



Auth0

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degrammer



`spotify:playlist:5BORFCwsX1UQV9eohF8TsL`

EXPERT IN NOTHING
curious about everything.



9/9

0800 Antan started

1000 " stopped - antan ✓

1300 (032) MP-MC

(033) PRO 2

conv

Relays 6-2 in 033 failed special speed test
in relay

Relays changed

1100 Started Cosine Tapc (Sine check)

1525 Started Multy Adder Test.

1545



Relay #70 Panel F
(moth) in relay.

First actual case of bug being found.

1630 Antan started.

1700 closed down.

{ 1.2700 9.037 847 025
9.037 846 995 conv
~~1.982147000~~
~~2.130476415~~ 4.615925059(-2)

2.130476415

2.130676415

Relay
2145
Relay 3370



Why the 60s ?



Why the 60s ?



Fernando José
"Corby" Corbató
was a prominent
American computer
scientist.

Why the 60s ?

Corbató is credited with the first use of passwords to secure access to files on a large computer system in 1961.

The world has a problem with passwords



Passwords are the
root cause of **80%**
of data breaches.

The world has a problem with passwords



An average user
has **more** than **90**
online accounts!

The world has a problem with passwords



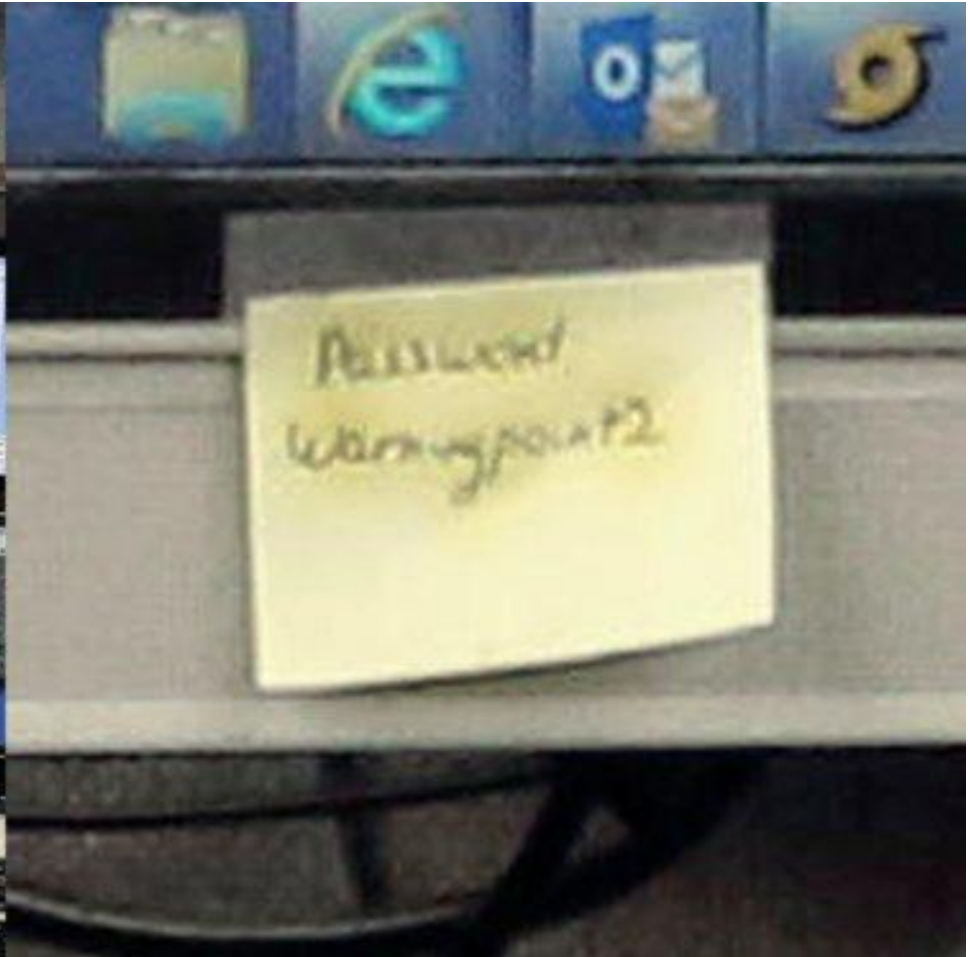
Up to **51%** of
passwords are
reused

The world has a problem with passwords

More than **30%** of
online purchases are
abandoned due to
forgotten passwords



Please don't try this at Home!!





GIPHY

What can we do to
mitigate them ?

Introducing WebAuthn

It's a recent standard published by the W3C, defining a web based API for strong authentication using public-key cryptography.

A Recent standard from W3C



A Recent standard from W3C

1. Working Draft

A Recent standard from W3C

2. Candidate recommendation

A Recent standard from W3C

3. Proposed recommendation

A Recent standard from W3C

4.W3C recommendation

A Recent standard from W3C

WebAuthn is an
Industry standard
since March of
this year!



A Recent standard from W3C



Surprised
dev wearing
a tie
opening his
mouth.

Web based API

```
const credential = await navigator.credentials.create({  
  publicKey: publicKeyCredentialCreationOptions  
});
```

```
const credential = await navigator.credentials.get({  
  publicKey: publicKeyCredentialRequestOptions  
});
```

STRONG

Authentication



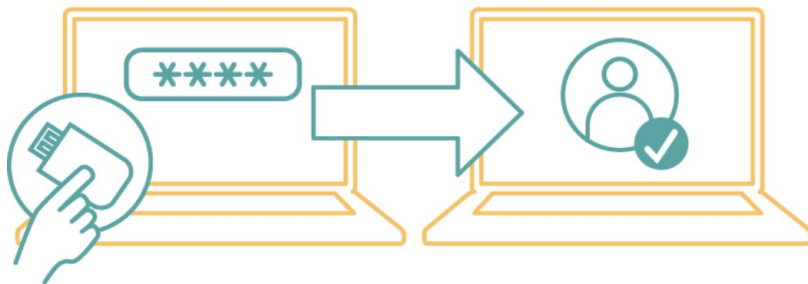
fidoTM
ALLIANCE

How

Addresses a Variety of Authentication Use Cases



Passwordless authentication



Second-factor authentication



Multi-factor authentication

How

How People Use FIDO



Security key



Facial recognition



Fingerprint

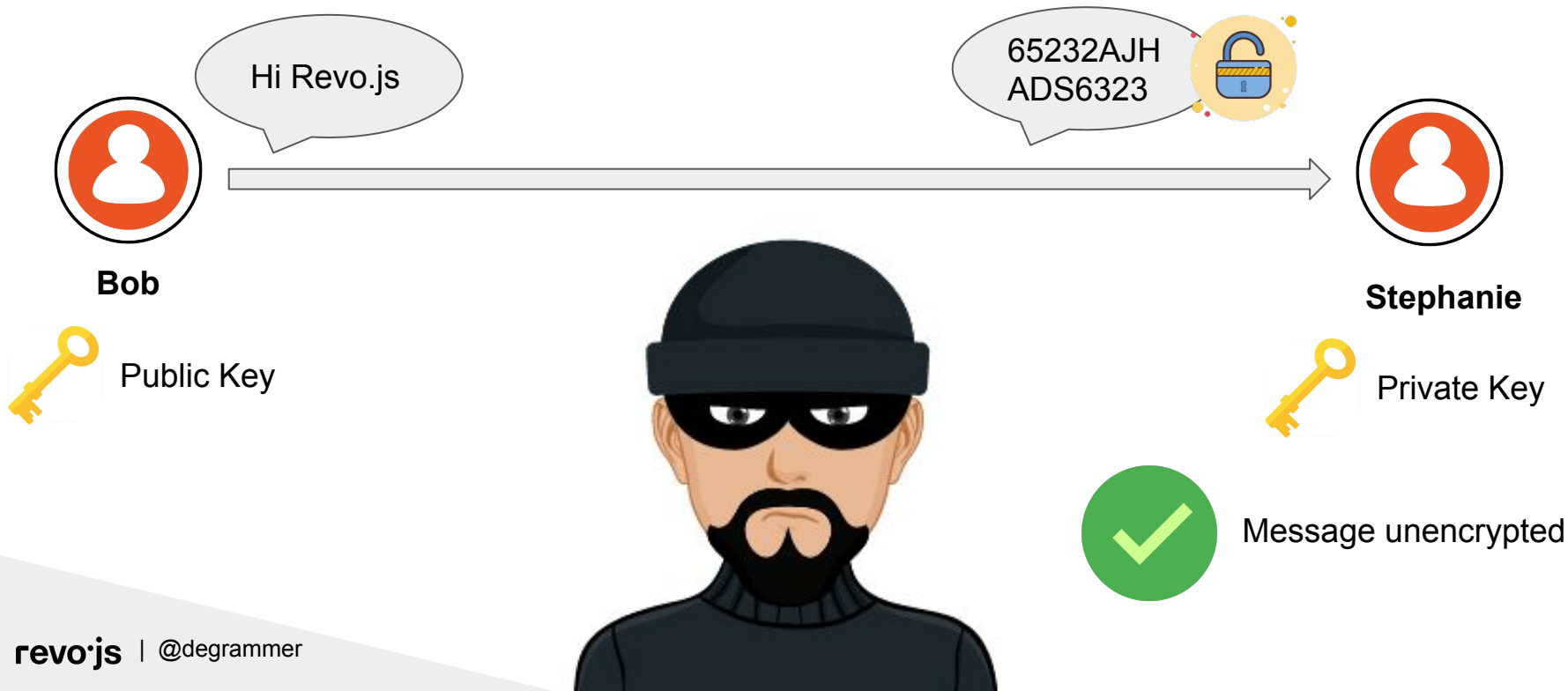


Voice

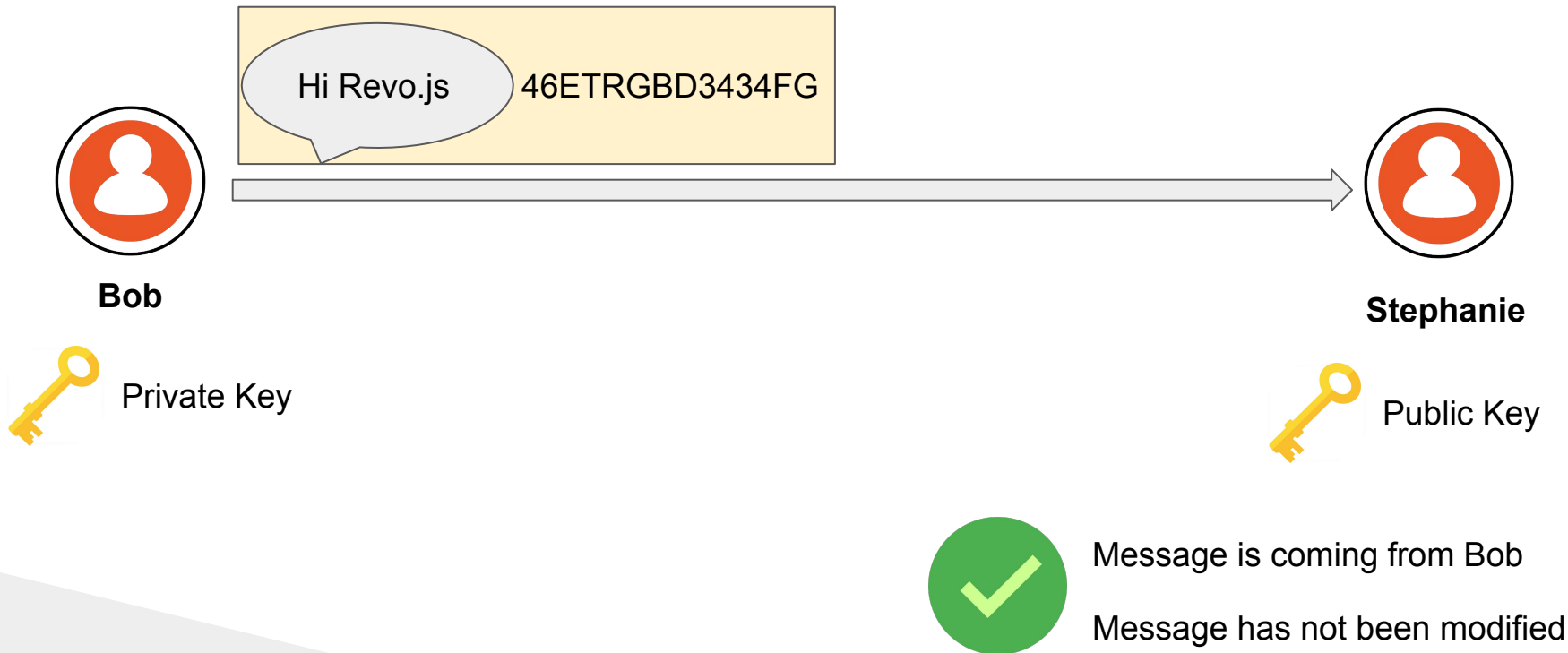
Public-key cryptography



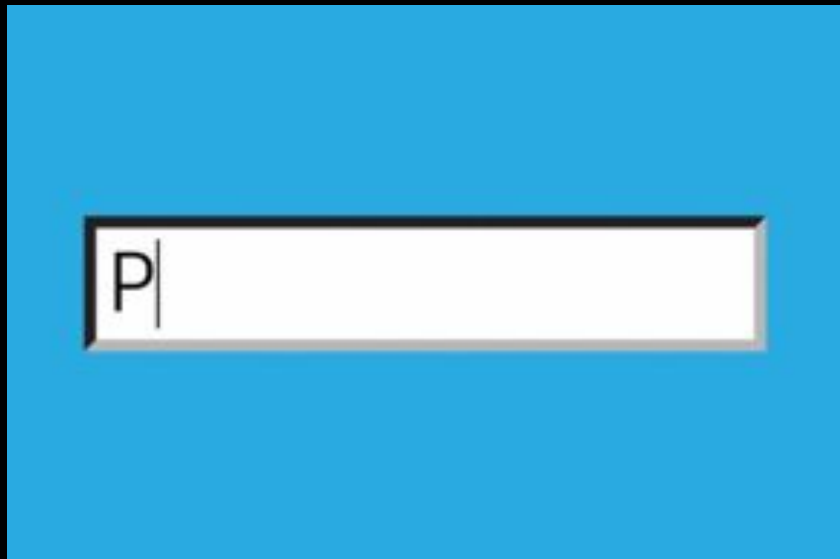
Encryption



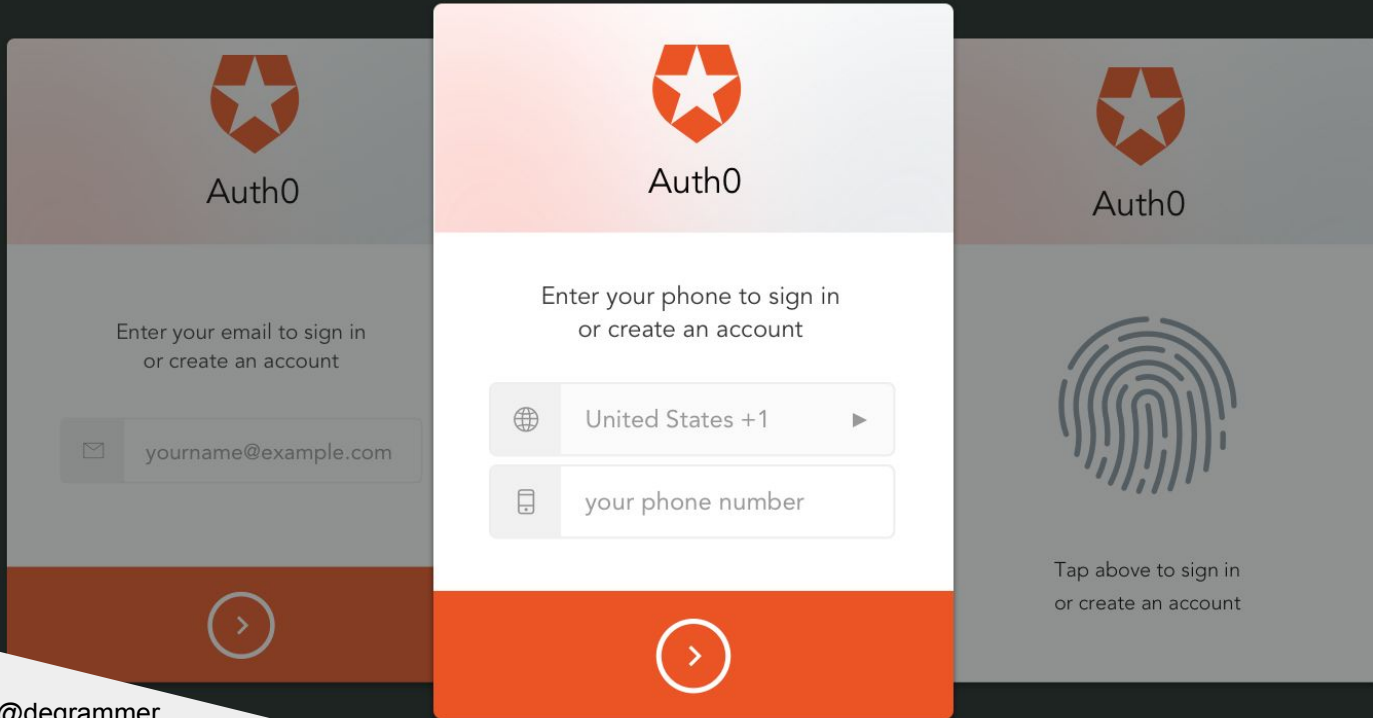
Digital Signature



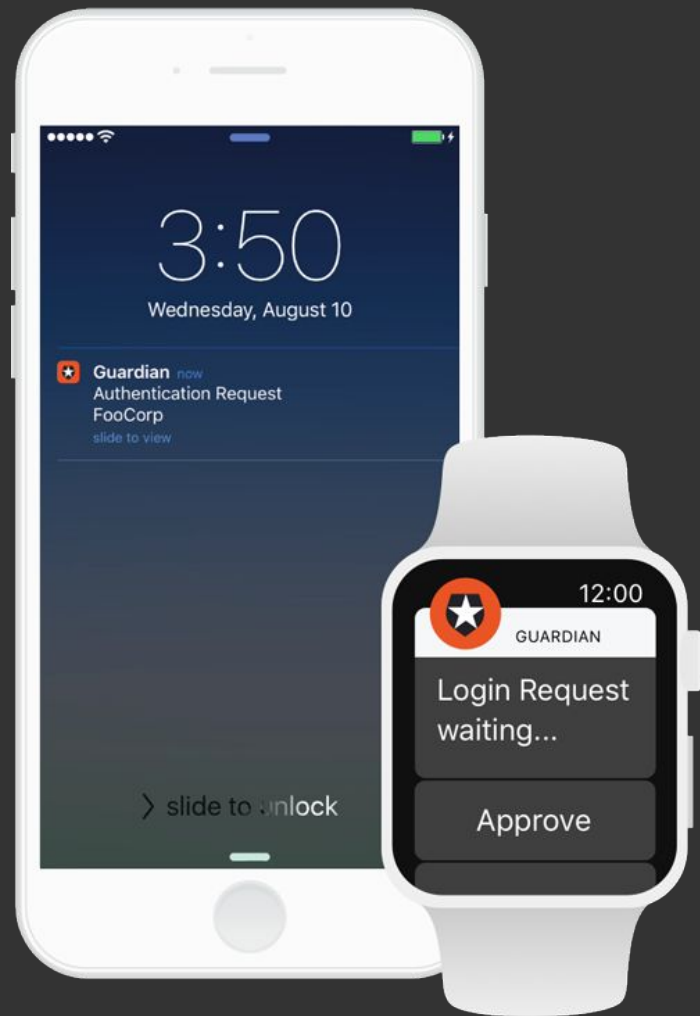
Is it the end of passwords?



Passwordless mechanism



Second factor
authentication
without using
SMS Codes.



How WebAuthn works

It's about trust with
some key features.

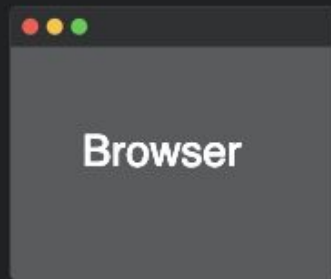


How WebAuthn works

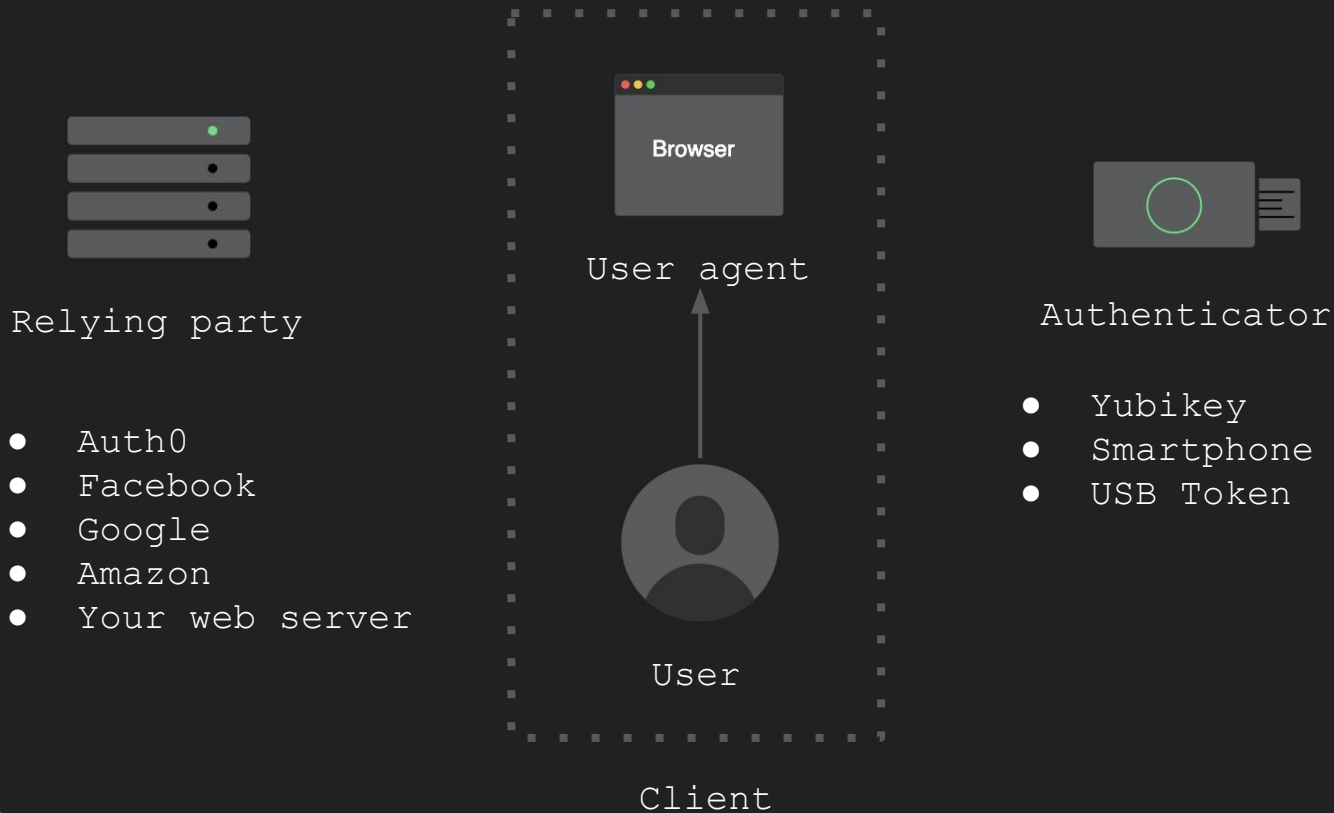
- Strong
- Scoped
- Attested



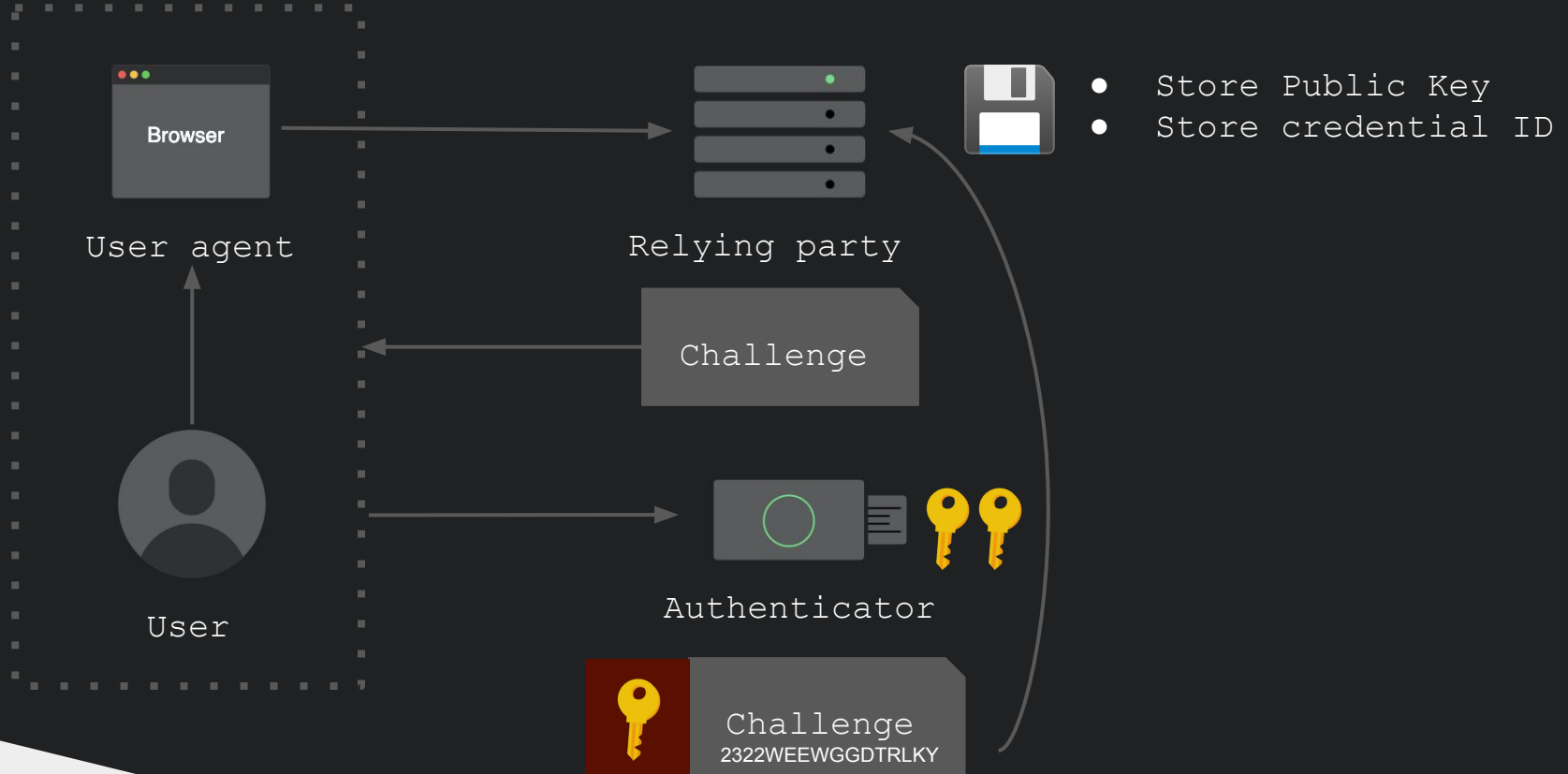
Hardware security module



WebAuthn elements



Registration



Authentication

