

CZCE4153 BlockChain - Dutch Auction DApp

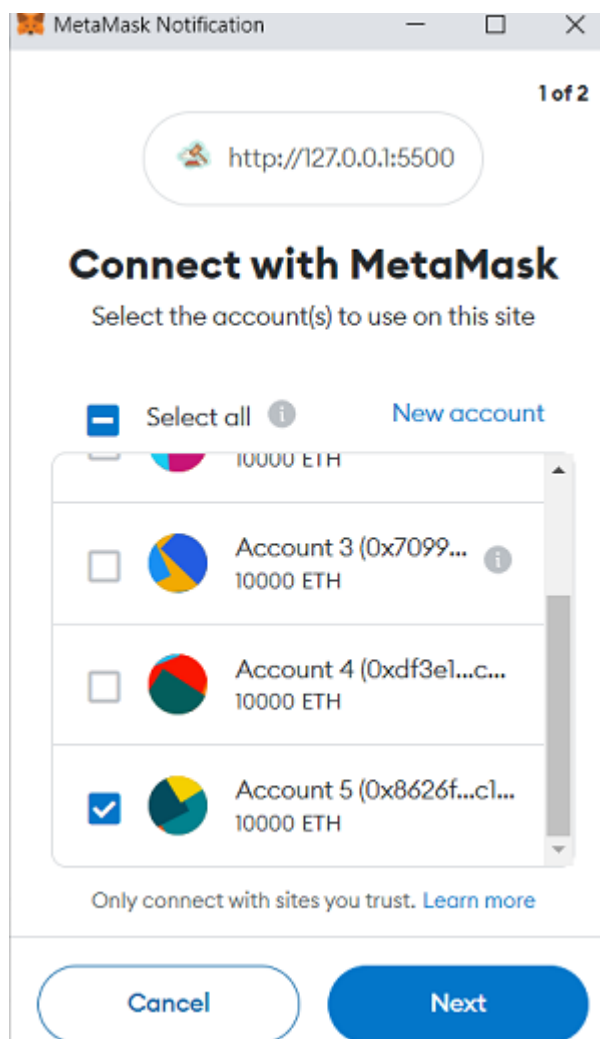
Welcome to the Dutch Auction DApp.

To get the smart contract setup and deployed please follow the steps below.

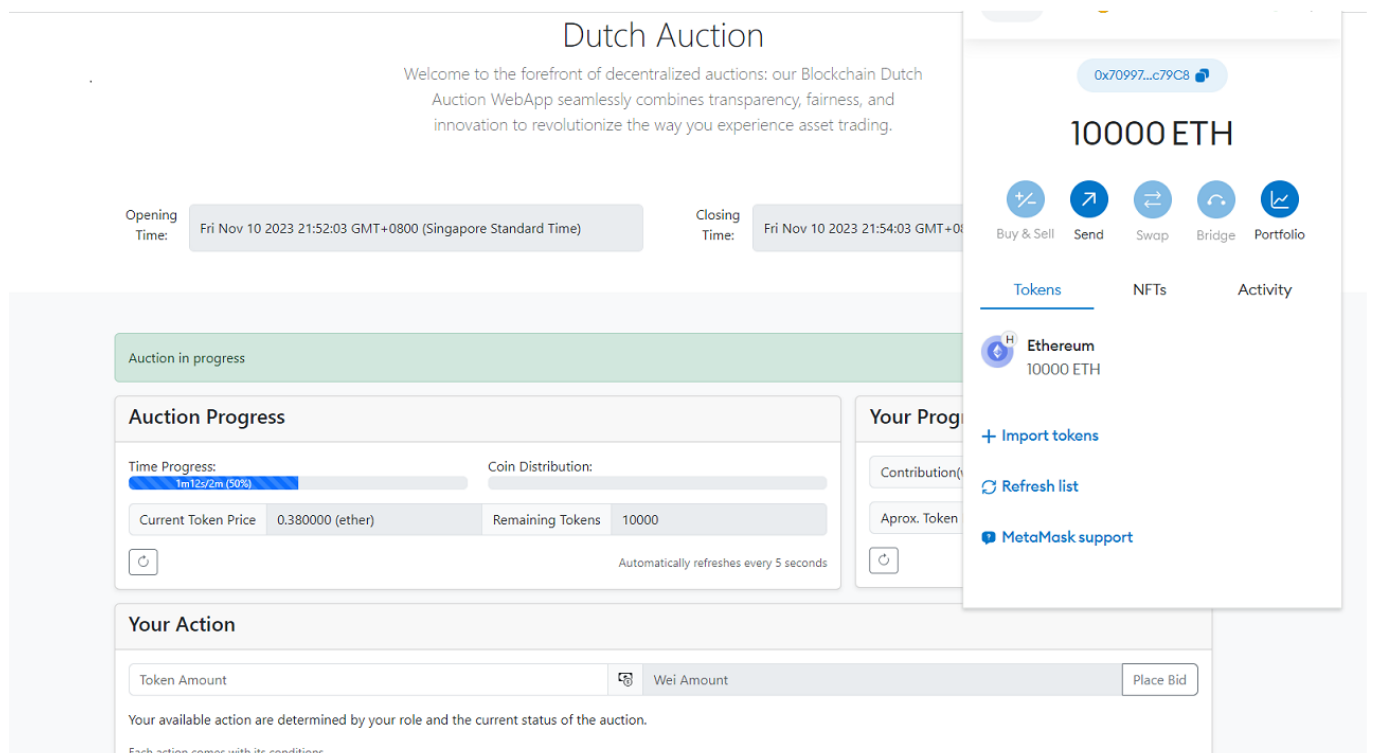
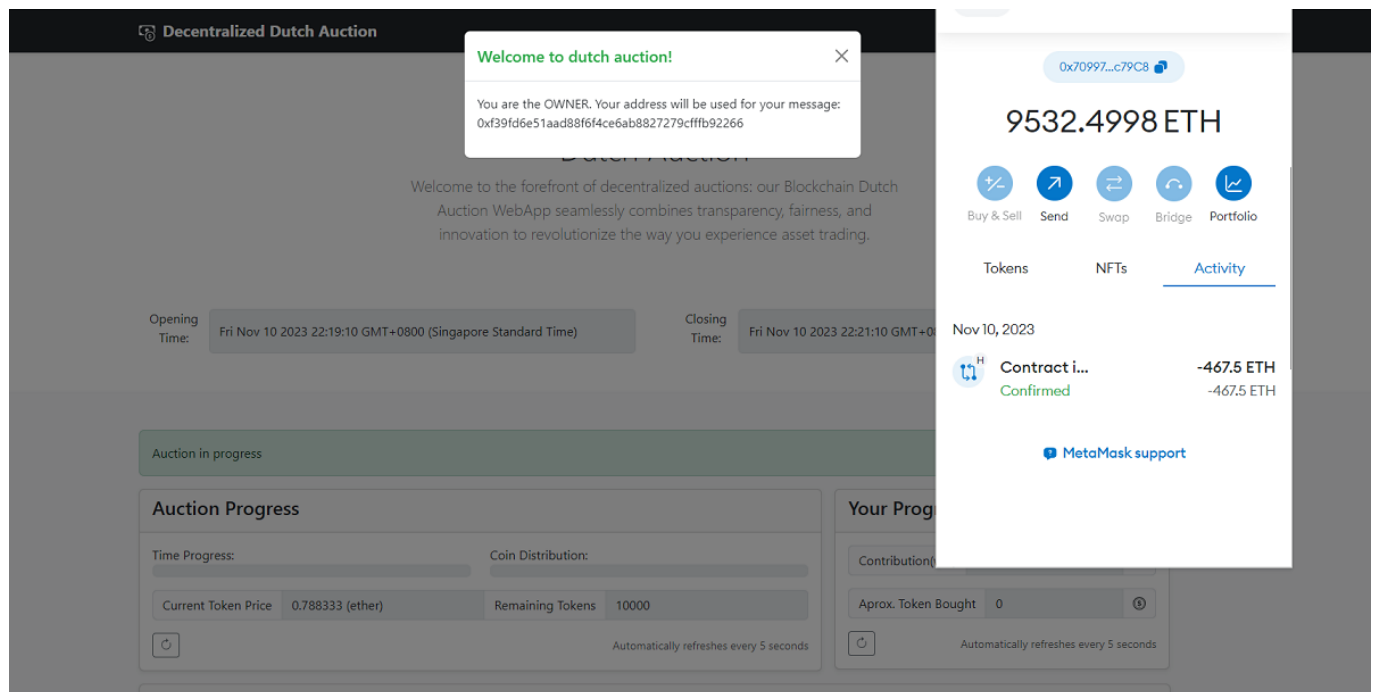
- Install Node.js
- Install npm
- Install the [Liveserver](#) Extension in VSCode to run the frontend later
- Follow [Connect Metamask with a Local Hardhat Network](#) to setup hardhat and accounts locally, you would need to do it once
- run the hardhat node `npm run hardhat node` if you have not done so.
- open another terminal to run `npm run hardhat run --network localhost ./scripts/deploy.js` to deploy the contract to your localhost network do the following:

Right click `./frontend/index.html`, click on "Open With Live Server"

Connect to any account you have added



Interact with the contract!

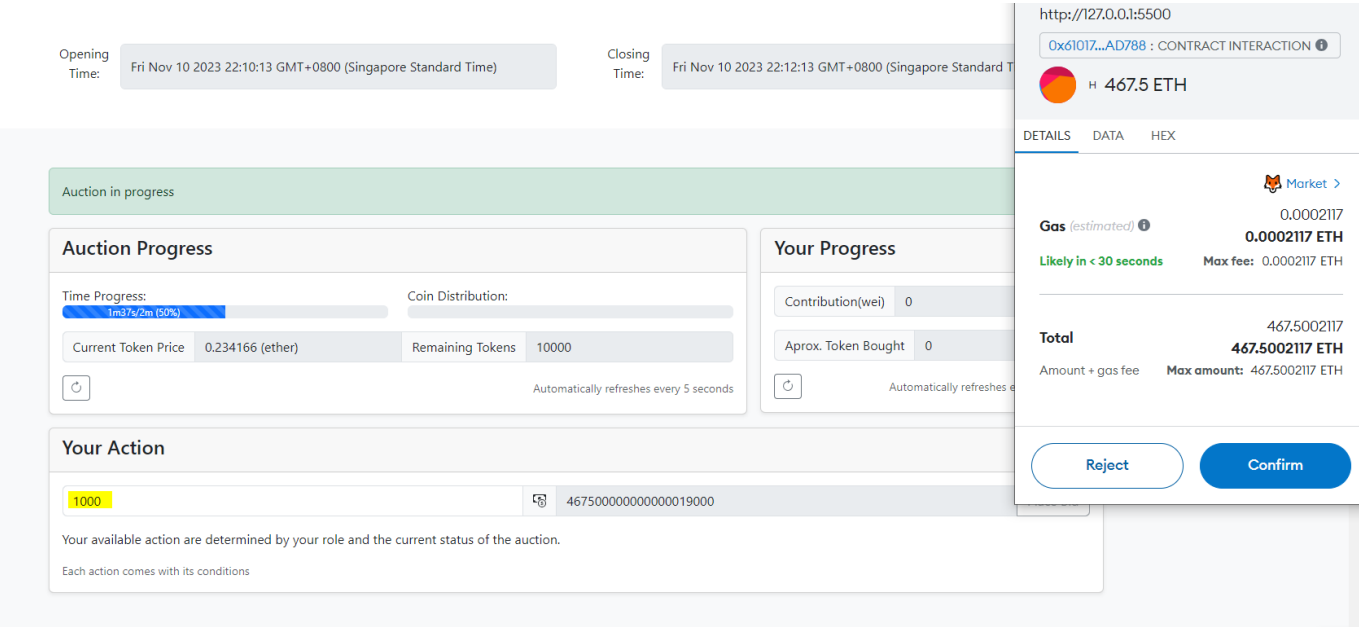


Demo

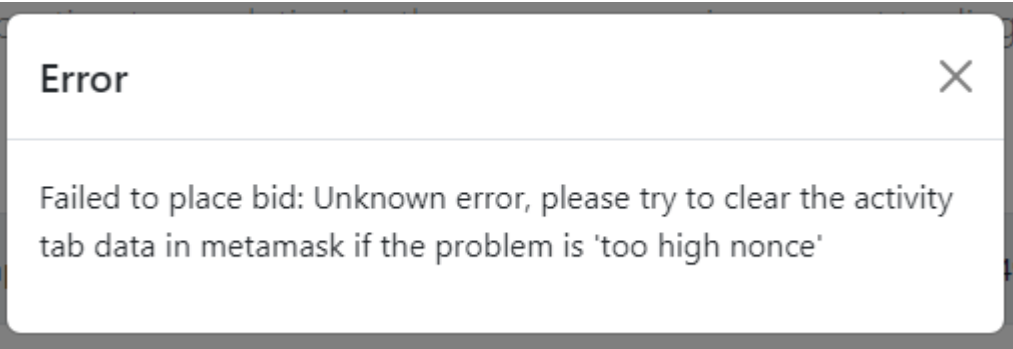
Switch your metamask accounts to experience both owner and bidder roles.

Please note only the account0 generated when u ran `npm run hardhat node` would be the Owner account which has the power to finalize the auction, burn/withdraw tokens AFTER the auction ends, the rest are all bidder accounts.

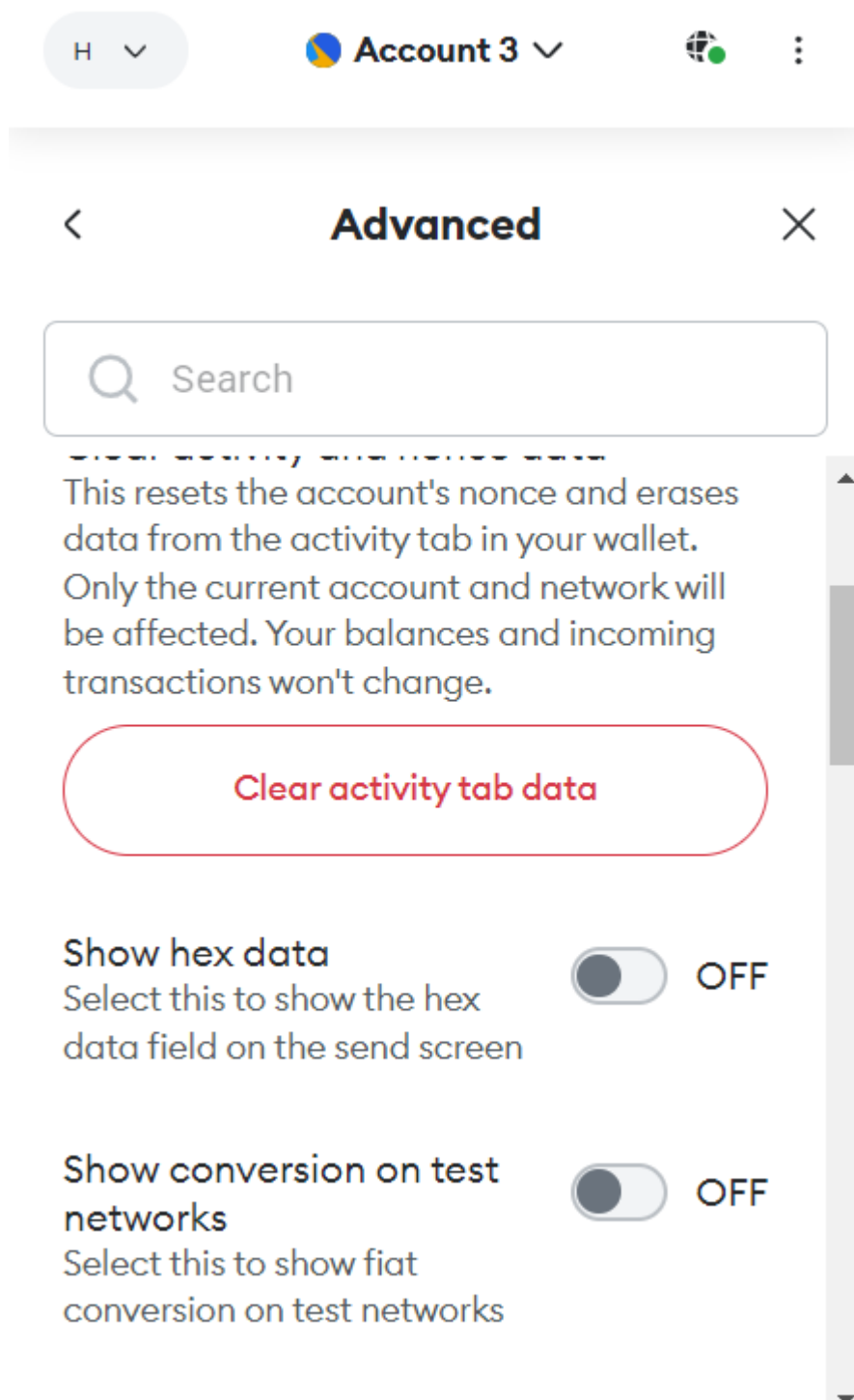
Next, wait for the auction start time then place your bid under "Your Action" Card.



If you find this error



Click the three vertical dots in the top-right corner, and then go to Settings > Advanced. Scroll down to the 'Clear activity and nonce data' section and click the button.



Run the test cases with hardhat

The tests can be found in "test" folder Run all the test cases together with the coverage rate `npx hardhat coverage`

Run one test (eg. Reentry attack Test) `npx hardhat test ./test/ReentryAttack.js`