



Forgot Password?

Yes I Did !

About Me



@joel__lord



joellord



Sign in

Username



user



Passwords Are Bad

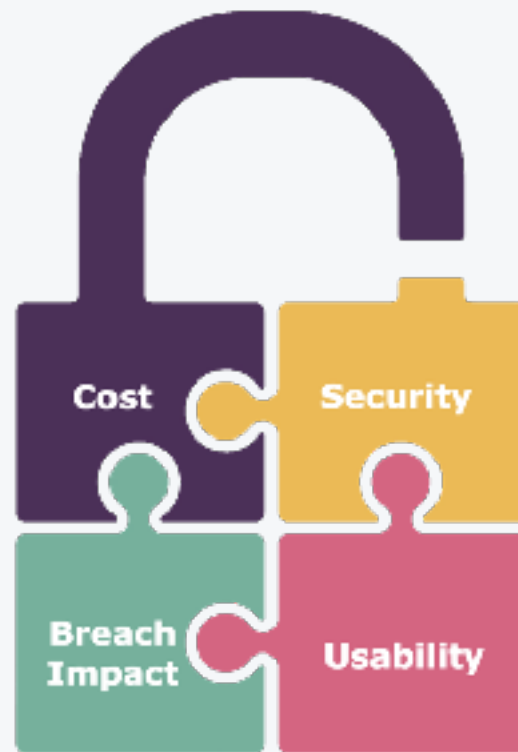
Password



Sign in

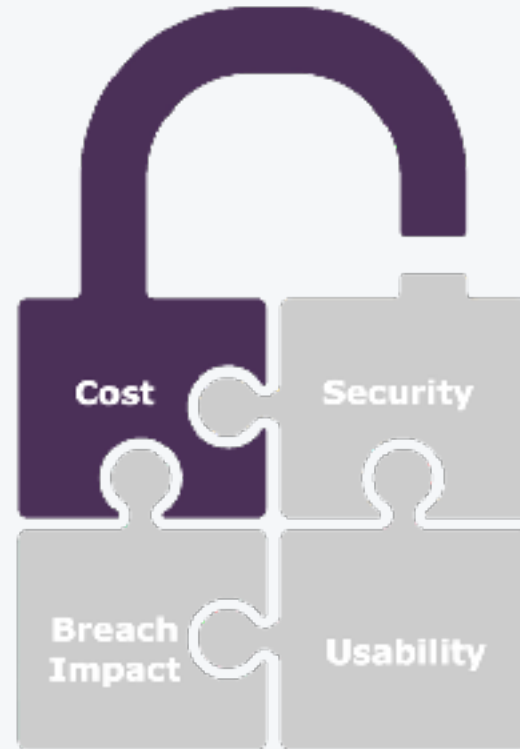
Passwords Are Bad

- Cost
- Breach Impact
- Security
- Usability



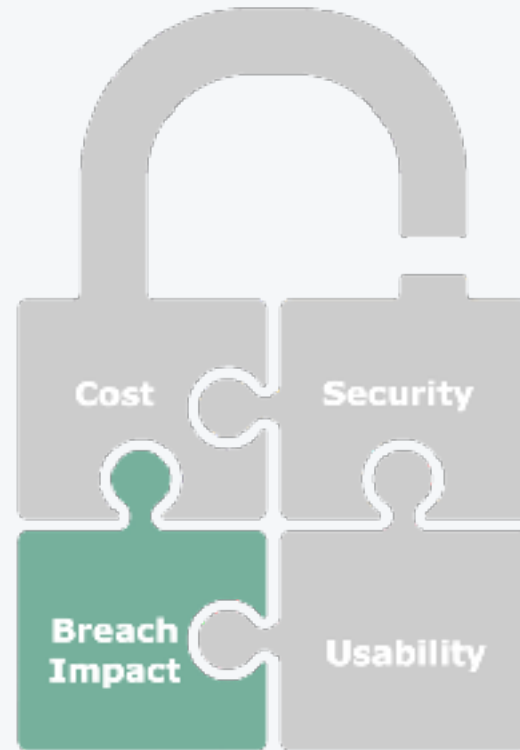
Cost

- Help desk costs
- Technology acquisition costs
- Management and operations costs



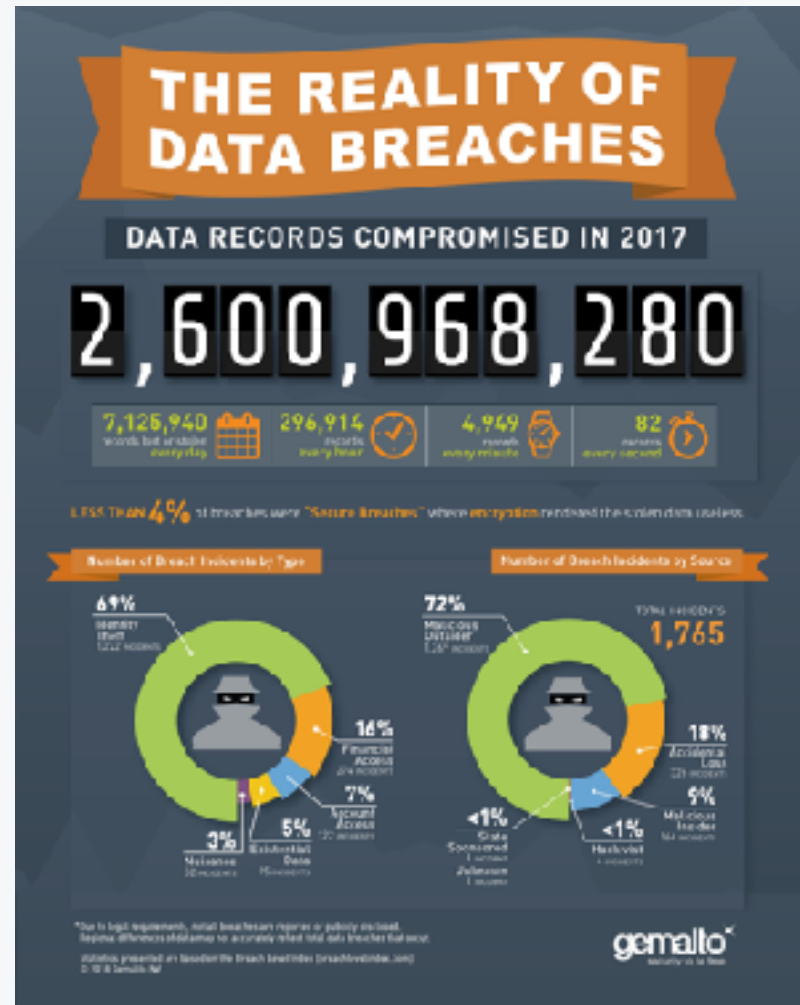
Breach Impact

- 2,6G data records compromised in 2017



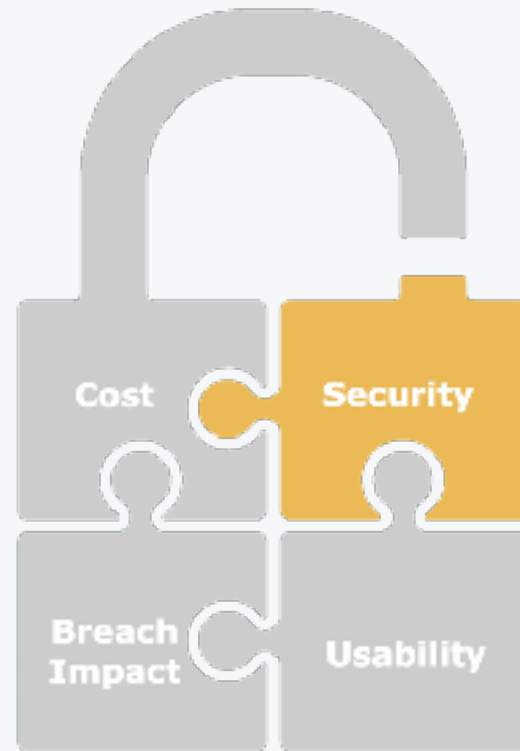
Breach Impact

- 2,6G data records compromised in 2017
- <https://breachlevelindex.com>



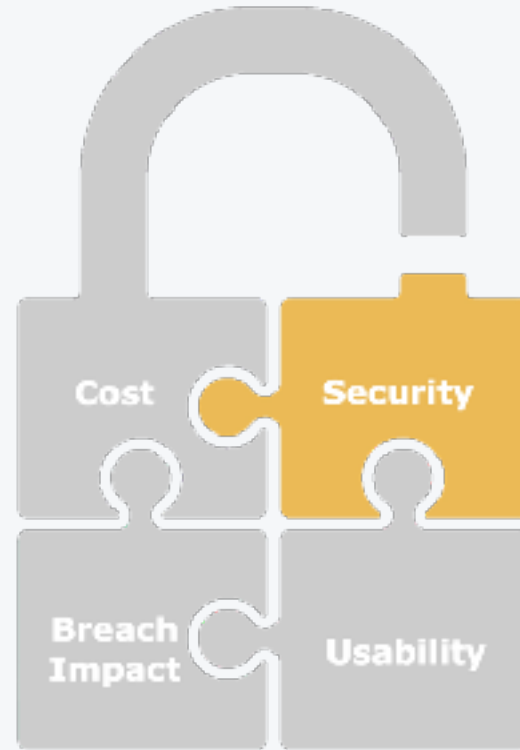
Security

- More computing power === easier cracking



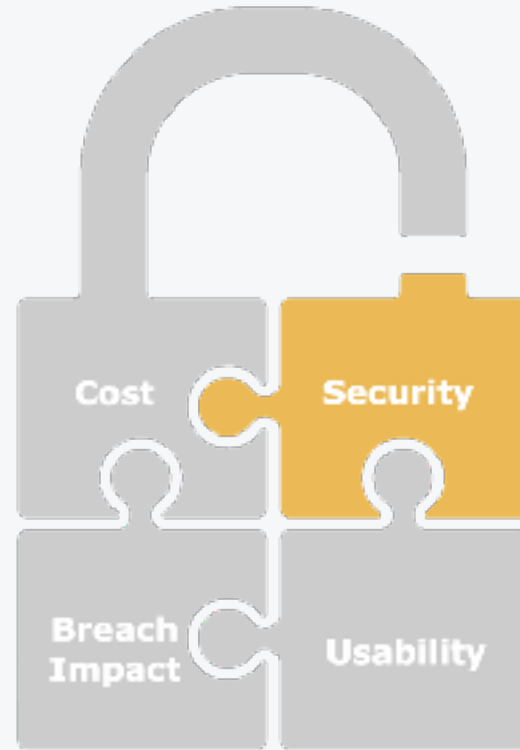
Security

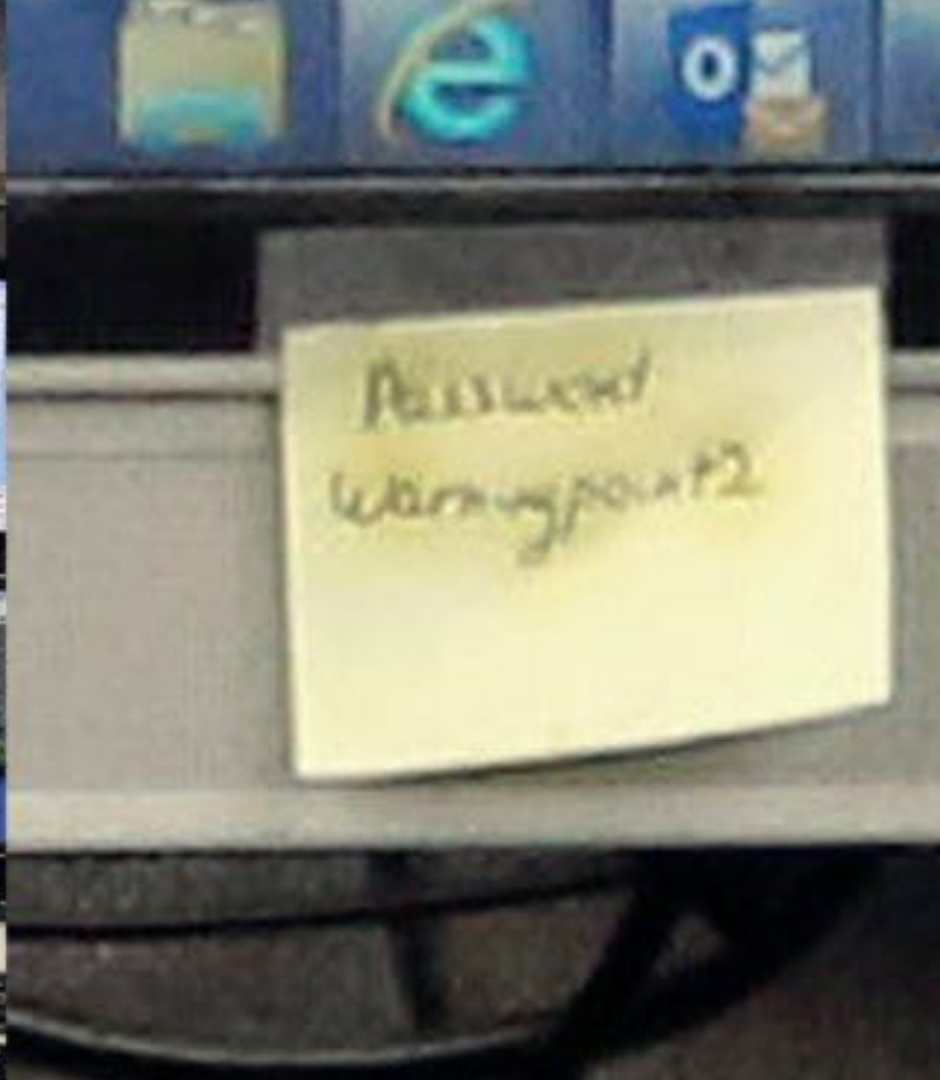
- More computing power === easier cracking
- More social media presence === easier social engineering



Security

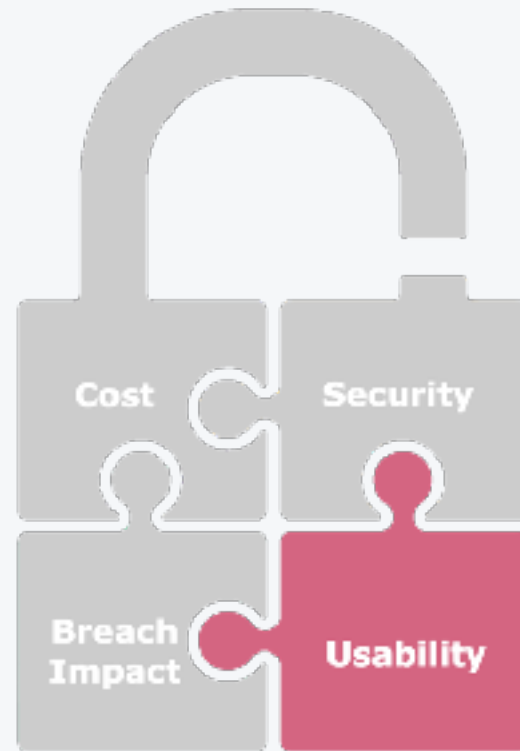
- More computing power === easier cracking
- More social media presence === easier social engineering
- Users will always be your weakest link





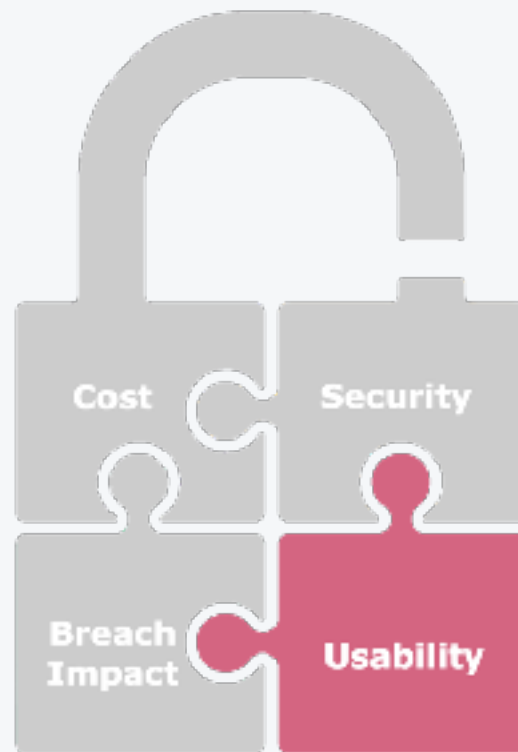
Usability

- 23% of users admit having only one password



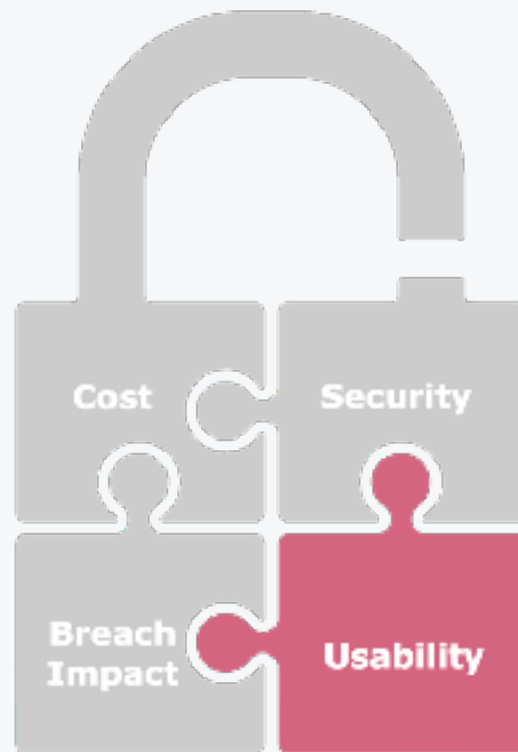
Usability

- 23% of users admit having only one password
- More than 60% of users use at least two devices everyday



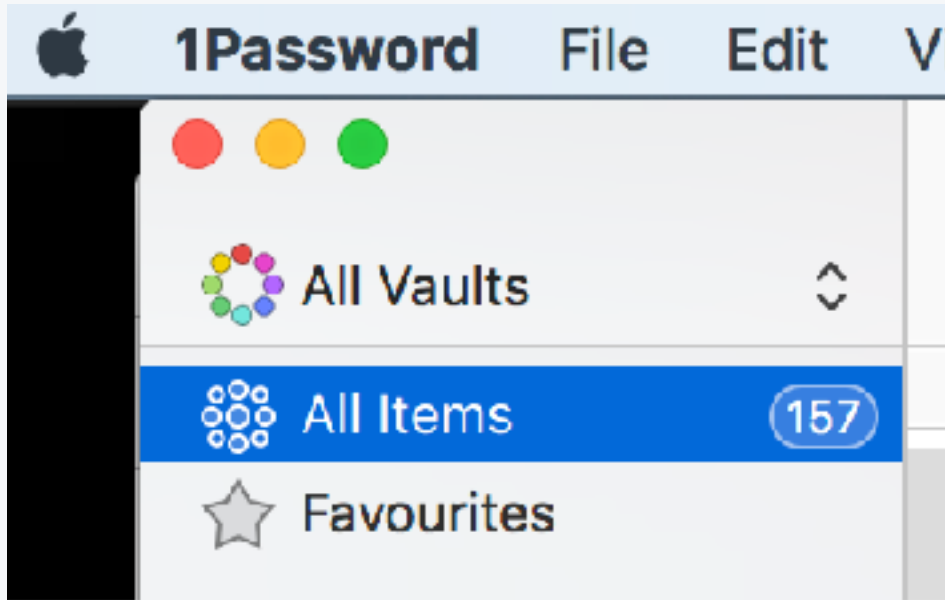
Usability

- 23% of users admit having only one password
- More than 60% of users use at least two devices everyday
- We all hate passwords!



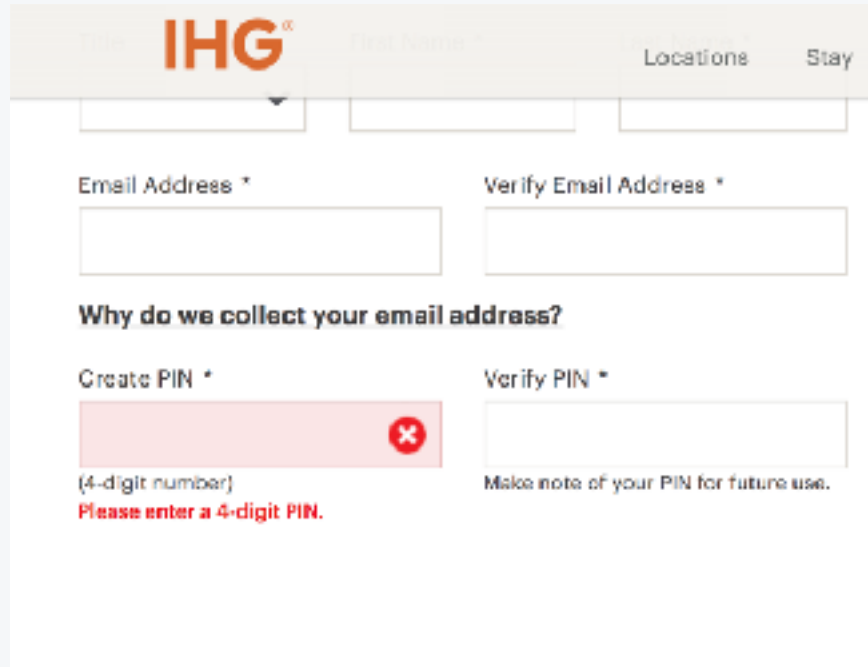
Passwords

Usability



Passwords

Usability



The screenshot shows the IHG login page with several usability issues highlighted:

- Title:** The label is faint and partially obscured by the IHG logo.
- First Name:** The label is faint and partially obscured by the IHG logo.
- Locations:** The label is faint and partially obscured by the IHG logo.
- Stay:** The label is faint and partially obscured by the IHG logo.
- Email Address:** The label is followed by an asterisk, indicating a required field.
- Verify Email Address:** The label is followed by an asterisk, indicating a required field.
- Why do we collect your email address?:** This text is highlighted in blue, suggesting it is a link or a question that needs attention.
- Create PIN:** The label is followed by an asterisk, indicating a required field. The input field is highlighted in red, indicating an error.
- Verify PIN:** The label is followed by an asterisk, indicating a required field.
- (4-digit number):** This text is highlighted in blue, suggesting it is a link or a question that needs attention.
- Please enter a 4-digit PIN:** This text is highlighted in red, indicating an error message.
- Make note of your PIN for future use:** This text is highlighted in blue, suggesting it is a link or a question that needs attention.

Passwords

Usability

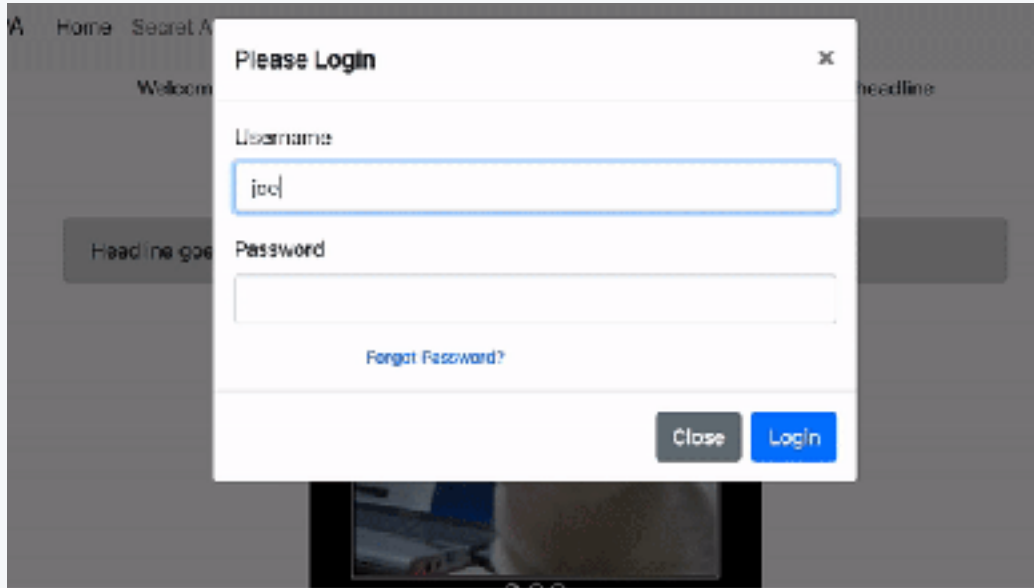
Password

84aUF.W8TYi}GTR4koYtfiTM|

Min. 8 characters. At least 1 upper and 1 lowercase letter.

Passwords

Usability



Please Login

Username

jcc

Password

[Forgot Password?](#)

Close Login

What Can We Do?



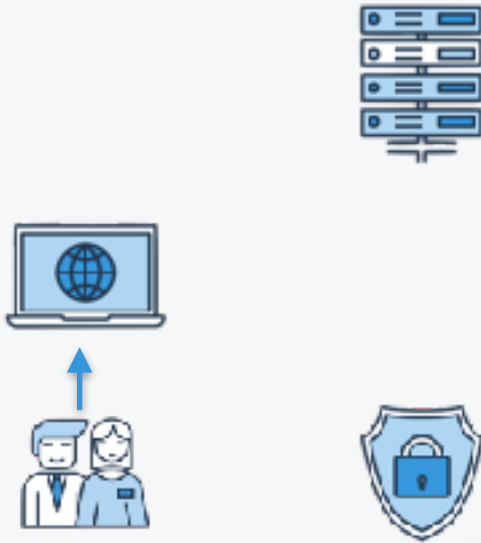
What Can We Do?

- OAuth



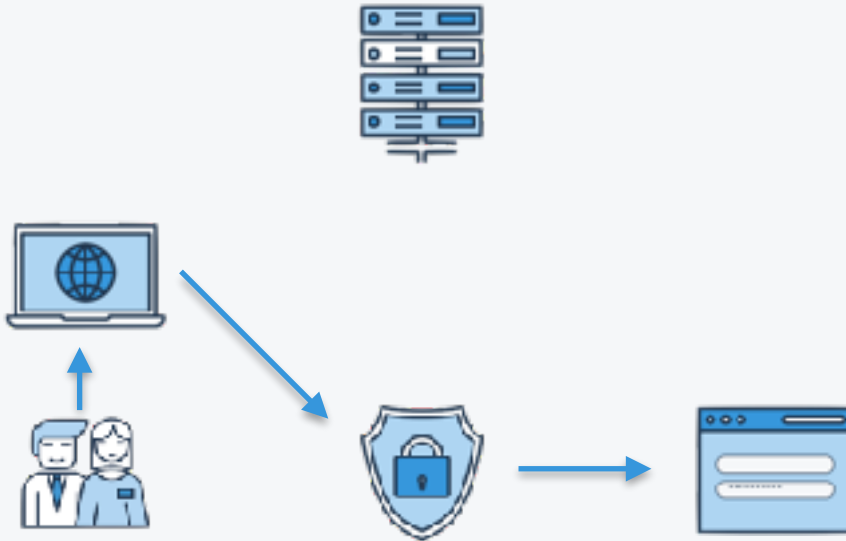
Authentication Flows

Implicit Flow



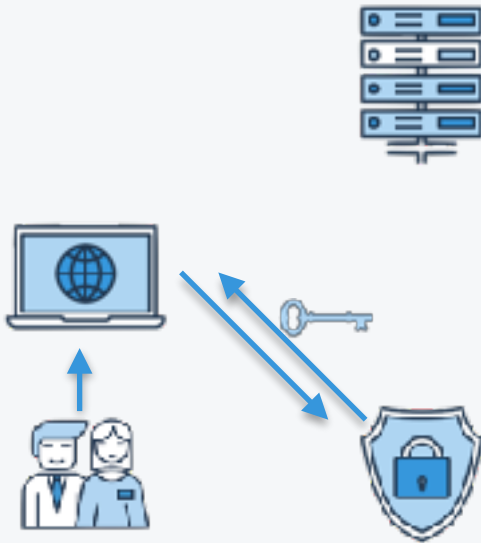
Authentication Flows

Implicit Flow



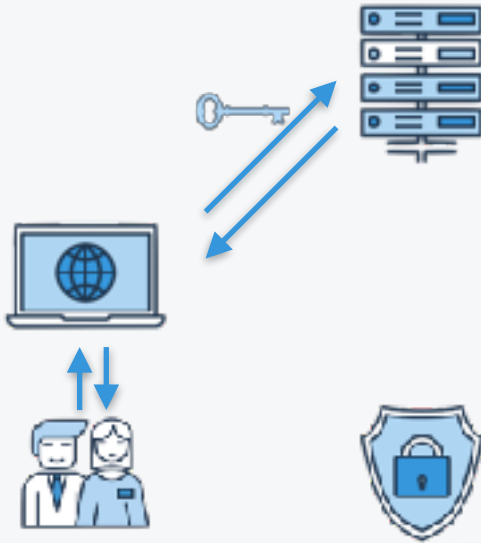
Authentication Flows

Implicit Flow



Authentication Flows

Implicit Flow



What Can We Do?

- OAuth
- Delegate



What Can We Do?

- OAuth
- Delegate
- MFA

Two factor authentication



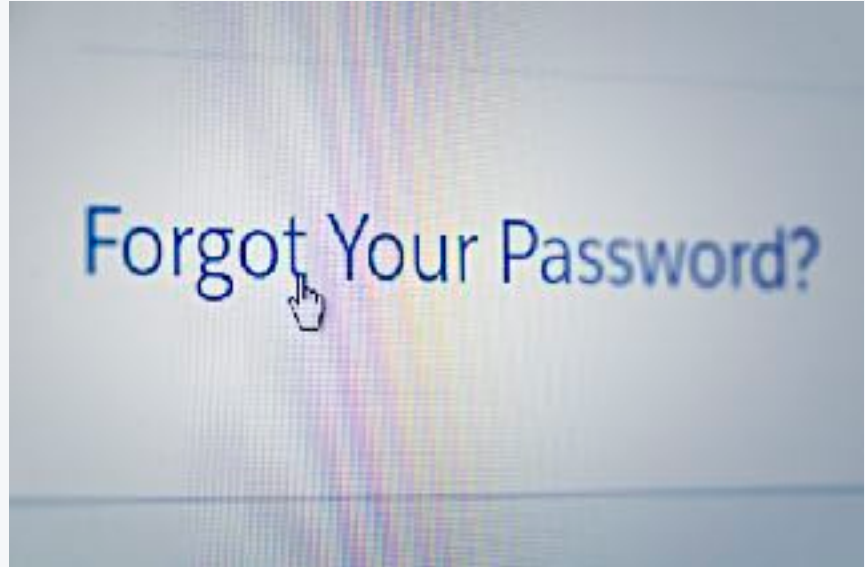
Something
you know



Something
you have

What Can We Do?

- OAuth
- Delegate
- MFA
- Forget Password



PASSWORD

?

Forget Those Passwords



How to forget a password

- Build strong passwords (something+name of page)

How to make a **strong** password in 3 simple steps

Step 1: Pick 3 random words

But what if you don't know 3 random words? Pick the ones Google knows the most.

Lightbulb
The answer
Anchor
I love me
Planet
The answer

But what if you don't know 3 random words? Pick the ones Google knows the most.

Step 2: Mix them up

Put together the words you picked and add a mix of upper and lower case letters, numbers and symbols.

LightbulbAnchorPlanet

Use a password manager to create and store passwords.

Step 3: Make it unique

The problem: You're logged in to each site, and you're not logging in to each site. It's not a good idea to reuse passwords.

Put the 3 random words in a password manager. Put the 3 random words in a password manager. Put the 3 random words in a password manager.

Tip: Be a genius

Put the 3 random words in a password manager. Put the 3 random words in a password manager. Put the 3 random words in a password manager.

How to forget a password

- Use a password manager





WITH
GREAT POWER COMES
GREAT RESPONSIBILITY

Alternatives

- Yubikeys (WebAuthn)



WebAuthn

- Let's look at some code

Alternatives

- Yubikeys
(WebAuthn)



Alternatives

- Yubikeys (WebAuthn)
- Biometrics



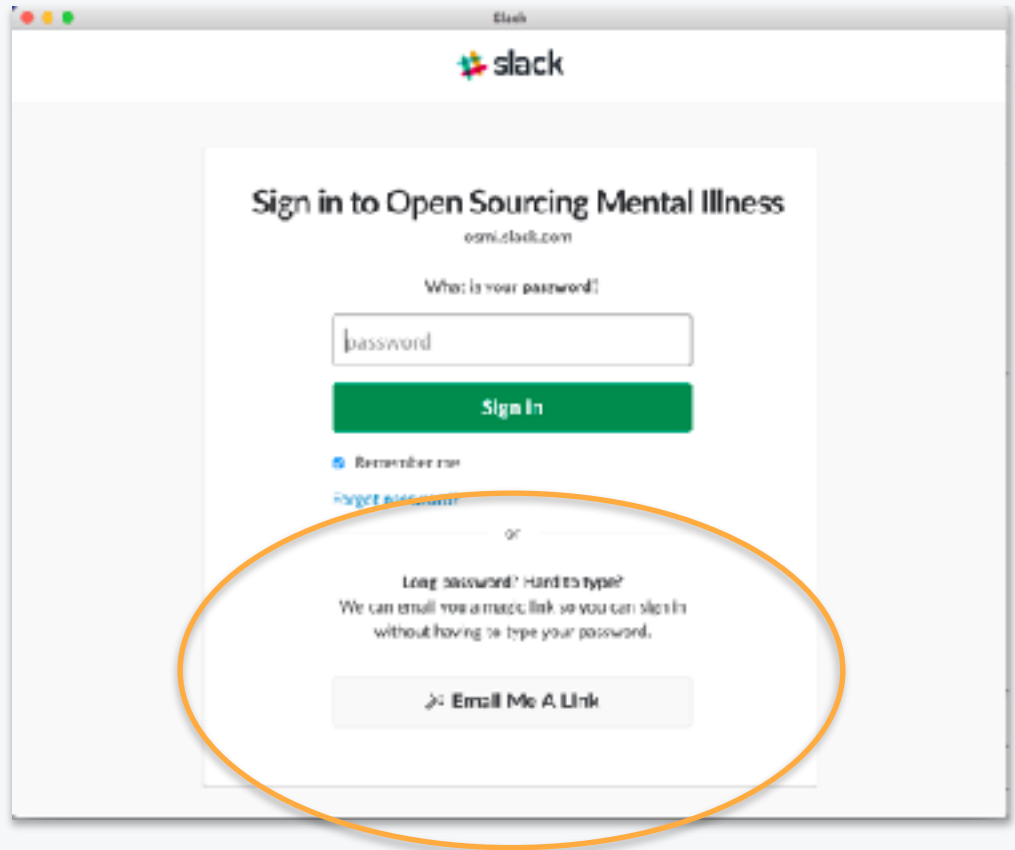
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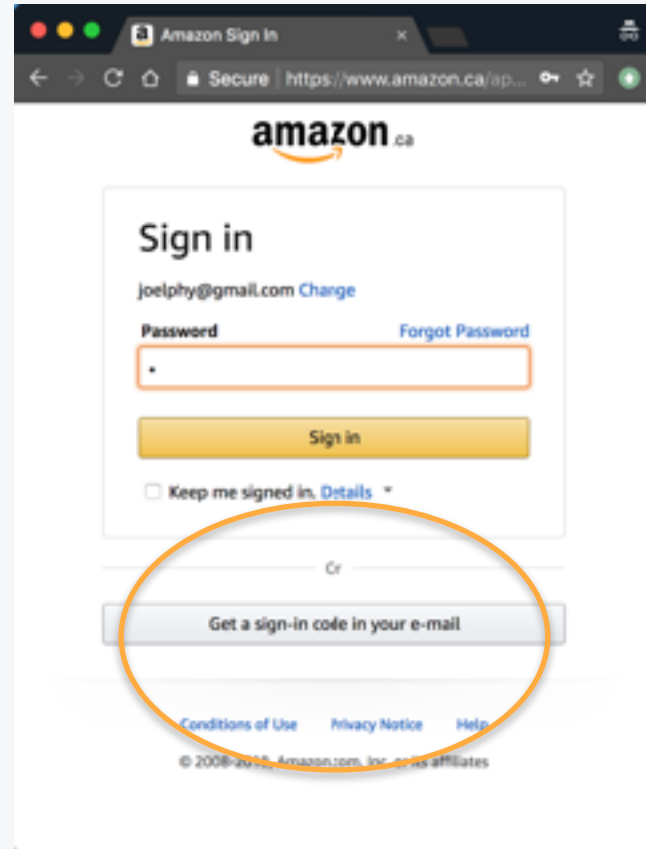
Alternatives

- Yubikeys (WebAuthn)
- Biometrics
- Magic Link



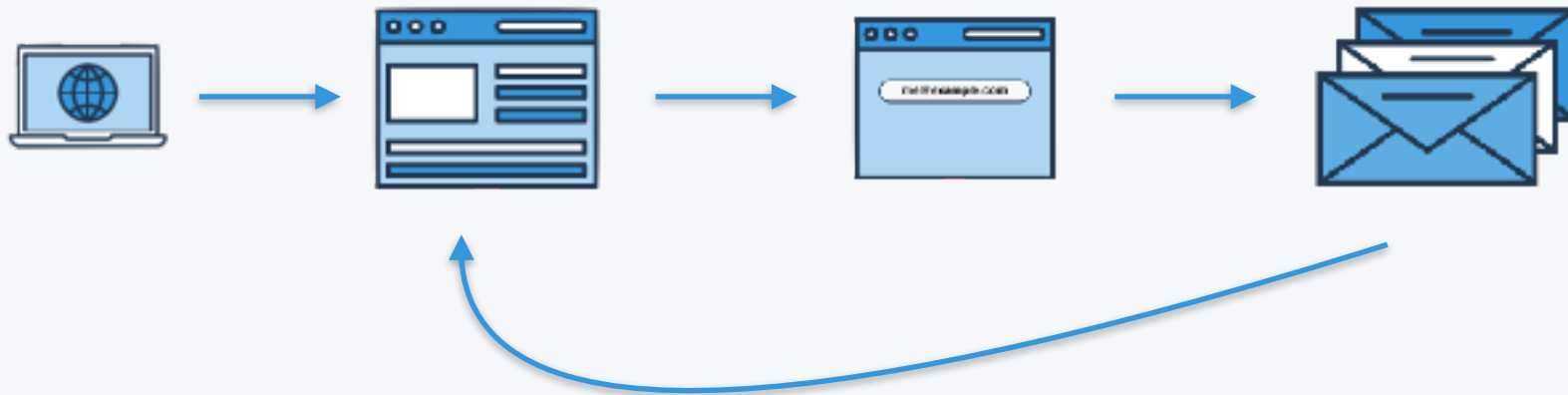
Alternatives

- Yubikeys (WebAuthn)
- Biometrics
- Magic Link



Magic Link

Via email or SMS



Magic Links

- Let's look at some code

Alternatives

- Yubikeys (WebAuthn)
- Biometrics
- Magic Link



Alternatives

- Yubikeys (WebAuthn)
- Biometrics
- Magic Link



A human hand is shown from the top right, reaching down with the index finger extended. Below it, a metallic, silver-colored robotic hand is reaching up from the bottom left. The two hands are positioned as if they are about to make contact. The background is a solid, light blue color. A dark grey rectangular box is centered horizontally across the middle of the image, containing the text "Future Of Identity Management" in white.

Future Of Identity Management



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Skyway Software Symposium
Minneapolis, MN
June 15th, 2018



@joel__lord



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