



# Braive Passwordless

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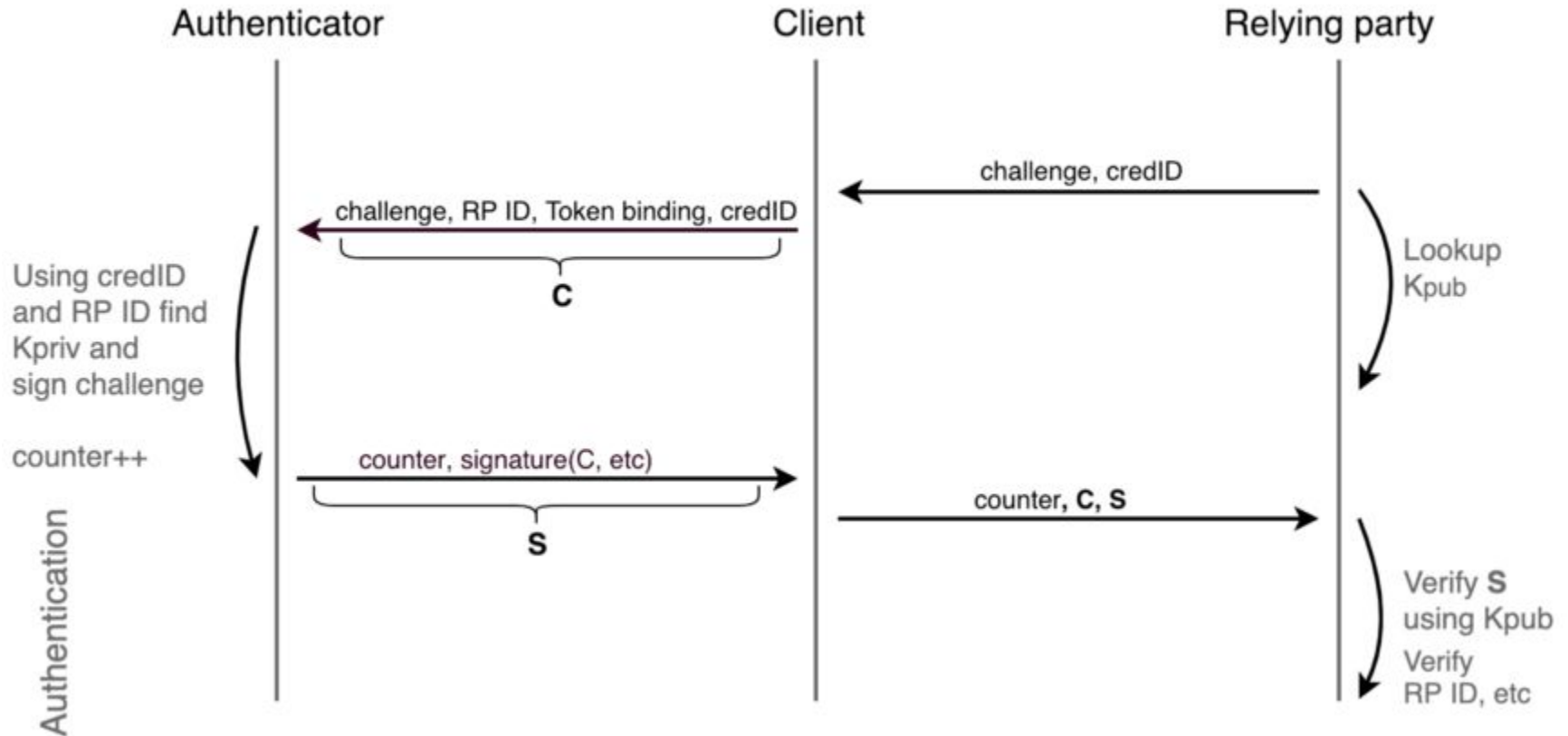
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- Introducing another Authentication solution to Brave users.
- Exploring the FIDO2 protocol and its application.
- Get on the Passwordless boat with the implementation to all application platforms.



- FIDO Alliance is a consortium that develops secure, open, standard, phishing proof authentication protocol.
- FIDO has three protocols: UAF, U2F and FIDO2

# The basic flow



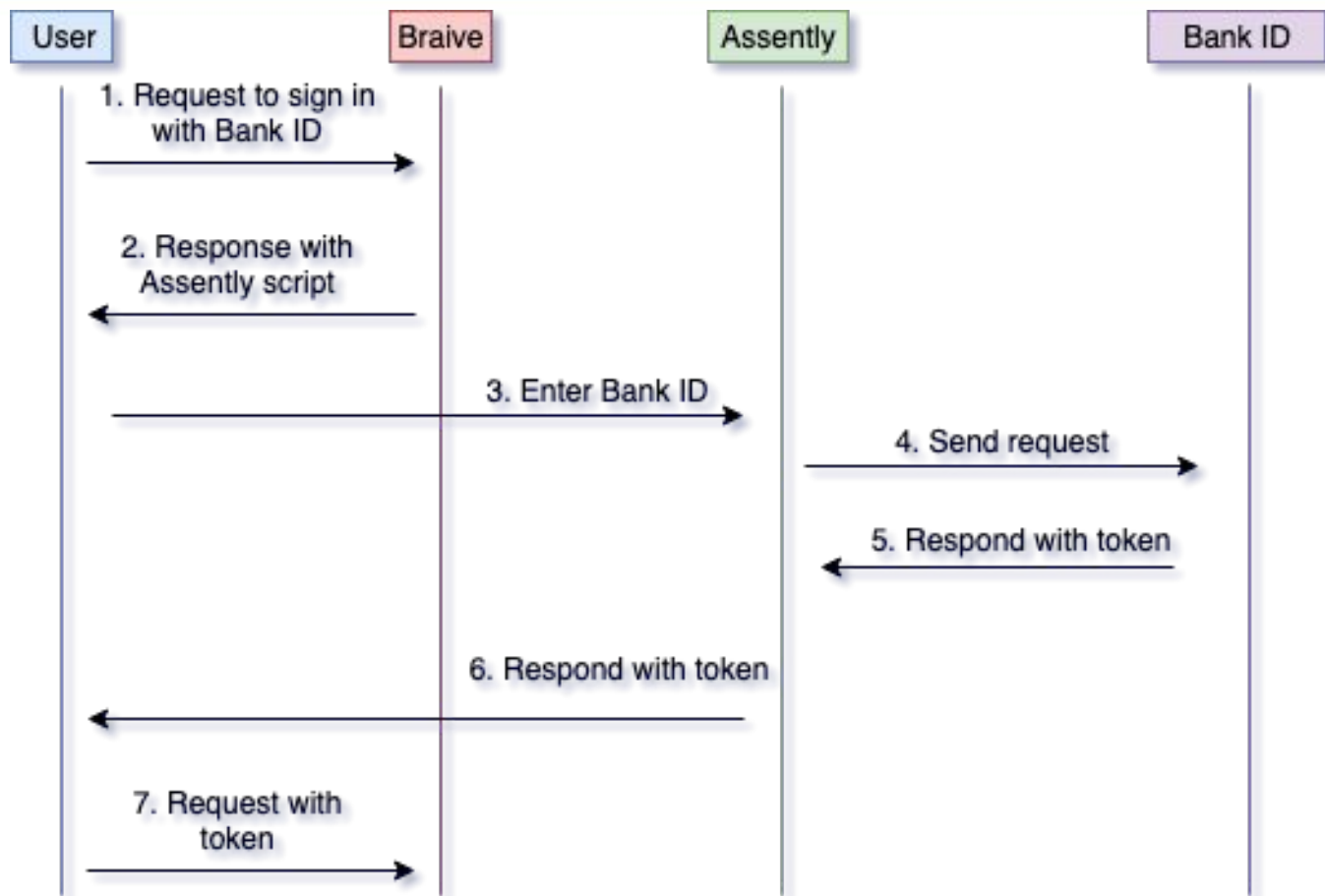
## A sample FIDO2 response



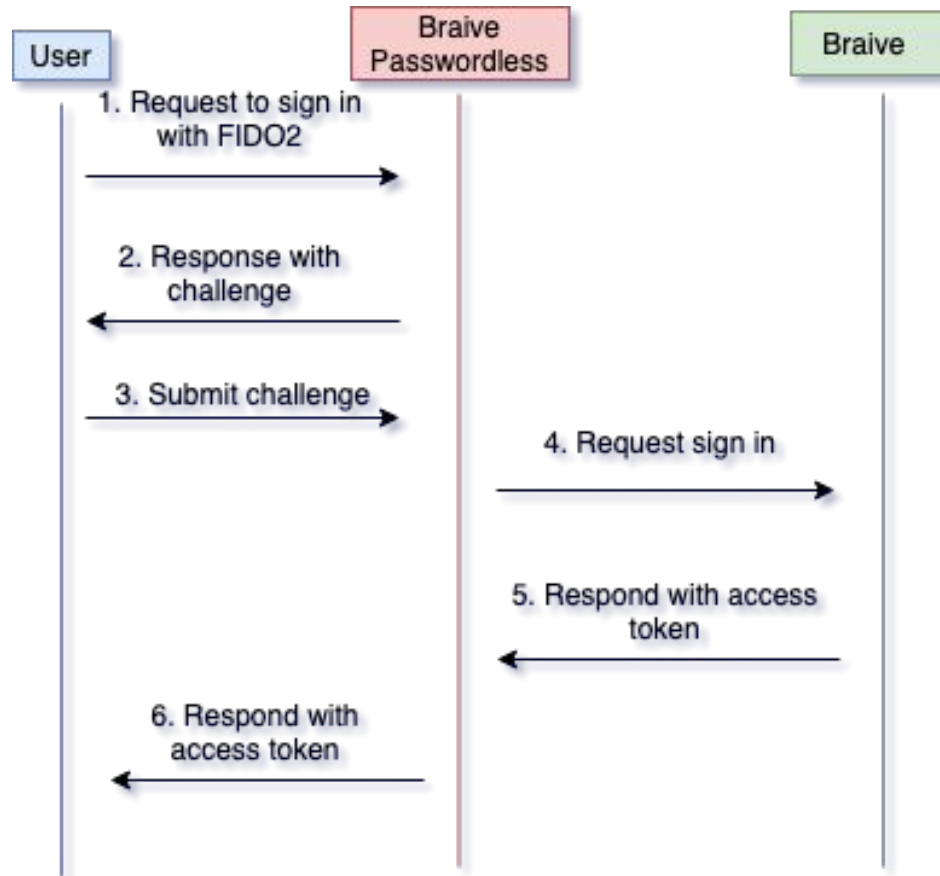
```
{
  "rawId": "imCIoe8U_N.....",
  "id": "imCIoe8U_N9.....",
  "response": {
    "attestationObject": "base_64_encoded_obj",
    "clientDataJSON": "base_64_encoded_obj"
  },
  "getClientExtensionResults": {},
  "type": "public-key"
}
```

- An integration to the current system.
- Learning from the BankId login practise.

## Bank ID sign in flow



# Braive Passwordless sign in flow





## Fido2 in Android

- Android provides the Fido2 library via the Google Play services.
- It provides 4 ways of authentication:
  - Bluetooth
  - NFC
  - USB
  - Fingerprint
- It provides a pretty nice abstraction for us use, but you need to know how the Fido2 works, because of lack of documentation.
- It handles basically everything including displaying the UI.

# Fido2 in Android

16:29 P 93

100%

16:29 P 93

100%



## Use your Security Key with Brave

Using your Security Key with Brave helps protect your private data.

GET STARTED



## Choose how to use your Security Key

Security Keys work with Bluetooth, NFC, and USB. Choose how you want to use your key.



Use Security Key with Bluetooth



Use Security Key with NFC



Use Security Key with USB



Use Security Key with Fingerprint



16:30 P 93

100%

16:31 P 93

100%



## Choose how to use your Security Key

Security Keys work with Bluetooth, NFC, and USB. Choose how you want to use your key.



Use Security Key with Bluetooth



Use Security Key with NFC



Use Security Key with USB



Use Security Key with Fingerprint

### Verify your identity

Confirm your fingerprint so Brave can verify it's you.



Touch sensor

Cancel

Use screen lock



## Choose how to use your Security Key

Security Keys work with Bluetooth, NFC, and USB. Choose how you want to use your key.



Use Security Key with Bluetooth



Use Security Key with NFC



Use Security Key with USB



Use Security Key with Fingerprint

### Verify your identity

Confirm your fingerprint so Brave can verify it's you.



Fingerprint recognized

Cancel

Use screen lock





**DEMO**

## Achievement and Progress

- Braive app:
  - Added new authentication method with fido2
  - Added API to update user's fido\_token
- 3rd-party service acting as the middleware:
  - Validate the client's request/response
  - Communicate with Braive App
  - Forward back to client app [WIP]
- Android:
  - Setup Braive project.
  - Try the Fido2 on Braive.

It's fun, yeah



# Thanks!

## Contact Nimble

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