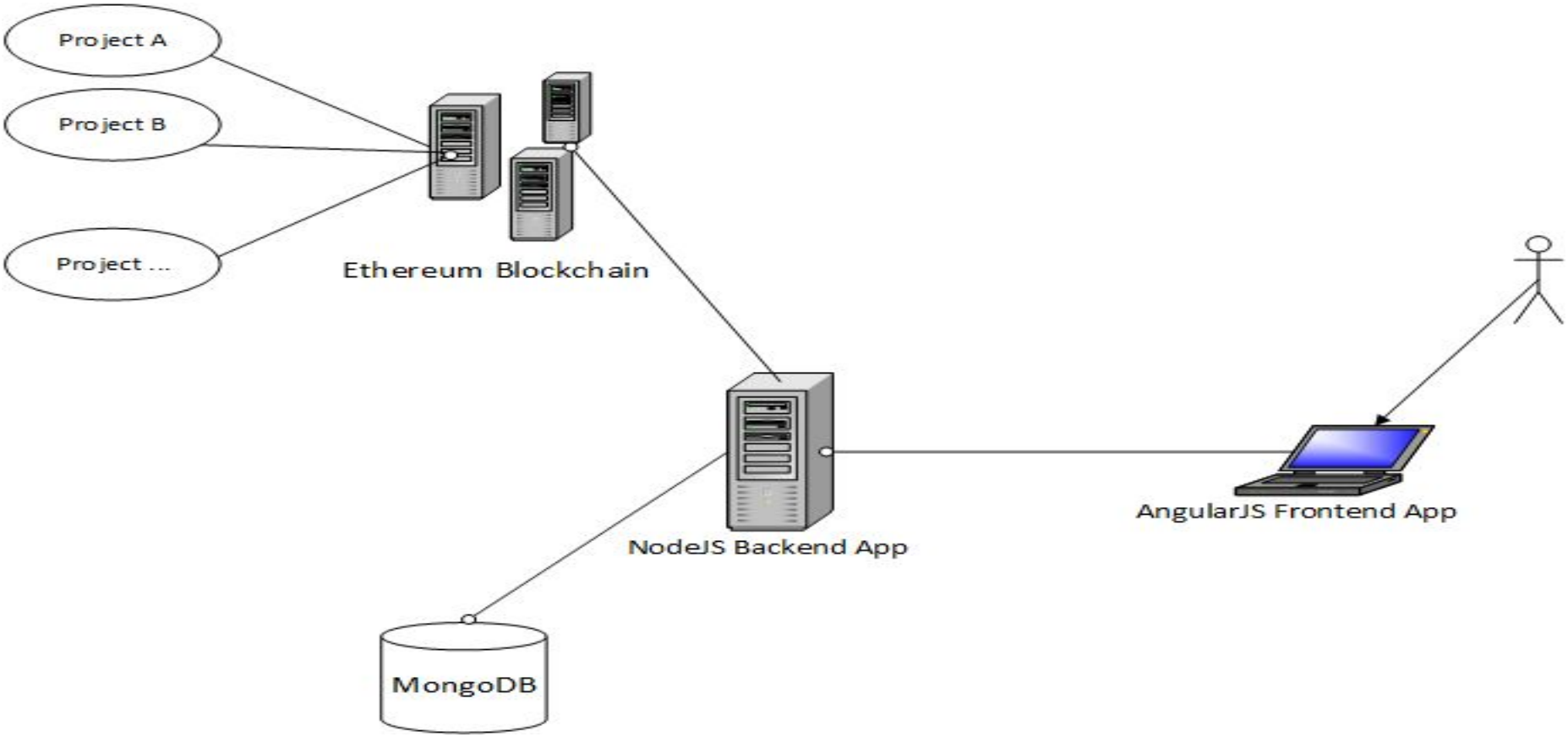
Architecture



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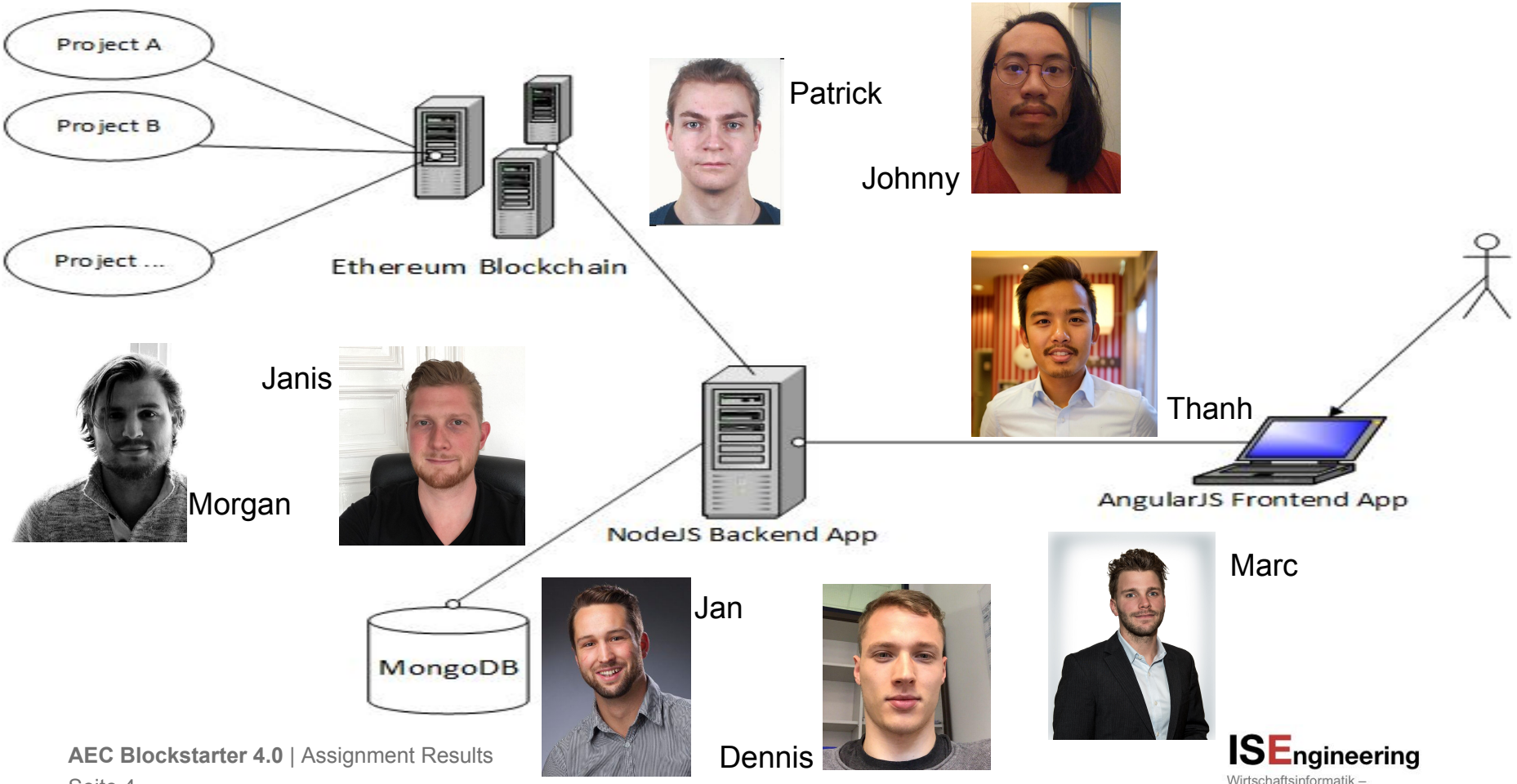
Team and Task Division



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Smart Contract(s)

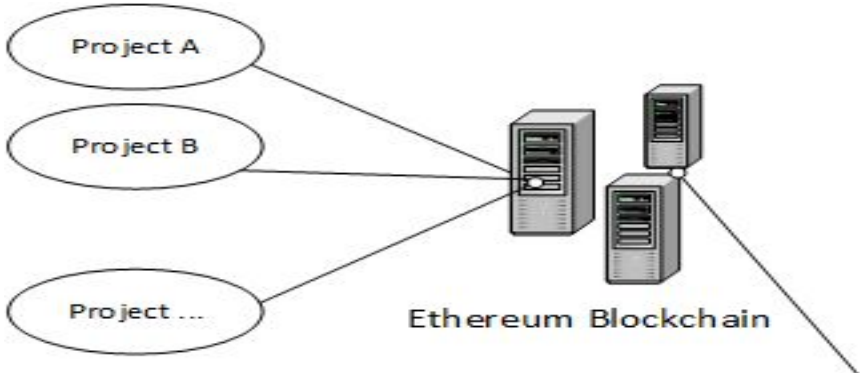
Language: Solidity

IDE: Remix

Testing: Remix, Postman, with Frontend GUI

Base Implementation: create, kill, invest, getter methods (e.g. Token Share)

Extensions: Funding Deadline, Trade Tokens, Voting on Issues



browser/project.sol

```
1  pragma solidity ^0.4.8;
2
3  /*- Receive Ether from anony                rs
4  - Update the funding statu                 ect
5  - Show funding status of th                e.g., show
6  - Allow the Creator of a Pr                ct to rem
7  - allows project owners to w               unds when a
8  - allows backers to retrieve               (token) for
9
10 contract Project{
11
12   mapping(address => uint) backers;
13   mapping(uint => address) indicesAddresses;
14   uint numberOfBackers;
15   address owner;
16   uint funding_goal;
17   uint paid_in = 0;
18   uint totalWithdrawnAmount;
```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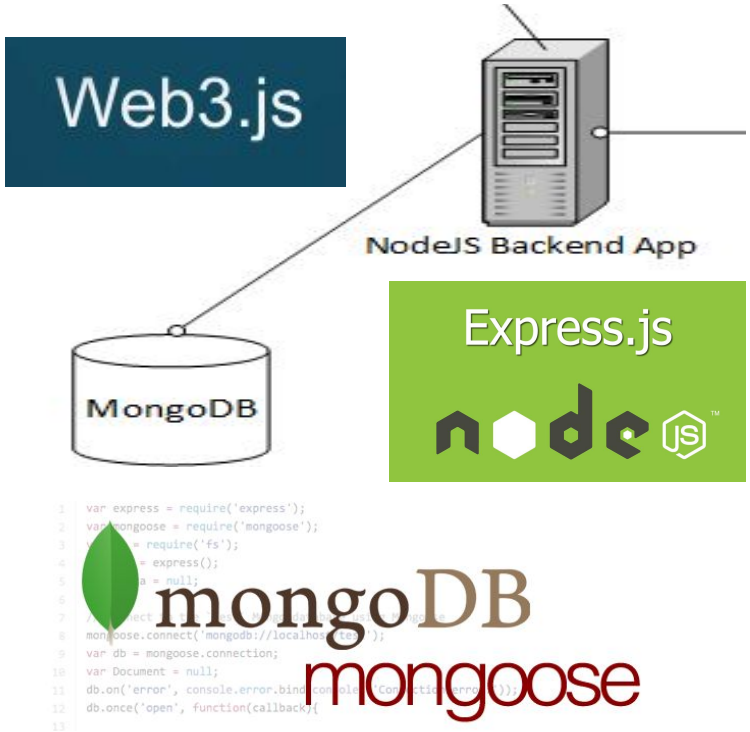
Backend (1/2)

Technologies: Node.js, Express.js, MongoDB, Mongoose, Web3.js

Testing: Postman, with Frontend GUI

Data models: user, project, contract

Provides: Routes (REST API)



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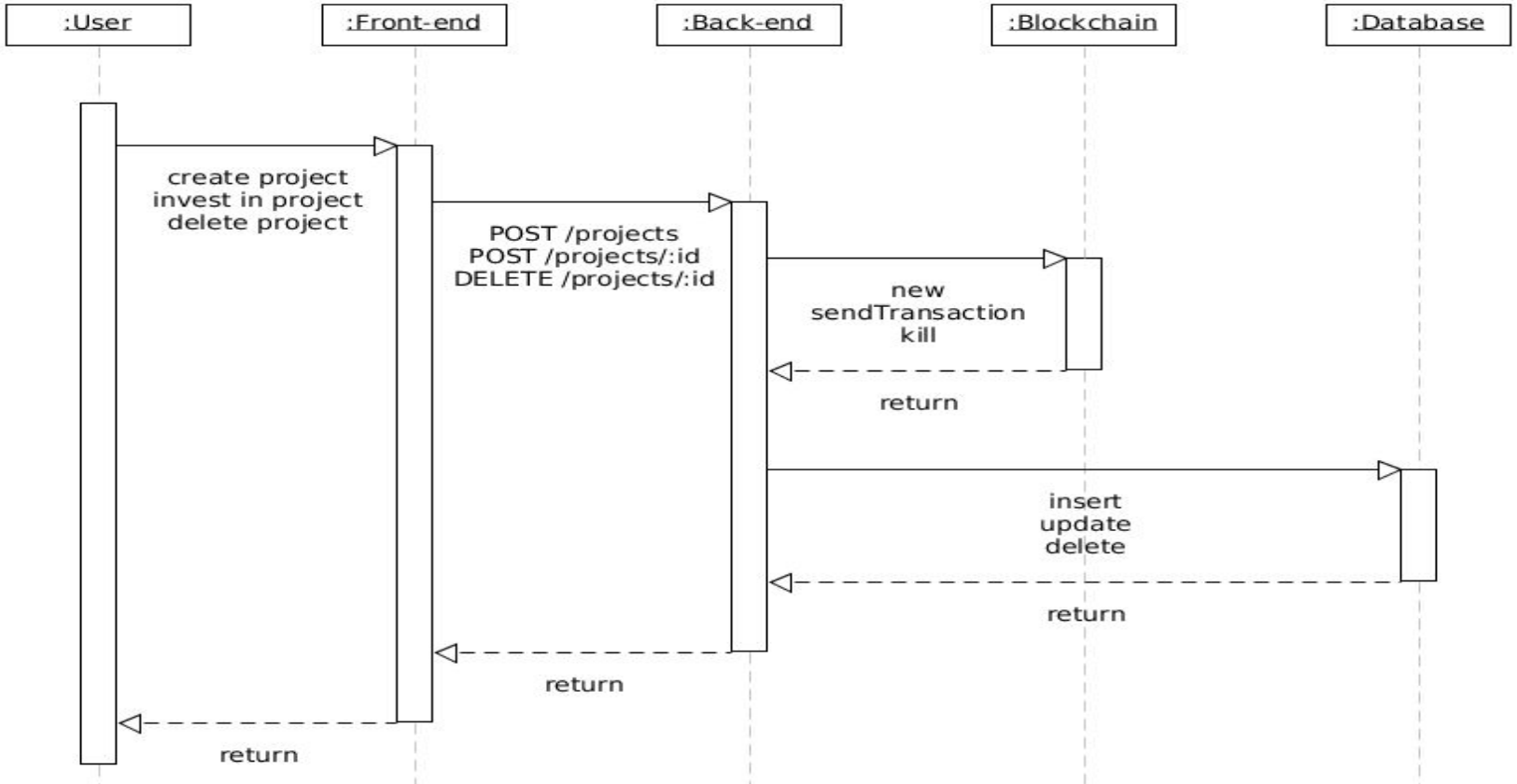
Backend (2/2) - Base Project Transactions



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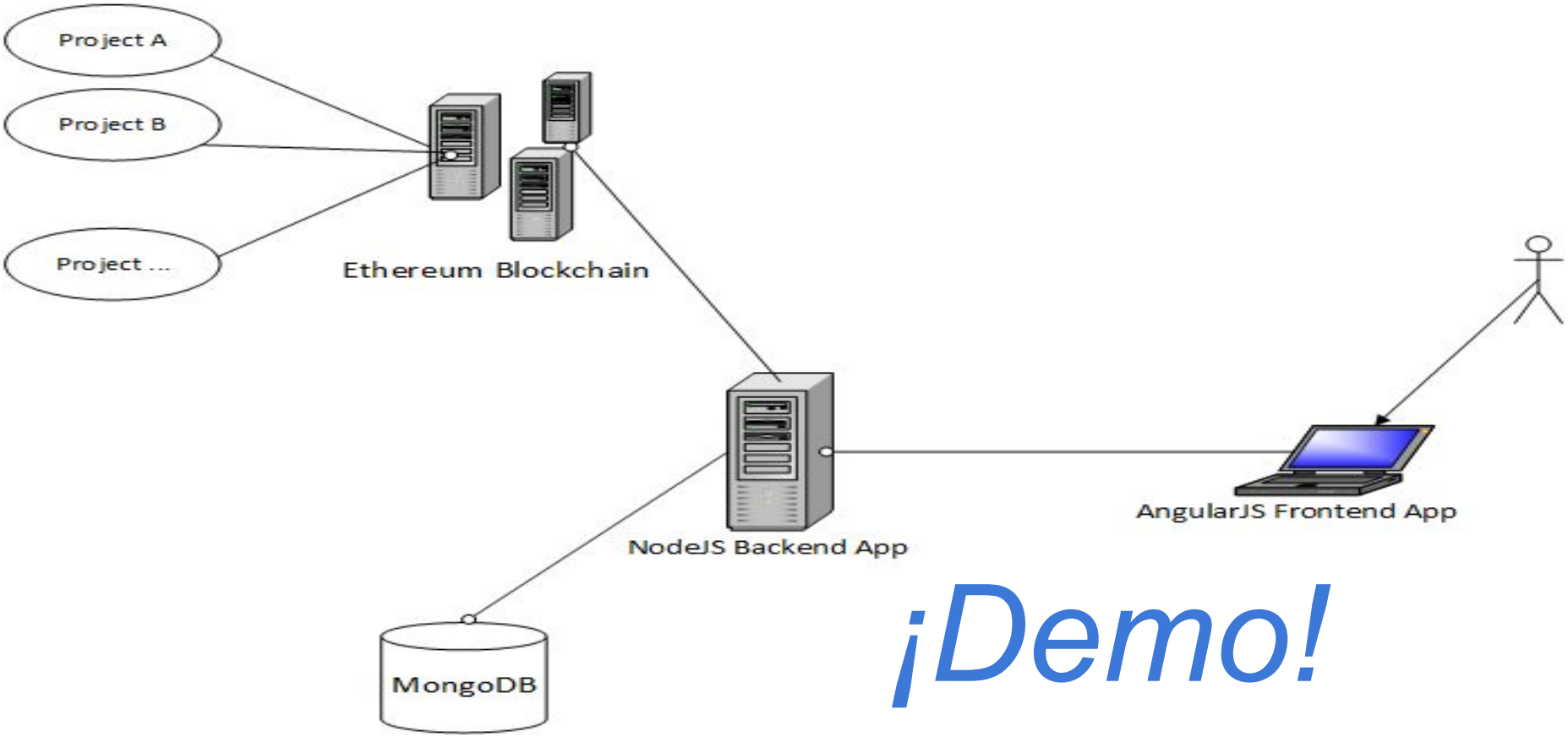
Frontend



¡Demo!

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Strong Points & Potential Next Development Steps

★ All Functionalities of Crowdfunding platform

★ Synchronization MongoDB & Blockchain

★ Fast Response Times for User

➔ Distributed Backend Environment

➔ Voting Functionality into Application

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Q & A

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Thank You

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