

PASSWORDLESS LOGIN

A better way to authenticate your users

SPEAKER PROFILE



BASIC INFO

Name: Aleks “Ola” Linczewska

Age: classified

Gender: Female

Studies: French Philology

Job: React Native Dev at Callstack

Household: 2 kids, 1 cat, 1 dog, 1 hamster,
1 axolotl, 1 husband

SKILLS



HABITS

90% Sleep

70% Eat

HOBBIES



Twitter: @p_syche_

BlueSky: psychebsky.bsky.social

01

WHY

Why should you care about
passwords

02

STATUS

What are the currently
available options

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SOLUTION

Let's talk about
passkeys

01

WHY

Why should you care about
passwords?



555 MILLION

Hackers have published as many as 555 million stolen passwords on the dark web since 2017. (Cnet, 2020)



80%

80% of hacking incidents are caused by stolen and reused login information. (Verizon, 2020)



39 SECONDS

Hacking attacks using scripts that try to guess usernames and passwords happen every 39 seconds, globally. (WebsiteBuilder.org, 2021)





YOUR COMPANY

How sure are you that the app
you are working on is not going
to be breached?

02

STATUS

What are the currently available options?

PASSWORD OPTIONS



WORDS

Unique, but
memorable words



EMAIL

Magic links



MFA

Apps, tokens and so
much more




PASSKEYS

Secure, unique,
easy

03

SOLUTION

Let's talk about Passkeys



“When I started planning this talk only Apple published their Passkey API. Now we have Android Credential Manager too.”

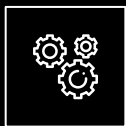
– me

PASSKEYS

Passkeys give you a simple and secure way to sign in without passwords by relying on biometrics to identify you when you sign in to supporting websites and apps.



EXAMPLE FLOW



SIGN IN

Simple registration
requires username
only



CHECK ACCOUNT

Check for previously
saved passkeys



SAVE PASSKEY

Save the passkey
using Apple Passkeys
or Android Credential
Manager

Sign in or sign up

Continue

Save a passkey

Sign in to your account easily and securely
with a passkey. Note: Your biometric data is
only stored on your devices and will never be
shared with anyone.

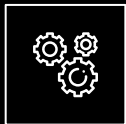
Save a passkey

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Sign up

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Utwórz klucz

Ten klucz będzie używany w aplikacji
www.passkeys.io



fancy@fancy.com

Anuluj

Dalej



desmurs.linczewska@gmail.com ▼



CODE

```
import { Passkey, PasskeyRegistrationResult } from 'react-native-passkey';

// authenticate your user with a FIDO-compliant backend
// which needs to return a base-64 encoded challenge
try {
  // Generate an authentication request
  const authRequest = {
    username: 'user@example.com',
  };

  // Send the authentication request to the server
  const authResponse = await fetch(
    'https://<your-server-url>/auth',
    {
      method: 'POST',
      headers: {
        'Content-Type': 'application/json',
      },
      body: JSON.stringify(authRequest),
    },
  );

  // Handle Passkeys here

} catch (error) {
  // Handle Server auth Error...
}
```

EXAMPLE FLOW

```
try {
  // Call the Passkey 'register' method with the retrieved request in JSON format
  // A native overlay will be displayed
  const result: PasskeyRegistrationResult = await Passkey.register(authResponse);

  // The 'register' method returns a FIDO2 attestation result
  // Pass it to your server for verification
  const passkeyResponse = await fetch(
    'https://<your-server-url>/passkey-auth',
    {
      method: 'POST',
      headers: {
        'Content-Type': 'application/json',
      },
      body: JSON.stringify(result),
    },
  );

  // Your user is registered! Yay!

} catch (error) {
  // Handle Passkey Error...
}
```



DROP-IN SOLUTIONS

Auth0 currently has a WebAuth Passkey



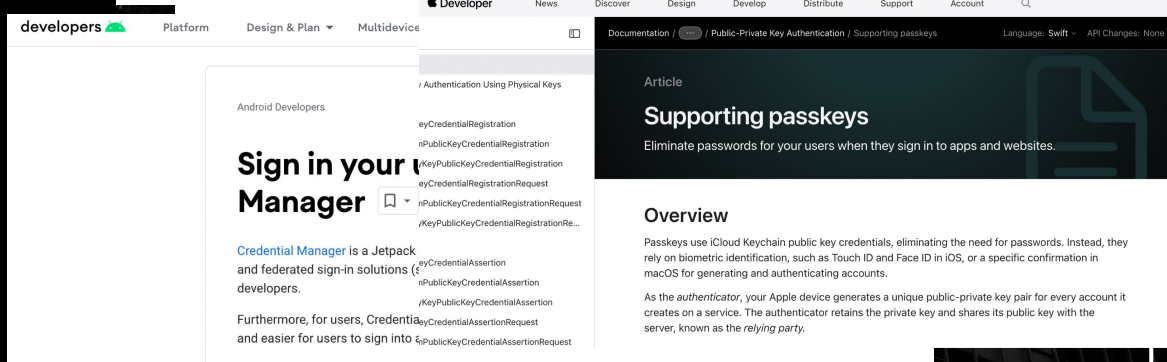
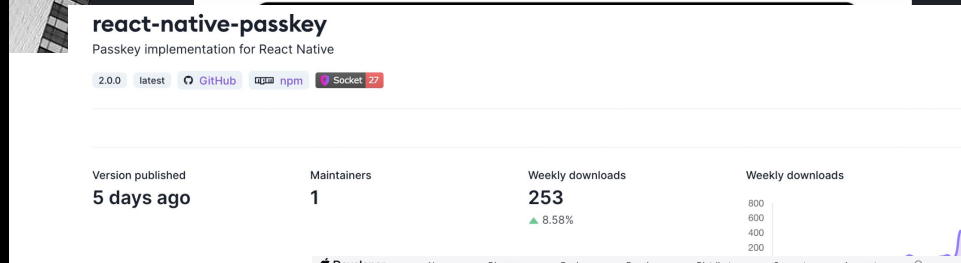
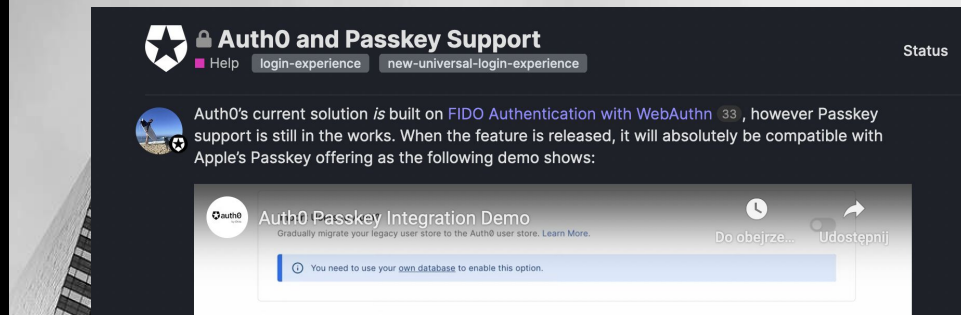
OSS

There's at least 1 library out there implementing Passkeys for RN



WORK IT

You can create your own implementation



WHAT TO KEEP IN MIND



FIDO

Passkeys
require a safe,
FIDO-compliant
backend



SETUP

There are
additional setup
steps for both
platforms



MOBILE AND WEB

The same
passkey can be
used across
devices



DEMOS

Check out some
demos

DEMOS

WEB DEMOS

<https://webauthn.io/>

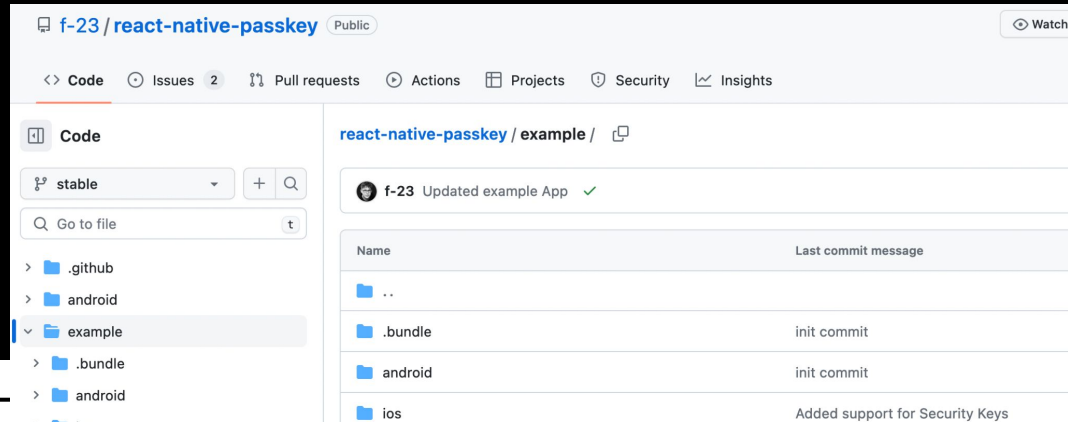
<https://www.passkeys.com/>

<https://passkeys-demo.appspot.com>

Shopify includes Passkeys in Shop Pay:

<https://www.shopify.com/blog/ecommerce-payment-authentication>

Example app with react-native-passkeys:



“Passkeys are the bomb! I will definitely start using them now!”

—Someone Watching this presentation



THANK YOU!

