

Navcoin-js Hackathon Day 1

<https://github.com/aguycalled/navcoin-js-hackathon>
alex@nav.community

HELLO!

- What are we going to do during the Hackathon?
- What is Navcoin?
- What is Navcoin-js?
- Basic dev setup.
- Library methods overview.
- Practical example: Creating a secret chat app.
- Questions.

What is this about?

- My name is Alex, contributing thousands of lines of code to Navcoin since 2016.
- I want to show you how to use the navcoin-js library to create apps which built on top of the Navcoin blockchain.
- First day of the Hackathon. Every Friday at the same time.
- Today we will have a very high level overview and create a private chat app. Second day we will develop further the app, talk about dotNav, private tokens, NFTs, answer questions. Third day, public broadcast.

What is this about?

- Don't worry, we won't go deep into cryptography or low level functions.
- December 16th -> Last day to submit your projects.
- Projects will be voted and awarded with prizes (1x25,000, 1x10,000, 3x5,000 NAV)
- Conditions:
- Open source, project is finished and functional.

What is Navcoin?

- Navcoin is a cryptocurrency with privacy-enhanced features.
- Today we will focus on building on top of xNAV.
- xNAV is a private token inside of the Navcoin blockchain.
- xNAV transactions hide the sender, receiver, amount and allow to embed encrypted data.
- Yesterday we released Navcoin Core 7.0. Protocol upgrade with Private Tokens, NFTs, dotNAV, etc. We will talk about this the next session.

What is Navcoin-js?

- Navcoin-js is a high level javascript library to interact with the Navcoin blockchain.
- This means you don't need to care about: wallet/key management, network communication, basic functionality.
- In continuous development.
- Built on top of @aguycalled/bitcore-lib which is a fork of bitpay's bitcore-lib.
- Navcoin-js -> High Level functions
- @aguycalled/bitcore-lib -> Lower Level functions

Basic Dev Setup

- Node v15 and NPM v7
- Code editor: I use WebStorm (they give you a free license if you are an open source contributor), other alternatives: Sublime, Visual Code, any text editor
- I use nvm for node version management:
- `brew install nvm`
- `nvm install 15`
- `nvm use 15`
- `vm alias default 15`

Basic Dev Setup

- Create empty folder.
- `npx create-react-app . --template typescript`
- `npm i navcoin-js`
- `yarn start`
- Edit `src/index.tsx`

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";

// eslint-disable-next-line @typescript-eslint/no-var-requires
const njs = require("navcoin-js");

njs.wallet.Init().then(async () => {
  ReactDOM.render(
    <React.StrictMode>
      <App njs={njs} />
    </React.StrictMode>,
    document.getElementById("root")
  );
});
```


Basic Dev Setup

- Edit `src/App.tsx`
- Receive `njs` object from properties...
- Play with it!

Basic Dev Setup (Optional)

- Run a full node: <https://doc.nav.community/>

Library Methods Overview

- <https://github.com/aguycalled/navcoin-js/blob/main/README.md>

Creating a Private Chat Messaging App

- Scaffold to build navcoin-js apps: <https://github.com/aguycalled/navcoin-js-hackathon>
- From this base, I will live code a very basic private chat messaging app.

What's next.

- Ideas to build your Hackathon projects.
- Questions?
- You can reach me anytime for questions on Discord, email (alex@nav.community) or Telegram (@aguycalledalex)
- Navcoin-js will keep seeing new features added in the next days.
- See you next Friday!