Smart Contract Dapp on Ethereum Ropsten

Truffle.js+MetaMask+Ganache

Prototype of Dapp Ethereum's Ropsten Testnet

localhost:3000

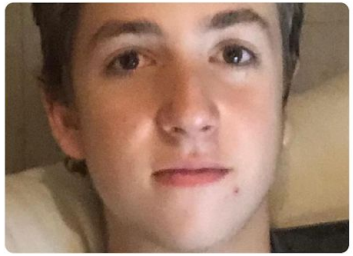
Tech Unicorn Employee Database

Clara

Status: Full-Time
Age: 30
Location: San Franciso, CA

Start Employment
End Employment

Rafael



Status: Intern
Age: 13
Location: São Paulo, Brazil

Start Employment
End Employment

Gina

Status: Part-Time
Age: 28
Location: New York, NY

Start Employment
End Employment

Collins

Status: Full-Time
Age: 25
Location: Denver, CO

Start Employment
End Employment

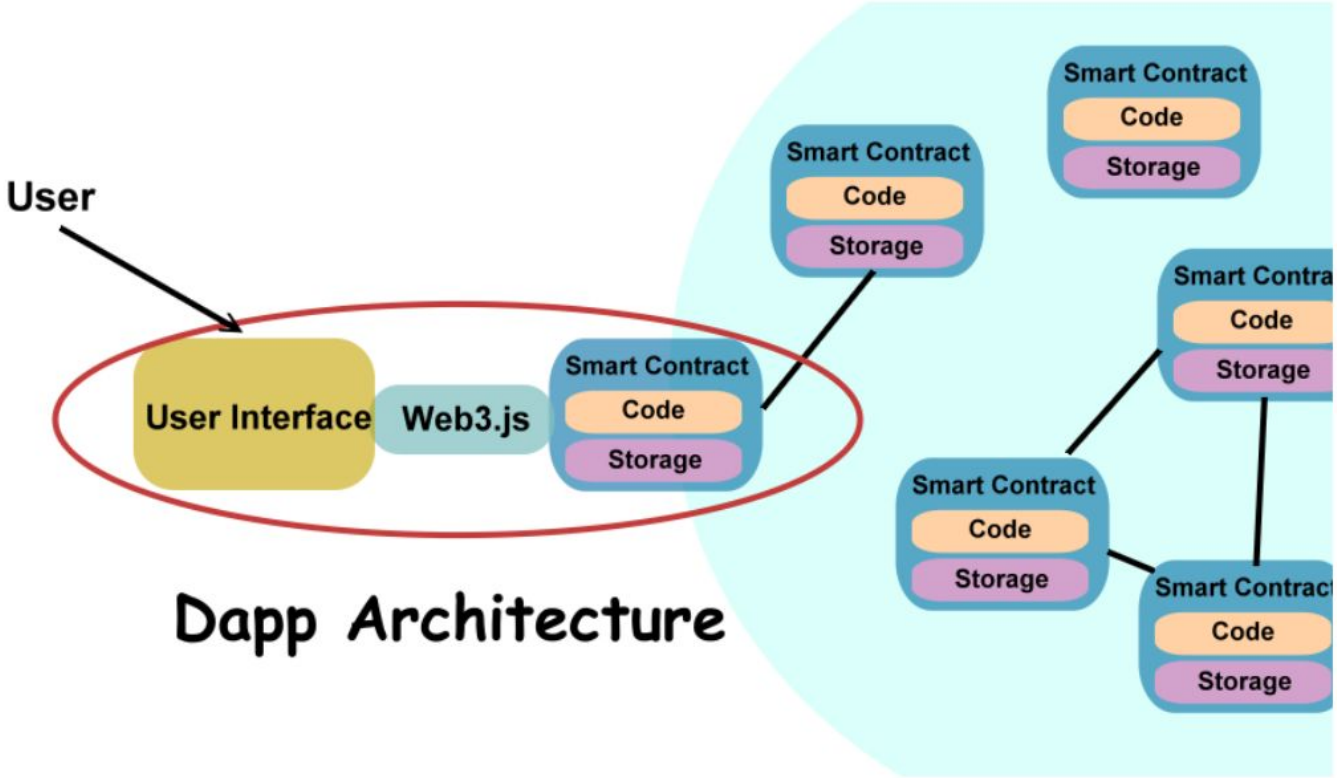
James

Viktor

Latisha

Amara

Overview of Dapp Architecture



Đapp Architecture

Source: https://medium.com/hci-wvu/how-to-build-your-first-%C3%B0app-fe0c89d8f95f

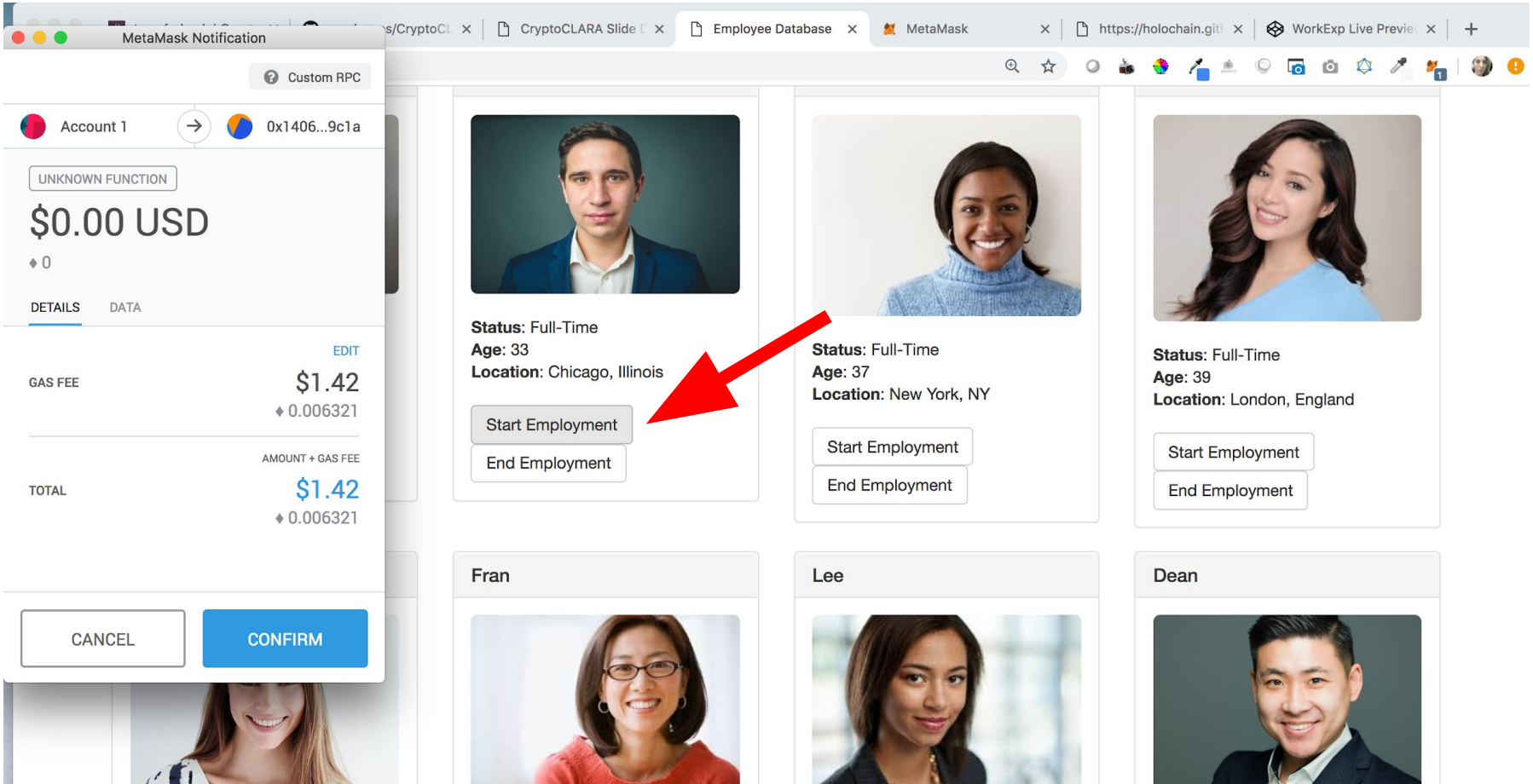
Tech Stack

Frontend: Metamask, JQuery, Web3.js

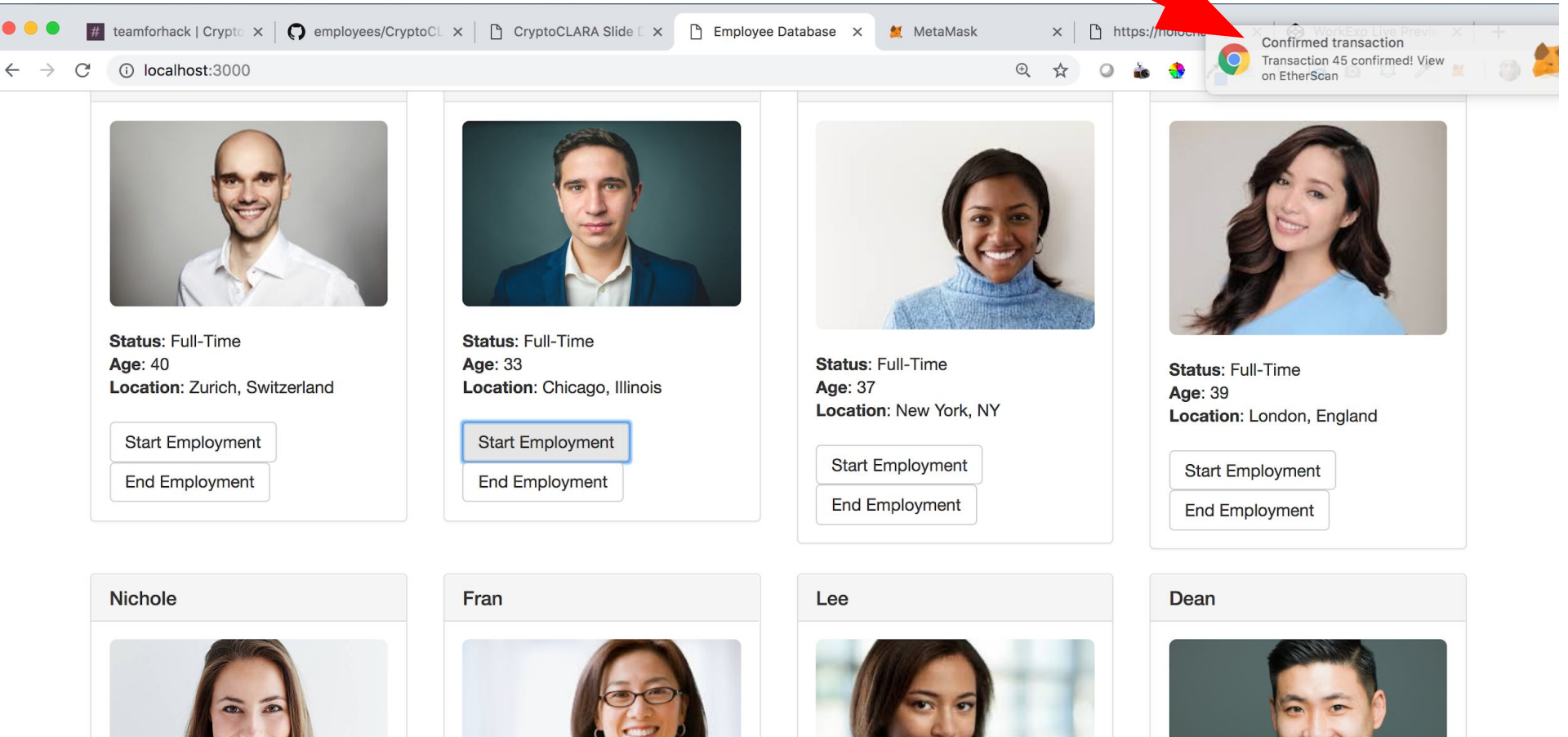
Smart Contracts (Backend): Ganache, Truffle.js, Node.js/npm, Solidity

Blockchain transactions occur on the client-side, so users can click and sign messages directly on the app.

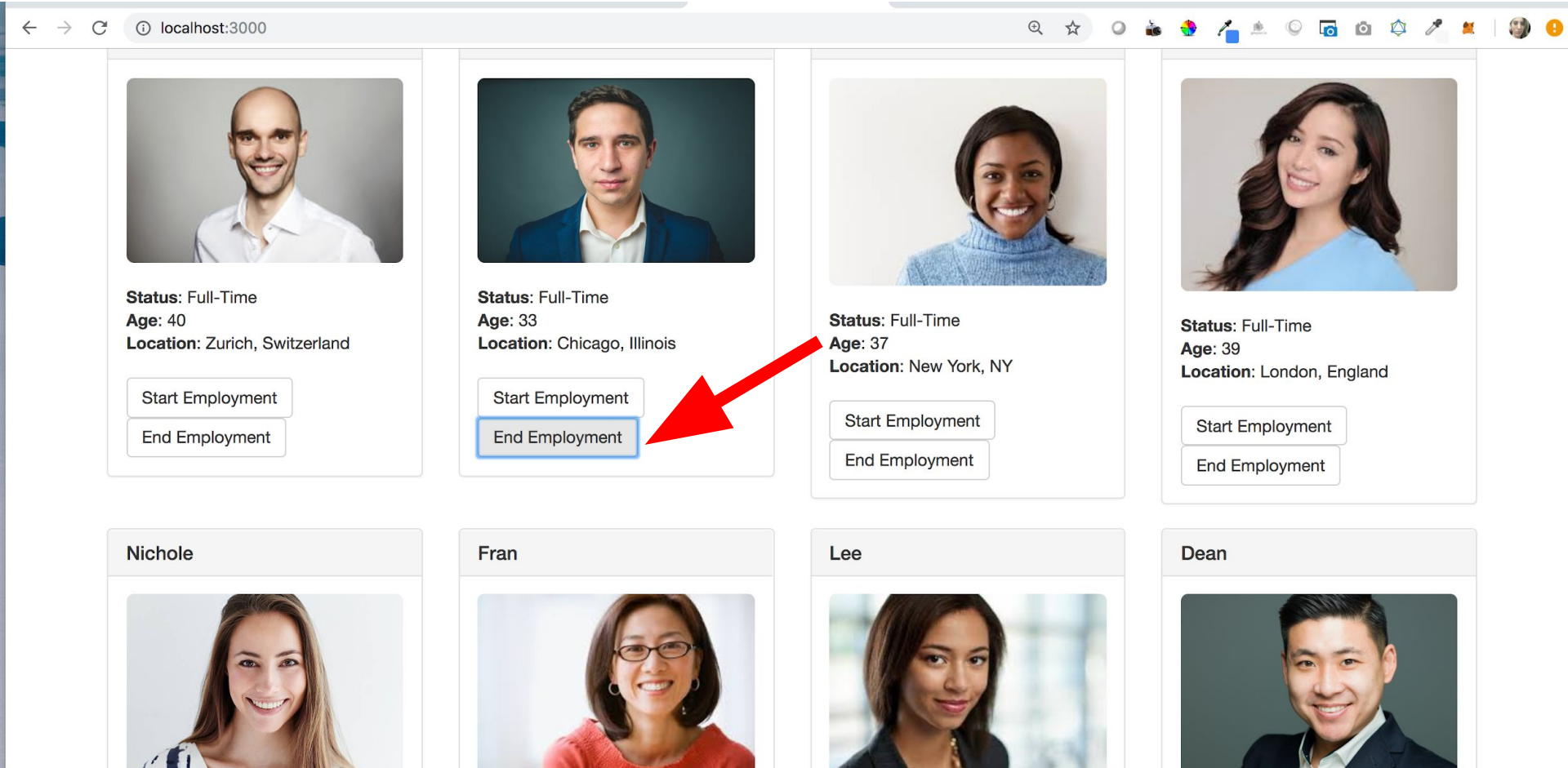
Click Start Button & Signal to MetaMask



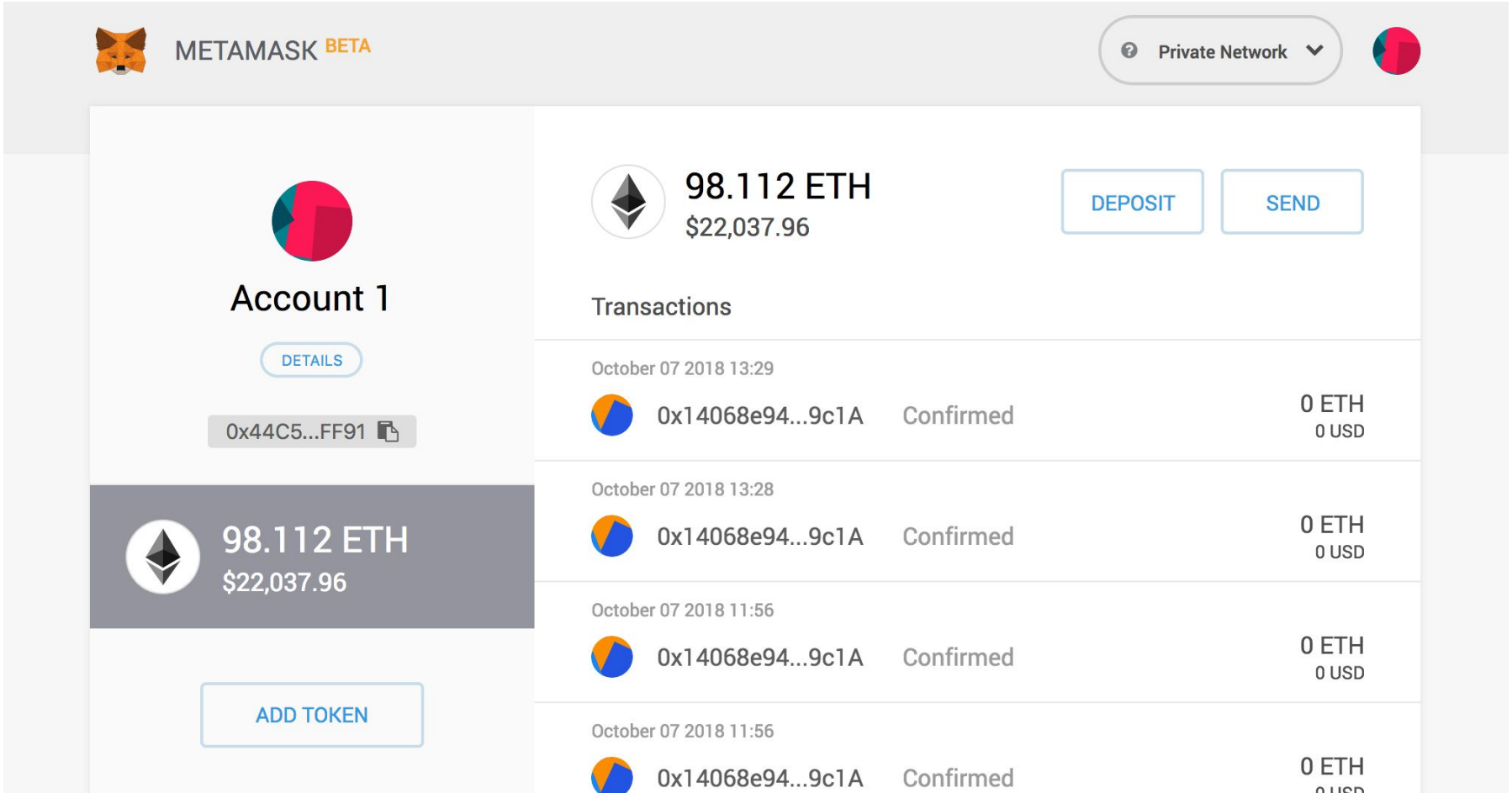
Accept & MetaMask Pop-Up Will Confirm Transaction



Click End Employment Button



Transactions are Approved & Confirmed in MetaMask



Imagine A Ledger with Record and Timestamps....

Here is a screenshot of one of my wallet addresses on Ethereum, showing timestamped transactions that look a lot like a traditional accounting ledger.

TxHash	Block	Age	From		To	Value	[TxFee]
0xc6d2f295b08ed8...	6295711	29 days 20 hrs ago	0x413b956364f1d6...	OUT	IDEX_1	3 Ether	0.0002778
0x145c4532f9e04dc...	6295704	29 days 20 hrs ago	Kucoin	IN	0x413b956364f1d6...	3.0363361 Ether	0.000315
0xc3dc04d182d69c...	6295658	29 days 21 hrs ago	0x413b956364f1d6...	OUT	IDEX_1	0.02 Ether	0.0002778
0x8025a4746c7e57...	6295638	29 days 21 hrs ago	0x413b956364f1d6...	OUT	IDEX_1	1 Ether	0.0002778
0xf8eb5c357a2c587...	6295632	29 days 21 hrs ago	Kucoin	IN	0x413b956364f1d6...	1.0297673 Ether	0.000315