



Roi Zimon

Electify

Smart Contracts And Secured Blockchain
Encryption E-voting

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Introduction

- Israeli voters are casting their votes the old-fashioned way, which is costly, ineffective, and not environmentally friendly.
- Our goal is to create a smart and secure Blockchain encryption-based platform to allow voters to cast their vote digitally.
- Due to the sensitivity of this topic, the solution must first be vetted by the government and the Knesset.
- With the advancement of computing and automation, there is an opportunity to develop a sound application via Elctify.



Main Goals

Project

- Innovate the way we vote today
- Convince the government use our platform
- Full transition to digital voting

Audience

- Citizens - voting to Knesset Israel
- Elections to parties in Israel
- Municipal elections

Pros and Cons of E-voting

Pros

- Potential to make the voting process easier and more accessible for electors
- Environmentally friendly election and save paper, printing, and delivery costs by shifting online.
- Over the long term, Internet voting has the potential to be less expensive to operate and execute.

Cons

- Risk related to security viruses/hackers that could compromise an election and public confidence.
- Greater opportunity for fraud or coercion, potentially violating ballot integrity.
- The initial cost will cost in buying computers or voting machines

Development Tools



01 JavaScript

Develop With JavaScript

02 Visual Studio code

Integrated development environment

03 React

Front-end JavaScript library

04 CSS

Style sheet language used for describing the presentation

05 HTML

The standard language for documents.

06 Node.js

Node.js is a JavaScript runtime.

Electify

Wellcome to Electify!

Smart contracts and secured blockchain encryption e-voting



Represented by:

Hadas Israeli, Inbar Israeli, Ohad Edry

LOGOUT

Screens

Wellcome to Electify

About page with a summary idea and names of members.

Login

Name:

ID:

Password:

LOGIN



Login

User login screen

BallotBox

Party Name

0

SUBMIT

Yair Lapid

Yesh Atid

1

CHOOSE PARTY

Avigdor Lieberman

Yisrael Beiteinu

2

CHOOSE PARTY

Gideon Sa'ar

New Hope

3

CHOOSE PARTY

Benjamin Netanyahu

Likud

4

CHOOSE PARTY

Naftali Bennett

Yamina

5

CHOOSE PARTY

Merav Michaeli

Israeli Labor Party

6

CHOOSE PARTY

Ballot box

The voters will see the parties running for Knesset and can choose from all the options.

BallotBox

Benjamin Netanyahu

4

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Choosing parties

The voters chooses the party he wants, for example, here, Likud, by the leadership of Benjamin Netanyahu

אישור

BallotBox

Benjamin Netanyahu

4

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CHOOSE PARTY

Submit

After clicking Submit, the voter will receive a confirmation message.

Vote Submitted

From: o4e68c481e240effe081... | Balance:
1000

To: Benjamin Netanyahu... | Sent: 4
To: o4e68c481e240effe081... | Sent: 996

[SEND VOTE](#)

[LOGOUT](#)

Vote Submitted

After clicking OK, go to the Send Voting screen.

אישור

Vote Submitted

From: 04e68c481e240effe081... | Balance:

1000

To: Benjamin Netanyahu... | Sent: 4

To: 04e68c481e240effe081... | Sent: 996

SEND VOTE

Send Vote

Clicking Send Vote will send the ballot permanently. By clicking on OK, the voter will be sent back to the About page to Log-out.

Exit

Blocks

1

2

Hash:482682b756c306f...

Timestemp:1.9.2021, 15:37:28

Data:[{"id":"5doad4eo-ob21-11ec-b57b-67b...
Show More

Hash:1454c15eea2e662...

Timestemp:1.9.2021, 15:37:21

Data:[{"id":"5937acdo-ob21-11ec-b57b-67b...
Show More

Hash:9edb358c35f445b...

Timestemp:1.9.2021, 15:37:16

Data:[{"id":"5652dc60-ob21-11ec-b57b-67b...
Show More

Hash:34071630f992ddc...

Timestemp:1.9.2021, 15:37:11

Data:[{"id":"5329affo-ob21-11ec-b57b-

Voting Screen

- A screen that shows all the votes - blocks within a Blockchain.
- You can scroll through the pages.

Exit

Blocks

1

2

Hash:482682b756c306f...

Timestemp:1.9.2021, 15:37:28

From: 04698d7dfe712738cebi... |

Balance: 1366

To: Naftali Bennett... | Sent: 5

To: 04698d7dfe712738cebi... | Sent:
1361

From: *authorized-reward*... |

Balance:

To: 04698d7dfe712738cebi... | Sent:
50

Show Less

Hash:1454c15eea2e662...

Timestemp:1.9.2021, 15:37:21

Voting Screen

You can expand "show more" and see what is inside the block.

Exit

Blocks

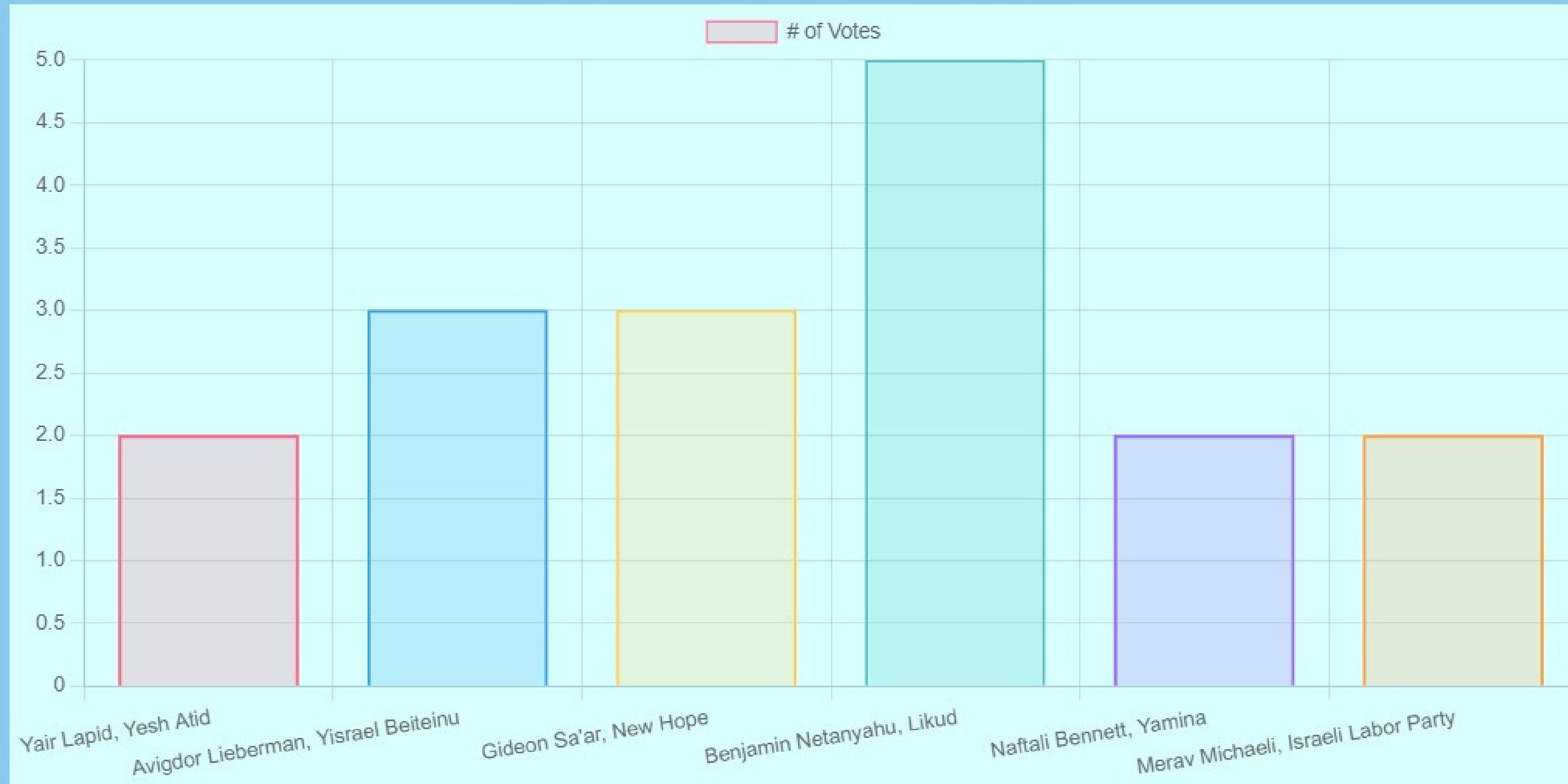
1 2 3

Hash:hash-1...
Timestamp:1.1.1970,
2:00:00
Data:[]
Show More

Blocks

- You can scroll through the pages.
- The last block that appears in the Blockchain on the Blocks page is the "Genesis" block from which the chain of blocks begins.

Election Results Status Chart



Election Results

Final result

COUNT VOTES

The winning party is:

Benjamin Netanyahu, Likud

Conclusion



We believe that we have managed to meet all the emphases and goals for the ultimate development



We managed to stand with the pre-planned scheduled and main goals



Elctify is an easy-to-use and monitors election system.

Do you have any questions?

We hope you learned something new.

Video -

[https://www.youtube.com/watch?
v=wFxPg98Sw1U](https://www.youtube.com/watch?v=wFxPg98Sw1U)

