



Connect machines and IoT using the **OAuth Device Flow**





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Shawn

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Today we will...

**Learn the
Fundamentals**

Of GitHub Apps

**Create a
GitHub App**

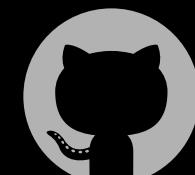
And set it up for local
development

**Authenticate
the App**

Through your
GitHub user

Use the App

To perform GitHub
Actions on your behalf



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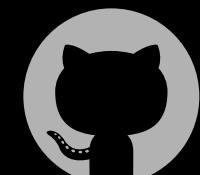
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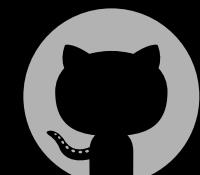
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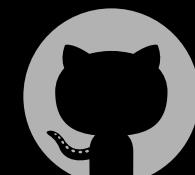
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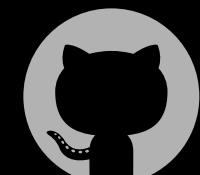
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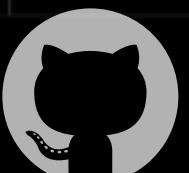
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Demo



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GitHub Apps

The way to build integrations with GitHub



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- Granular permissions
- Grantable on individual resources
- Better insight into user identity
- Token expiration
- More comprehensive rate limiting





SECURITY

Authentication

Apps have two ways to authenticate

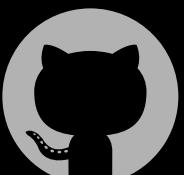


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Server

to-Server

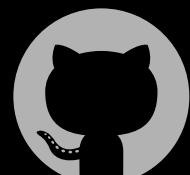
User



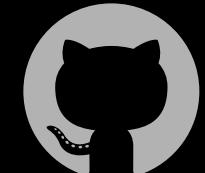
Server

to-Server

User



- First class actors within GitHub
- Can act on its own behalf, taking actions via the API



Success! I have authenticated with Device Flow! #16

! Open

presentation-app

bot

opened this issue 8 minutes ago · 0 comments



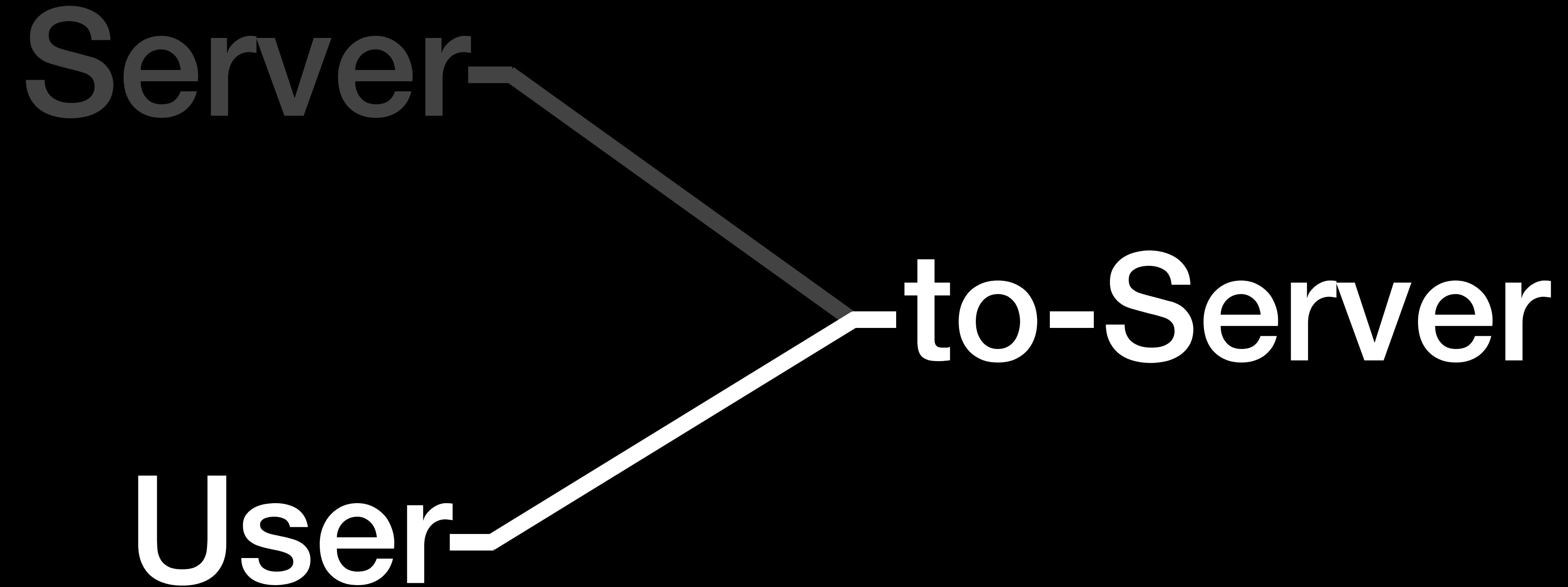
presentation-app

bot

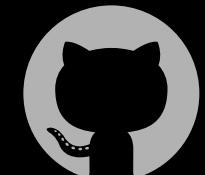
commented 8 minutes ago



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- Uses the User's identity instead of the Bot
- Allows you to represent an action the app took as the user





ADAM RUINS
EVERYTHING

truTV

Success! I have authenticated with Device Flow! #15

ⓘ Open

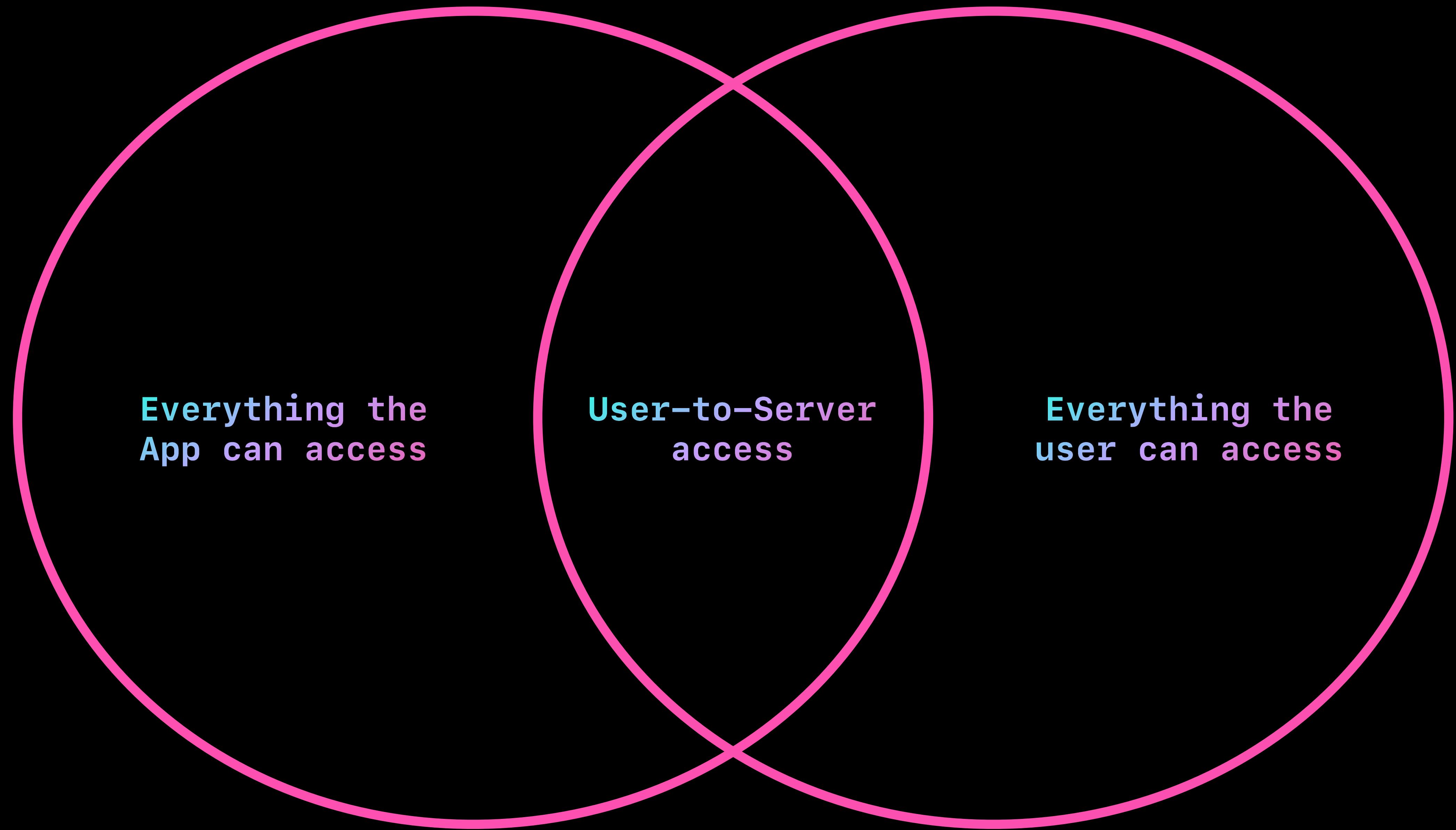
jakewilkins opened this issue 6 days ago — with [Presentation App](#) · 0 comments



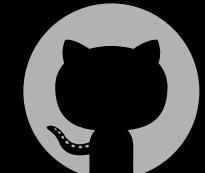
jakewilkins commented 6 days ago — with [Presentation App](#)



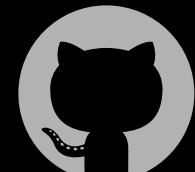
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- Server-to-server Authentication
 - Requires installation
- User-to-server Authentication
 - Requires authorization



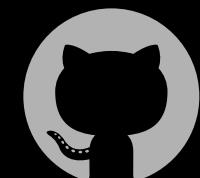
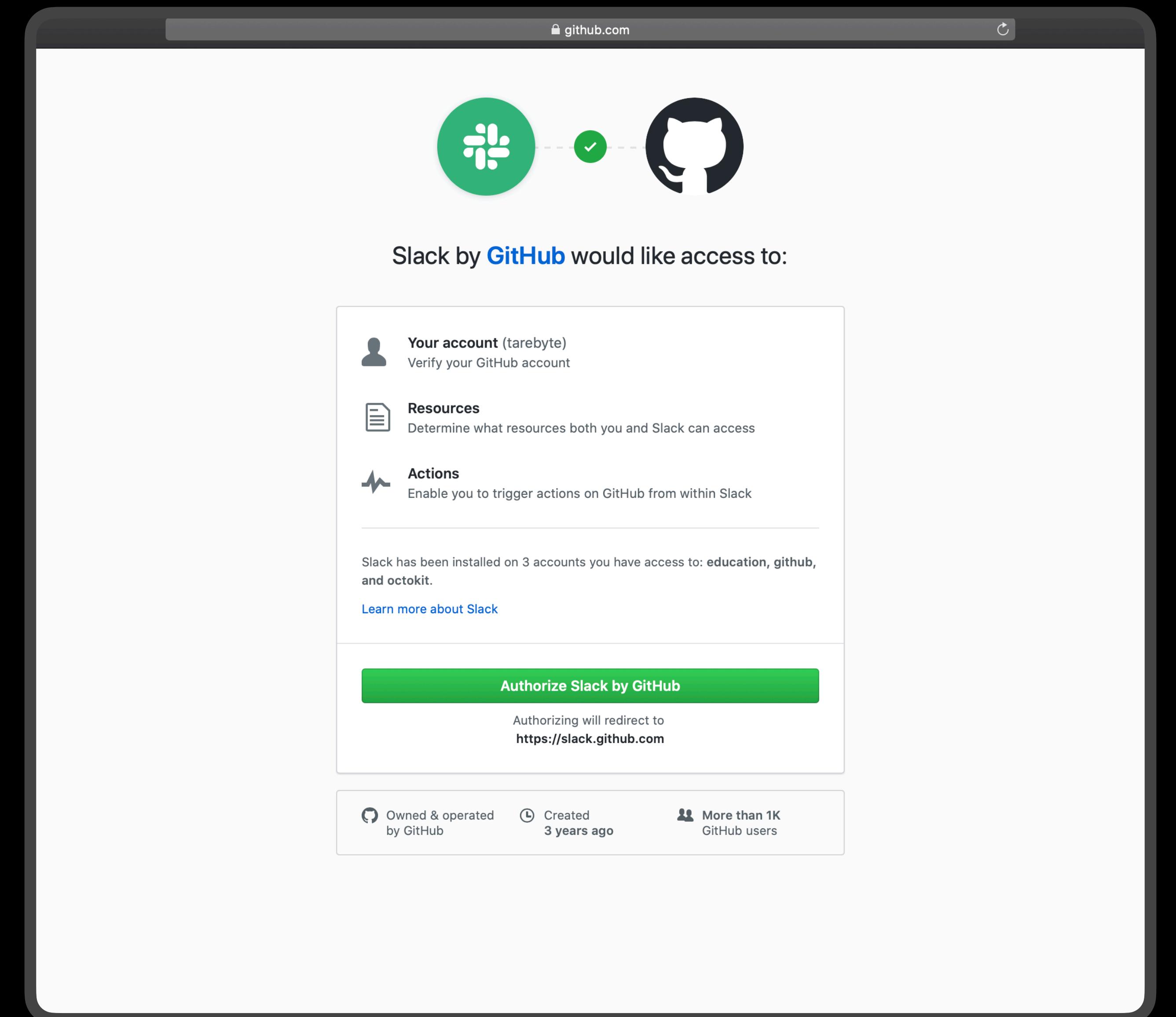
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User Authorization Flows

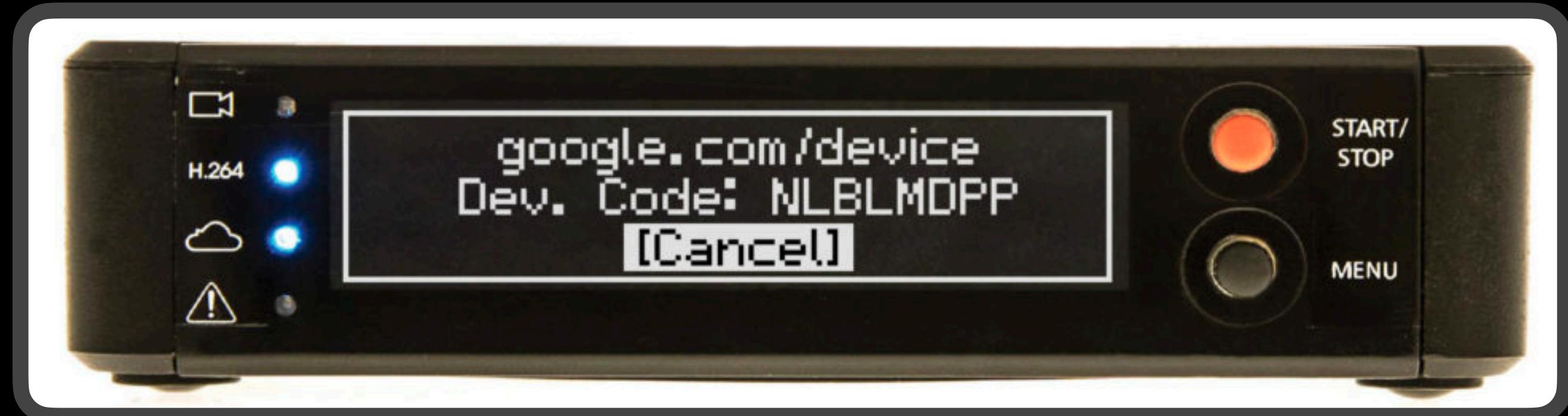
There are two ways once again! The traditional UI ...



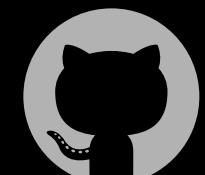


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... and Device Flow



<https://www.oauth.com/oauth2-servers/device-flow/user-flow/>



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Device Activation

Enter the code displayed on your device

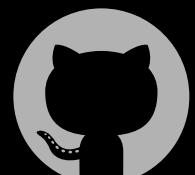
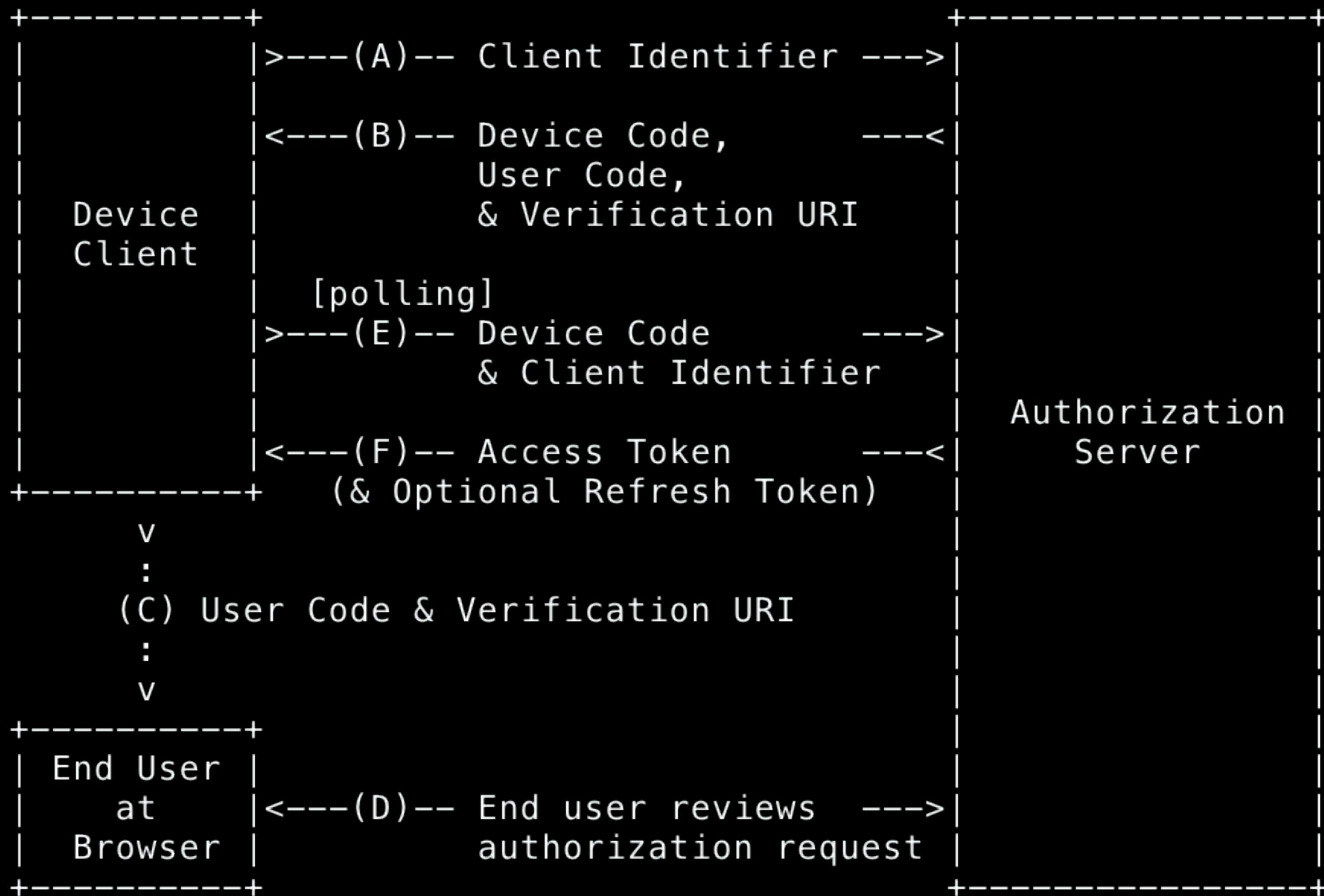
 -
 -

Continue

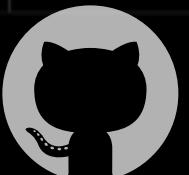
GitHub staff will never ask you to enter your code on this page.



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Let's Code



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Thank you!

