Web3: Smart Wallets in React

The evolution of ownership, the conflict of wallet standards, and the code that connects them.

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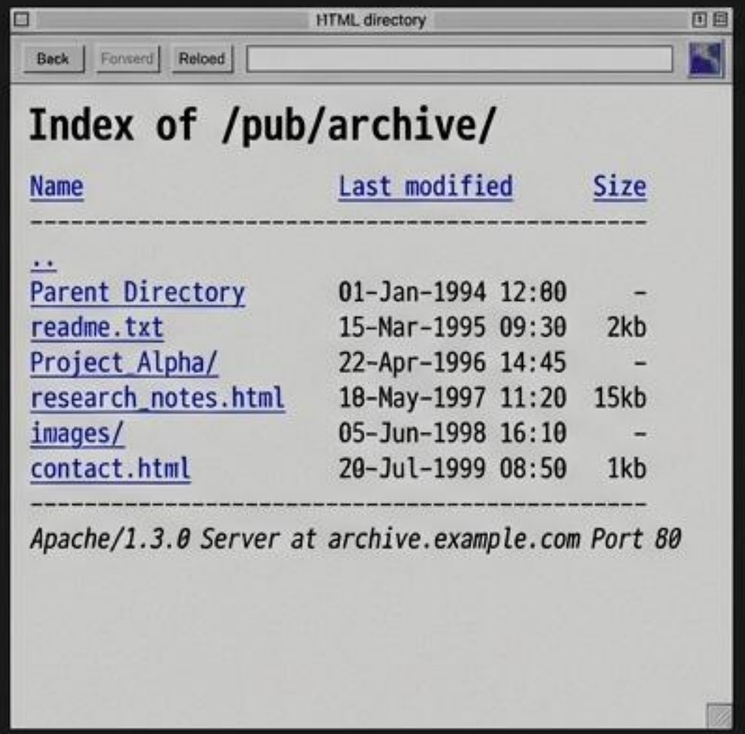
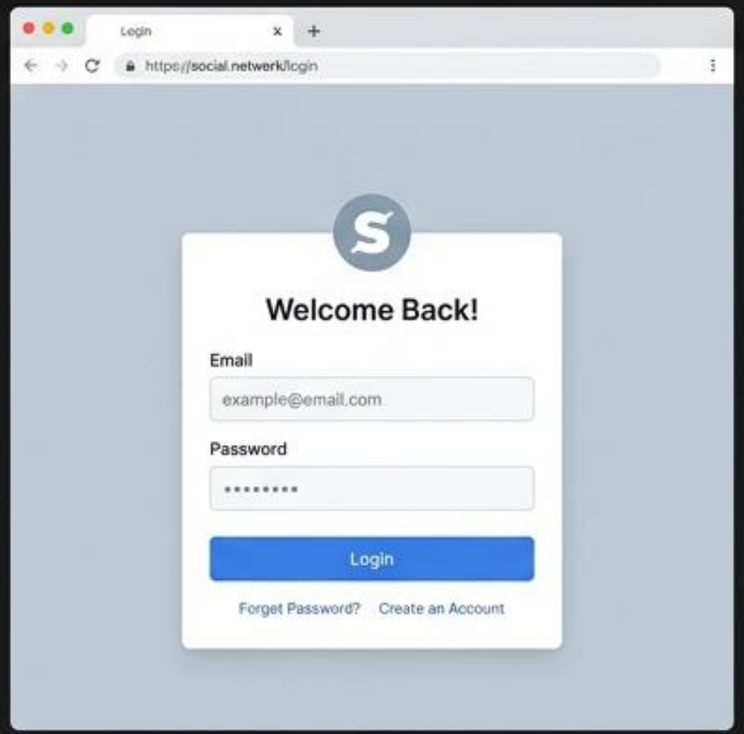
EVOLUTION OF USER INTERFACE



Web1: Read



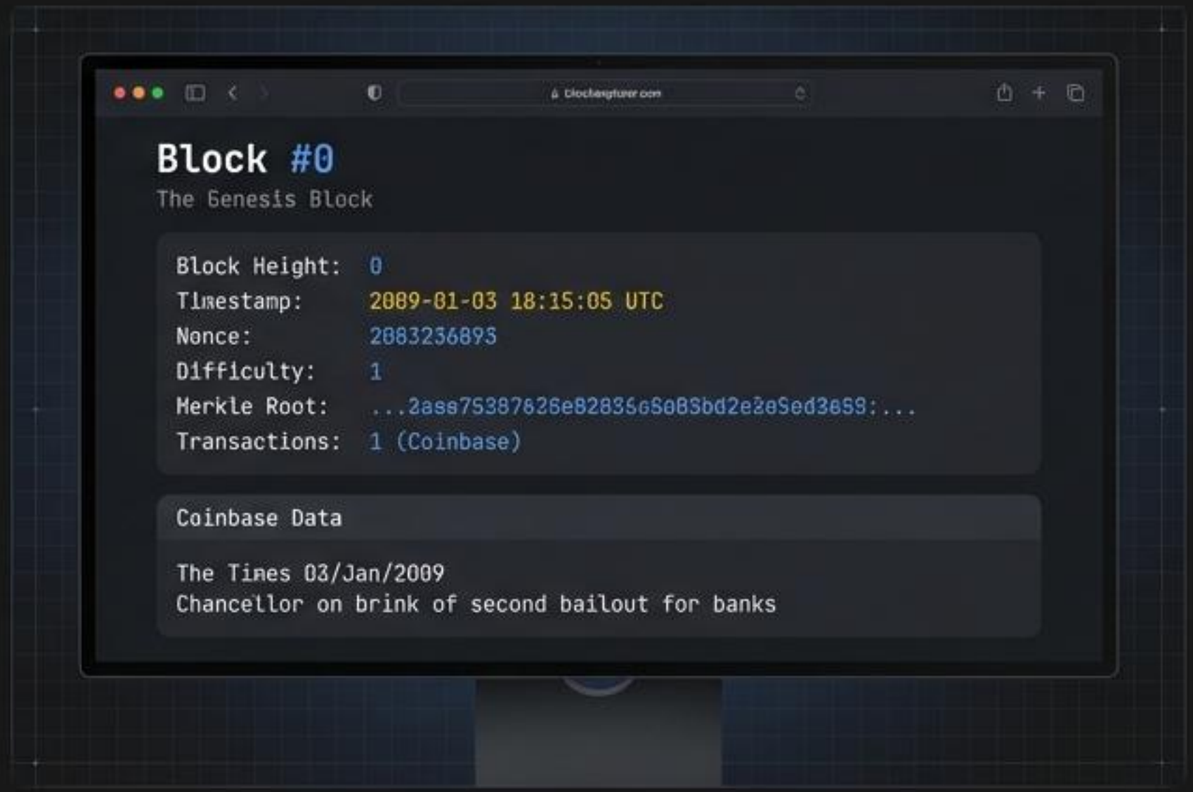
Web2: Read-Write

Web3: Read-Write-Own

From static protocols to centralized silos, to user sovereignty.

The Spark: 2009

A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution.



- Trustless Architecture
- Digital Scarcity
- Cryptographic Proof

The Passport, Not the Vault

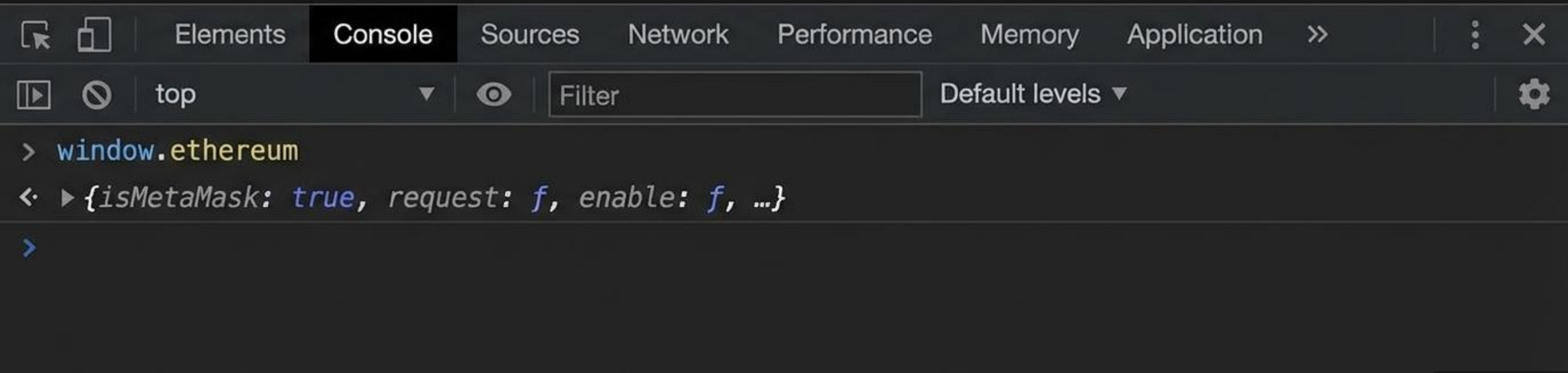
Misconception: Wallets store assets.

Reality: Wallets store Private Keys.

• Function: The Signer.

The Injection

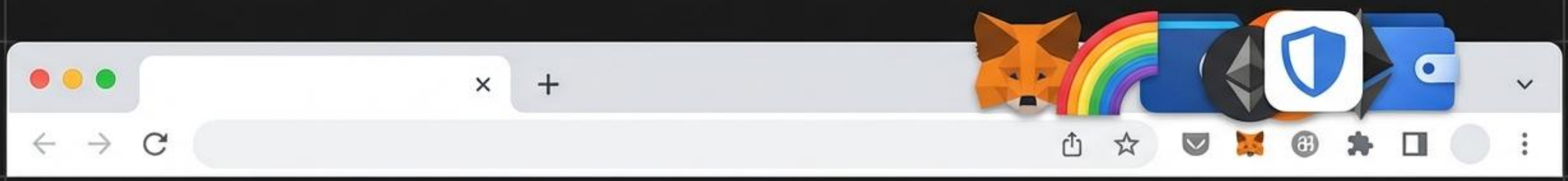
The Bridge: How the browser meets the blockchain via the injected Global Object.



The Wallet Wars: Clobbering

Race Conditions. One global object. Zero choice.

The system broke by its own success.



```
window.ethereum.request({ method: 'eth_requestAccounts' });
const provider = window.ethereum;
console.error(provider);
// Output: Uncaught Error: Multiple providers detected.
```

EIP-6963

Multi Injected Provider Discovery

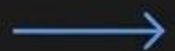
The Peace Treaty: Moving from global objects to event listeners.

The Handshake

Bidirectional communication. Every installed wallet identifies itself with a UUID, Name, and Icon.

dApp Request

```
window.dispatchEvent(new Event('eip6963:requestProvider'));
```

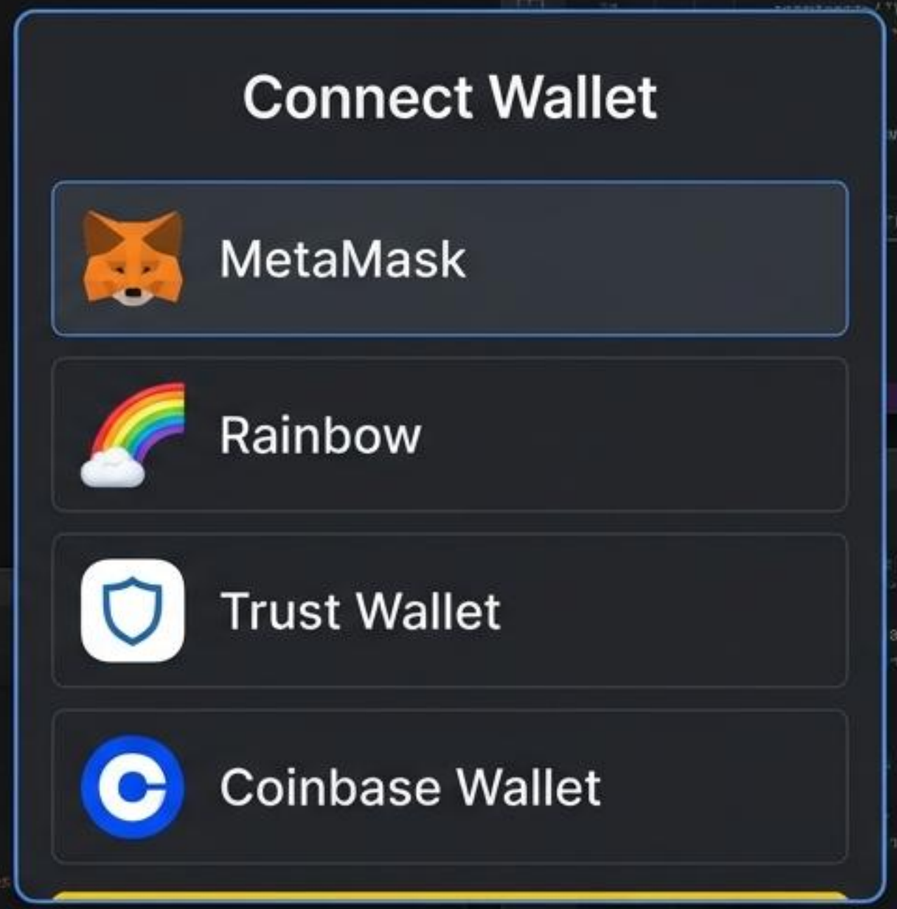


Wallet Announce

```
window.addEventListener('eip6963:announceProvider', (event) => {
  ...
});
```

True User Choice

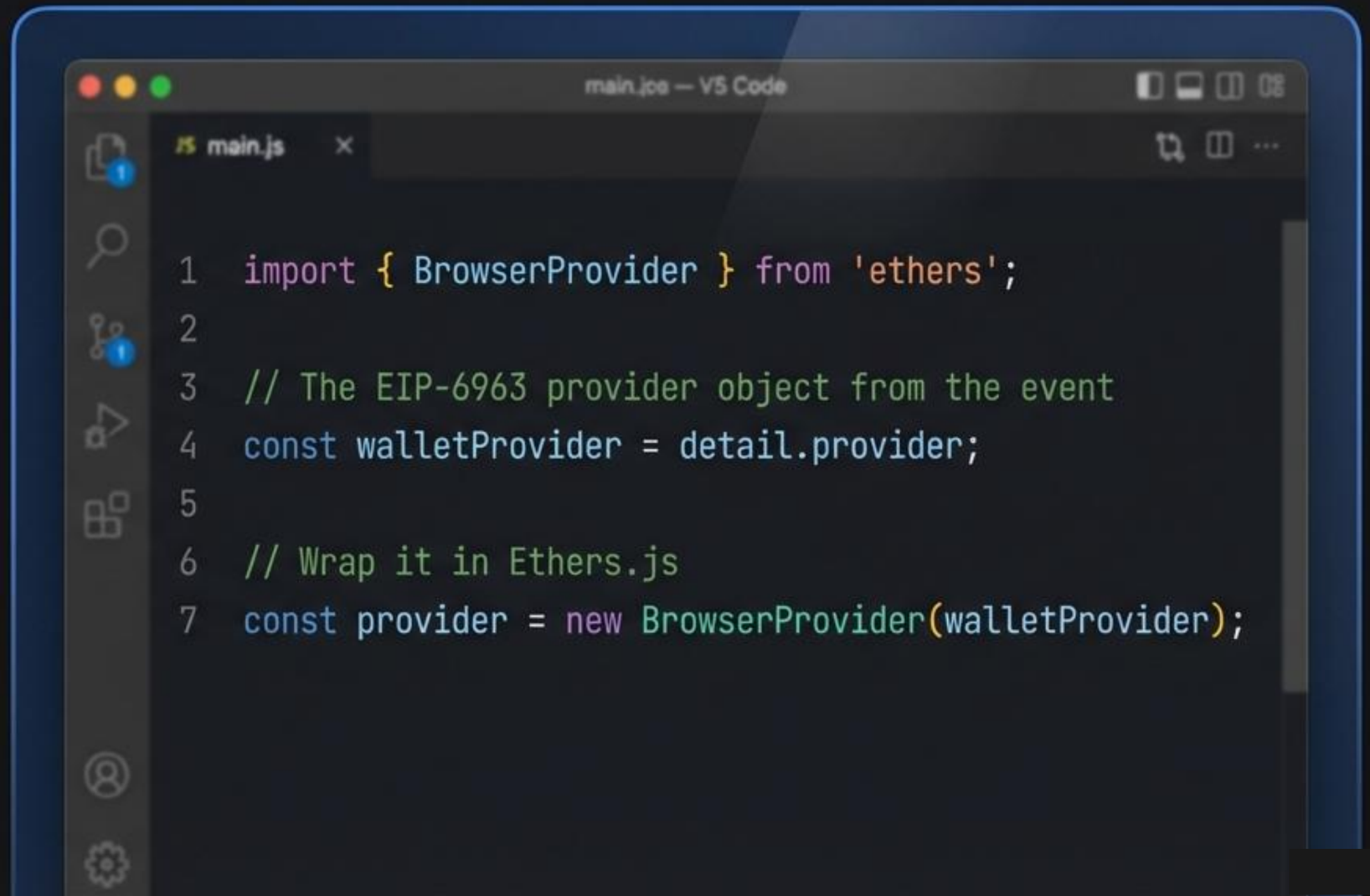
No conflicts. Just options.
The dApp displays exactly
what the user has installed.



The Tool: Ethers.js

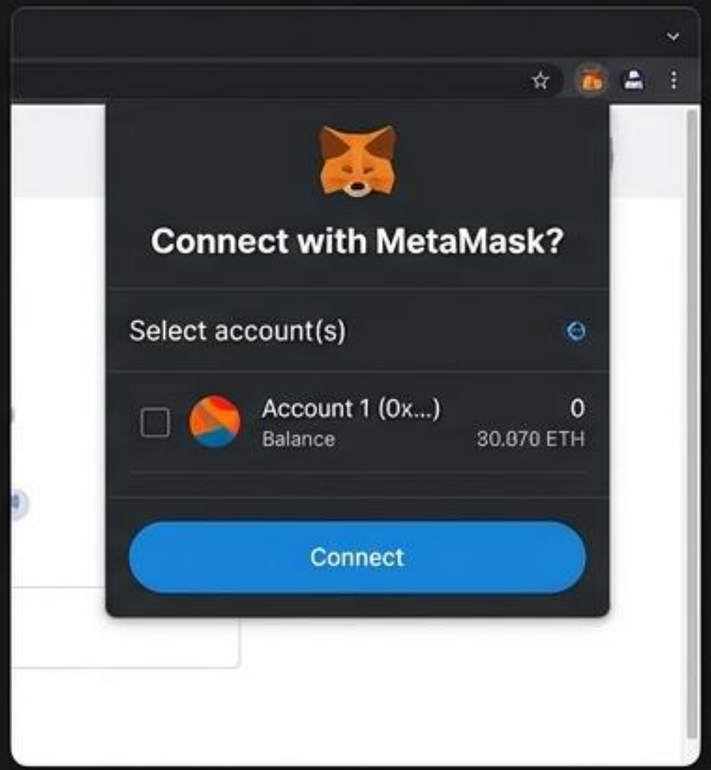
Abstraction. Wrapping complex RPC calls into clean JavaScript

methods.



The Connection

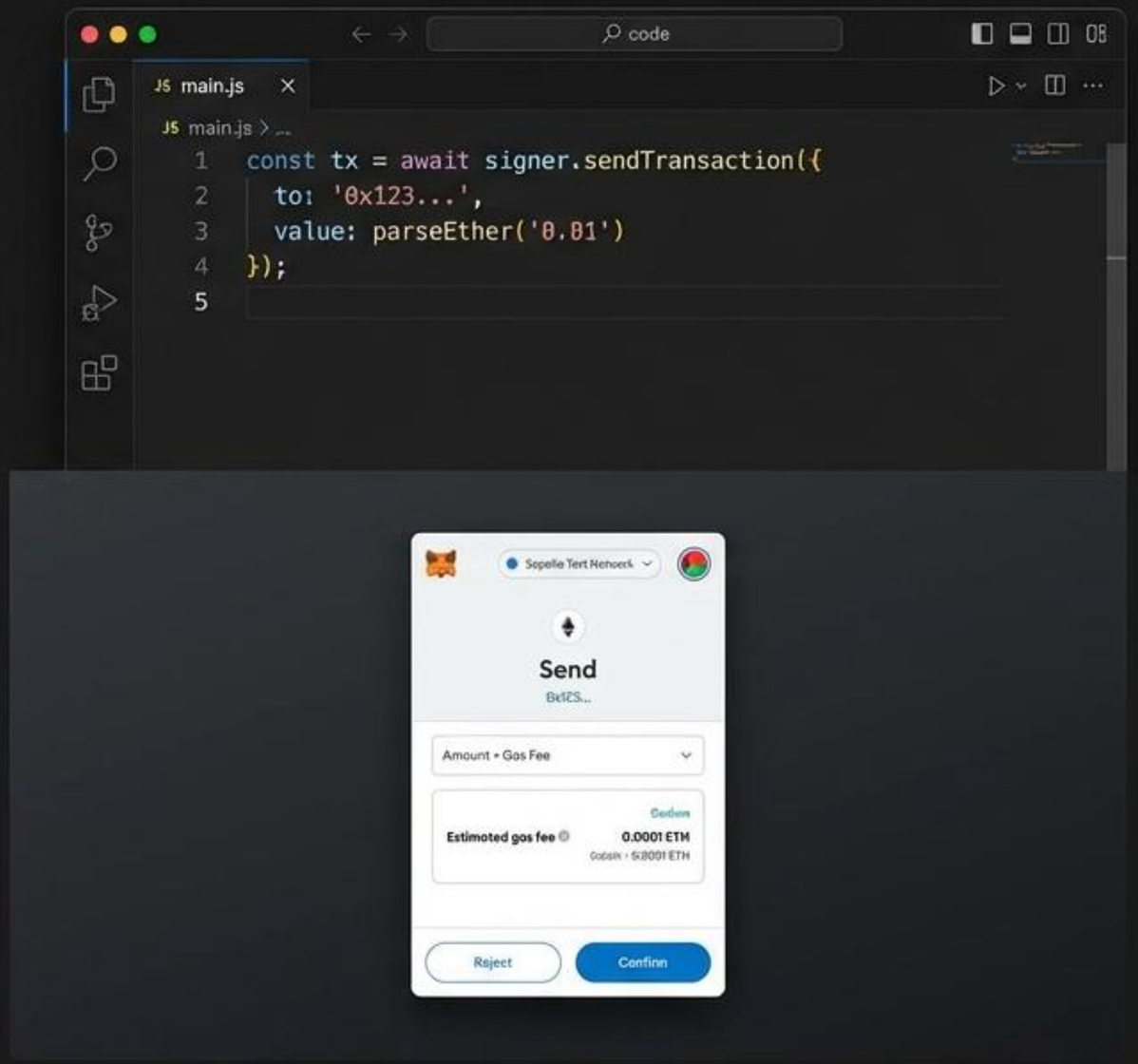
The Handshake. Requesting permission to view the address and initiate the Signer.



The Transaction: Sepolia Testnet

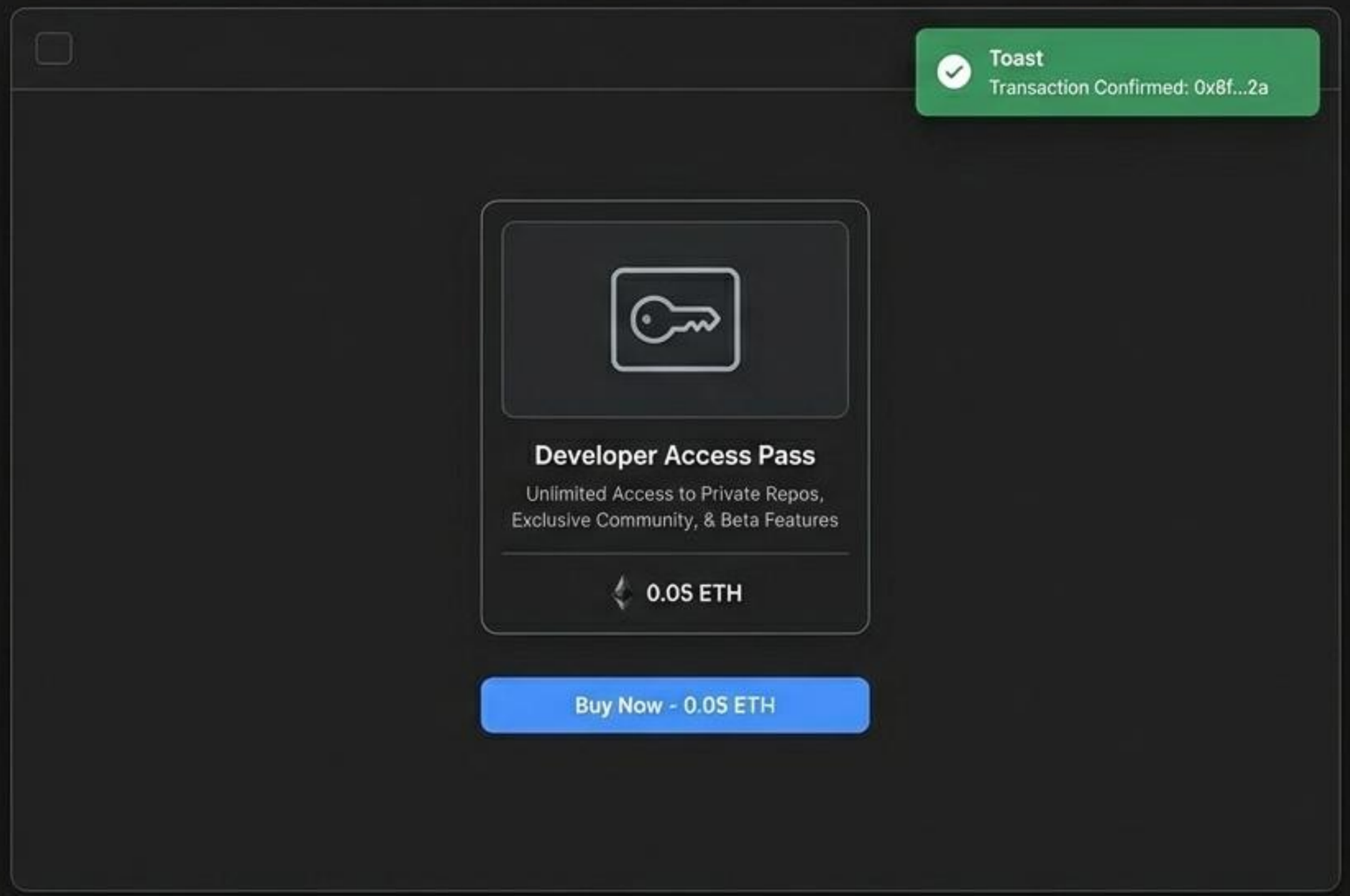
State Change. Moving value, paying gas, and recording truth on the ledger.

JetBrains Mono



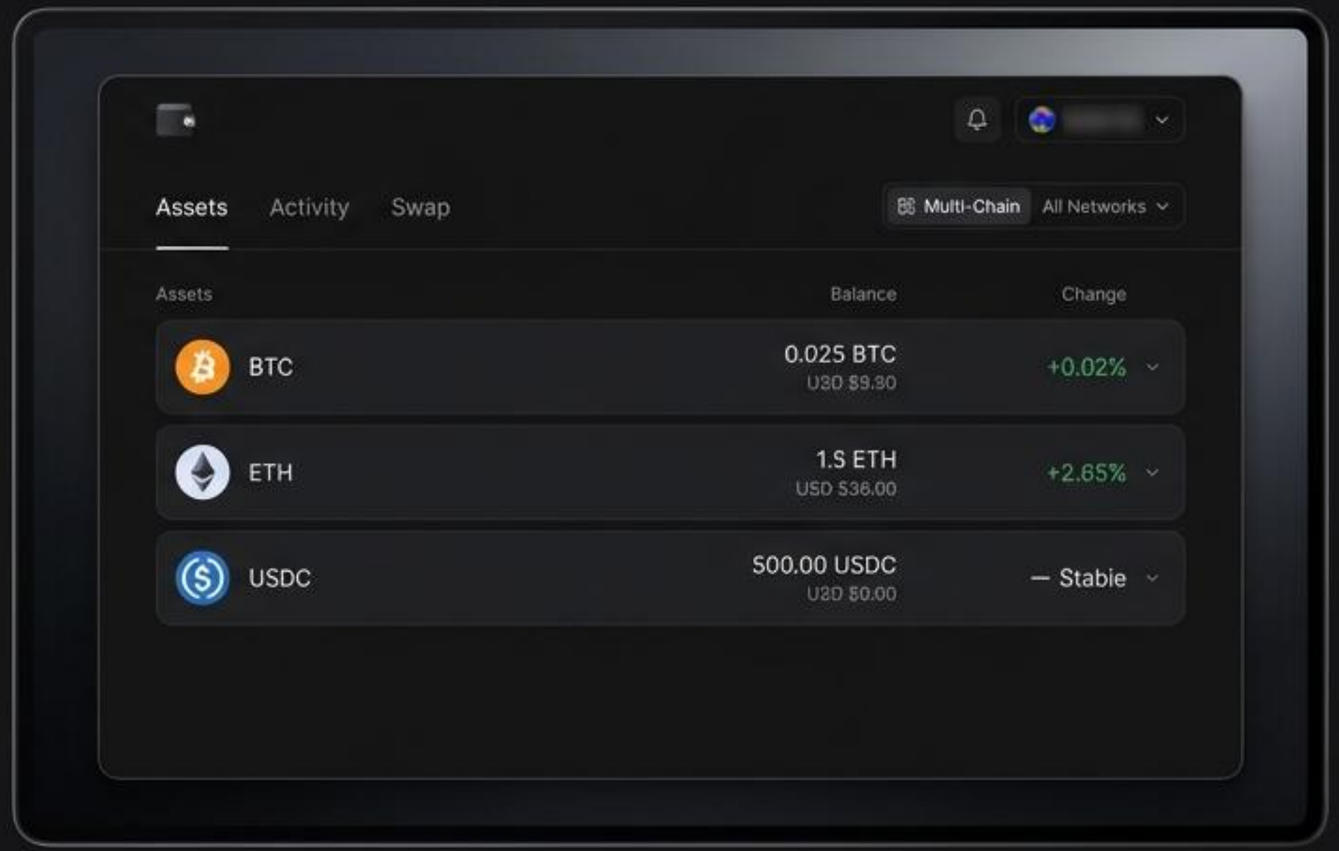
Value Exchange: The Marketplace

The code empowers the commerce. Connect -> Sign -> Own.



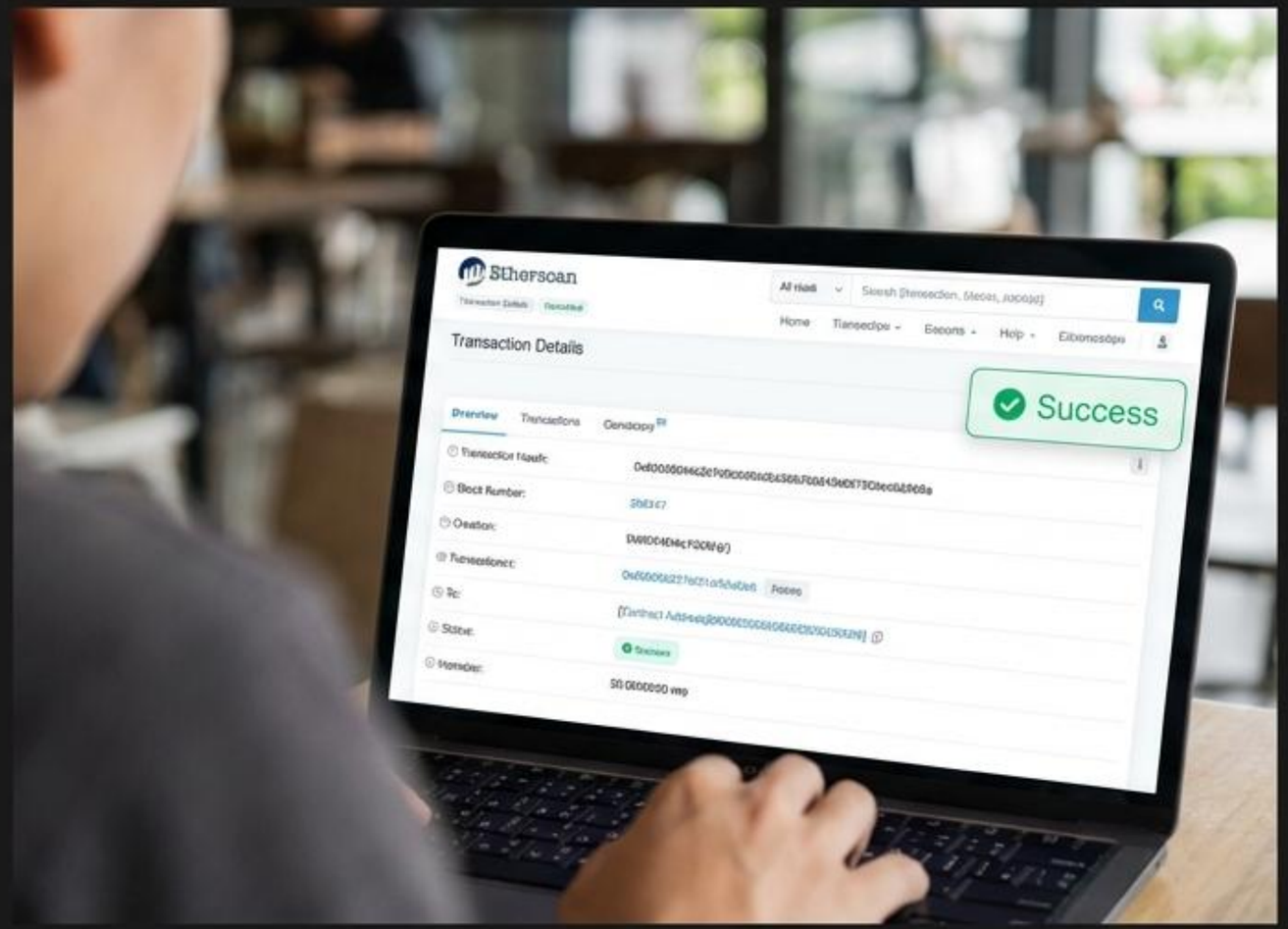
Beyond Ethereum: Multi-Coin Support

Interoperability. Managing a diverse portfolio of Bitcoin and ERC-20s in a single view.



The Future is User-Centric

Seamless. Secure. Sovereign. The friction is gone; now we build.



Thank you

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