Dapp Management Tool for Gas Station Network

This tool consists of a prototype that helps Dapp developers manage their application in relation to the Gas Station Network.

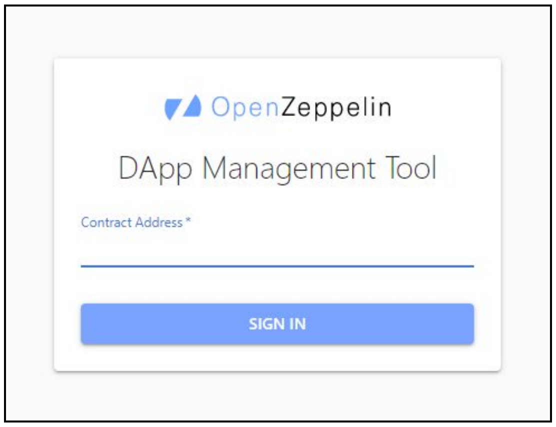
The tool was built using the latest React JS version (16.8.6) with a whole lot of dependencies: *Material-UI* (core, icons and styles), *Classnames*, *ESLint*, *Immutable*, *Time Ago*, *Moment*, *PropTypes*, *Recharts*, *Redux*, *Router* and *Web3*.

The application is built in a single page fashion, routing links with the Router library. It was encouraged to build every component as small as possible taking care of their properties types and requirements with PropTypes. Real transactions are being provided by Etherscan API to inforce real life scenarios: real values, huge amounts of transaction and/or no transactions at all. At the moment Web3 was only used to translate values in wei to Eth. Also the main theme was adapted to match Open Zeppelin's website. Some connection errors are being catched and spinners are being used to give proper feedback to the user.

The repository with its building instructions can be found at: Zeppelint Solutions GitHub and at the moment it consists of the following sections:

a) Landing Page

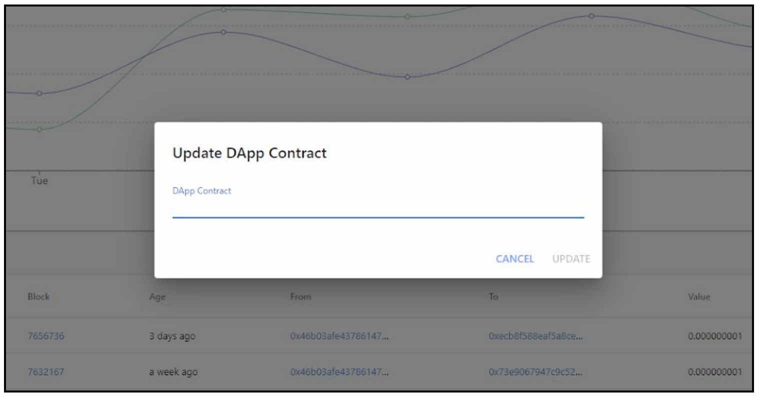
Once you start the dapp management tool, you need to enter a valid contract address and then it takes the user to the Dashboard. The app and all the information displayed is dynamically consumed using this address. It can also be updated once inside.



A valid contract address to start browsing transactions: 0x7607e5a7576674cbc7d03a1465bdef84b457eb0b

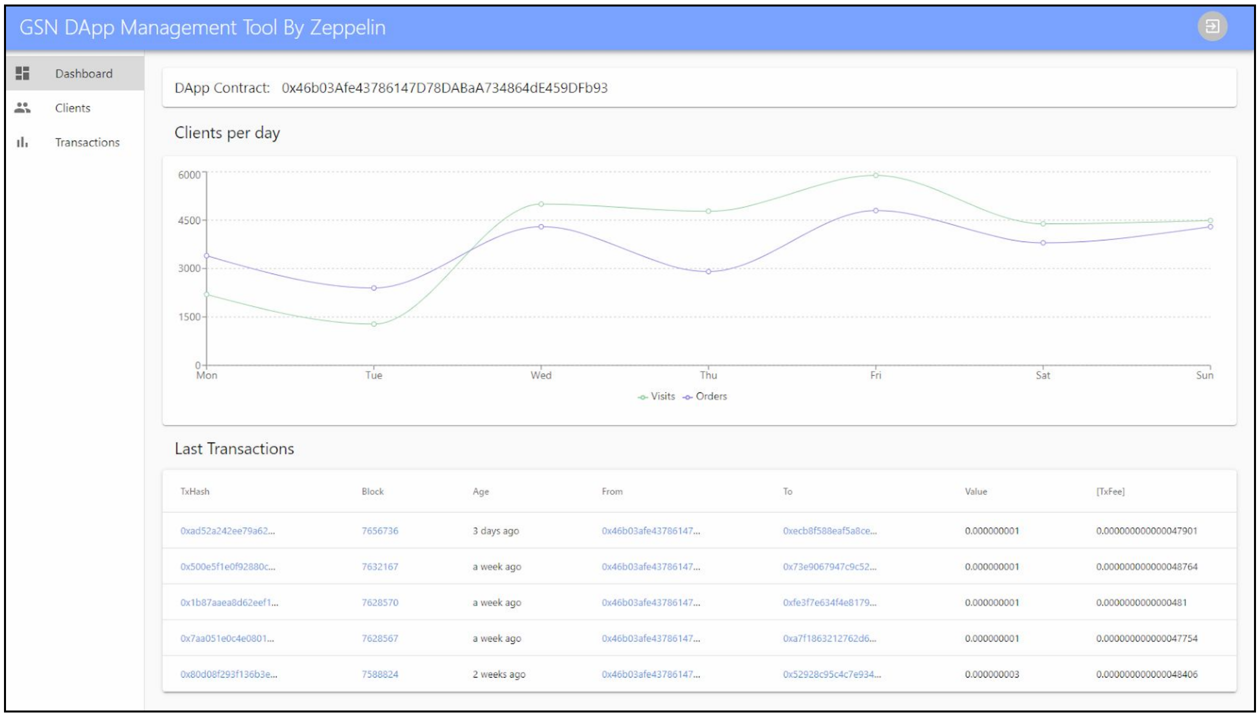
b) Dashboard Page

It shows the current status of the dapp for the given contract. The screen features a mock chart, a list of the last ten transactions (coming from a request done with the provided contract address) and the possibility to change this value without leaving the app.



Block	Age	From	To	Value
7656736	3 days ago	0x46b03afe43786147...	0xecb8f588eaf5a8ce...	0.000000001
7632167	a week ago	0x46b03afe43786147...	0x73e9067947c9c52...	0.000000001

Clicking on the last transactions table it takes the user to the full list in its corresponding subsection. Also clicking on the current contract address provides a modal where a new value can be used as input. A logout button available from any section removes the actual contract address taking the user back to the landing page.



DApp Contract: 0x46b03Afe43786147D78DABaA734864dE459DFb93

Clients per day

Last Transactions

TxHash	Block	Age	From	To	Value	[TxFee]
0xad52a242ee79a62...	7656736	3 days ago	0x46b03afe43786147...	0xecb8f588eaf5a8ce...	0.000000001	0.000000000000047901
0x500e5f1e0f92880c...	7632167	a week ago	0x46b03afe43786147...	0x73e9067947c9c52...	0.000000001	0.000000000000048764
0x1b87aaea8d62eef1...	7628570	a week ago	0x46b03afe43786147...	0xfe3f7e634f4e8179...	0.000000001	0.0000000000000481
0x7aa051e0c4e0801...	7628567	a week ago	0x46b03afe43786147...	0xa7f1863212762d6...	0.000000001	0.000000000000047754
0x80d08f293f136b3e...	7588824	2 weeks ago	0x46b03afe43786147...	0x52928c95c4c7e934...	0.000000003	0.000000000000048406

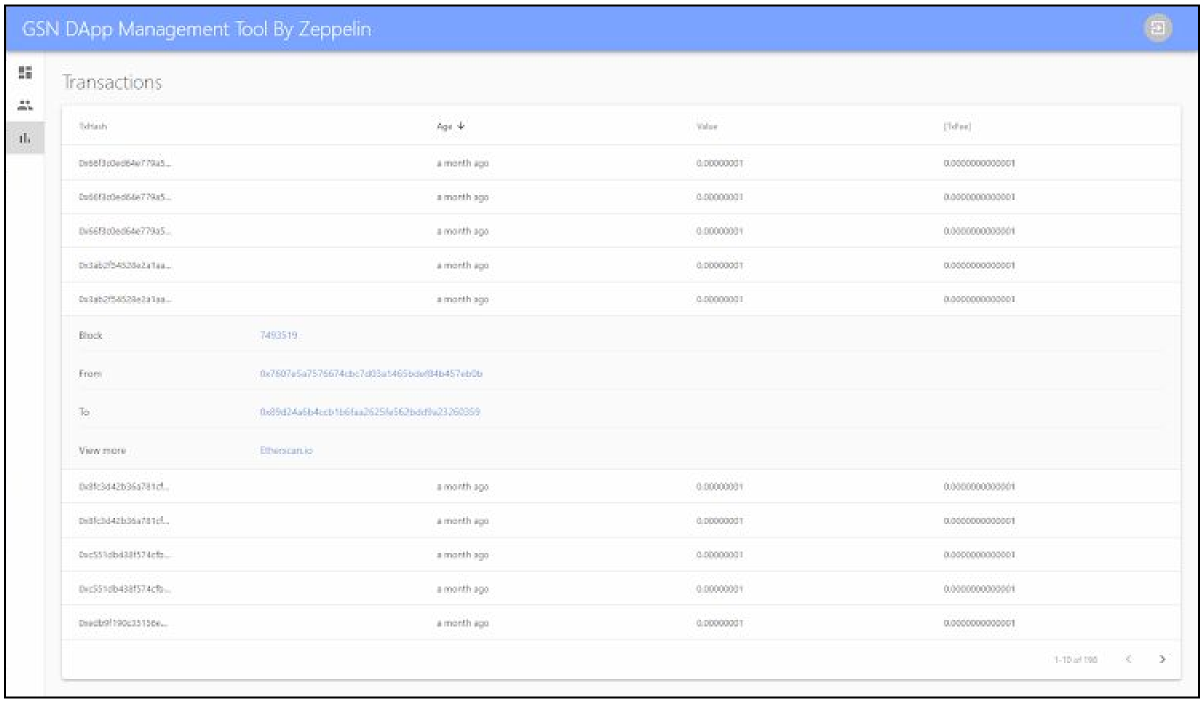
c) Clients Page

Lists all the clients relayed. Right now it works as a placeholder until the information becomes available.

d) Transactions Page

Lists all the transactions relayed in descending order (from last to first). Sortable by any of the fields being currently displayed: TxHash, Age, Value, TxFee. Transactions are also paginated client side.

Every row is expandable and reveals extra information: Block number, From Address, To Address and a link to see more information from the Etherscan website.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Transactions

TxHash	Age ↓	Value	[TxFee]
0x66f3c0ed64e779a5...	a month ago	0.00000001	0.0000000000001
0x66f3c0ed64e779a5...	a month ago	0.00000001	0.0000000000001
0x66f3c0ed64e779a5...	a month ago	0.00000001	0.0000000000001
0x3ab2f54528e2a1aa...	a month ago	0.00000001	0.0000000000001
0x3ab2f54528e2a1aa...	a month ago	0.00000001	0.0000000000001
Block	7493519		
From	0x7607a5a7576674cbc7d03a1465bdef84b457eb0b		
To	0x89d24a6b4ccb1b6faa2625fe562bdd9a23260359		
View more	Etherscan.io		
0x8fc3d42b36a781cf...	a month ago	0.00000001	0.0000000000001
0x8fc3d42b36a781cf...	a month ago	0.00000001	0.0000000000001
0xc551db438f574cfb...	a month ago	0.00000001	0.0000000000001
0xc551db438f574cfb...	a month ago	0.00000001	0.0000000000001
0xadb9f190c35156e...	a month ago	0.00000001	0.0000000000001

What's next?

The following steps include connection with a real relay to get expected transactions wrapped as the ones originally scoped. That connection is also gonna get the necessary information to populate clients section. Once that's done, getting some graphs with real data it's a must. Wiring the graphs is gonna make sense on building a funding tool for the user.