

## Build a Blockchain Explorer

Your bigshot boss has commissioned you to build a blockchain explorer. And don't give me any canned <u>Etherscan.io</u> bullshit, he growls, Gimme something innovative, something to impress the investors—Make it pretty and make it do something cool...

Hmm, this is gonna be tricky. Your first thought *was* just to scrape Etherscan's (<u>or some other block explorer's</u>) HTML and plug it into <u>their API</u>. You could still use <u>their API</u> or <u>Websocket</u> and extend usability somehow...or—if you really wanted to impress him—you could structure a series of <u>Web3.js calls</u> (or <u>establish a websocket</u>) around the local full node you maintain as a good Ethereum developer.

Now what about the extended functionality? Here are a few ideas:

- **Active monitoring (Hacker Wallet Watcher):** Allow the user to follow the status of an account. When the account sends a transaction, the explorer <u>sends an SMS</u> to the user.
- **Follow the money (KYC):** Given a the balance in an account, allow the user to follow the accumulation and / or distribution of the payment. Where did it come from? Where did it go? <u>Visualized in graph form.</u>
- Analytics (How Healthy is an ICO?): Query the state, receipt or transaction tree for each new Ethereum block and visualize the data (growth / decline of accounts, number of transactions on a popular contract, etc.)

Let's get started...