

ALEX VAN DE SANDE



HOW TO TALK TO ~~GIrls~~ USERS AT PARTIES ~~YOUR APP~~

Why User Research
matters for any app



PROJECT CEMETERY

RIP:

ETHEREUM WALLET (2014–2017)

ETHEREUM.ORG (2016–2019)

THE DAO (2016–2016)

MIST (2015–2018)

UNILOGIN (2018–2020)



OVERGROWN BRICKS

RIPPED:

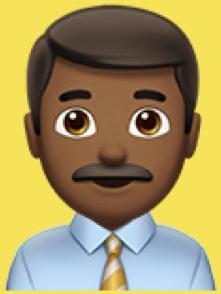
ERC20 TOKENS

HASHCHECKSUM

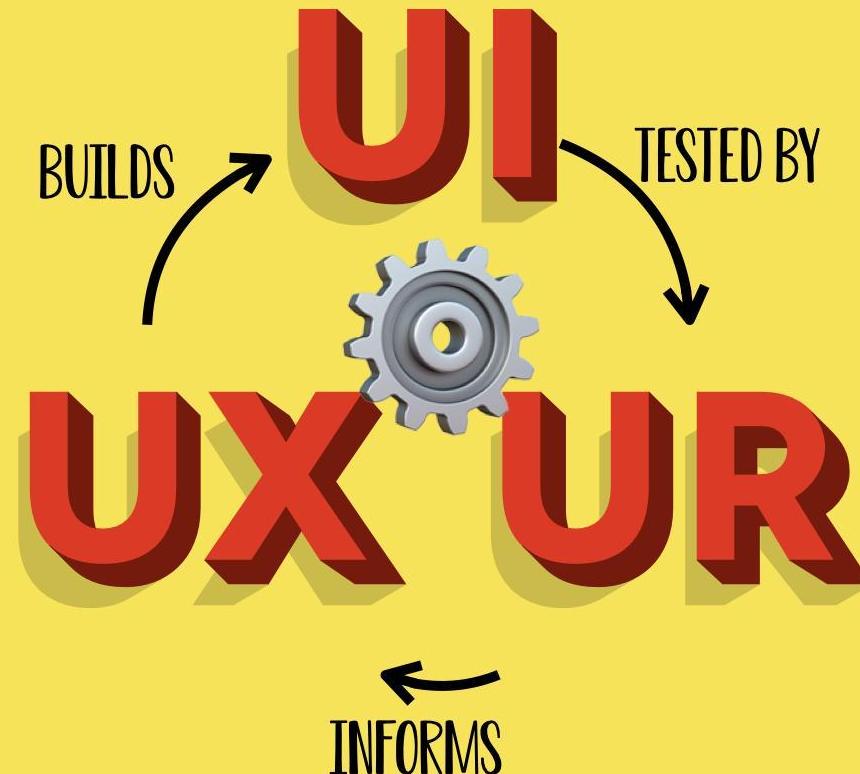
BLOCKIES

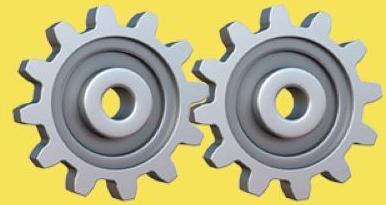
ENS

META-TRANSACTIONS

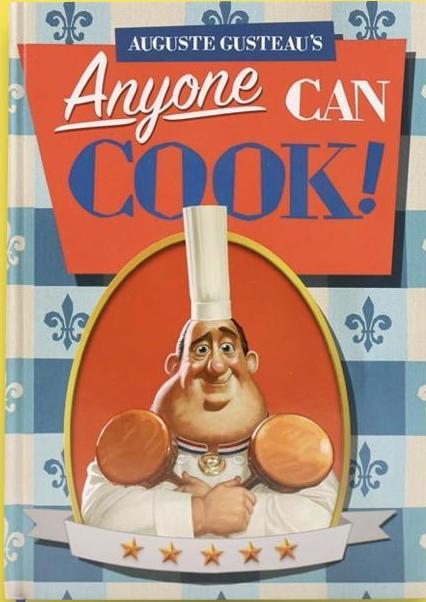


**DESIGNERS ARE
TRANSLATORS**





DESIGN DEV
GEAR GEAR



**ANYONE CAN DO IT
EVEN YOU!**

UR ≠ TUTORIAL



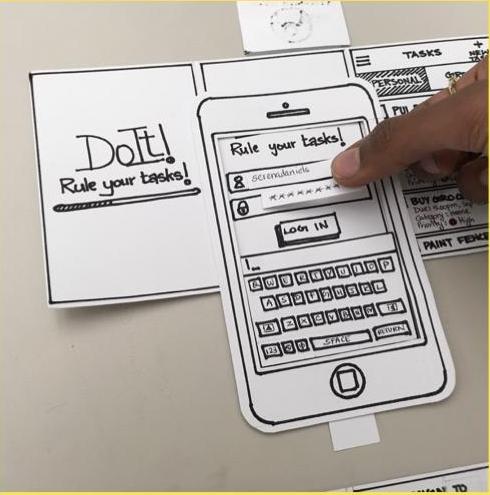
LET YOUR USERS SPEAK!



DON'T EXPLAIN YOUR APP!



THEY'RE NOT BEING TESTED!



CLASSIC UR



ONE WAY MIRRORS



PAPER PROTOTYPES



RANDOM PEOPLE ON THE OFFICE



5 SECOND TEST

USABILITY HUB.COM

page displaying stocks app
incomes appears
Performance presume like statistics
about Investments returns choice
showing last show seems market
chart
investment either WETH looks BAL graph
trading portfolio Currently DAI sort months
pool charts due currency **Crypto**
platform **Cryptocurrency** cryptocurrencies



FIRST CLICK

USABILITY HUB.COM

The screenshot shows a DeFi platform interface with several sections:

- Build**: Shows a green circular icon.
- Balancer**: Shows a stack of coins icon.
- Put your money to work**: A call-to-action with a brief description: "Earn more on your Ethereum-based assets. Add tokens to pools and earn compounding fees when people trade on the exchange utilizing your liquidity."
- Investment pools**: A search bar and a table listing various investment pools with their details:

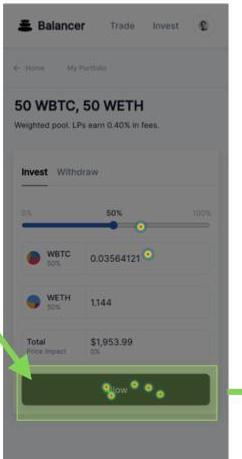
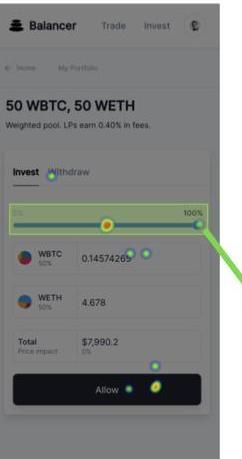
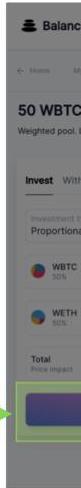
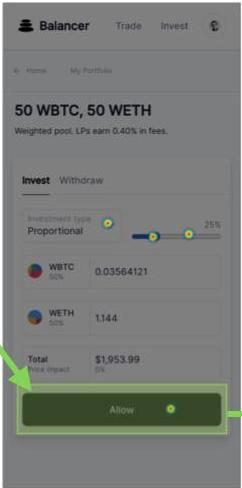
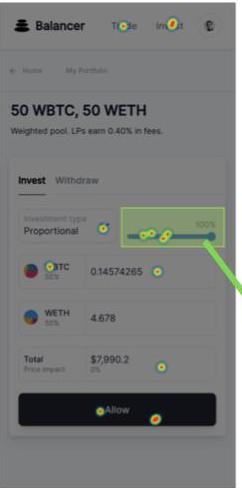
Pool name	Pool value	Volume (24h)	APY (1y)
+ 50 WETH + 50 WBTC	\$274.4m	\$6.5m	29.07%
+ 80 BAL + 20 WETH	\$274.4m	\$6.5m	29.07%
+ 80 WETH + 20 DAI	\$274.4m	\$6.5m	29.07%
+ 50 WBTC + 20 WETH	\$274.4m	\$6.5m	29.07%
+ 50 WETH + 50 WBTC	\$274.4m	\$6.5m	29.07%
+ 50 AAVE + 50 SNX	\$274.4m	\$6.5m	29.07%
+ 50 LIMA + 25 SNX + 25 AAVE	\$274.4m	\$6.5m	29.07%
+ 50 WETH + 50 WBTC	\$274.4m	\$6.5m	29.07%
+ 86 wPE + 2 STR + 2 LIFT + 2 NFTS + 2 PIXEL + YFU + IMPACT + GIFT	\$274.4m	\$6.5m	29.07%

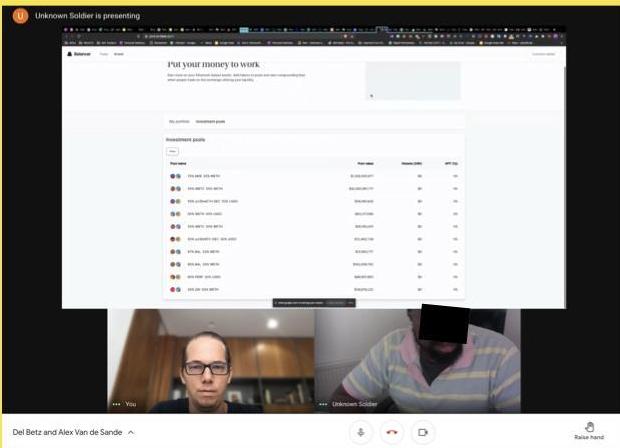
At the top right, there is a "Connect Wallet" button.



NAVIGATION TEST

USABILITY HUB.COM



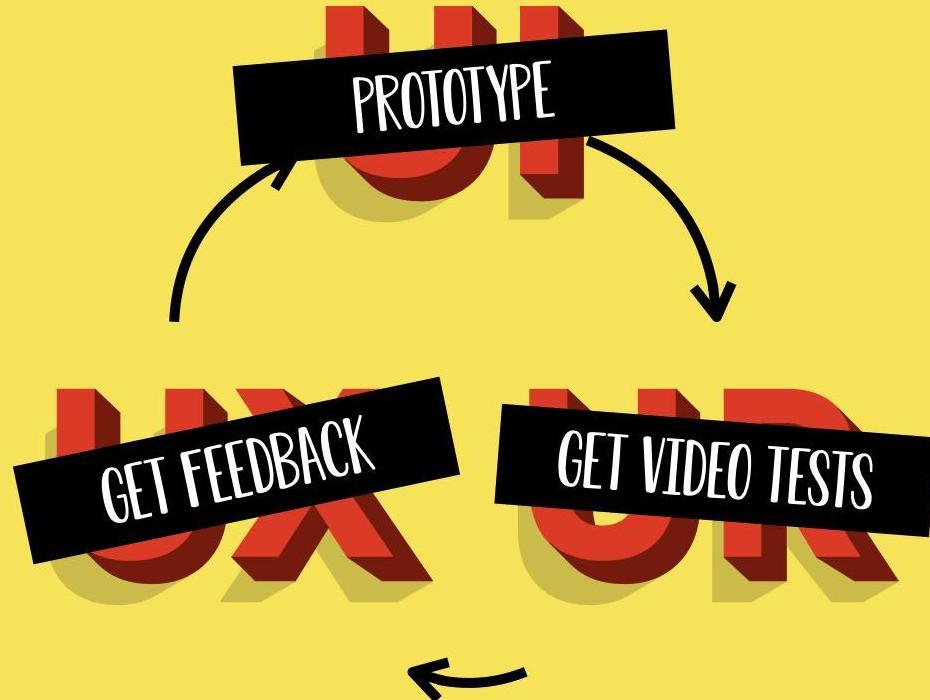


Action	Details	Value	
+ Invest	♦ 7.4818	\$26.98k	about 3%
+ Invest	♦ 338	\$1.22m	about 4%
- View Productive Pomodoro	06:18:59	\$180.46k	about 4%
- View		\$1.22m	about 5%
- Withdraw	0.5406 ♦ 0.4231	\$3.52k	about 18%

ONLINE MEETINGS



ONLINE PROTOTYPES
SCHEDULE MEETING WITH CALENDLY
GET RECORDED MEETING WITH USER BRAIN



RAPID FEEDBACK DESIGN!



CASE STUDY: INCENTIVIZATION

DID YOU MISS ON THIS AWESOME DROP?

WARNING:

USERS MIGHT (RIGHTFULLY) NOT TRUST YOU!



SCAMMER

UX RESEARCHER



SCAMMER

UX RESEARCHER



SCAMMER

Promises easy money



UX RESEARCHER





SCAMMER

Promises easy money



**Asks for you to click
on shady links**



UX RESEARCHER





SCAMMER

Promises easy money



**Asks for you to click
on shady links**



**“Can you download
and install this app?”**



UX RESEARCHER





SCAMMER

Promises easy money



Asks for you to click
on shady links



“Can you download
and install this app?”



“Can I watch you as
you use your wallet?”



UX RESEARCHER





SCAMMER

- Promises easy money
- Asks for you to click on shady links
- “Can you download and install this app?”
- “Can I watch you as you use your wallet?”
- Wants to see your password/secret phrase

UX RESEARCHER

- ✓
- ✓
- ✓
- ✓
- ✓
- ✗

CASE REPORT: POOL ICONS



Select the pool that contains
DAI

Select the pool that contains
DAI

Select the pool that contains
DAI

Select the pool that contains
DAI

Select the pool that contains
DAI

CONGRATS!



OPTIONS ARE NEVER EQUAL

DON'T REFLECT THE SYSTEM,
REFLECT THE USER'S NEEDS

Scenario: User wants to do X. In the system there are two modes:



Tweedledee



Tweedledum

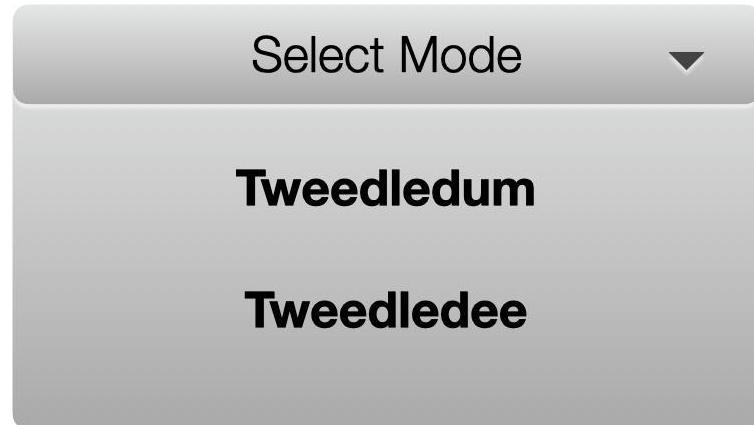
UI SHOULD **NOT** REFLECT YOUR INTERNAL SCHEMATICS

BAD: REPLICATE THE UNDERLYING LOGIC

Select Mode



BAD: REPLICATE THE UNDERLYING LOGIC



STILL BAD: BUT AT LEAST YOU PICKED A DEFAULT

Choose a mode



Tweedledum



Tweedledee

PROBABLY ONE OF THE OPTIONS IS WHAT MOST USERS WILL USE



Use Tweedledum mode



PROBABLY ONE OF THE OPTIONS IS WHAT MOST USERS WILL USE

Tweedledum mode uses a parametrized option choice that will reduce the impermanent loss at the cost of lower transaction variability and higher chance of revert errors.



Use Tweedledum mode



BETTER THAN A TOOLTIP: EXPLAIN IN FEW WORDS



Keep assets the same proportion

BE SMART: SHOW THE USER'S VALUE ADD

**Keep assets proportional
and get \$23.89 better price**



**IF YOU HAVE MULTIPLE CHOICES, CONSIDER
INTEGRATING THEM INTO THE ACTION**

Choose an action mode



Tweedledum



Tweedledee

Choose a token type



Wrapped



Non-wrapped

DON'T

**IF YOU HAVE MULTIPLE CHOICES, CONSIDER
INTEGRATING THEM INTO THE ACTION**



Keep assets the same proportion

Withdraw and unwrap

Withdraw wrapped
Keeps generating yield in Aave



DESIGN WITH CODE

FRAMER.COM

Invest

Withdraw



BAL

50%

0.5

Max: 12

\$27.73

\$665.40



WBTC

30%

0.0002766

Max: 1

\$16.64

\$60123.45



DAI

20%

11.0789210

Max: 1000

\$11.09

\$1001.00

Total

\$ 55.45



Keep Value Proportional

Achieves a price 0.00% better,
reduces max investable amount by
\$5,678.90

Invest

Action	Details	Value	
+ Invest	◆ 7.4818	\$26.98k	about 3
+ Invest	◆ 338	\$1.22m	about 4
- Withdraw	◆ 50.0481	\$180.46k	about 4
- Withdraw	◆ 338.5913	\$1.22m	about 5
- Withdraw	◆ 0.5406 ◆ 0.4231	\$3.52k	about 18

SOCIAL STYLE FEED

CASE REPORT: POOL ACTIVITY

Recent Pool Activity

1 hour ago



anna.eth swapped 1 WETH for 0.998 wstETH



Whale#F676 added \$1200.45 in liquidity

1 day ago

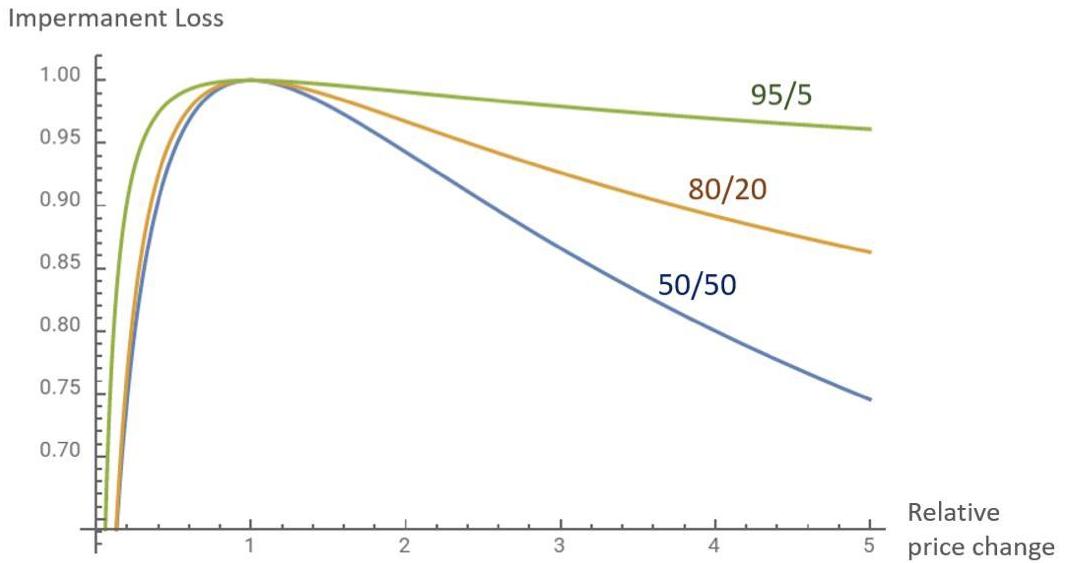


poap.xyz swapped 1 WETH for 0.998 wstETH



Whale#F676 added \$1200.45 in liquidity

CASE REPORT: “IMPERMANENCE LOSS” A DESIGNER’S JOB IS TO MAKE COMPLEX STUFF SIMPLE TO SEE



Compare with

USD ▾

\$ 100.00

1 day

1 week

1 month

max

I

TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

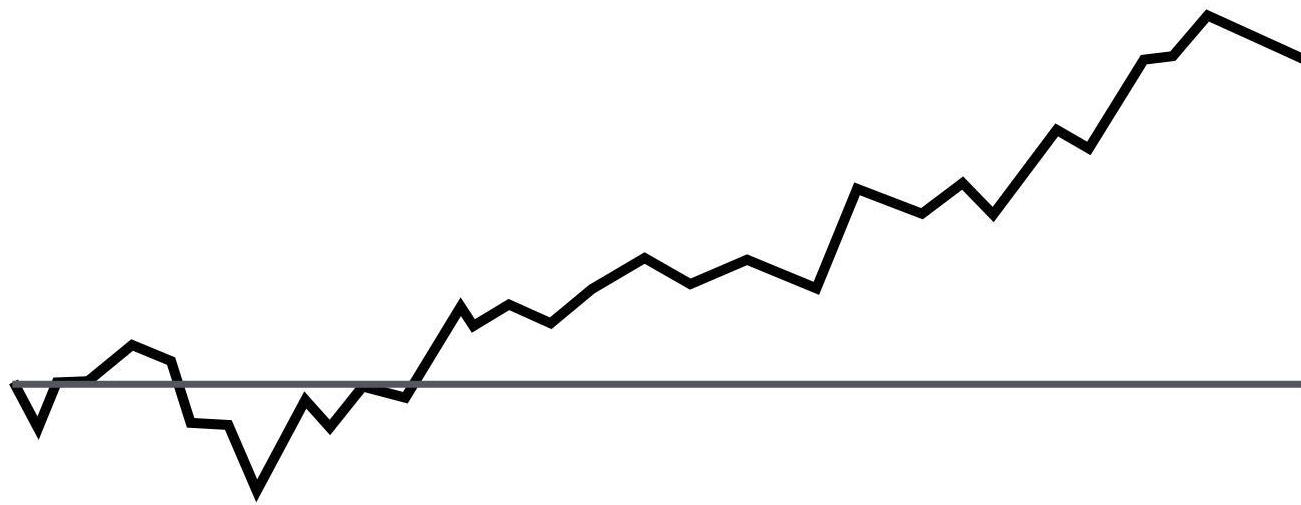
1 month

max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

I



TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

1 month

max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL

I
"IMPERMANENCE LOSS"



TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

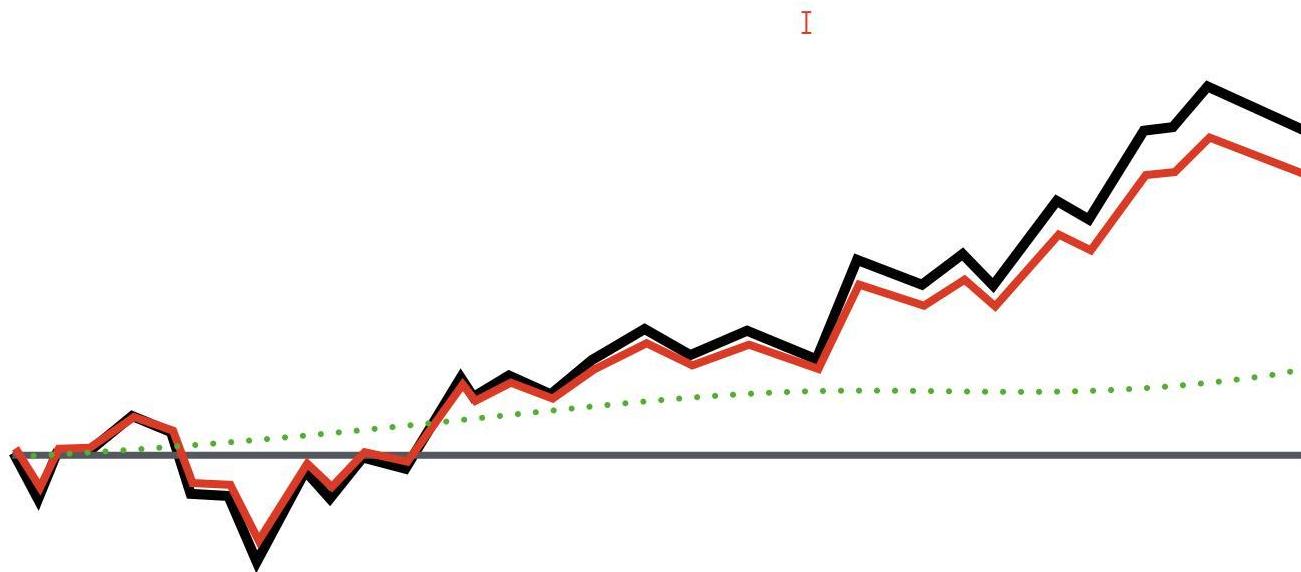
1 month

max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL



TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

1 month

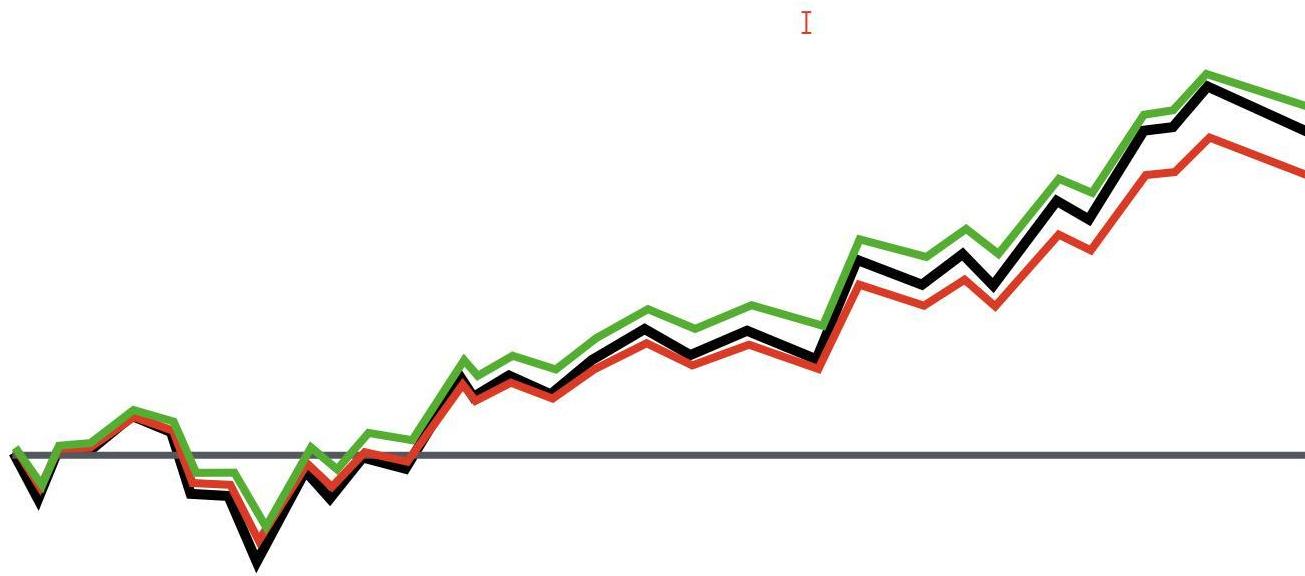
max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL

... WITH ADDED FEES



TOKEN A + TOKEN B

Compare with

USD ▾

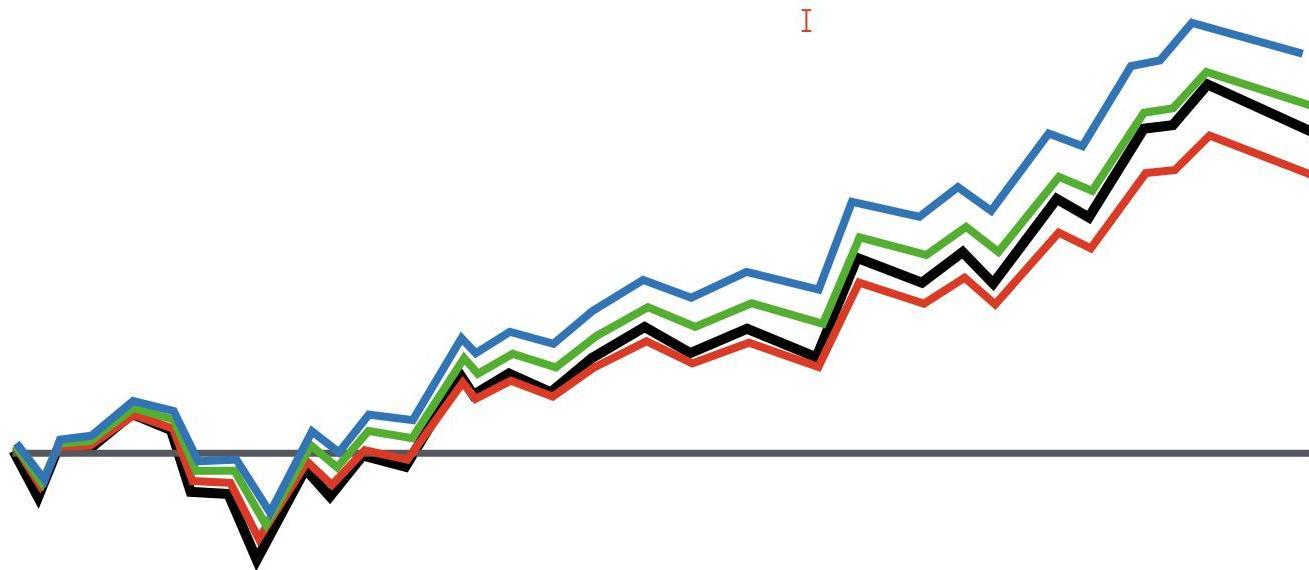
\$ 100.00

1 day

1 week

1 month

max



TOKEN A + TOKEN B

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL

... WITH ADDED FEES

... PLUS LIQUIDITY
INCENTIVES

Compare with

USD ▾

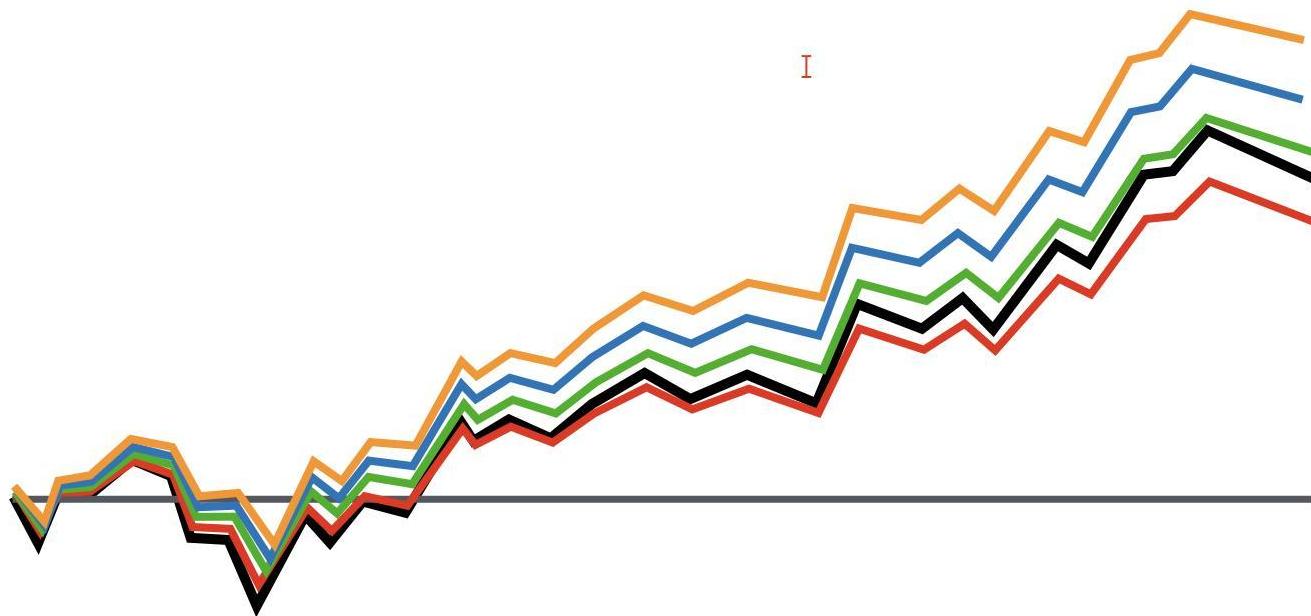
\$ 100.00

1 day

1 week

1 month

max



TOKEN A + TOKEN B

HOW MUCH YOU'D
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...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL

... WITH ADDED FEES

... PLUS LIQUIDITY
INCENTIVES

... PLUS LENDING,
STAKING, ETC ETC..

Compare with

USD

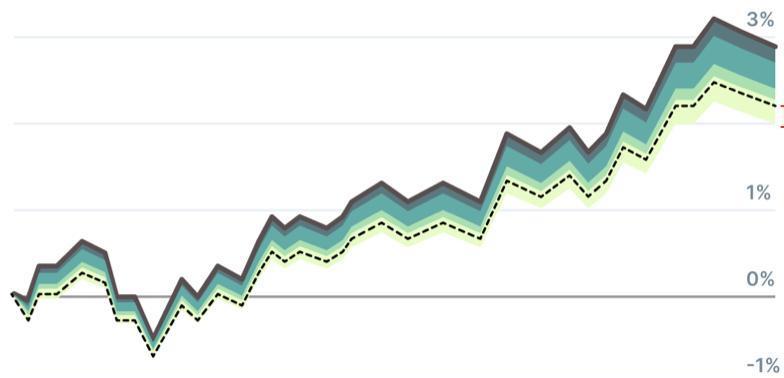
\$ 100.00

1 day

1 week

1 month

max



THE “RAINBOW” VISUALIZATION

Pool returns

What people who put money in this pool get

Total
0.63% ▲

APR: 7.65%

Assets
-5.4%

Swap Fees
0.2%

Staking Rewards
2.1%

BAL SU
0.76% »

Swap Fees

What traders pay to pool investors

last 30 days
\$7.48k

APR: 2.4%

Pool trading fee
0.04%

Fixed

Volume
\$18.7k

Total invested in Pool
\$383M

Compare with

USD

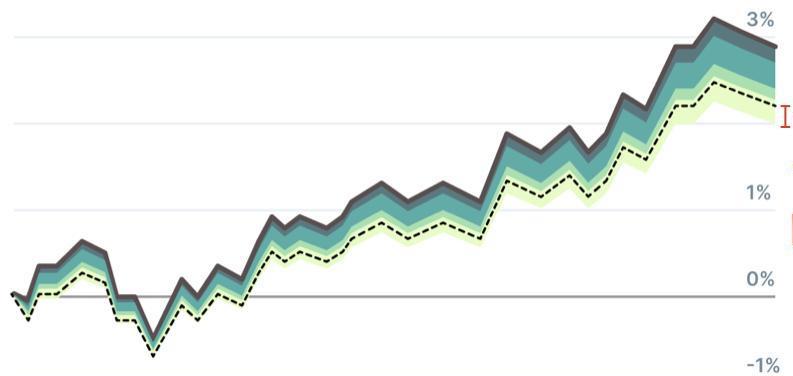
\$ 100.00

1 day

1 week

1 month

max



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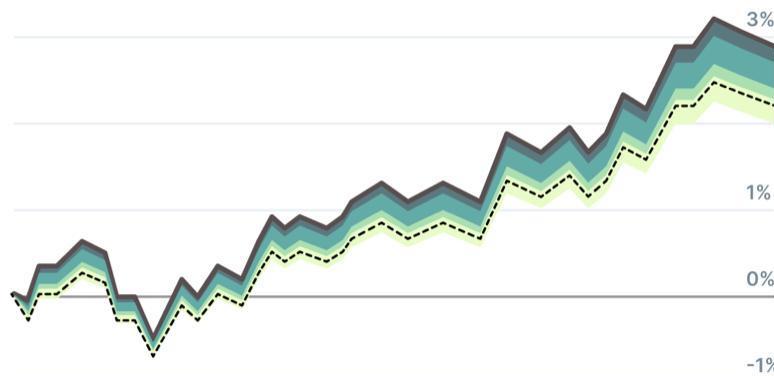
\$ 100.00

1 day

1 week

1 month

max



THE “RAINBOW” VISUALIZATION

“IMPERMANENT”
LOSS

Pool returns

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»

EVERYTHING WE
DO FOR YOU!

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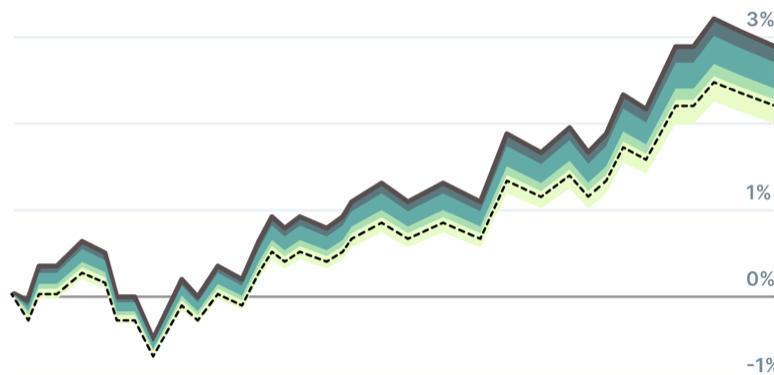
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1 day

1 week

1 month

max



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MORE INFO ON
THE ABOVE!

INSIGHTS



UNKNOWN ≠ ZERO (NUMBERS ARE UI)



DON'T TELL, SHOW!



USERS LOVE TO SEE OTHER USERS



GREY PATTERN: NOT SOLVING AN ISSUE IS AN ISSUE

THANKS!

To Fernando Martinelli, Pon Katerra and the great
Balancer Team. I had an awesome time.
Thanks for the ENS community and team!

FIND ME AT AVSA.ETH OR @AVSA