



Date: 26/05/2022

ETHEREUM TO DO LIST

ABOUT THE PROJECT

A blockchain based ToDoList that runs on Ethereum Networks. Every task added or completed triggers a smart contract and is counted as a transaction on the blockchain. A new block is mined for every transaction. The Wallet balance before and after every transaction also reflects on Metamask Wallet (or any Ethereum Wallet).

TECH STACK USED

Solidity, Javascript, Truffle, Ganache, HTML, CSS

CONTRIBUTORS

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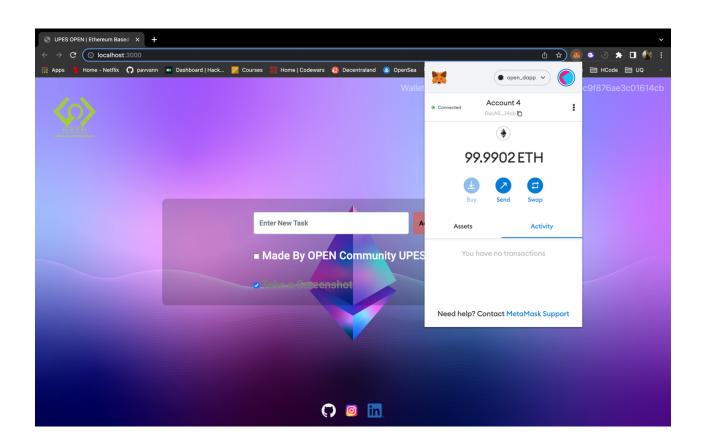




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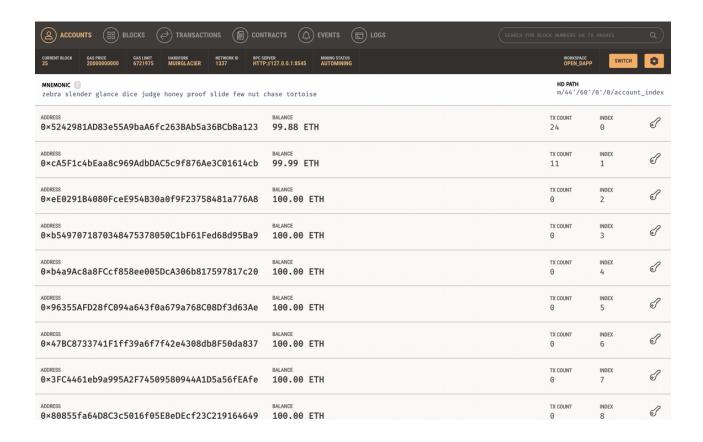
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SCREENSHOTS









```
DAPP > contracts > * ToDoList.sol

1  // SPDX-License-Identifier: MIT

2  pragma solidity >=0.4.22 <0.9.0;
 > OPEN EDITORS
 v CODE 「ユロット
    V DAPP

∨ build / contracts

                                                        contract ToDoList {
    uint public taskCount = 0;
     {} ToDoList.ison
                                                               struct Task {
   uint id;
   string content;
   bool completed;

∨ contracts

    Migrations.sol
    ToDoList.sol

      JS 1_initial_migratio..
                                                               mapping(uint => Task) public tasks:
                                                               event TaskCreated(
uint id,
string content,
bool completed
     ∨ source
       bg.jpg
        github.png
                                                               event TaskCompleted (
uint id,
bool completed
        linkedin.png
       about.html
                                                               constructor() {
    createTask("Made By OPEN Community UPES");
      # styles.css
      JS TodoList.test.js
                                                               function createTask(string memory _content) public {
   taskCount++;
   tasks(faskCount) = Task(taskCount, _content, false);
   emit TaskCreated(taskCount, _content, false);
    {} package-lock.json
    JS truffle-config.js
                                                               function toggleCompleted(uint _id) public {
   Task memory _task = tasks[_id];
   _task.completed = !_task.completed;
   tasks[_id] = _task;
   emit TaskCompleted(_id, _task.completed);
}
  TIMELINE ToDoList.sol
 O File Saved 6 mins
O File Saved 19 hrs
O File Saved
O Undo / Redo 20 hrs
```





```
∨ CODE
∨ DAPP
                                                                          // Modern dapp browsers...
if (window.ethereum);
try (

// Request account access if r

await ethereum.enable();
// Accounts now exposed
     {} Migrations.json
{} ToDoList.json
      Migrations.sol
                                                                              ∨ migrations

JS 1_initial_migratio...
      > node_modules
                                                                        // Legacy dapp browsers...
else if (window.web3) {
    window.web3 = new Web3(web3.currentProvider);
    // Accounts always exposed
       ∨ images
        ☐ github.png
☐ instagram.png
                                                                          | | web3.eth.sendTransa
}
// Non-dapp browsers...
else {
      □ logo.png
⇔ about.html
                                                                                  console.log('Non-Ethereum browser detected. You should consider trying MetaMask!');
       o index.html
                                                             loadAccount: async () => {
    const account = await ethereum.request({ method: 'eth_requestAccounts' });
    App.account = account[0];
    gitignorebs-config.json
                                                               loadContract: async () => {
  const todoList = await $.getJSON('TodoList.json');
  App.contracts.TodoList = TruffleContract(todoList);
  App.contracts.TodoList.setProvider(new Web3.providers.HttpProvider("http://127.0.0.1:8545"));
  App.todoList = await App.contracts.TodoList.deployed();
    package.json
 > OUTLINE
  O File Saved
                                                                if (App.loading) {
  O File Saved
```

GITHUB URL:

https://github.com/upes-open/DAPP