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PROGRAMMING TASK – USE CASE

Need help? Contact steffen@slock.it with simon@slock.it in cc please.

The Ethereum Name Service (ENS) offers a secure and decentralised way to address resources both on and off the blockchain using simple, human-readable names.

Detailed information you can find on the project's internet page:

<https://ens.domains/>

Please write a test application to investigate or list or visualize the ENS contract events of the past (e.g. the last 1 or 2 days). focussing in particular on the bid revelation event:
unsealBid(bytes32 _hash, uint256 _value, bytes32 _salt)

The ethereum address of the ENS-Registrar Contract is:
0x6090A6e47849629b7245Dfa1Ca21D94cd15878Ef

You can use **any language** you feel fits best, ideally, this would have some type of GUI (Windows, Linux, Android, iOS or web app), testing and documentation.

We understand you are not blockchain experts and have chose a task achievable by anyone new to the space. We are interested **solely** in becoming acquainted with your programming style and your ability to solve new problems.

Be creative! Impress us!

Info:

You might want to first install the Parity Ethereum-Client on your computer. (see <https://github.com/paritytech/parity/releases>). After installing the software and synchronizing the blockchain (this may take some time!), you can watch the contracts according to the information in the blog directly in the application.). Of course, you can also use the GETH client or any other.

Please send your result inclusive source code to simon@slock.it with steffen@slock.it in copy

Some additional information:

Using the parity client allows you easily to inspect smart contracts running on the Ethereum blockchain. You must click CONTRACTS and +WATCH, select custom contract and input the data. See the example:

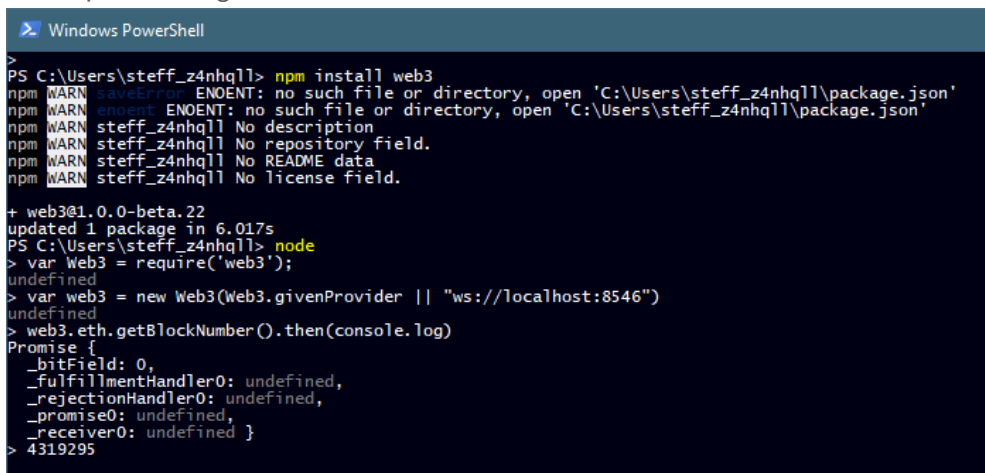


The screenshot shows a web form titled "ENTER CONTRACT DETAILS". It has several input fields: "choose a contract type" with a dropdown arrow, "network address" with a hex value "0xB7395c47EC901f4cE872dbEB253966D7b4f620c3", "contract name" with the text "a nice name", "(optional) contract description" with the text "an expanded description for the entry", and "contract abi" with a JSON string: [{"type": "function", "name": "setBlocked", "inputs": [{"name": "_poleID", "type": "bytes32"}, {"name": "_blocked", "type": "uint256"}], "outputs": [{"type": "bool"}]}].

To access the contract and its information or to interact with it from within a program, there exist a lot of possible open source libraries for different languages like JavaScript, Java, Python, and many others.

We mostly use Javascript and the web3.js library. Here is a short example: If you use JavaScript, install node.js and use the package manager npm to get the web3 library ("npm install web3"). For the web3.js library exists a good documentation: <https://web3js.readthedocs.io/en/1.0/getting-started.html>.

Here is a short example how to get the current block number:



```
Windows PowerShell
PS C:\Users\steff_z4nhq11> npm install web3
npm WARN saveError ENOENT: no such file or directory, open 'C:\Users\steff_z4nhq11\package.json'
npm WARN enoent ENOENT: no such file or directory, open 'C:\Users\steff_z4nhq11\package.json'
npm WARN steff_z4nhq11 No description
npm WARN steff_z4nhq11 No repository field.
npm WARN steff_z4nhq11 No README data
npm WARN steff_z4nhq11 No license field.

+ web3@1.0.0-beta.22
  updated 1 package in 6.017s
PS C:\Users\steff_z4nhq11> node
> var Web3 = require('web3');
undefined
> var web3 = new Web3(Web3.givenProvider || "ws://localhost:8546")
undefined
> web3.eth.getBlockNumber().then(console.log)
Promise {
  _bitField: 0,
  _fulfillmentHandler0: undefined,
  _rejectionHandler0: undefined,
  _promise0: undefined,
  _receiver0: undefined }
> 4319295
```

With the mentioned documentation you find all the functions needed to do the task. For Java or other languages you find also a lot of examples and documentation in the internet.