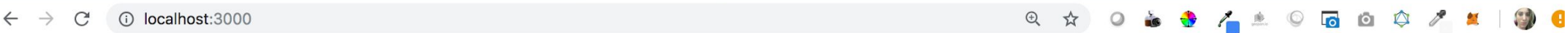




Smart Contract Dapp on Ethereum Ropsten

Truffle.js+MetaMask+Ganache

Prototype of Dapp Ethereum's Ropsten Testnet



Tech Unicorn Employee Database

Clara



Status: Full-Time

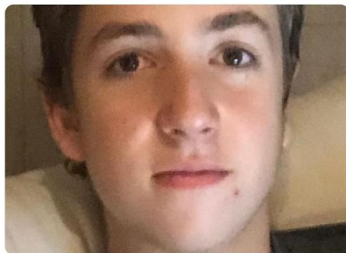
Age: 30

Location: San Francisco, 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

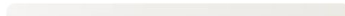
James



Viktor



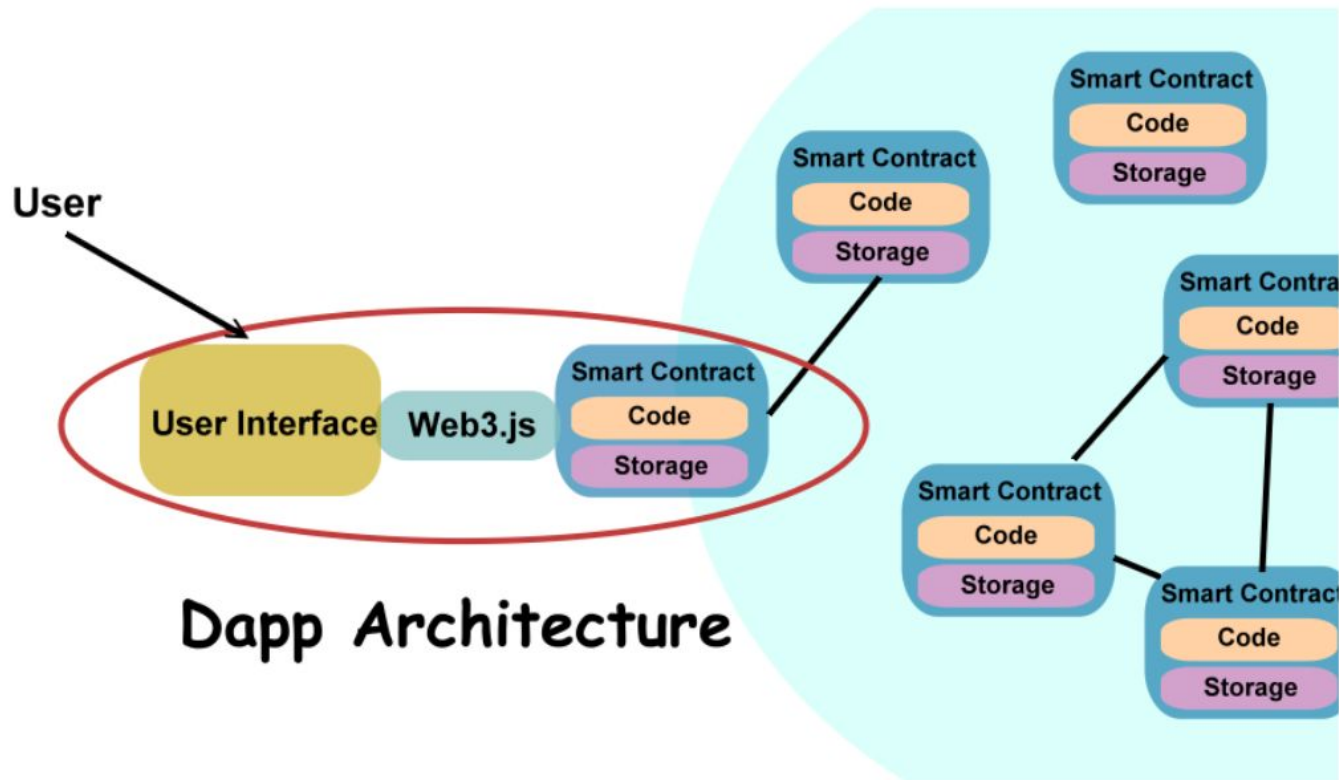
Latisha



Amara



Overview of Dapp Architecture



Dapp 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

MetaMask Notification

Custom RPC

Account 1 → 0x1406...9c1a

UNKNOWN FUNCTION

\$0.00 USD

◆ 0

DETAILS DATA

GAS FEE **\$1.42**
◆ 0.006321

AMOUNT + GAS FEE **\$1.42**
◆ 0.006321

TOTAL

CANCEL CONFIRM

Employee Database

MetaMask

https://holochain.giti x WorkExp Live Preview x

Start Employment End Employment

Status: Full-Time
Age: 33
Location: Chicago, Illinois

Start Employment End Employment

Status: Full-Time
Age: 37
Location: New York, NY

Start Employment End Employment

Status: Full-Time
Age: 39
Location: London, England

Fran

Lee

Dean

Accept & MetaMask Pop-Up Will Confirm Transaction



Status: Full-Time
Age: 40
Location: Zurich, Switzerland

Start Employment

End Employment



Status: Full-Time
Age: 33
Location: Chicago, Illinois

Start Employment

End Employment



Status: Full-Time
Age: 37
Location: New York, NY

Start Employment

End Employment



Status: Full-Time
Age: 39
Location: London, England

Start Employment

End Employment

Nichole



Fran



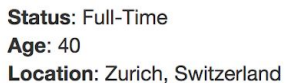
Lee



Dean

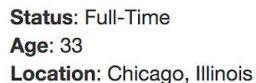


localhost:3000



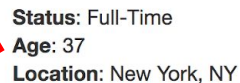
Start Employment

End Employment



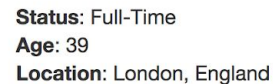
Start Employment

End Employment



Start Employment

End Employment



Start Employment

End Employment



Transactions are Approved & Confirmed in MetaMask



METAMASK BETA

Private Network



Account 1

DETAILS

0x44C5...FF91



98.112 ETH
\$22,037.96

ADD TOKEN



98.112 ETH
\$22,037.96

DEPOSIT

SEND

Transactions

October 07 2018 13:29



0x14068e94...9c1A

Confirmed

0 ETH
0 USD

October 07 2018 13:28



0x14068e94...9c1A

Confirmed

0 ETH
0 USD

October 07 2018 11:56



0x14068e94...9c1A

Confirmed

0 ETH
0 USD

October 07 2018 11:56



0x14068e94...9c1A




Confirmed

0 ETH
0 USD

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