



ZilPay dApp interactive wallet and call contract methods or deploy.

ZilPay wallet.



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Introduction to ZilPay.

ZilPay is a cryptocurrency wallet which can be used on the Chrome, Firefox, Opera and Brave browsers.

It's also a browser extension.

This means that it works like a bridge between normal browsers and the Zilliqa blockchain.

ZilPay requires no login and does not store your private keys in any server, instead they are stored on browser storage and password protected.

ZilPay is a dedicated way to allows you to run Zilliqa Apps right in your browser without running a full Zilliqa node. This wallet simplify the Zilliqa transactions. In browsers you can download its extension and soon they will improve one for (Chrome, Brawe, FireFox, Opera).

One of the core features of ZilPay is a secure identity vault, which lets you manage your identities on different sites and sign blockchain transactions.

Advantages.

* **Open source:** This means that all the ZilPay code is online and free to access. Open-source software can be reviewed and updated by the community, meaning that it can be continuously improved.

* **HD settings:** Hierarchical deterministic settings help users backup their accounts. They do this by giving the user a list of words called seed phrases. Seed phrases can be used to reset lost account information.

* **Simple interface:** Once it's set up, ZilPay is very simple to use. All of its features are laid out clearly so sending and receiving currency is easy, even for beginners!

* **Local key storage:** Some wallet providers store keys on their own servers. This is common on exchanges which provide wallets. ZilPay keys are stored on the user's own browser, not on any remote servers. This gives the user more control over their public and private keys.

Advantages.

This wallet will make it easier to work with Zilliqa,
At the moment this is the only wallet that can work with decentralized applications and supporting hardware wallet.
For Example “moonlet, Zilliqa Light Wallet, Green Wallet” wallet can only store and does not support hardware wallet and dApps.

You can already create your own "Fungible-Token" with the help you can also control them.

Also you can play within roll-game And maybe you want make and testing smart contracts with help scilla-web-ide.

it can be any dApps, for example, you can do DEX exchange and game, gambling, logic in your business infrastructure, social and other.

Advantages.

Why Decentralised application?

Advantages of Decentralized Applications (dApps):

To better understand the concept of decentralized apps, some context as to the software model of traditional apps must be mentioned. Most of the apps we know today are centralized, and this goes for both web and mobile applications. Being centralized means that the flow of information and the control of individual units are executed from a single governing node or center.

Decentralize apps (dApps), on the other hand, are apps whose software model is decentralized and is entirely distributed, meaning that computation is done by multiple nodes as opposed to one. As the term suggests, this also means that there is no single authority to execute changes and control.

Essentially, what sets dApps apart from traditional apps is that they are developed and hosted on the blockchain. Thus, dApps share the same characteristics of its host platform: they are autonomous and open-source, and the protocols and information are securely protected by cryptography—among many others.

Advantages.

Advantages of dApps over traditional apps

Today, dApps are gaining a foothold on the app market. In fact, to date, there are over a thousand dApps and approximately 4,500 smart contracts—and the number keeps growing. Even large corporations such as Facebook, Google, Microsoft, and IBM are also working with blockchain technology and developing their own blockchain-based solutions.

Decentralized apps are reshaping the app development landscape as we know it, and it's all for a very good reason: They offer a number of advantages over traditional apps. Here are some of their strengths:

1. Security

Blockchain technology was borne out of the intent to solve the limitations of centralized models, the vulnerability to security attacks and the chances of collusion are among the latter's greatest weaknesses.

The key advantage of a dApp is its higher level of security. Since the code is stored on the blockchain and the information is distributed to all the nodes in the network, there is no single point of failure and thus makes it virtually impossible—and hugely expensive—to attack the whole network. In addition, transactions that occur on the blockchain are immutable, meaning that all verified transactions are stored permanently and cannot be tampered with, resulting in more secure data protection.

2. Transparency

All the records stored on the blockchain are open to the public yet tightly secured through cryptography. This stark transparency adds to its security, as every transaction is easily verifiable.

Advantages.

3. Speed, efficiency, and reliability

Decentralization essentially takes out the necessity for a middleman, resulting in faster and cheaper transactions. This also applies to the processing and storing of data on the blockchain, as well as those running on a dApp.

With the velocity of data coming from new and modern sources such as the Internet of Things (IoT), dApps offer a fast, efficient, and affordable way to handle big data. Moreover, as there is no central data center to harbor the entirety of the data stored, dApps are immune to downtimes and physical outages.

4. Community involvement

In a decentralized software model, any changes to the underlying code can only be executed after reaching a consensus. This fosters a stronger sense of community involvement, as everyone in the network can actively participate and contribute to the decision-making process.

Additionally, the inclusivity of dApps also extends to its synergistic capacity. As anyone can interact with and use a decentralized app once it's hosted on a blockchain, many dApps can be compatible with one another. This makes for a whole ecosystem of apps that seamlessly work together to create an innovative solution.

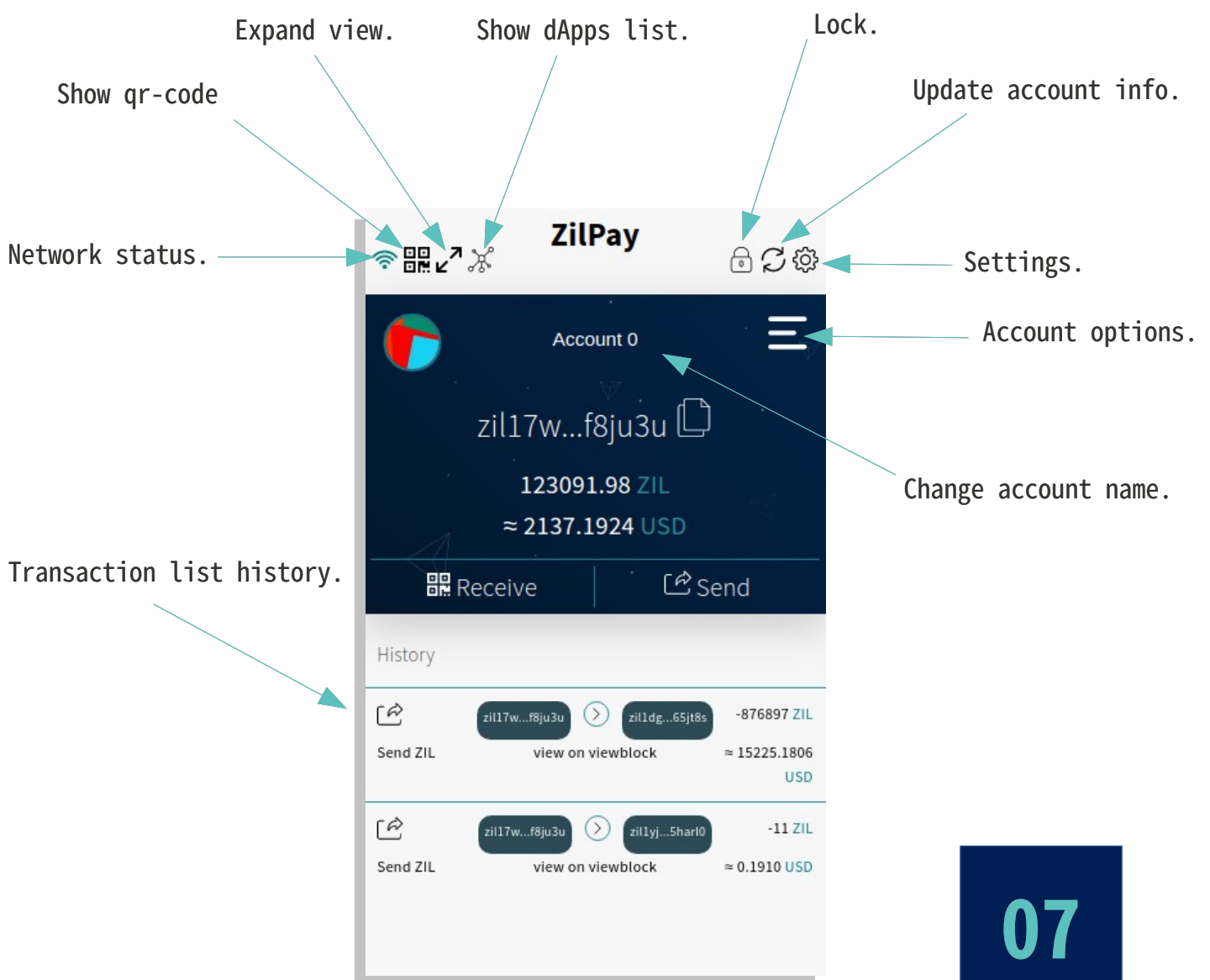
In conclusion

Blockchain technology has many implications to the disruption of modern technology, and dApps, in particular, signify a new era in the web and mobile app development space. While the process of dApp development is still in its early phase, it holds a bright promise of creating a more cost-efficient solution that can address the limitations plaguing traditional apps.

Overview.

Home page:

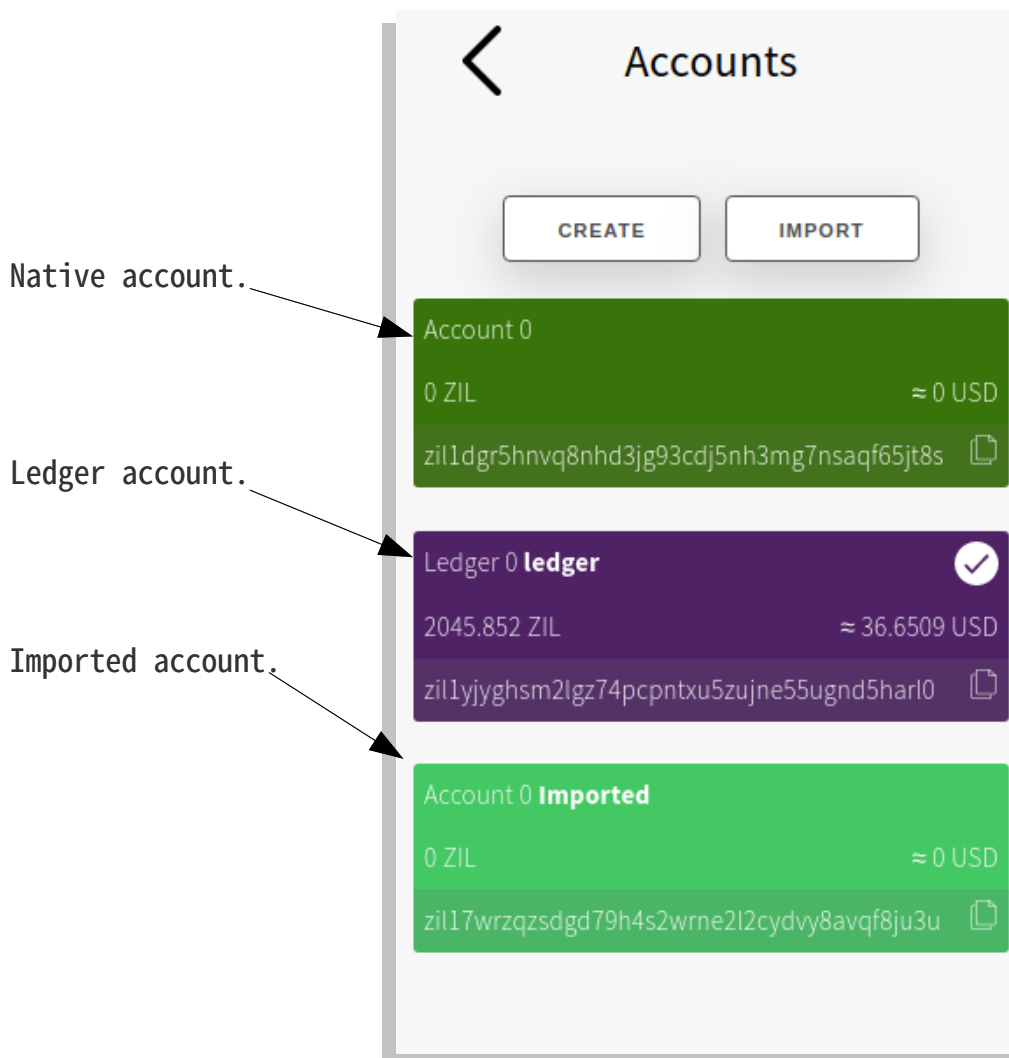
Home screen is shows some information about your account.



Overview.

Accounts page:

Screen accounts to show list your accounts.



Overview.

Receive page:

Show qr-code and address.



Overview.

Send page:

This page can send ZIL.

You account list.

Calculate by balance.

Transaction fee.

Change fee.

Send

To address

To address

Account 0	zil1dg...65jt8s
Ledger 0	zil1yj...5harl0
Account 0	zil17w...f8ju3u

Transfer Amount ZIL: [max](#)

0

fee: 0.001 [- Advance](#)

Gas Limit Gas Price (Li)

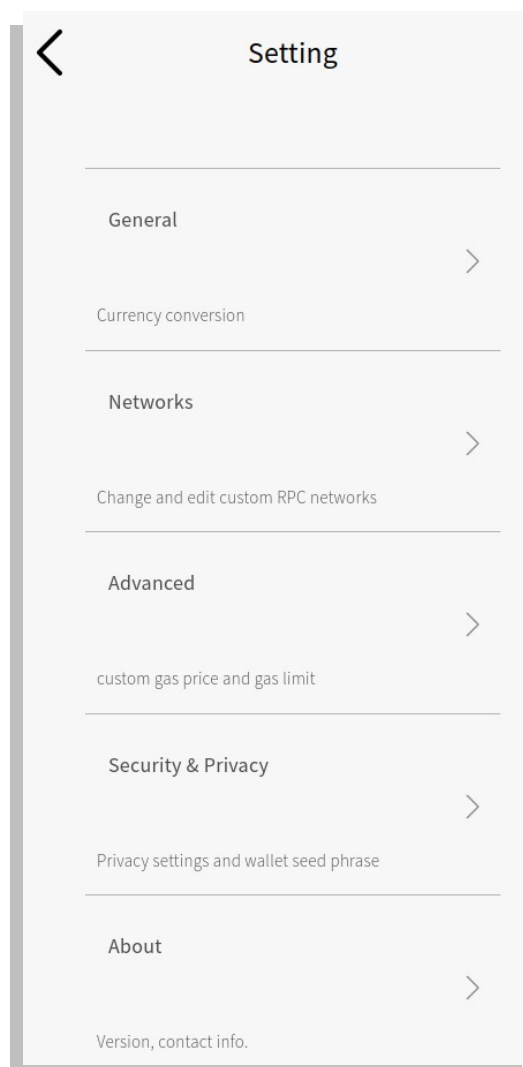
1 1000

SEND TRANSACTION

Overview.

Setting page:

This page contains all settings wallet.



Overview.

General page:

Show general settings.

Change current currency.

Change address format.

General

Currency Conversion

USD

Address format

Bech32

Clear history transaction.

CLEAR

Overview.

Network page:

You can change network and node params.

< Networks X

mainnet ▼

mainnet

https://api.zilliqa.com

MSG ID

1

private

http://127.0.0.1:4200

MSG ID

1

Overview.

Advanced page:

You can customize default gasPrice and gasLimit.

Change timeout auto logout.

Advanced

Gas Price (Li)

1000

Gas Limit

1

fee: 0.001

Auto-Logout Timer (hours)

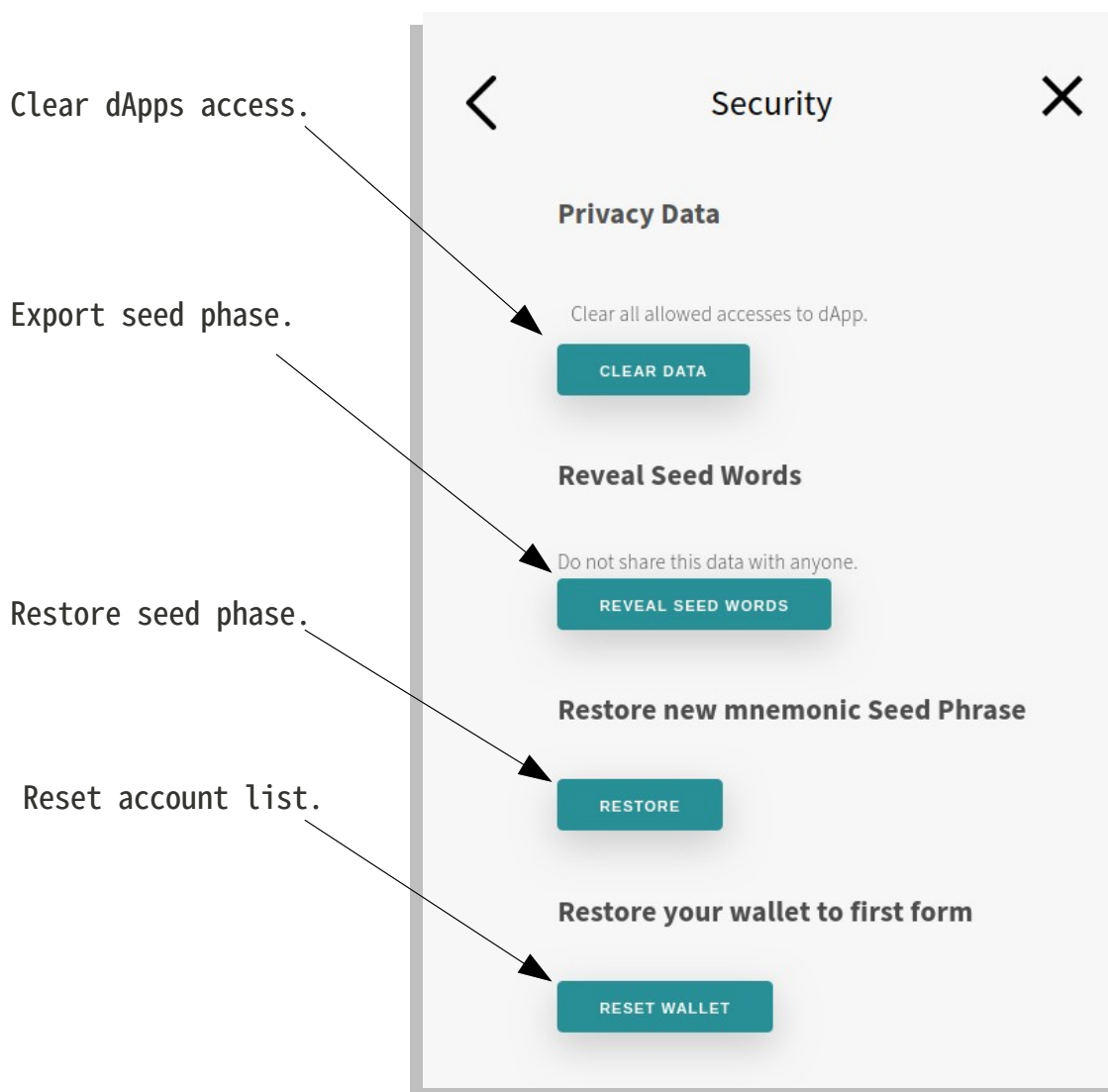
3

DEFAULT

Overview.

Security page:

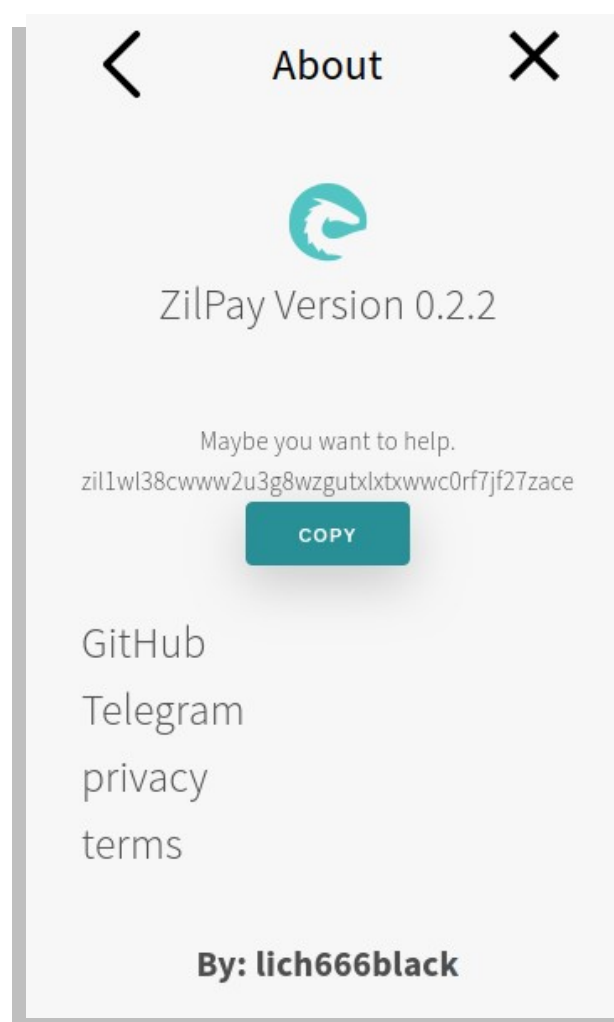
security settings, be careful use it.



Overview.

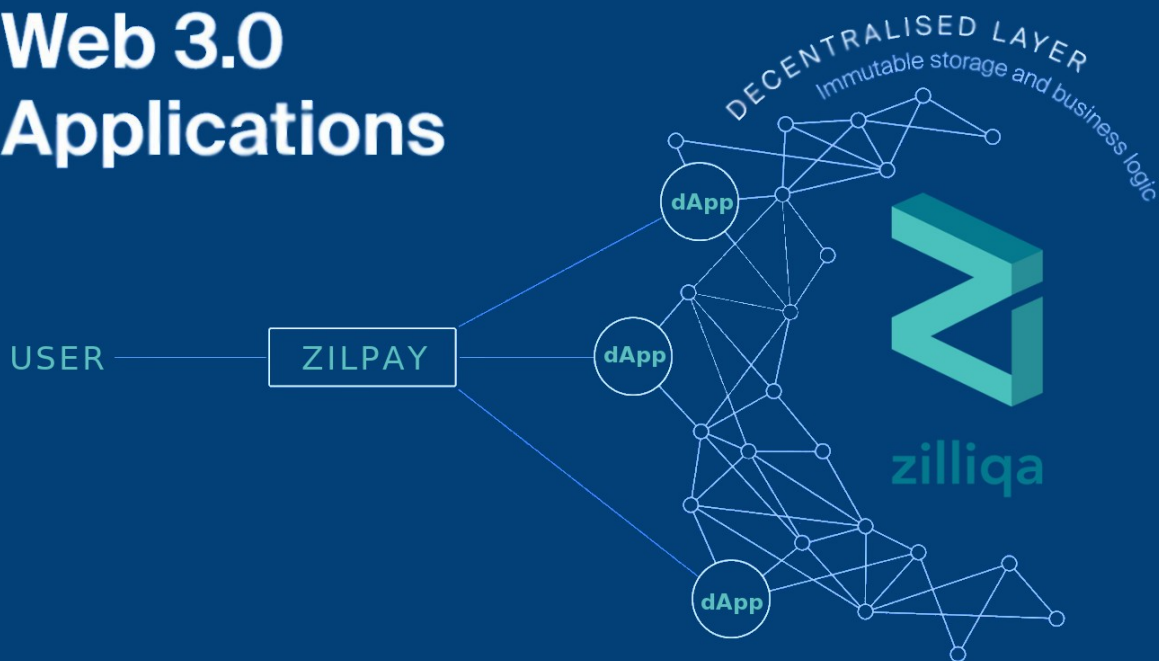
About page:

Some info about wallet.



Decentralised application.

Web 3.0 Applications



You can implement any logic on scilla language and make for it UI, ZilPay is gateway for your business logic.

The gateway to our decentralized world is going to be your ZilPay. Storing private keys user-side and not trusting any sensitive data to third parties is the key to decentralizing.

Decentralised application.

Example dApps.

1: Fungible-Token Creator: you can deploy your Fungible-Token and control it.

The image shows two side-by-side web interfaces for Zilliqa dApps. The left interface is the 'FungibleToken creator', which includes fields for 'Contract owner:', 'Token name:', 'Token symbol:', and 'Total supply of tokens:'. The right interface is 'FungibleToken Connect', displaying wallet information such as 'Owner:', 'Total supply:', 'Balance:', 'Decimals:', 'name:', and 'Symbol:'. Below this information are buttons for 'TransferFrom', 'Transfer', 'Approve', and 'Allowance'. Overlaid on top of these interfaces is a 'Zilliqa Wallet | ZilPay' window showing a 'Transaction 1' confirmation. The transaction details include: 'Ledger 0', 'zil1x2...ekj4gg', a Zilliqa logo, 'type: Contract call method:', 'method: Transfer', 'amount: 0 ZIL ≈ 0 USD', and 'DApp: ft-creator'. At the bottom of the transaction window, it shows 'fee: 9.000' and a '+ Advance' link, with 'CONFIRM' and 'REJECT' buttons.

Decentralised application.

2: Non-FungibleToken Creator: you can deploy your Non-Fungible-Token and control it.

Non-FungibleToken creator

This dApp is a form to create a NonfungibleToken token.

This token is implementation of ERC721 non-fungible tokens.

Contract Owner

It's value should be a Zilliqa address.

Name


It's value should be the token name.

Token symbol

[Create](#)

Zilliqa Wallet | ZilPay

Ledger 0 > zil1qq...9yf6pz



Transaction 1

type: Contract creation.
method:
amount: 0 ZIL ≈ 0 USD
DApp: NonfungibleToken creator

fee: 10.000 [+ Advance](#)

[CONFIRM](#) [REJECT](#)

Decentralised application.

3: Scilla-web-ide: you can deploy and test in your scilla smart contract.

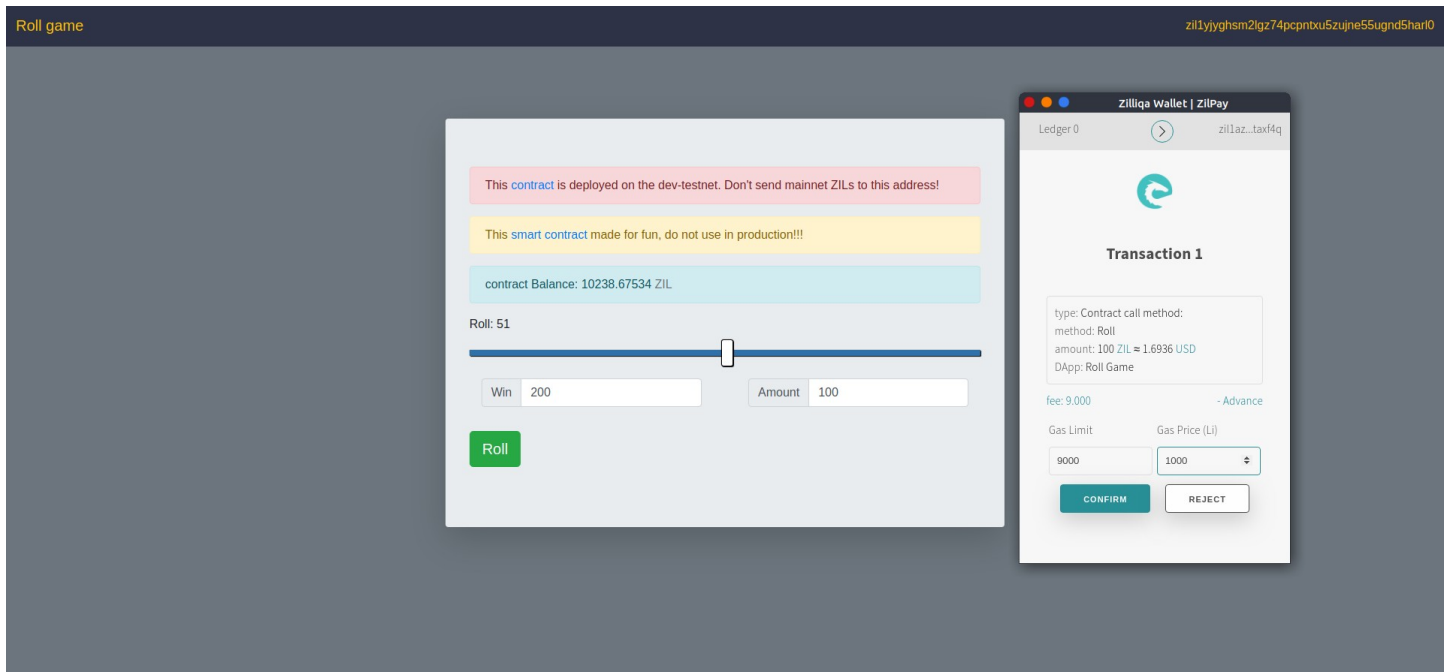
The screenshot displays the Scilla web IDE interface. On the left, a code editor shows a Scilla smart contract named 'HelloWorld'. The contract includes a 'setHello' transition that updates a 'welcome_msg' field and a 'getHello' transition that returns the current message. In the center, a 'Zilliqa Wallet | ZilPay' window shows a transaction confirmation for 'Transaction 1', detailing the contract creation, method, amount (0 ZIL ≈ 0 USD), and a fee of 10,000. On the right, a JSON output panel shows the transaction details, including the 'vname', 'type', and 'value' for the contract creation and the 'creation_block'.

```
1 scilla_version 0
2
3 (* HelloWorld contract *)
4
5 import ListUtils
6
7 (*****
8  (* Associated library *)
9  (*****
10 library HelloWorld
11
12 let not_owner_code = Int32 1
13 let set_hello_code = Int32 2
14
15 (*****
16  (* The contract definition *)
17  (*****
18
19 contract HelloWorld
20 (owner: ByStr20)
21
22 field welcome_msg : String = ""
23
24 transition setHello (msg : String)
25   is_owner = builtin eq owner_sender;
26   match is_owner with
27   | False =>
28     e = { _eventname : "setHello()"; code : not_owner_code };
29     event e
30   | True =>
31     welcome_msg := msg;
32     e = { _eventname : "setHello()"; code : set_hello_code };
33     event e
34   end
35 end
36
37
38 transition getHello ()
39   r <- welcome_msg;
40   e = { _eventname : "getHello()"; msg : r };
41   event e
42 end
```

```
1 {
2   "vname": "scilla_version",
3   "type": "UInt32",
4   "value": "0"
5 },
6 {
7   "vname": "owner",
8   "type": "ByStr20",
9   "value": "zilljyghsm2lgz74pcntxu5zujne5sugnd5har10"
10 },
11 {
12   "vname": "creation_block",
13   "type": "BNum",
14   "value": "100"
15 }
16
17 }
```

Decentralised application.

4: **Roll game**: you can roll your zil and win or lose it.



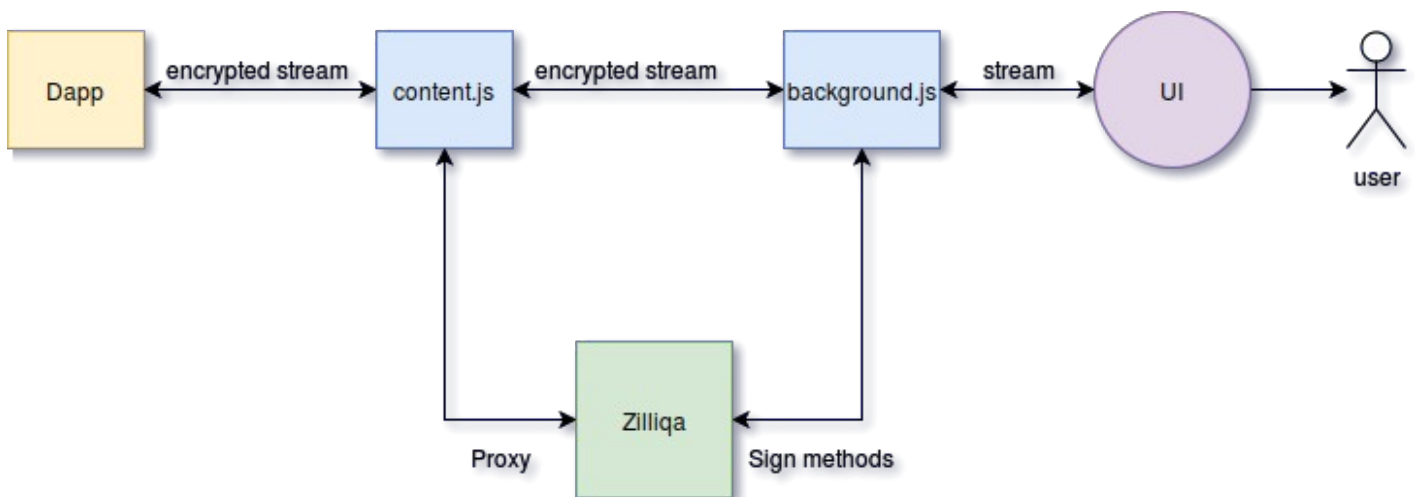
Decentralised application.

As you can see, decentralized applications can be any.

With this article you can create your own dApp, and then you will understand how ZilPay makes it easy to work with Zilliqa blockchain.

How does it work.

Zilpay will protect your data, any method of calling and get an intelligent contract state, an encrypted and random key, this rule work for each tabs.



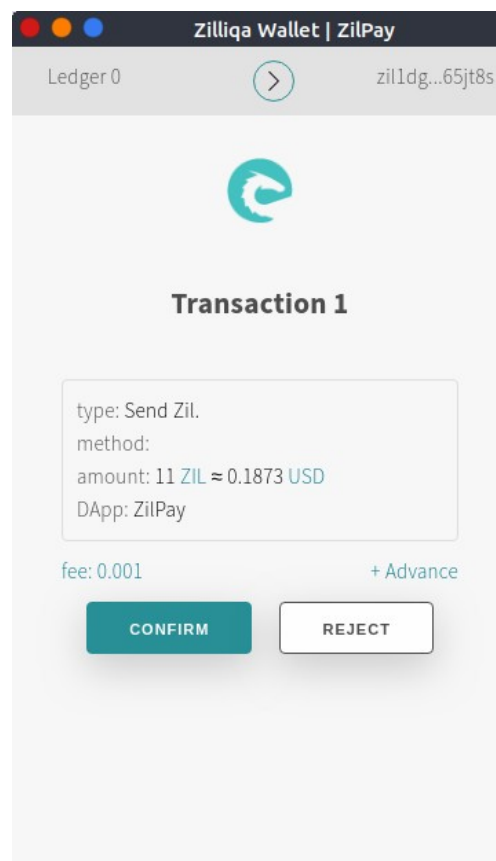
- * **Content.js:** Injected script in tabs and proxied methods.
- * **background.js:** Manages all data and signs all transactions.
- * **inpage.js:** Create Zilliqa object and wallet state proxy.

How does it work.

Notification system.

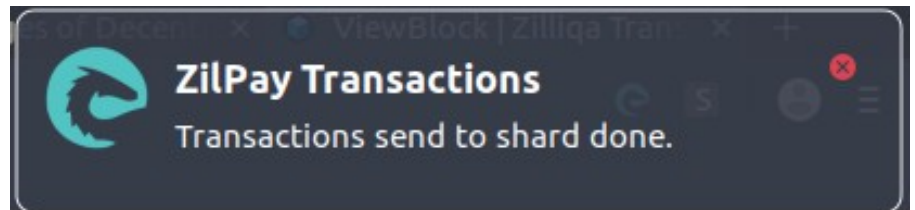
unlike competitors “moonlet, Zilliqa Light Wallet, Green Wallet”
ZilPay supporting Notification service.

For example if you send ZIL or working with dApp than ZilPay create popup with full info about your transaction.

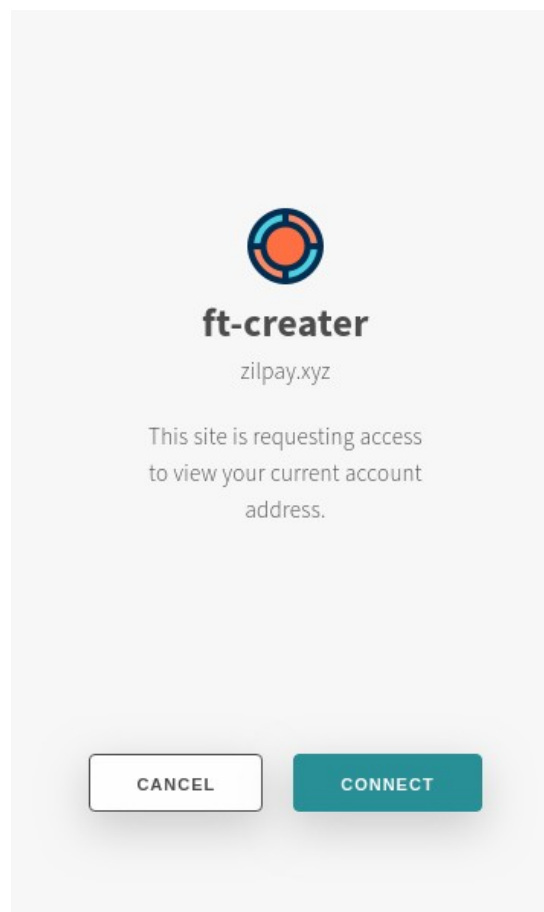


How does it work.

Also, if your transaction is completed, ZilPay will display a notification about it and if you click on it, you will be taken to view block explorer.



to see your address, dApp needs to ask you, when dApp connect to your wallet, ZilPay show popUp about it.



Security.



ZilPay is designed in such a way that your data is hidden in a private repository and encrypted in parallel.

User permission is required to perform any actions.

ZilPay also supports ledger hardware wallet.

ZilPay does not give out your data in order to get your data any dApp ask you access.

Any access and signature is carried out in background.js

What to do.

In future i want make:

- Security audit.
- Improve scilla-editor.
- Make collection game.
- Make support Trezor.
- Make support fungible-token, Non-Fungible-Token.
- Implement scan qr-code for mobile and webcam.
- Implement mobile version.

Conclusion.

In conclusion, we can say that ZilPay is very good tool for working with Zilliqa blockchain.

You can make any business logic and make for it any UI.
ZilPay is very good securing you data.