

ALEX VAN DE SANDE



~~HOW TO TALK TO GIRLS AT PARTIES.~~

USERS

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:

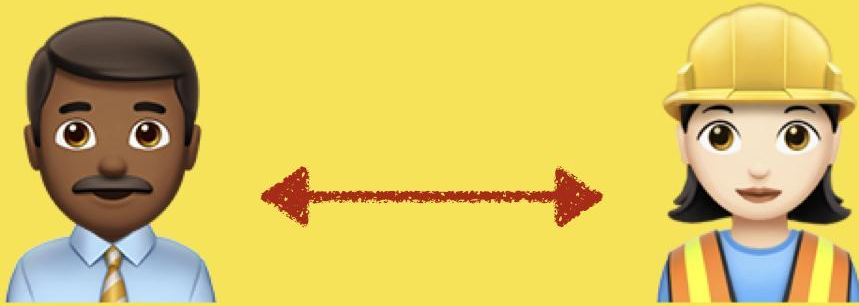
ERC20 TOKENS

HASHCHECKSUM

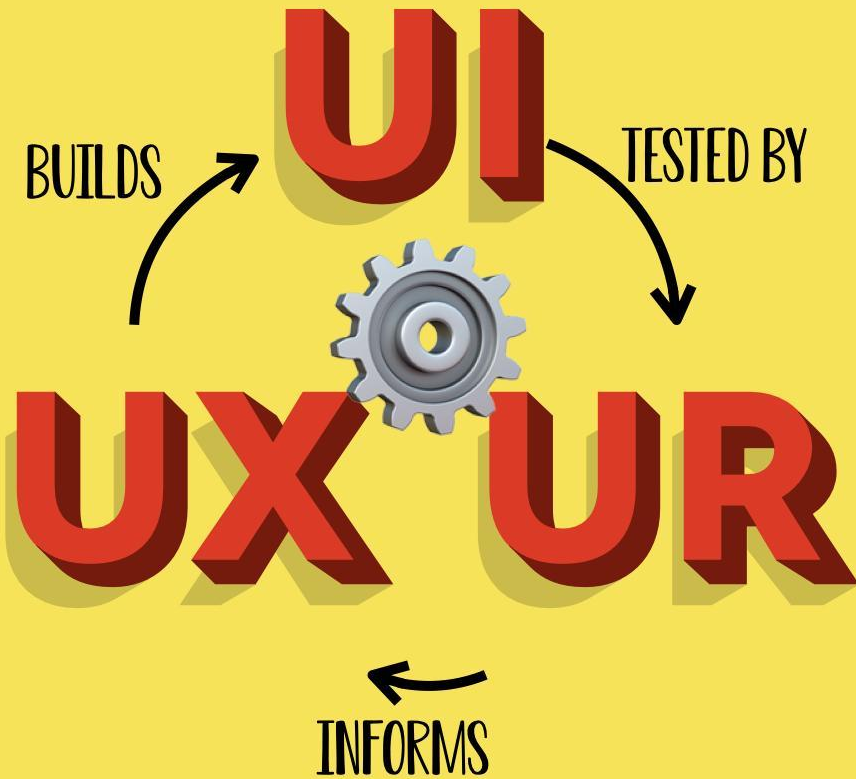
BLOCKIES

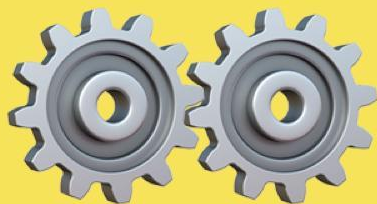
ENS

META-TRANSACTIONS



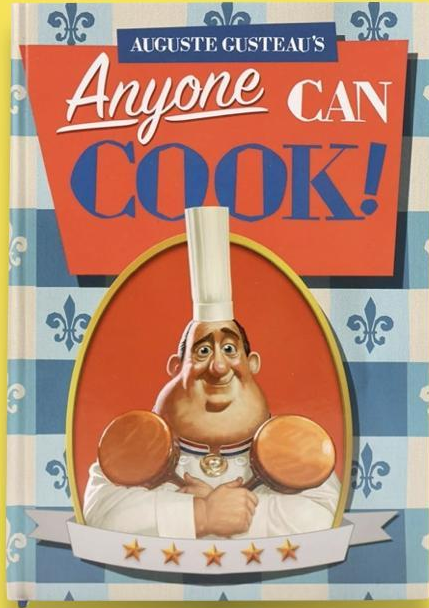
**DESIGNERS ARE
TRANSLATORS**





DESIGN
GEAR

DEV
GEAR



**ANYONE CAN DO IT
EVEN YOU!**

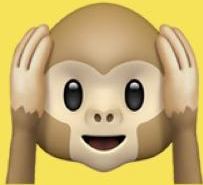
UR ≠ TUTORIAL



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

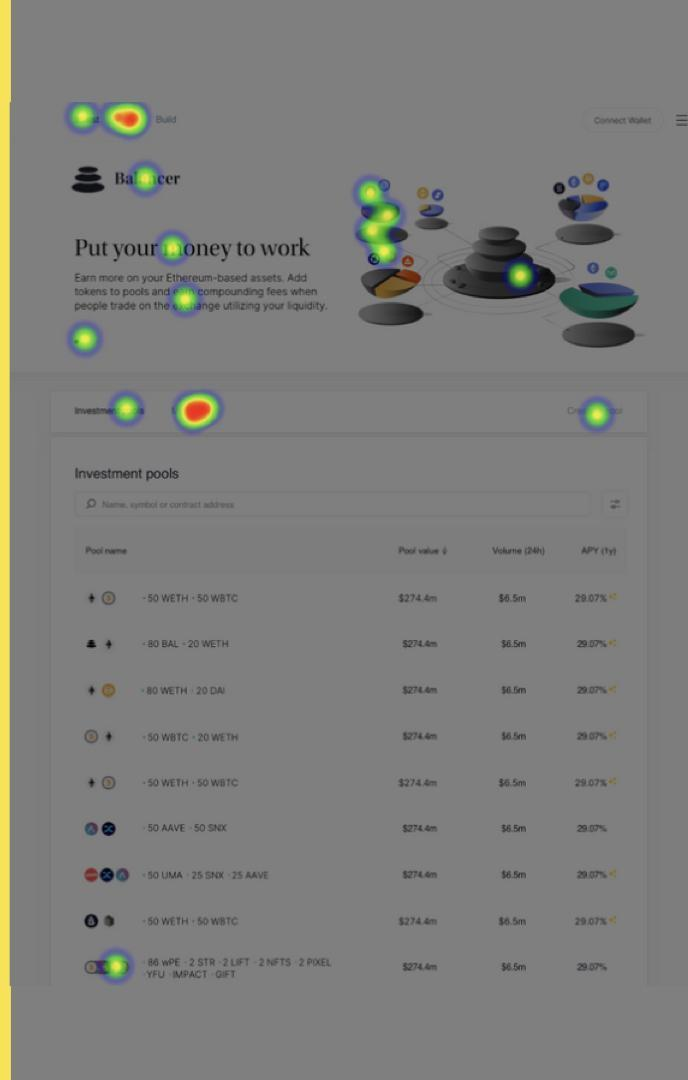
USABILITY HUB.COM





FIRST CLICK

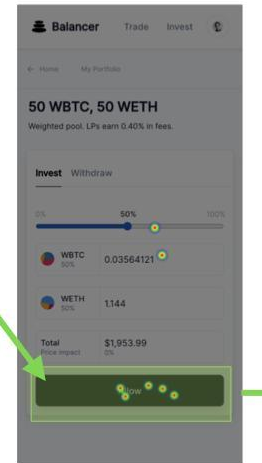
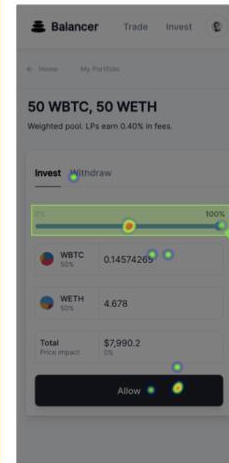
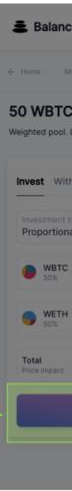
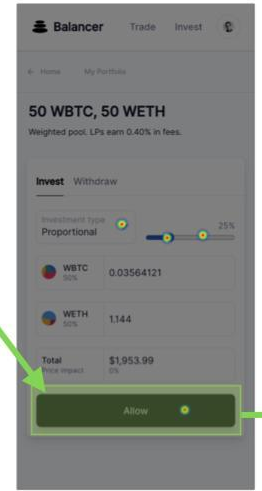
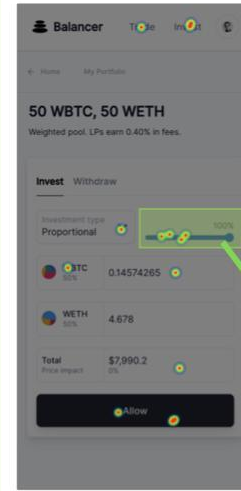
USABILITY HUB.COM

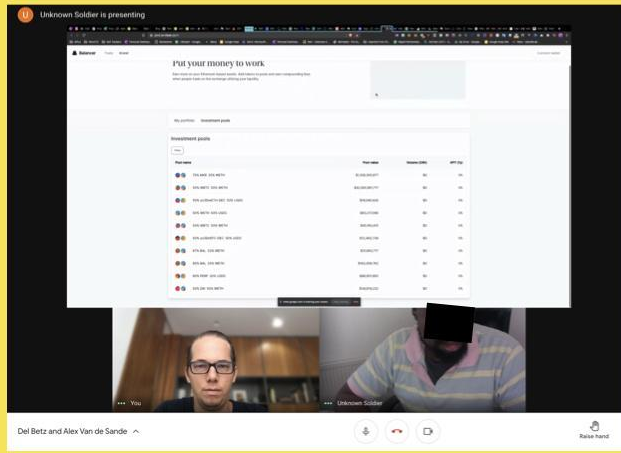




NAVIGATION TEST

USABILITY HUB.COM





Action	Details	Value	
+ Invest	7.4818	\$26.98k	about 3
+ Invest	338	\$1.22m	about 4
- V	Productive Pomodoro 06:18:59	\$180.46k	about 4
- V		\$1.22m	about 5
- Withdraw	0.3406	\$3.52k	about 18

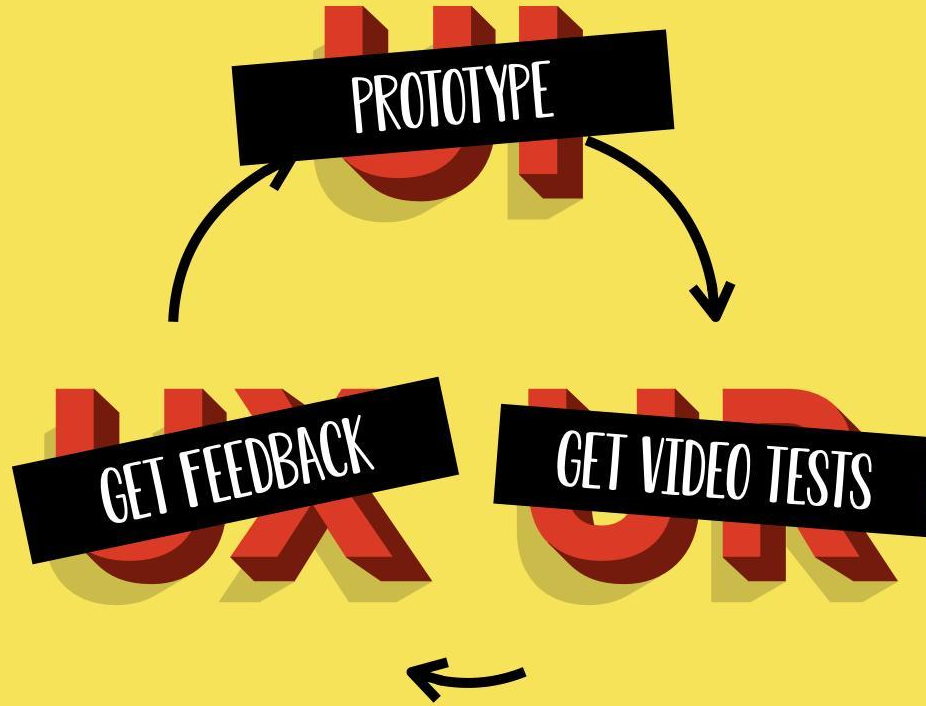
ONLINE MEETINGS

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

UX RESEARCHER

Promises easy money





SCAMMER

UX RESEARCHER

Promises easy money



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





SCAMMER

UX RESEARCHER

Promises easy money



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



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





SCAMMER

UX RESEARCHER

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?”**



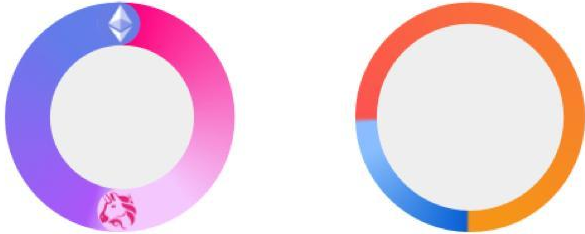
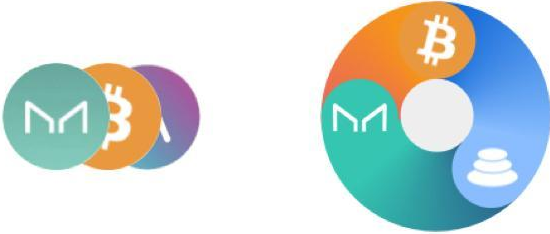


SCAMMER

UX RESEARCHER

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		

CASE REPORT: POOL ICONS



Select the pool that contains
DAI

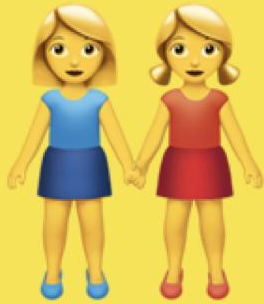
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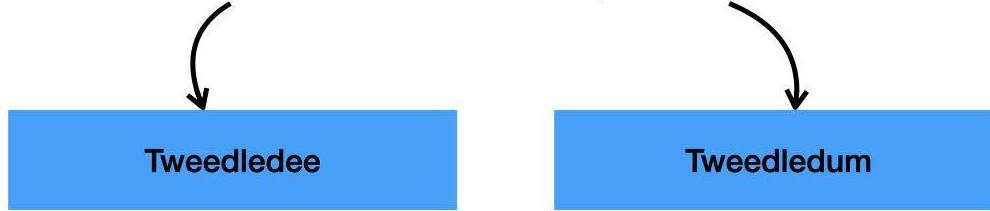
CONGRATS!



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:



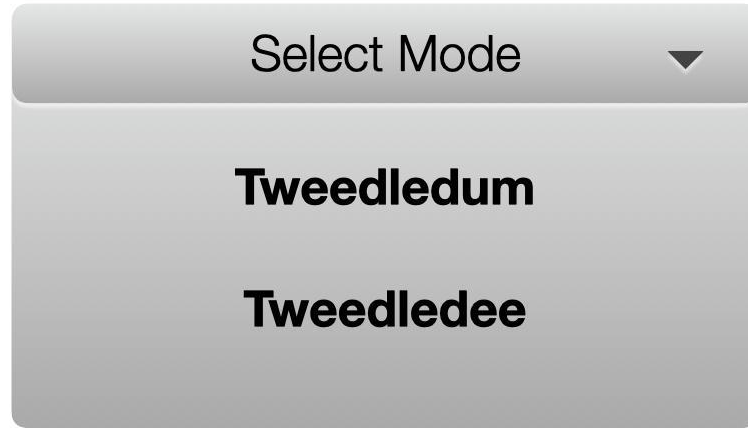
UI SHOULD **NOT** REFLECT YOUR INTERNAL SCHEMATICS

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

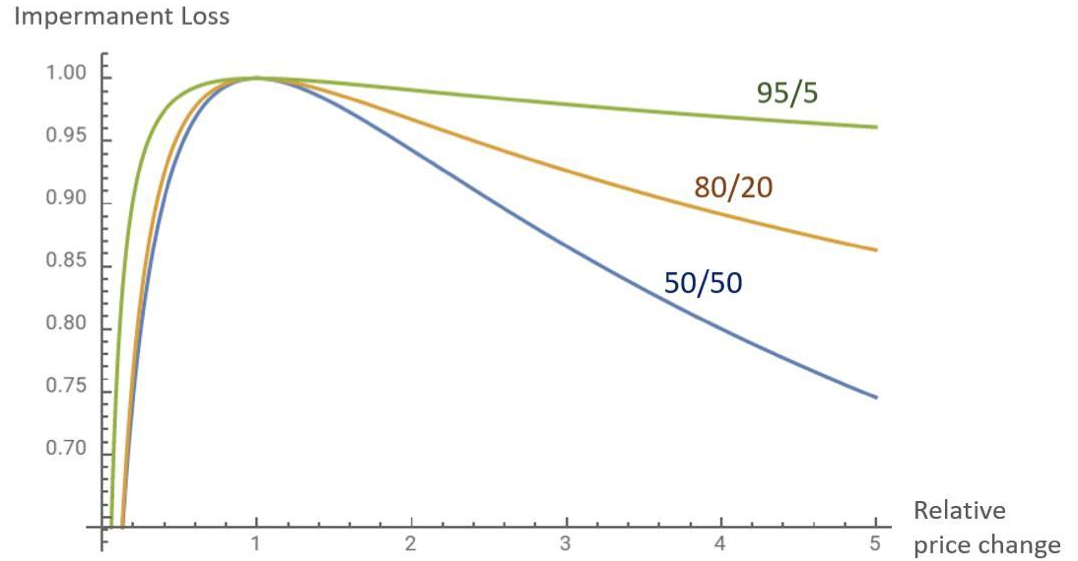


[Whale#F676](#) added \$1200.45 in liquidity

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

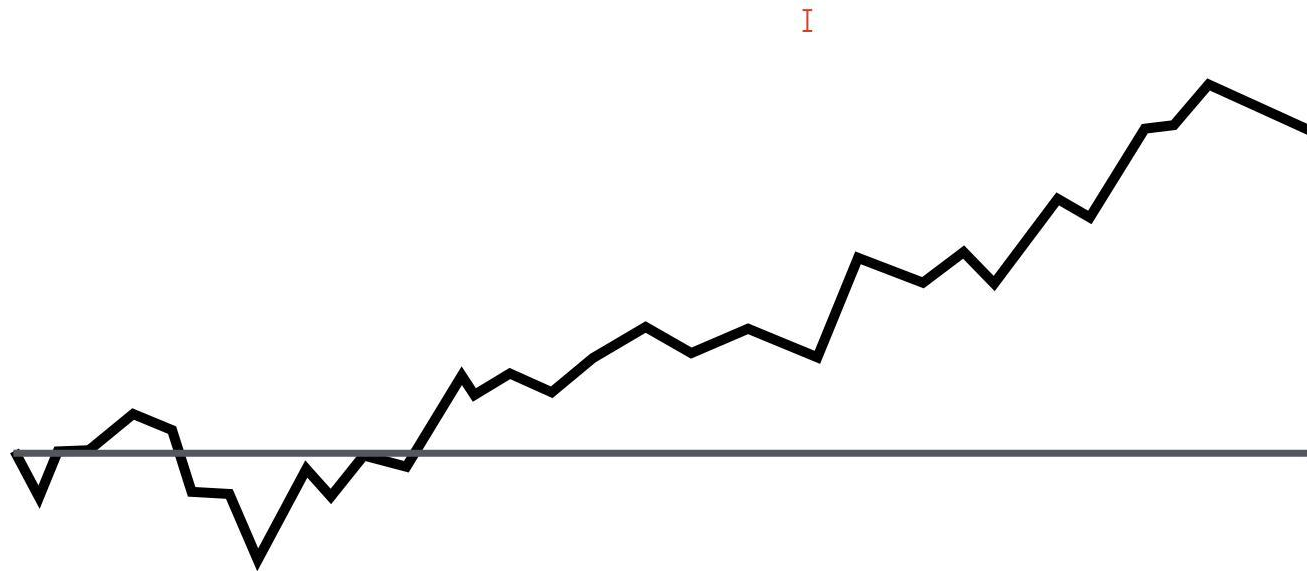
1 week

1 month

max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS



TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

1 month

max

I
“IMPERMANENCE LOSS”



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

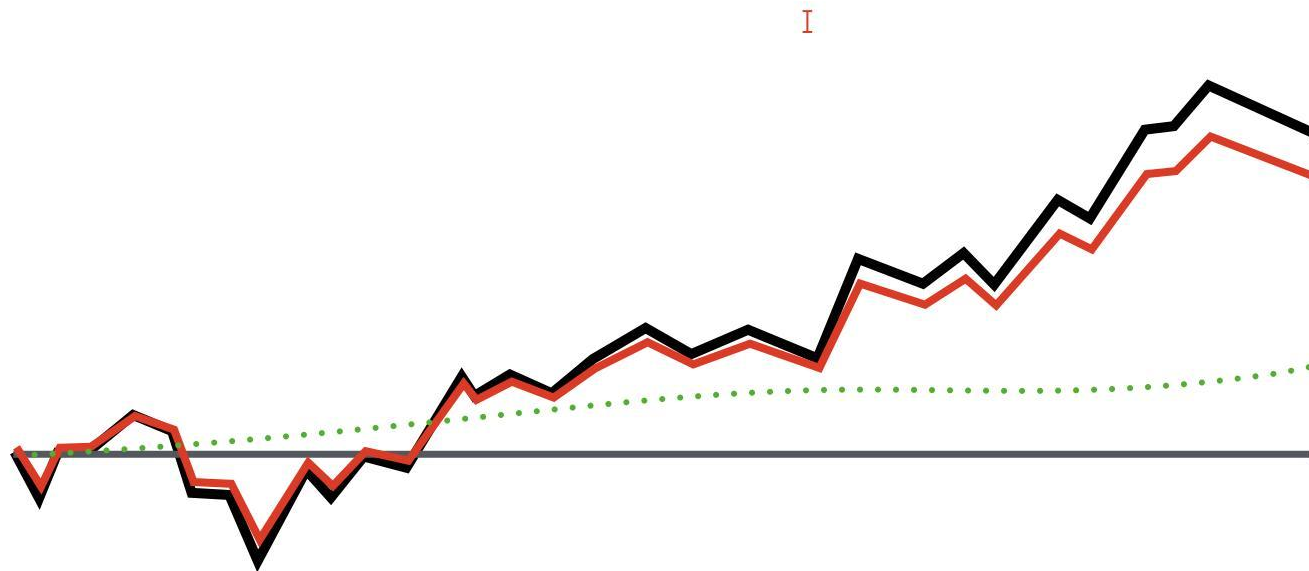
1 month

max

HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL



TOKEN A + TOKEN B

Compare with

USD ▾

\$ 100.00

1 day

1 week

1 month

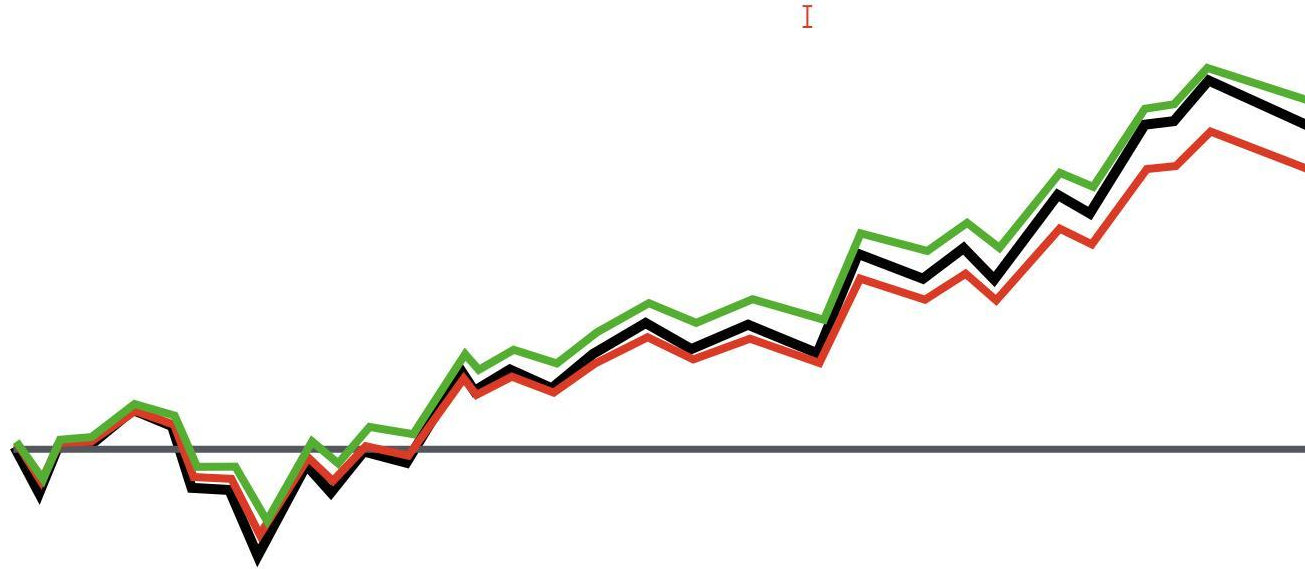
max

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

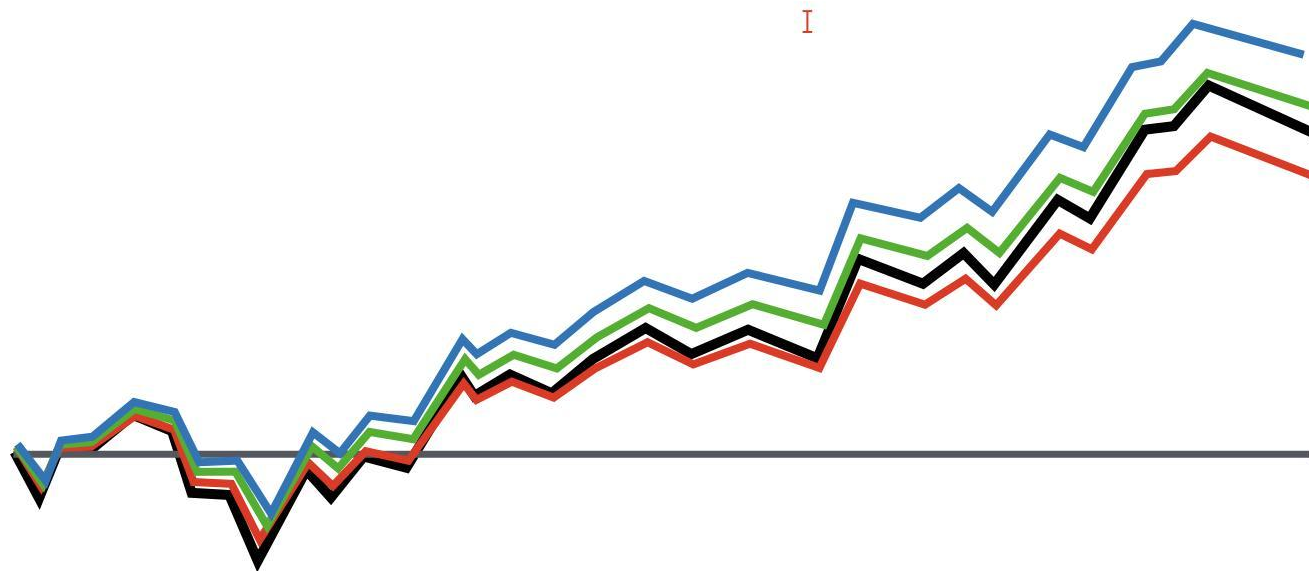
HOW MUCH YOU'D
HAVE IF YOU...

...HELD THE
TOKENS AS IS

...INVESTED THEM IN
A LIQUIDITY POOL

... WITH ADDED FEES

... PLUS LIQUIDITY
INCENTIVES



TOKEN A + TOKEN B

Compare with

USD ▾

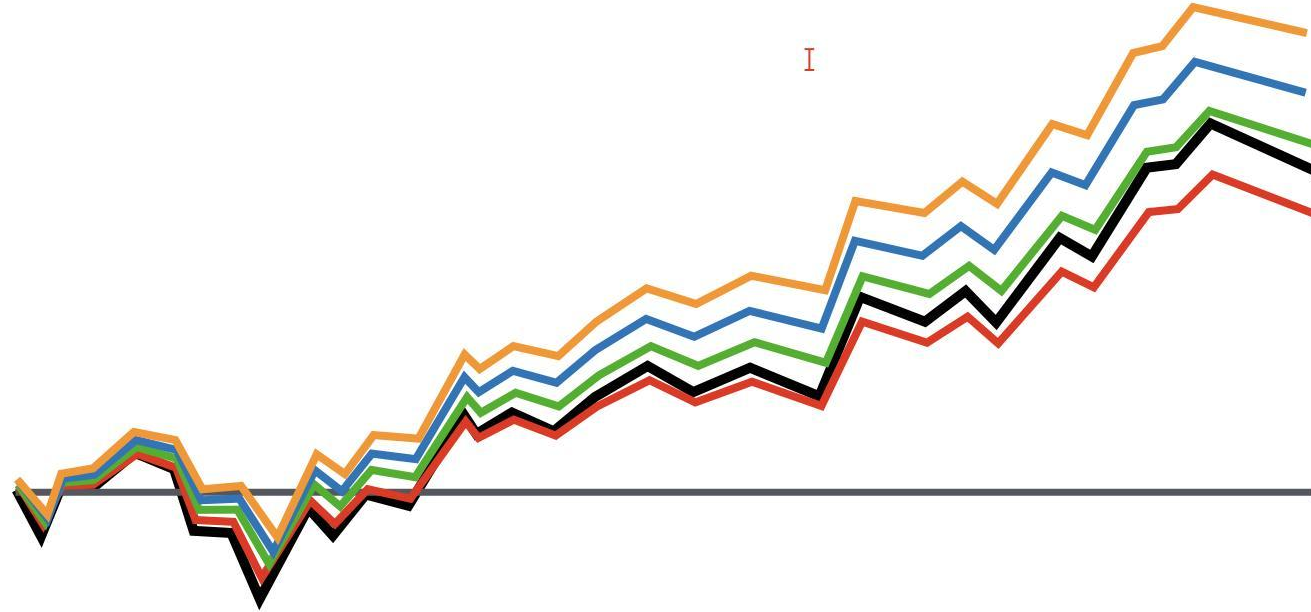
\$ 100.00

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

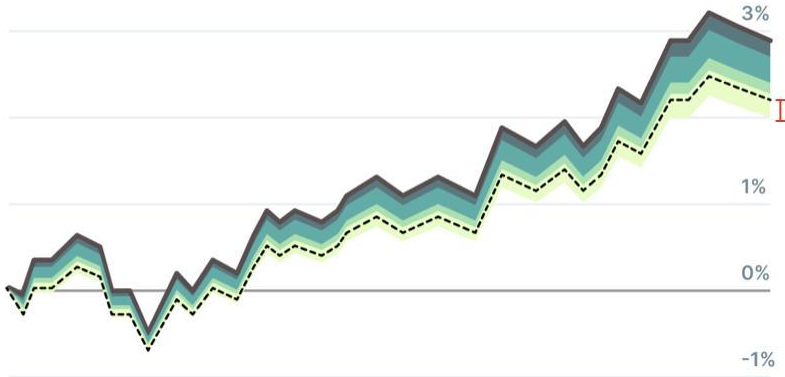
... PLUS LIQUIDITY
INCENTIVES

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

TOKEN A + TOKEN B

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% »
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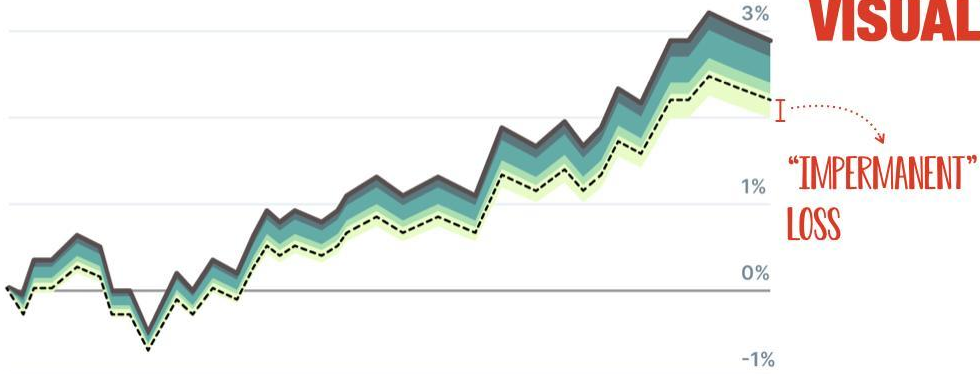
Swap Fees

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
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Compare with **USD** \$ 100.00 1 day 1 week **1 month** max

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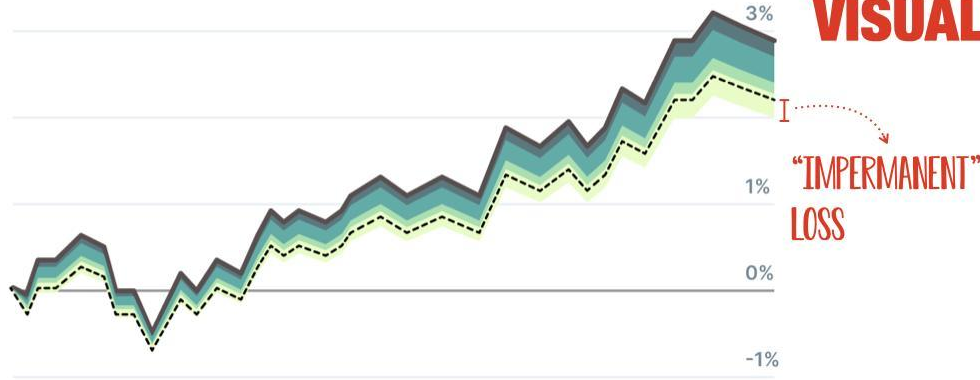
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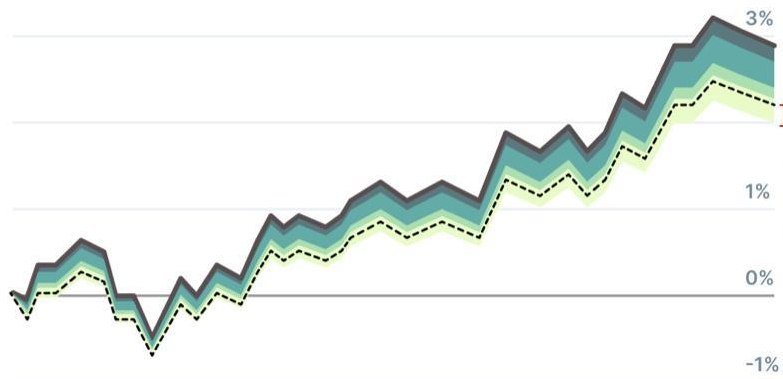
» **EVERYTHING WE DO FOR YOU!**

Swap Fees

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THE "RAINBOW" VISUALIZATION

Pool returns

What people who put money in this pool get



» **EVERYTHING WE DO FOR YOU!**

Swap Fees

What traders pay to pool investors



» **MORE INFO ON THE ABOVE!**

INSIGHTS



UNKNOWN \neq 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 Kattera and the great
Balancer Team. I had an awesome time.
Thanks for the ENS community and team!

FIND ME AT [AVSA.ETH](https://www.avsa.eth.ch) OR [@AVSA](https://twitter.com/AVSA)