

NEXTJS SMART CONTRACT LOTTERY

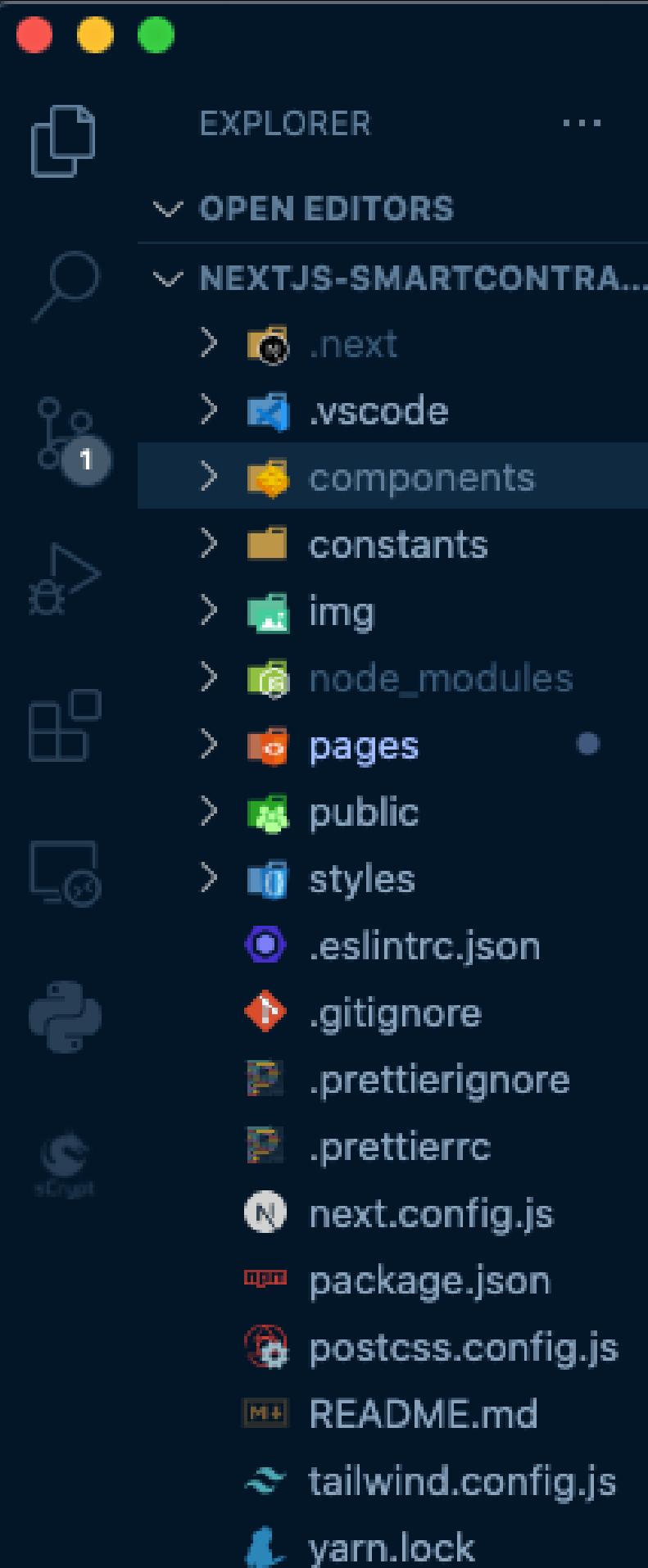
Blockchain

LIBRARY REACT YANG PERLU DISIAPKAN

- Web3React
- wagmi
- react-moralis
- useDapp
- Web3Modal
- useMetamask

Blockchain





NEXT JS SETUP

Persiapkan setup next JS dengan perintah tersebut di terminal.

```
yarn create next-app .
```

A screenshot of the Visual Studio Code interface. The top menu bar includes Code, File, Edit, Selection, View, Go, Run, Terminal, Window, and Help. The title bar shows "ManualHeader.js — nextjs-smartcontract-lott". The left sidebar has icons for Explorer, Open Editors, NextJS, components, Header.js, LotteryEntranc..., ManualHeader.js (which is selected), constants, img, node_modules, pages, public, styles, .eslintrc.json, .gitignore, .prettierignore, .prettierrc, next.config.js, package.json, postcss.config.js, README.md, tailwind.config.js, and yarn.lock. The main editor area displays the following code:

```
3 import { useEffect } from "react"
4 import { useMoralis } from "react-moralis"
5
6 // Top navbar
7 export default function ManualHeader() {
8     const { enableWeb3, isWeb3Enabled, isWeb3EnableLoading, account } = useMoralis()
9
10    useEffect(() => {
11        if (
12            !isWeb3Enabled &&
13            typeof window !== "undefined" &&
14            window.localStorage.getItem("connected")
15        ) {
16            enableWeb3()
17            // enableWeb3({provider: window.localStorage.getItem("connected")})
18        }
19    }, [isWeb3Enabled])
20    // no array, run on every render
21    // empty array, run once
22    // dependency array, run when the stuff in it changes
23
24    useEffect(() => {
25        Moralis.onAccountChanged((account) => {
26            console.log(`Account changed to ${account}`)
27            if (account == null) {
28                window.localStorage.removeItem("connected")
29                deactivateWeb3()
30            }
31            console.log("Null Account found")
32        })
33    }, [])
34
35    return (
36        <div>
```

COMPONENT

Membuat tampilan manual header jenis 1 dengan:

- JSX
- Moralis
- React Moralis

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure:
 - components > JS Header.js
 - NEXTJS... .next
 - .vscode
 - components
 - JS Header.js (selected)
 - JS LotteryEntranc...
 - JS ManualHeader.js
 - constants
 - img
 - node_modules
 - pages
 - public
- JS Header.js**: The active editor tab.
- Code Content:**

```
1 import { ConnectButton } from "web3uikit"
2
3 export default function Header() {
4     return (
5         <nav className="p-5 border-b-2 flex flex-row">
6             <h1 className="py-4 px-4 font-bold text-3xl"> Decentralized Lottery</h1>
7             <div className="ml-auto py-2 px-4">
8                 <ConnectButton moralisAuth={false}>
9                 </div>
10            </nav>
11        )
12    }
```

COMPONENT HEADER 2

Connection Button menggunakan web3uikit

Code File Edit Selection View Go Run Terminal Window Help

LotteryEntrance.js — nextjs-smartcontract-lottery-fcc

EXPLORER ... JS LotteryEntrance.js

OPEN EDITORS

components > JS LotteryEntrance.js > ...

```
1 import { contractAddresses, abi } from "../constants"
2 // dont export from moralis when using react
3 import { useMoralis, useWeb3Contract } from "react-moralis"
4 import { useEffect, useState } from "react"
5 import { useNotification } from "web3uikit"
6 import { ethers } from "ethers"

7
8 export default function LotteryEntrance() {
9     const { Moralis, isWeb3Enabled, chainId: chainIdHex } = useMoralis()
10    // These get re-rendered every time due to our connect button!
11    const chainId = parseInt(chainIdHex)
12    // console.log(`ChainId is ${chainId}`)
13    const raffleAddress = chainId in contractAddresses ? contractAddresses[chainId].address : null
14
15    // State hooks
16    // https://stackoverflow.com/questions/58252454/react-hooks-using-usestate
17    const [entranceFee, setEntranceFee] = useState("0")
18    const [numberOfPlayers, setNumberOfPlayers] = useState("0")
19    const [recentWinner, setRecentWinner] = useState("0")
20
21    const dispatch = useNotification()
22
23    const {
24        runContractFunction: enterRaffle,
25        data: enterTxResponse,
26        isLoading,
27        isFetching,
28    } = useWeb3Contract({
29        abi: abi,
30        contractAddress: raffleAddress,
31        functionName: "enterRaffle",
32        msgValue: entranceFee,
33        params: {},
34    })
```

> OUTLINE

> TIMELINE

CALLING FUNCTIONS IN NEXTJS

Menjalankan Contract Function:

- Moralis Provider
- useMoralis
- parseInt

Otomatis Memperbaharui Constant Value UI:

- ethers.utils.FormatTypes

TAILWIND & STYLING

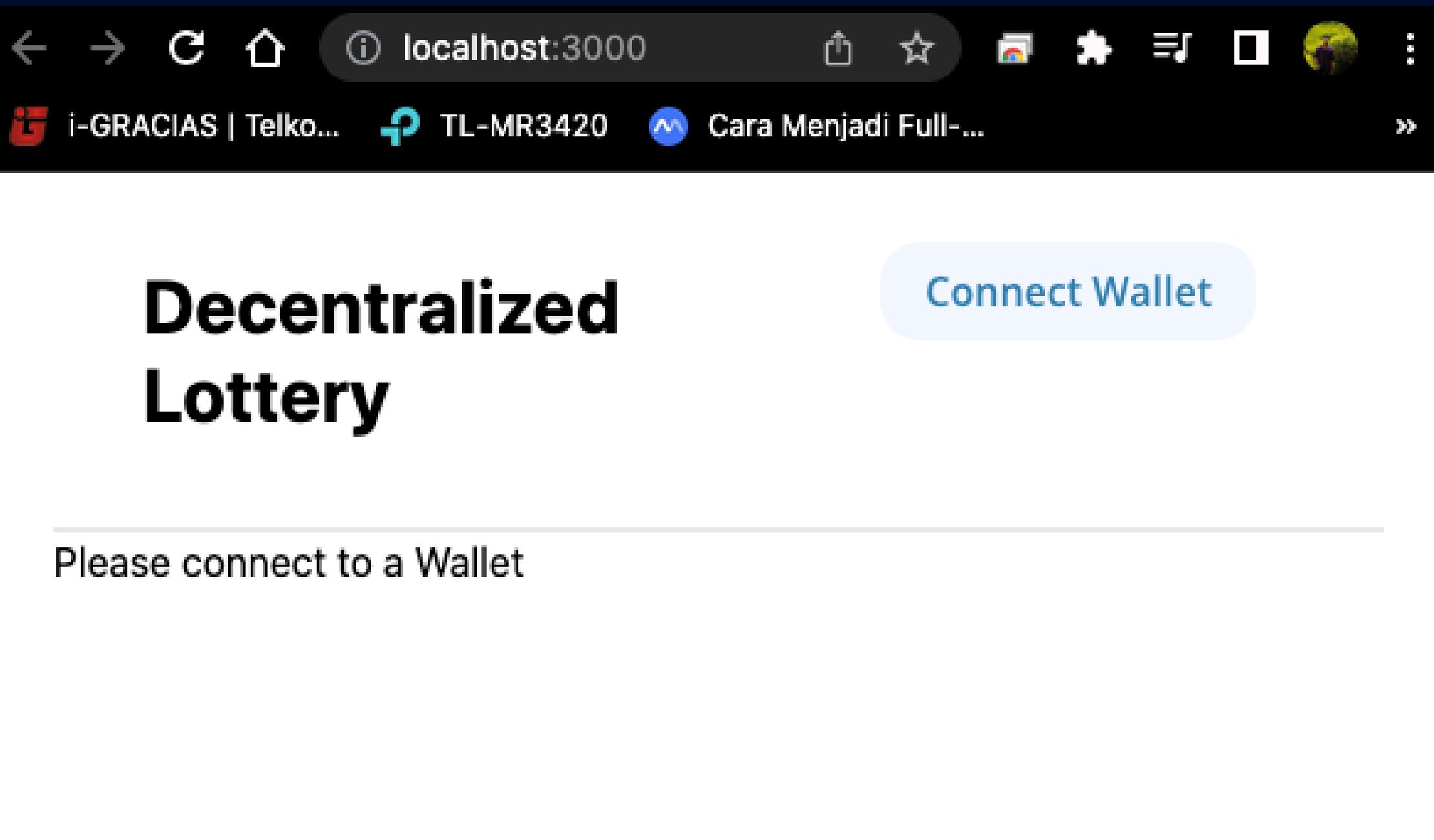
Install Tailwind untuk
melakukan styling & jangan
lupa tambahkan extention
PostCSS, Tailwind.

The screenshot shows a VS Code interface with the following details:

- EXPLORER:** Shows the project structure under "NEXTJS-SMARTCONTRA...".
- Home.module.css:** Contains CSS rules for ".container", ".main", ".footer", and ".title a".
- tailwind.config.js:** Contains the configuration for Tailwind, defining "module.exports" with "content", "theme", "extend", and "plugins".
- globals.css:** Contains the base Tailwind imports: "@tailwind base;", "@tailwind components;", and "@tailwind utilities;".

```
1 .container {  
2   padding: 0 2rem;  
3 }  
4  
5 .main {  
6   min-height: 100vh;  
7   padding: 4rem 0;  
8   flex: 1;  
9   display: flex;  
10  flex-direction: column;  
11  justify-content: center;  
12  align-items: center;  
13 }  
14  
15 .footer {  
16   display: flex;  
17   flex: 1;  
18   padding: 2rem 0;  
19   border-top: 1px solid #eaeaea;  
20   justify-content: center;  
21   align-items: center;  
22 }  
23  
24 .footer a {  
25   display: flex;  
26   justify-content: center;  
27   align-items: center;  
28   flex-grow: 1;  
29 }  
30  
31 .title a {  
32   color: #0070f3;  
33   text-decoration: none;  
34 }
```

```
1 module.exports = {  
2   ...  
3   content: ["./pages/**/*.{js,jsx,ts,tsx}"],  
4   theme: {  
5     extend: {}  
6   },  
7   plugins: []  
8 }  
9  
10 @tailwind base;  
11 @tailwind components;  
12 @tailwind utilities;
```



RUNNING PROGRAM

Tampilan awal program di running

RUNNING PROGRAM

Pilihan menu koneksi
ke Wallet

localhost:3000

Decentralized Lottery

Please connect to a Wallet

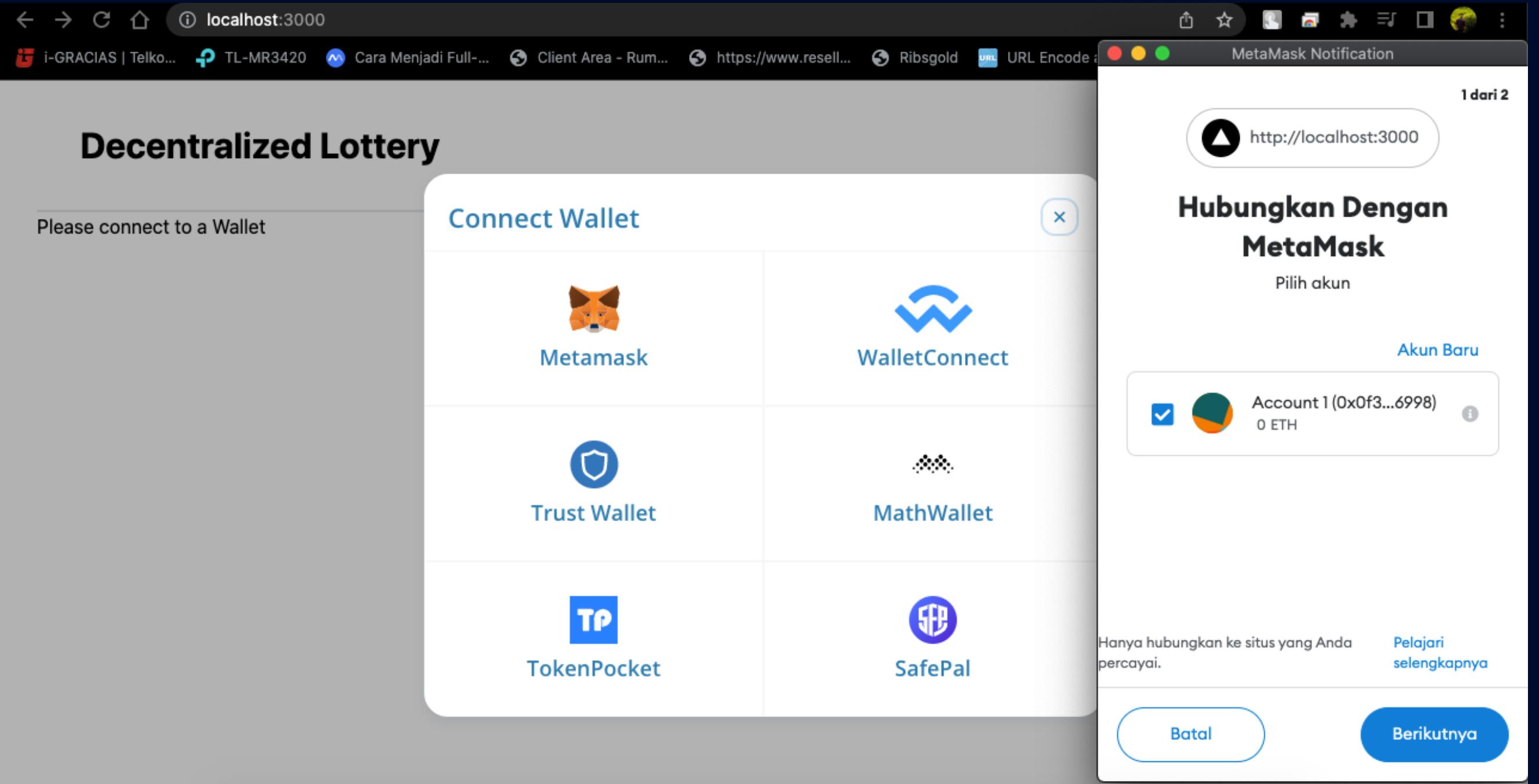
Connect Wallet

Metamask	WalletConnect
 Metamask	 WalletConnect
 Trust Wallet	 MathWallet
 TokenPocket	 SafePal

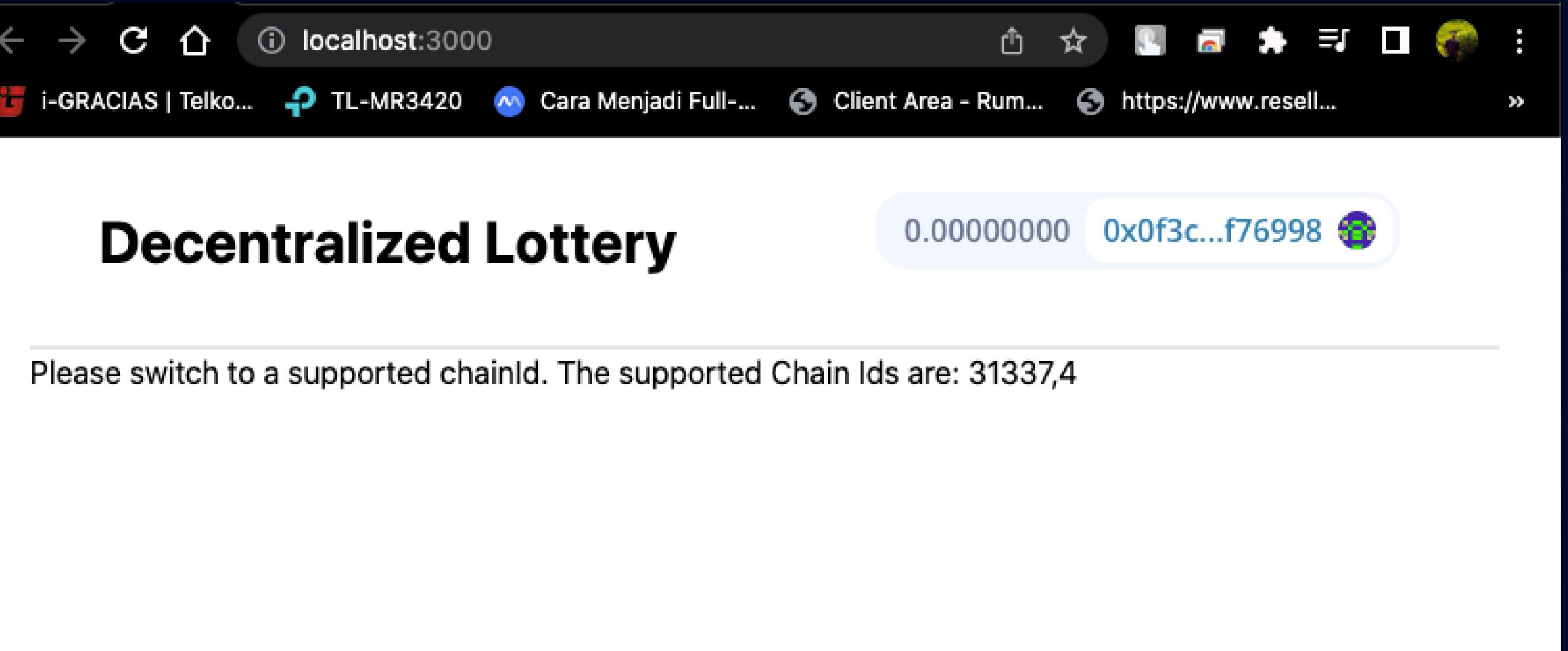
Connect Wallet

RUNNING PROGRAM

Setelah
mengkoneksikan pada
wallet Metamask



RUNNING PROGRAM



Tampilan setelah
terhubung pada wallet
Metamask

IPFS

Blockchain

The screenshot shows the IPFS Desktop application window. On the left is a dark sidebar with the IPFS logo at the top, followed by menu items: STATUS (selected), FILES, EXPLORE, PEERS, and SETTINGS. At the bottom of the sidebar, it says "UI v2.15.0", "Revision fadd900", "See the code", and "Report a bug". The main content area has a header with "QmHash/bafyHash" and "Browse" buttons, along with a question mark and refresh icon. Below the header, the text "Connected to IPFS" is displayed, followed by "Hosting 18 KiB of data — Discovered 454 peers". It shows peer details: PEER ID (12D3KooWDjmW5JeeQWCm7MyfrdtQJTw44qznestLuPWURShZYPR), AGENT (go-ipfs v0.13.0 desktop), and UI (v2.15.0). A "► Advanced" link is also present. A modal dialog at the bottom asks for anonymous usage data with "OK" and "No thanks" buttons. The lower half of the screen features two charts: "BANDWIDTH OVER TIME" showing fluctuating teal and orange lines on a grid, and "NETWORK TRAFFIC" showing a circular gauge with "27 KiB/s Incoming" and "0 KiB/s Outgoing".

IPFS

Install IPFS Desktop di
device anda

IPFS

Open file tersebut lalu buka pada browser dan sediakan juga extention IPFS pada browser



IPFS BUILD DIREKTORI FILE

Setelah lakukan build adalah melakukan export pada terminal.

Coba running program tersebut dengan perintah "yarn run dev".

```
~/Desktop/nextjs-smartcontract-lottery-fcc on main !1
yarn build
yarn run v1.22.17
$ next build
info  - Checking validity of types

./components/LotteryEntrance.js
78:8 Warning: React Hook useEffect has a missing dependency: 'updateUIValues'. react-hooks/exhaustive-deps

./components/ManualHeader.js
20:8 Warning: React Hook useEffect has a missing dependency: 'enableWeb3'. Either -hooks/exhaustive-deps
34:8 Warning: React Hook useEffect has missing dependencies: 'Moralis' and 'dependency array. react-hooks/exhaustive-deps

info  - Need to disable some ESLint rules? Learn more here: https://nextjs.org/c
info  - Creating an optimized production build .(node:28072) [ESLINT_PERSONAL_C
onfig files have been deprecated. Please remove it or add 'root:true' to the cor
'~/.eslintrc.*' accidentally. (found in ".../../.eslintrc.js")
(Use `node --trace-deprecation ...` to show where the warning was created)
info  - Creating an optimized production build
warn  - Compiled with warnings
```

FINAL TEST IPFS

Decentralized Lottery

Hi from lottery entrance!

Enter Raffle

Entrance Fee: 0.1 ETH

Number Of Players: 5

Recent Winner: 0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266

9999.49323010 0xf39f...b92266 

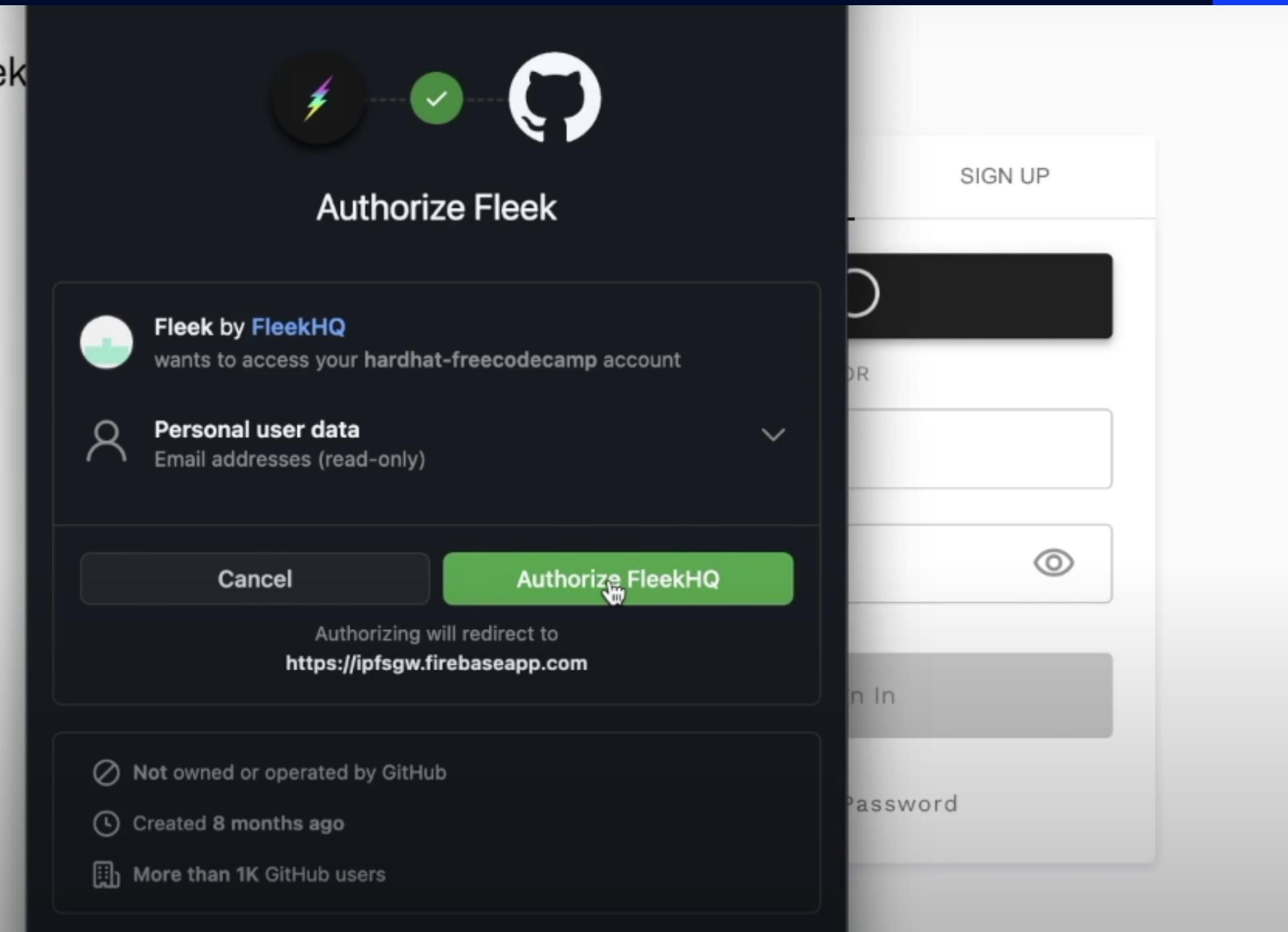


HOSTING ON IPFS & FILECOIN USING FLEEK

Future Technology
Blockchain

AUTHORIZE FLEEX

Hubungkan Fleex pada
github



SETTING FLEEK

Push Code di new repository baru yang sudah terhubung dengan flex dan Ubah build command seperti yang ada digambar tersebut

The screenshot shows the Fleek dashboard interface. On the left, there's a sidebar with options: Team (selected), Hosting (highlighted with a blue bar), Storage, Billing, Members, and Team Settings. The main area is titled "Hosting" and contains the following configuration fields:

- "If you're using a static site generator or build tool, we'll need to" (with a link to "Learn more in our docs →")
- "Framework": A dropdown menu set to "Other".
- "Docker Image Name (e.g. node:16)": A text input field containing "fleek/next-js:node-16".
- "Build command": A text input field containing `yarn install && yarn run build && yarn run export`. This line is highlighted with a blue box.
- "Publish directory": A text input field containing "out".
- "Base Directory": An empty text input field.

DEEPLY FLEEX

Lakukan Deploy pada
Fleex dan lihat status
File Coin ID.

The screenshot shows the Fleek web interface. On the left, there's a sidebar with a team dropdown set to "My team", a "Hosting" button (which is highlighted in blue), and other options like "Storage", "Billing", "Members", and "Team Settings". The main area has a breadcrumb navigation "Hosting > holy-bird-9835". A vertical sidebar on the right lists "General", "Build & Deploy" (which is selected and highlighted in blue), "Continuous Deployment", "Advanced Build Settings", "Site Management", and "Domain Management". The "Build Settings" section contains the following fields:

- Repository:** `https://api.github.com/repos/hardhat-freecodecamp/nextjs-smartcontract-lottery-fcc` with a "Change repository" button.
- Base directory:** "Not set" with a note: "Directory to change to before starting a build. Where we will look for package.json/.nvmrc/etc."
- Build command:** `yarn install && yarn run build && yarn next`
- Publish directory:** "out"

At the bottom, there's a link: "Learn more about common configuration directives in the docs →".

RUNNING CODE

CONNECT FLEEX

Decentralized Lottery

9999.39314657

0xf39f...b92266



Hi from lottery entrance!

Enter Raffle

Entrance Fee: 0.1 ETH

Number Of Players: 6

Recent Winner: 0xf39Fd6e51aad88F6F4ce6aB8827279cffFb92266

WHATS UPPP

THANK YOU

Fullstack Web3 Smart Contract

Future Blockchain Technology