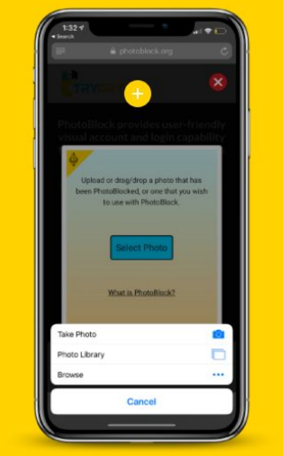
PhotoBlock alpha

One Login. Every Blockchain.

Watch the Video



1:32

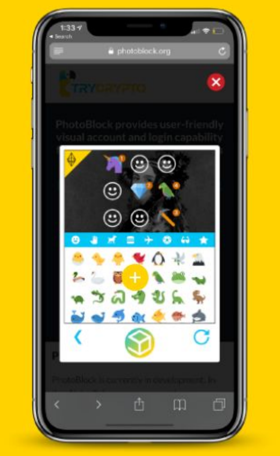
photoblock.org

PhotoBlock provides user-friendly visual account and login capability

Upload or drag/drop a photo that has been PhotoBlocked, or one that you wish to use with PhotoBlock.

Select Photo

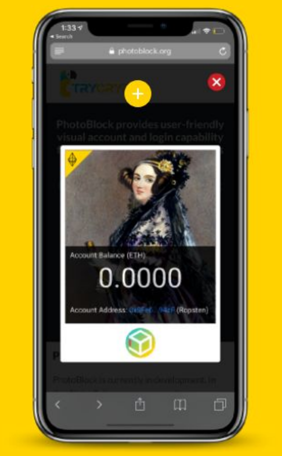
What is PhotoBlock?



1:33

photoblock.org

PhotoBlock provides user-friendly visual account and login capability



1:33

photoblock.org

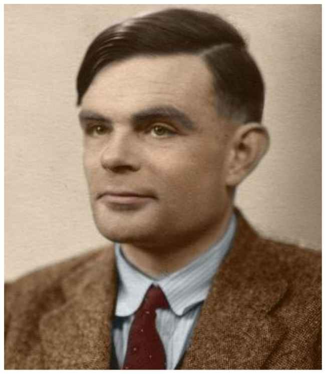
PhotoBlock provides user-friendly visual account and login capability

Account Balance (ETH)

0.0000

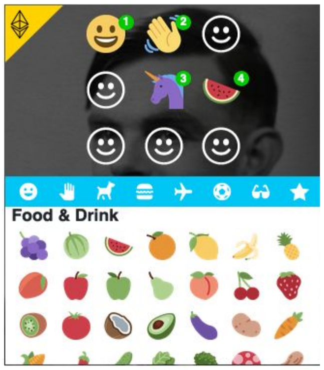
Account Address: (Ropsten)

Try the Demo



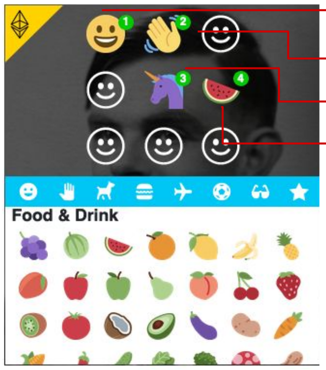
1

User uploads their photo



2

User creates EmojiKey by choosing emojis at each of nine positions in sequence.



(1) 1F600

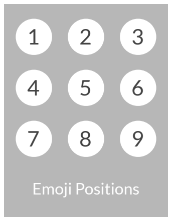
(2) 1F44B

(3) 1F984

(4) 1F349

3

PhotoBlock gets the byte value for each emoji in sequence, ignoring empty positions.



```
8950 4E47 0D0A  (1)
1A0A 0000 000D  (2)
4948 4452 0000
0190 0000 006A
0806 0000 0092  (5)
C107 0700 000A  (6)
4369 4343 5049
4343 2070 726F
6B48 DB48 2DA4
```

4

PhotoBlock divides photo bytes into nine segments and extracts bytes for each emoji position.

H1 = blake2s("1F600", "89504E470D0A")

H2 = blake2s("1F44B", "1A0A0000000D")

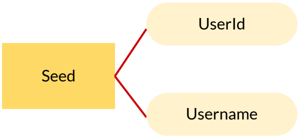
H3 = blake2s("1F984", "080600000092")

H4 = blake2s("1F349", "C10707000000A")

Seed = blake2s(H1, H2, H3, H4)

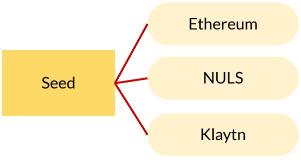
5

PhotoBlock uses the Blake2s algorithm to hash emoji bytes with photo bytes for each position, and finally, produces an aggregate hash of the positional hashes. This is the high-entropy seed for keygen.



6

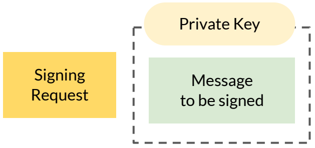
The seed is used to deterministically generate a UserId and Username in "adjective - phonetic word" format. Their hash is compared to the hash stored in the XMP (eXtensible Metadata Platform) photo section.



7

If the hash matches, the same seed is used to deterministically generate a public key and account address for the blockchain where PhotoBlock is being used.

No private key or any other security information is ever stored in PhotoBlock!



8

The public key and account address are reported to the calling application. The private key is only generated for signing requests and not available to the application.

TRYCRYPTO