

# Blockchain App: First Crypto-Mining Browser Development

Velvetech helps Blockmint Technologies build a secure cryptocurrency mining browser

- **Project:** web browser Minter
- **Duration:** 14 months
- **Technologies:** blockchain, cryptocurrency, Chromium, VPN
- **Target audience:** Monero (XMR) miners and cryptocurrency enthusiasts



*Blockmint Technologies is a Canadian company that creates new distributed ledger technologies to enable a more decentralized deployment of blockchain-based apps.*

## THE CASE

Blockmint Technologies wanted to introduce to the market a new web browser that would offer users better privacy and let them reap the benefits of blockchain, such as participation in the crypto economy.

## Challenge

We had to build a secure web browser that would allow users to mine cryptocurrency while surfing the net and, at the same time, preserve their privacy. So, besides crypto-mining, the browser would have to feature a VPN, ad blocker, and crypto wallet.



*We aim to make the crypto-economy more decentralized and accessible to everyone.*

**Nelson Ijeh**

CEO and CTO at Blockmint Technologies

## Process

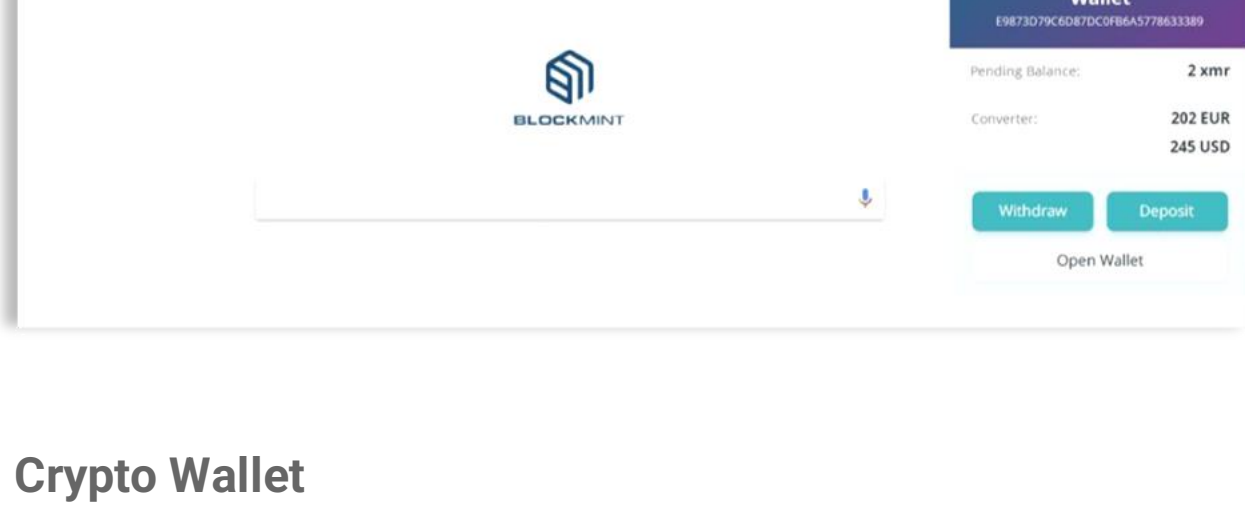
### Crypto Revolution with Blockchain App Development

#### Web Browser

Our team of [blockchain developers](#) chose the Brave browser as the platform for building Minter — the first browser that allows users to mine crypto. Brave comes with the perfectly set up privacy features:

- Ad blocker
- Pop-up blocker
- Secure HTTP connections
- Script blocking
- Third-party cookie blocking

Besides, Brave comes with Chromium, Google's open-source web browser, that offers the latest Chrome features, APIs, extensions and guarantees a smooth browsing experience for the user.



#### Crypto Wallet

To allow users to mine and make transactions with Monero — a secure, private, and untraceable digital currency — we integrated a Monero crypto wallet into the Minter browser.

The crypto wallet lets users check their balance and send funds to external Monero crypto wallets. The underlying blockchain technologies that enable secure wallet operations are the mining pool, its proxy, and the miner algorithm.

#### Ultra-Secure VPN

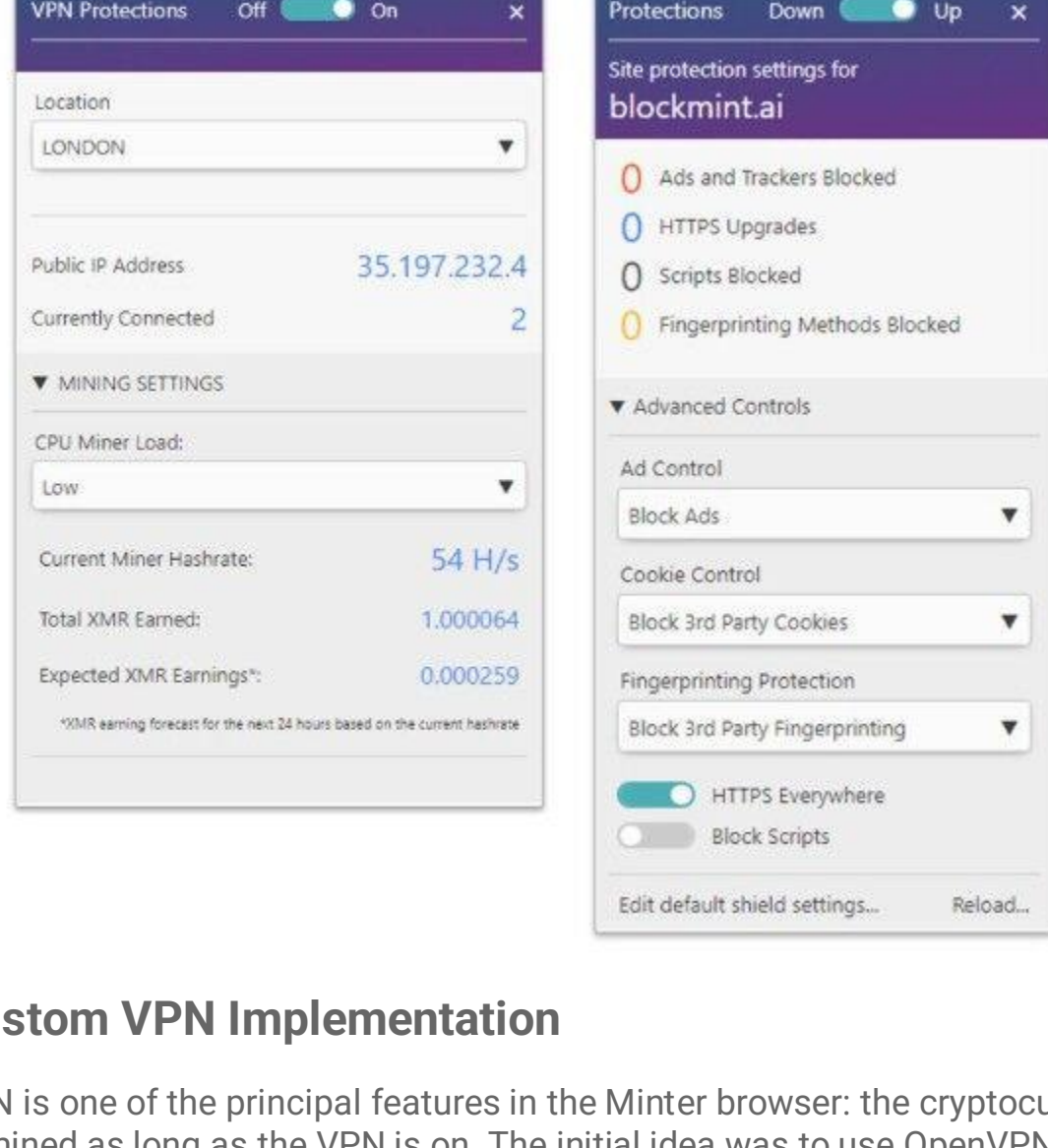
A virtual private network built into the Minter browser is fast and censorship-resistant, meaning it's incredibly hard to detect whether Minter's user is browsing via a VPN at all. The VPN we developed relies on the proof-of-work algorithms, and so it can't be detected by Deep Packet Inspection — a special software ISPs and network managers use to reroute or block traffic.

#### Admin Dashboard

Besides building the browser, Velvetech also developed an admin portal with a dashboard where Blockmint's employees can review user statistics: balances, mining rate, VPN usage, etc.

## Technical Challenges

As with any [software development project](#) that involves the use of nascent technologies, our team ran into a couple of roadblocks. Despite that, our expertise and focus on the client's goals helped us successfully resolve all issues and deliver a top-notch blockchain app.



#### Custom VPN Implementation

VPN is one of the principal features in the Minter browser: the cryptocurrency is mined as long as the VPN is on. The initial idea was to use OpenVPN, but after additional research, the team opted for Shadowsocks — a more secure technology to implement a custom VPN.

Shadowsocks has gained massive public acclaim as the primary tool to circumvent Internet censorship in mainland China. As a result of switching to Shadowsocks:

- The client got a browser with a more secure VPN (that hides an IP address altogether)
- The team built and integrated the VPN into Minter faster and with fewer resources

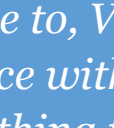
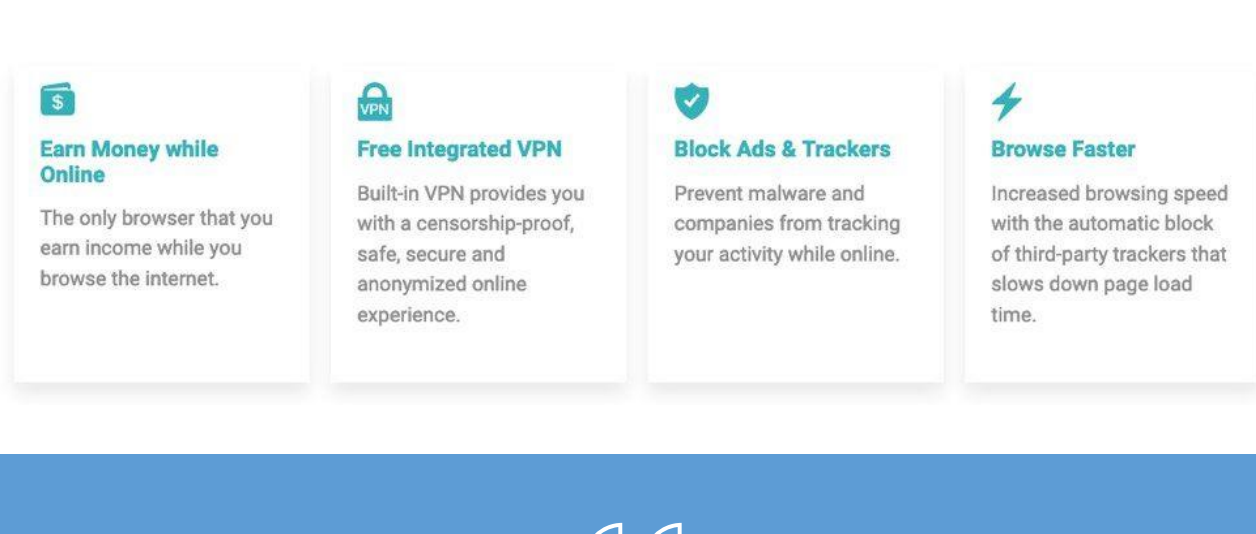
#### Keeping Pace

Brave became a great open-source platform to bootstrap the development of Minter, but after Velvetech had started engineering, the Brave team announced a switch to Chromium — a superior web browsing engine by Google. In the end, we had to maintain compliance with new Brave versions and account for Chromium upgrades, which we handled flawlessly.

## Outcome

Minter is the first browser in the world that lets users earn cryptocurrency while browsing websites. On top of that, this application generates profits for Blockmint on a revenue-share model.

Minter's user adoption rate shows that blockchain technology is becoming mainstream, partially thanks to joined Blockmint Technologies and Velvetech's efforts.



*Of all the companies we spoke to, Velvetech was the one that had hands-on prior experience with Blockchain. Finding the Velvetech team was the best thing that happened to us. We were able to meet all our deadlines and ship our products on time. We look forward to collaborating with Velvetech in the Blockchain space and other future technological areas.*

**Nelson Ijeh**

CEO and CTO at Blockmint Technologies

## What's Next

We are in talks with Blockmint Technologies about the intentions to create Minter 2.0, a solution that will support even more advanced features. There are also plans to port the browser to the Mac and make the application available on the iOS and Android platforms.

Velvetech is excited to bring on its [blockchain app development expertise](#) to help trailblazers like Blockmint Technologies explore new growth opportunities and drive wider blockchain adoption in the mass consumer market.

# Ready to Initiate Your Blockchain Project?

LET'S TALK

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