

Course Project for Blockchain Beginner (due 28th Jul 2021)

Implement at least one of the ideas below to pass the beginner course. You need to submit:

- Github URL
- Netlify URL

Improving design of Dapp

Do you think the current design for the app is ugly? Me too! Try making the design better.

You may be interested to learn more about the following:

How to be awesome frontend developer:

- <https://github.com/kamranahmedse/developer-roadmap/blob/master/img/frontend.png?year=2021-2>
- <https://frontendmasters.com/guides/learning-roadmap/>

Tailwind CSS:

- <https://tailwindcss.com/>

Tailwind Component (free):

- <https://tailwindcomponents.com/>

Sending Robots from the Dapp

Don't you wish that your users never leave your application? How about letting them do more within your application. Try adding a function that allow owners of the Robots to send their robots to someone else within the application!

Support multiple Robots contracts

User has been growing and you are thinking about expanding businesses? How about we transform this little shopfront to an entire marketplace? Consider allowing users to interact with multiple contracts to buy not just Robots from you but also other NFTs from other NFT creators!

Handling errors & edge cases

Are you more concerned about polishing the user experience before expanding to more feature scope? Perhaps you've noticed that if you were to cancel the transaction midway, the modal never goes away? Perhaps you've noticed that when a transaction happen while you're on the page the owner isn't updated live? Perhaps you've noticed that the application crashes when the 6th robot is bought? Fix them!

More Robots

Right now you've got 5 robots for sale. Could you think of a way to quickly generate thousands of robots easily? Or even infinitely many robots, as long as people can afford to pay? Or even in a way that even you do not know how the robots look like until it's being created?

Options

- Convert the Pet Shop (Lab 5) into an e-commerce website (to accept ETH/token into transactions)
- Totally different implementations, with DAPP (web-based) and smart contract involving sending transactions and reading the state of the contracts

Botapp (extension of Lab 4 tutorial)

- Improve the design of Dapp & handling of some errors
- Install elevations into Tailwind to improve visual impact of images
- Added hero patterns svg to spruce up background
- Moved mint button up and used hover with striking colour differential for better UX
- Click outside the modal to clear the screen or interrupt the transaction
- Adjusted settings to optimise look-and-feel for responsiveness on both desktop and mobile, including truncating the owner address to prevent overflow (npm install react-truncate)
- Solidity, Hardhat, React JS, Tailwind

<https://github.com/markvelous/botdapp>

<https://botdapp.netlify.app/>

Botdapp2 (agnostic NFT minter)

- Minting of any number of robots (and other digital assets) using IPFS link, name and metadata provided by the minter
- Solidity, Hardhat, React JS, Tailwind

Rinkeby Etherscan Contract:

<https://rinkeby.etherscan.io/address/0x9049a2C93E7cf4d5aaf2baA9e1f404a0d766de1F>

<https://github.com/markvelous/botdapp2>

<https://botdapp2.netlify.app/>

Botdapp3 (infinite robohash minter)

- Auto-generate robohash bots by factoring in dynamic url using <https://robohash.org/{bot}?size=150x150>
- Prevent repetition of unique ID, i.e. bot name and allow truncation of long names to prevent text overflow
- Generate and mint robot NFTs on the fly
- Reconfigure setup to deploy contract on Rinkeby using hardwallet
- Solidity, React JS, Truffle, Ganache

Rinkeby Etherscan Contract:

<https://rinkeby.etherscan.io/address/0xB7d67fa0B552105c3Bcc7e15374Ea26B67A3b5A6>

<https://github.com/markvelous/botdapp3>

<https://markobots.netlify.app/>

Mark Bark Park (extension of Lab 5 tutorial)

- Pet shop with payable function for the adoption fee of 0.1 ether
- Solidity, JS, HTML, Truffle, Ganache

<https://github.com/markvelous/markbarkpar>

[Localhost:7545](http://localhost:7545)