

~~WebID~~ →
~~FedCM~~ →

Web Identity API

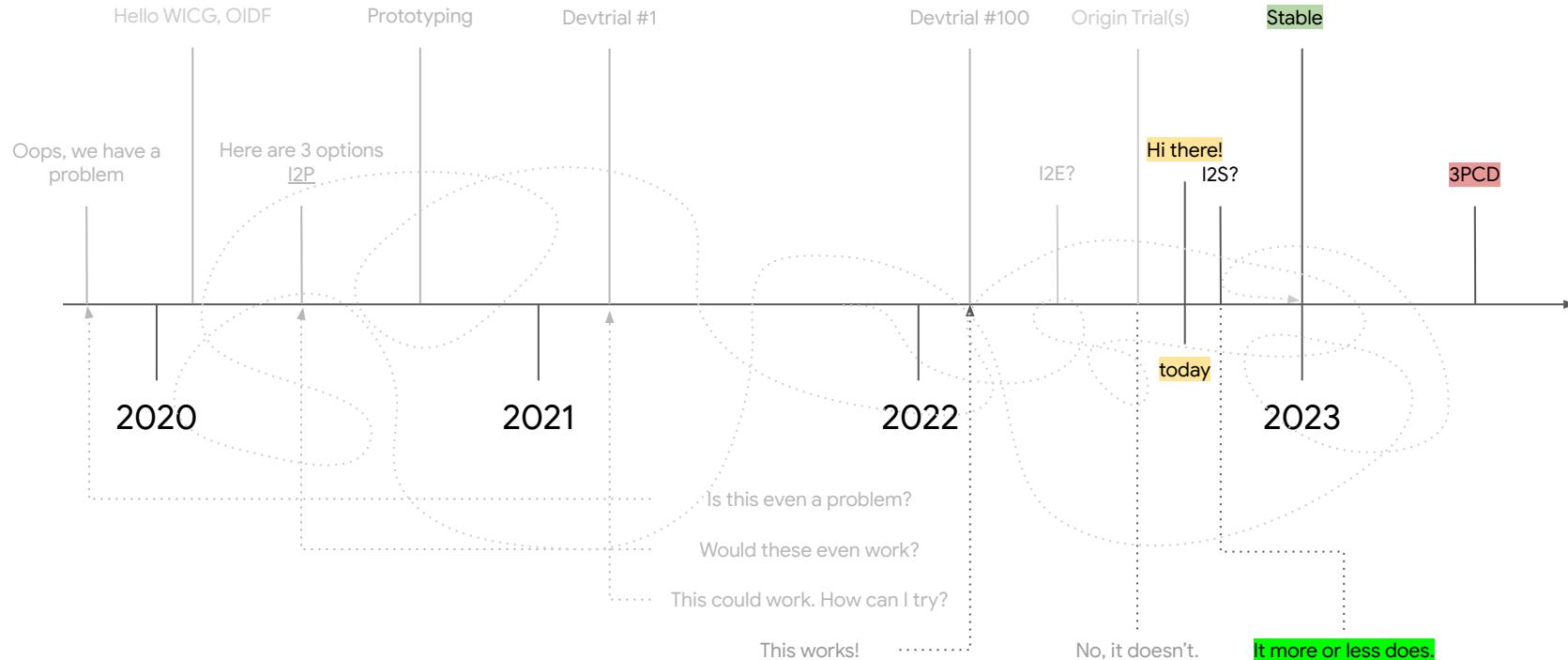
goto@chromium.org

June 2022

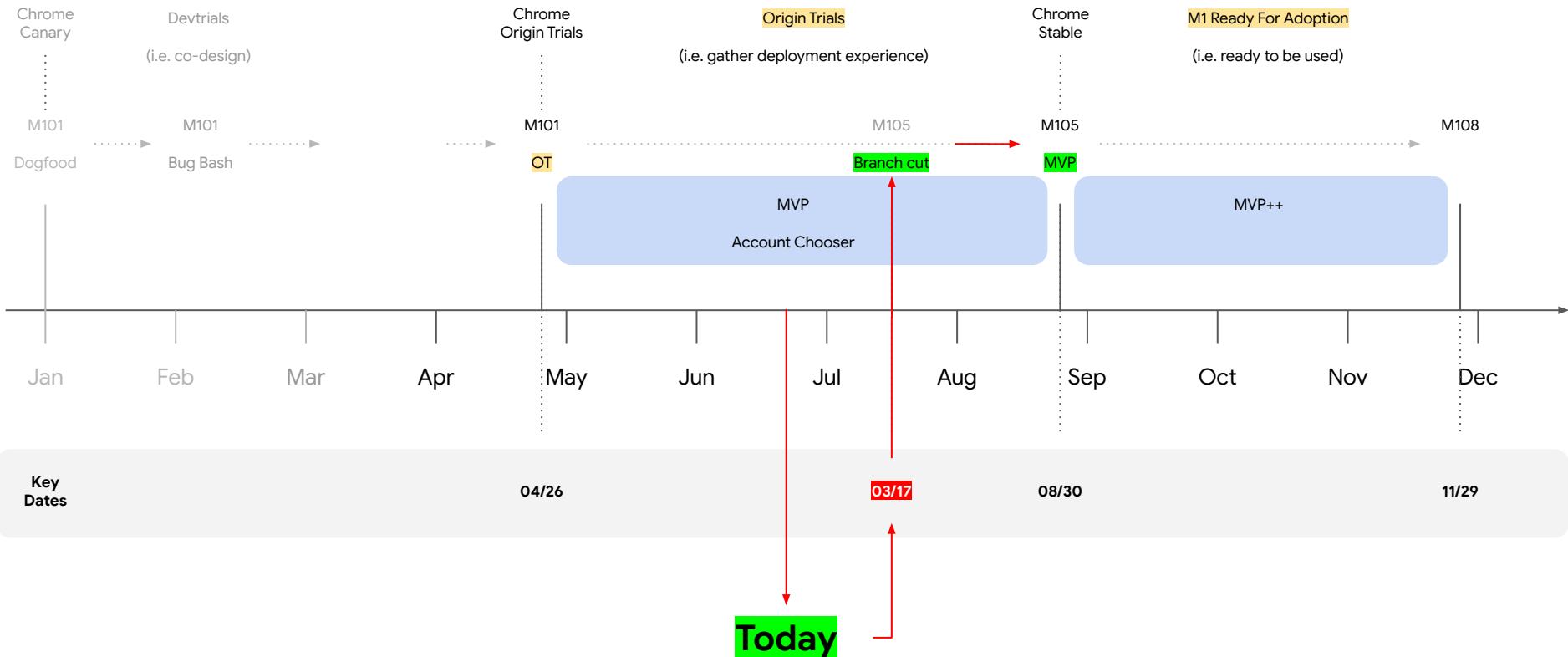
Agenda

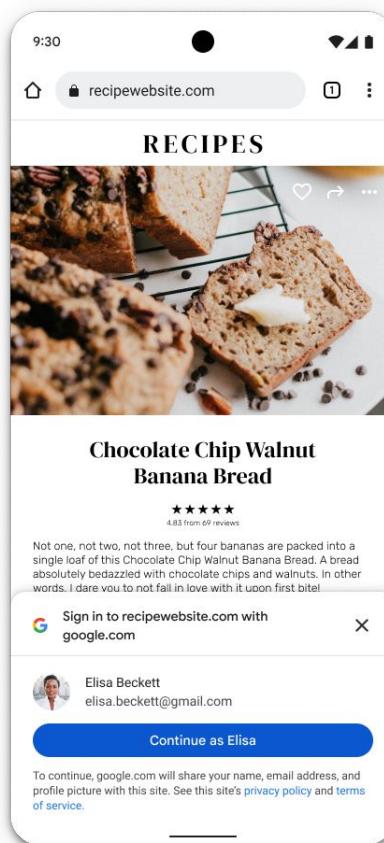
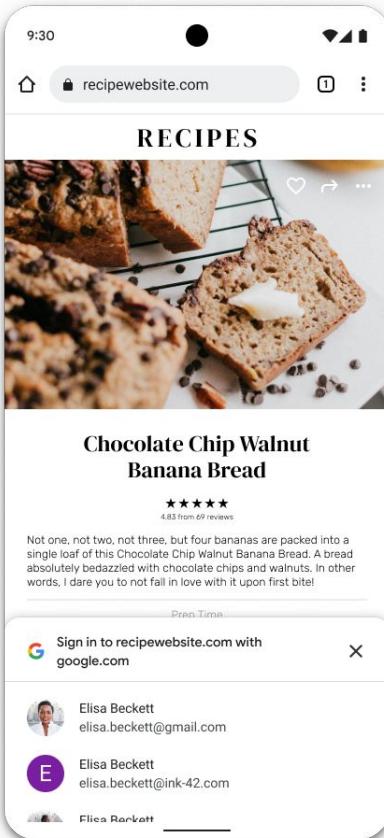
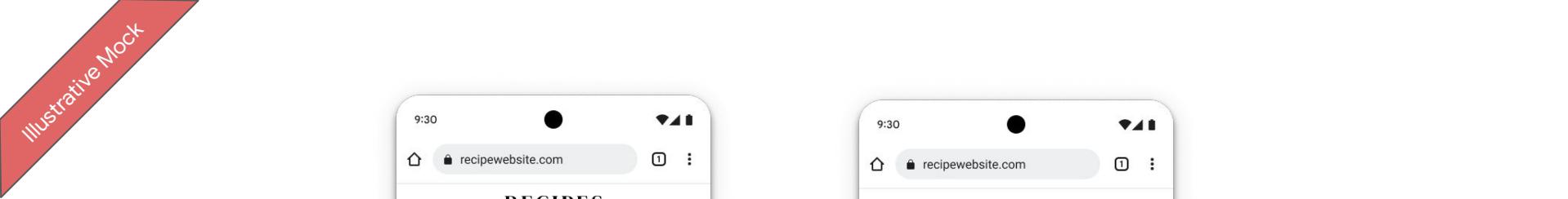
1. **What's behind us?**
2. **Intent-to-Experiment**
 - a. Thanks for the feedback!
 - b. Goal of origin trials is to learn
 - c. What we heard from you
 - d. How we expect the API to evolve
 - i. Use cases, UX and The Push Model
3. **Intent-to-Ship**
 - a. Timelines
 - i. Not aiming for perfect: it is ok if it doesn't cover all use cases. Incremental changes are easier.
 - ii. M105 July 21st (code complete)
 - b. Spec name
 - i. FederatedCredential harder to deprecate than we thought ([context](#))
 - ii. Web Platform Implementation Detail
 1. PublicKeyCredential => WebAuthn
 - iii. Alternatives considered:
 1. FederatedCredentialV2, MediatedFederatedCredential, VerifiableCredential, IssuedCredential, SocialCredential, etc
 - iv. How it relates to WebAuthn?
 - v. IdentityCredential (the interface name) / Web Identity API (a less implementation specific shorthand) best alternative that occurred to us based on naming collisions, how we expect it to evolve and that seemed to resonate with partners and implementers.
 4. **What's ahead of us?**

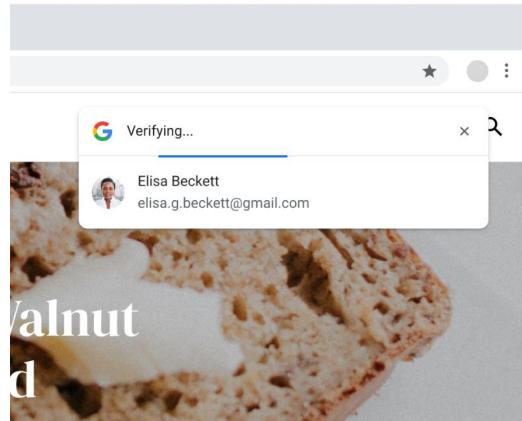
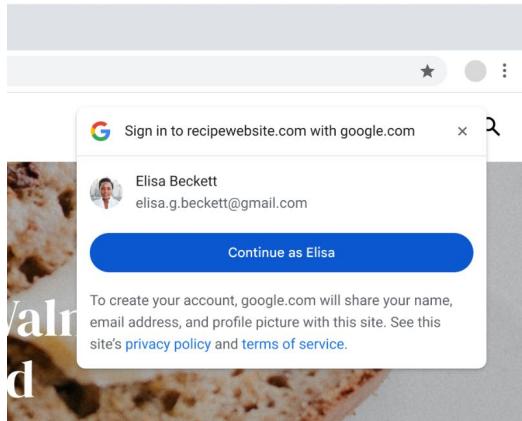
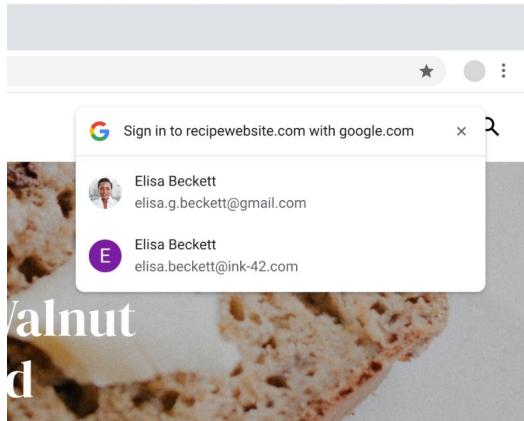
When?



When?







We still have more questions than answers, but we think we got a **baseline** to work from that we think is going to be **key** going forward.

We are planning to send our **I2S** in the next few **weeks**.

WDYT?

(pause)

So ... as we developed WebID, we got a good amount of questions that we didn't quite know the answers to.

What's the relationship between WebID and:

WebAuthn? [Webkit](#)

Multi-IDP? BYOIDP? [Issue #204](#)

SAML? [Issue #29](#)

First Party Sets?

Front-channel logout? [Issue #62](#)

Enterprise Profiles?

Login Status API? [Issue #230](#)

Autocomplete?

Selective Disclosure? [Issue #242](#)

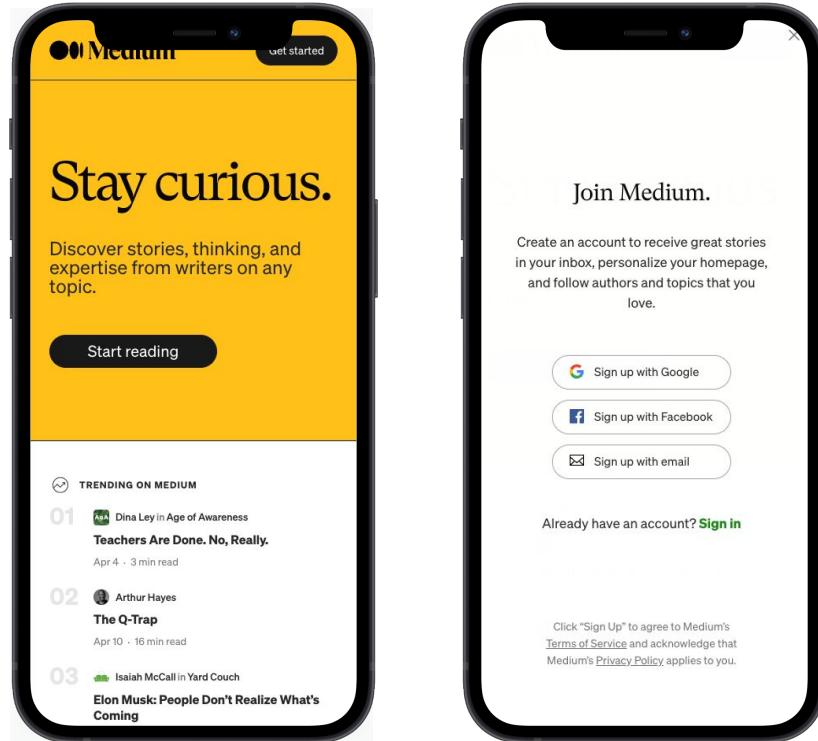
In the last **2+ years**, we built a massive amount of prototypes, ran experiments, origin trials and partnered with developers.

That's, after all, the goal of origin trials: **to learn**.

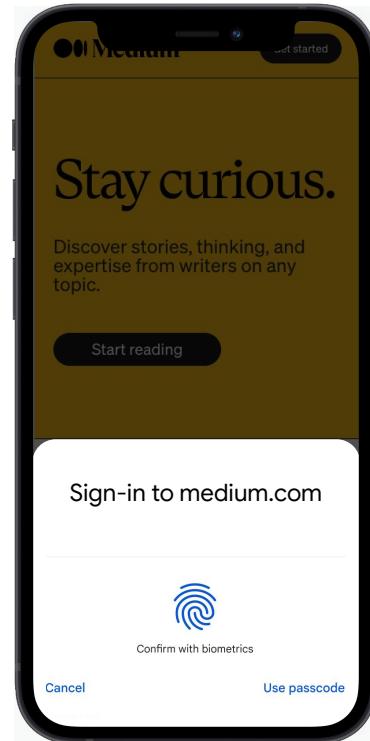
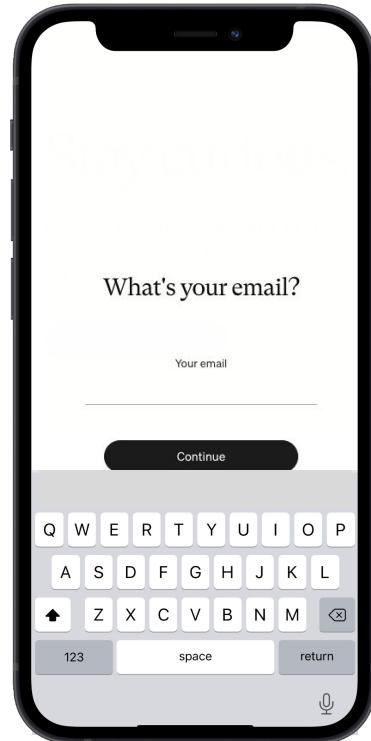
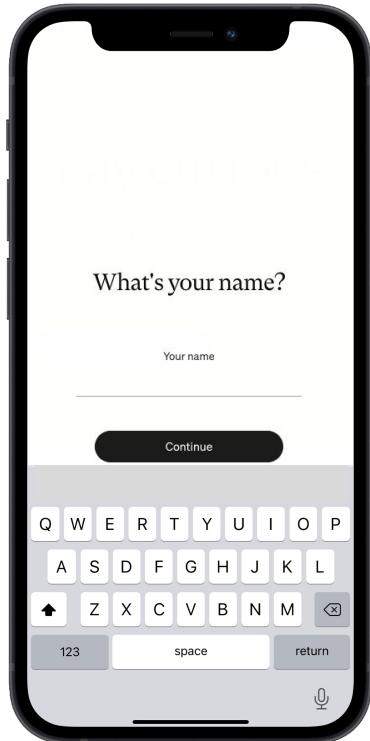
We think we now have a better idea of how to answer (not all, but some of) them and we have arrived at a good baseline to work from.

So here it goes ...

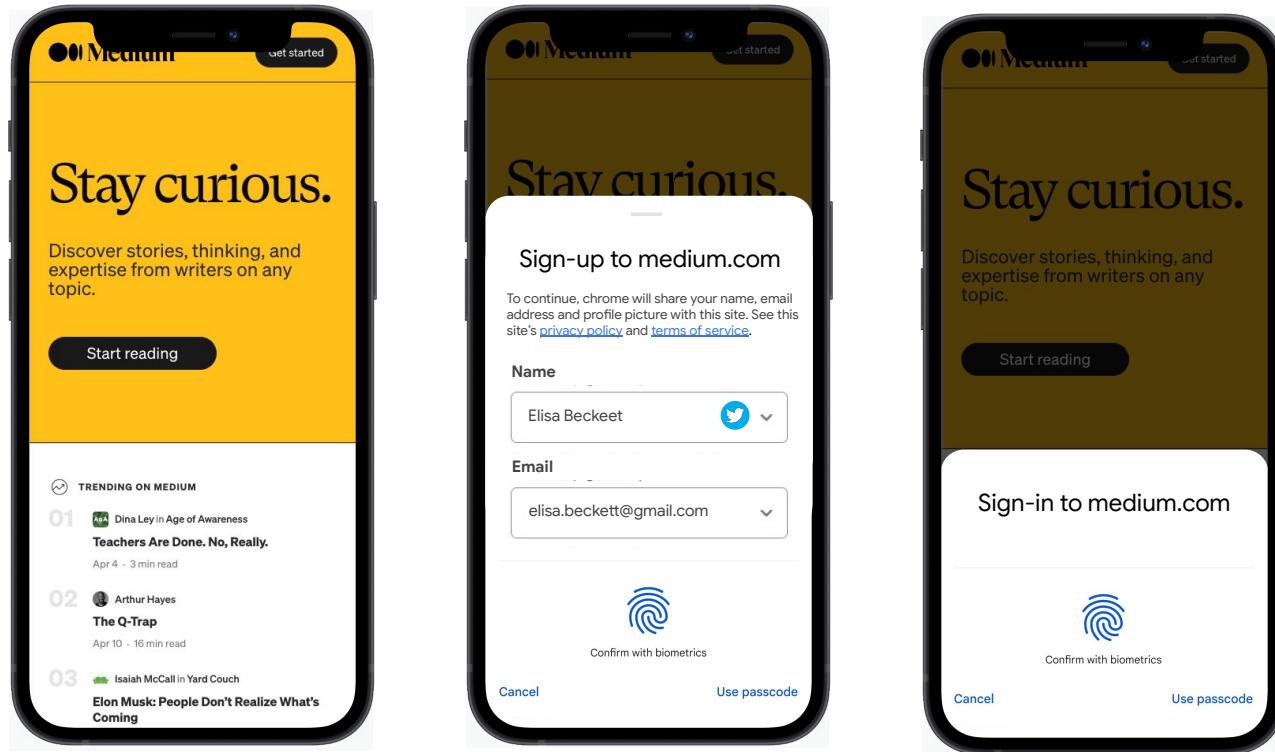
Illustrative Mock
NOT ready to build



Federation bundles authentication (logging-in) with identification (what's my name?): you sign-in with Google.
But, while convenient, it has all of these awkward properties about it.



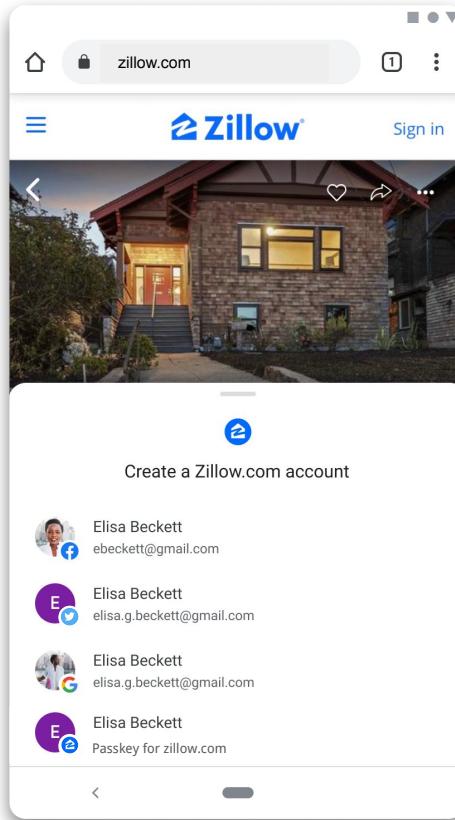
WebAuthn has really good privacy / security properties and is getting increasingly recoverable. So, in the future, while I still think you'll be using federation for identification (e.g. what's your name), I hope that you won't for authentication (e.g. sign-in) when you don't need to.



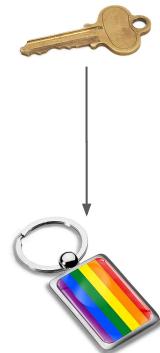
It is likely that you are going to need more than keys to create accounts, so we should build our API such that you can combine identification and authentication in the same UI.

Multiple Credential Types

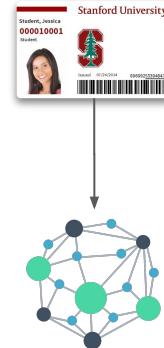
[Webkit](#)



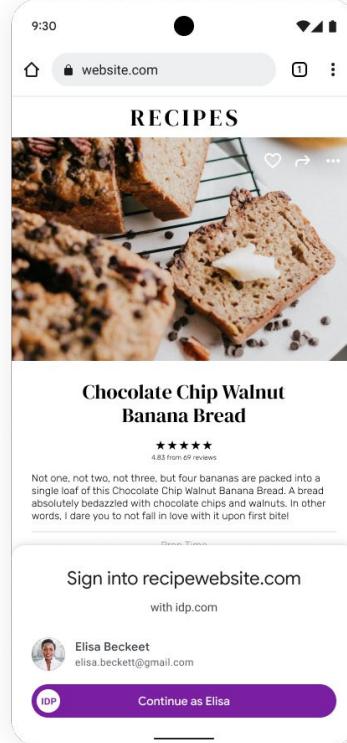
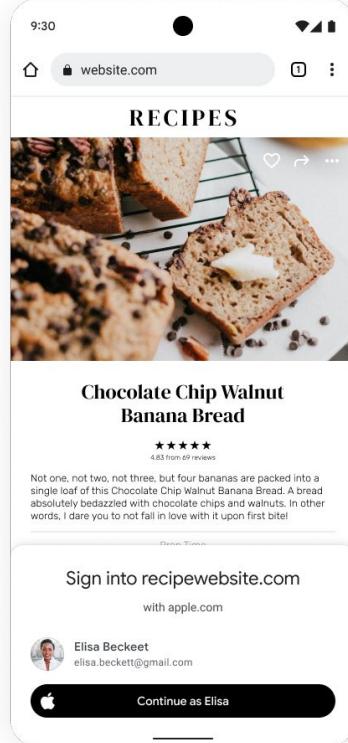
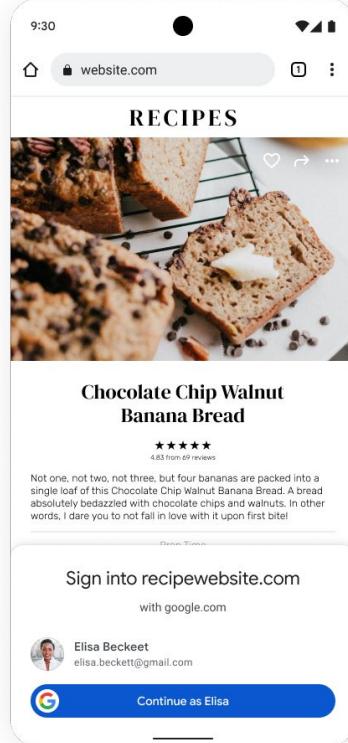
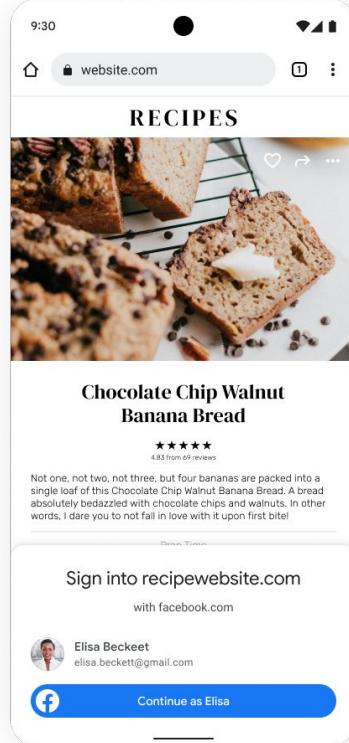
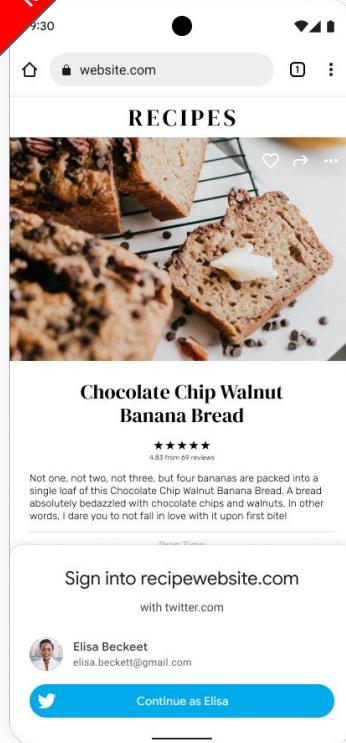
Web Authentication
manages your Keys



Web Identity
manages your IDs

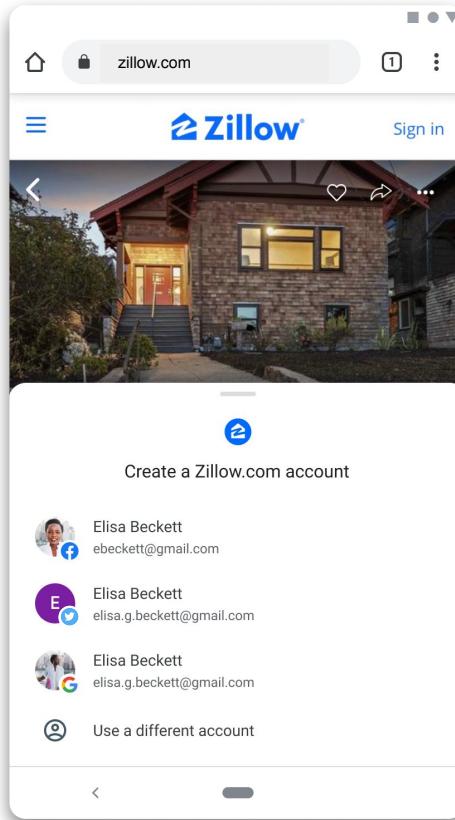


Social IDs



Multiple IDP / Bring your own IDP

[Issue #204](#)



Student IDs

Issue #29

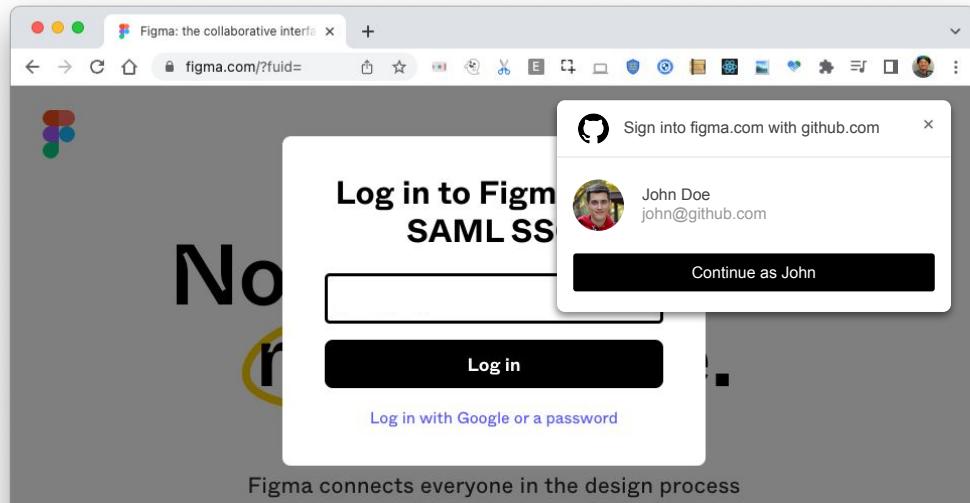
The screenshot shows a web browser window displaying an article from the **SAGE journals** website. The article is titled **Philosophy of the Social Sciences**. The main content area shows the abstract of the article, which discusses the Belief-Desire Model of Action Explanation Reconsidered: Thoughts on Bittner. The abstract states:

The belief-desire model of action explanation is deeply ingrained in multiple disciplines. There is reason to think that it is a cultural artifact. But is there an alternative? In this discussion, I will consider the radical critique of this action explanation model by Rüdiger Bittner, which argues that the model appeals to dubious mental entities, and argues for a model of reasons as responses to states or events. Instead, for Bittner, agents are reason-selectors—selecting the states or events to respond to and selecting the ones the agent is

A sign-in overlay is displayed, prompting the user to "Sign into sagepub.com with stanford.edu". It shows a profile picture of a person named John Doe and the email address john@stanford.edu. A red "Continue as John" button is visible.

Employee IDs

Illustrative Mock
NOT ready to build



Membership IDs

Issue #287

A screenshot of a web browser window displaying a news article from The Atlantic. The URL in the address bar is `politics/archive/2022/03/republican-democrat-lawmakers-congress-divide/623320/`. The main content of the article is titled "The Vibe Shift on Capitol Hill" and discusses the impact of the Russia-Ukraine war on Congress. A Twitter login overlay is visible, prompting the user to log in with their Twitter account to access ad-free content. The overlay includes the Twitter logo, the text "Ad-free theatlantic.com with Twitter Blue", a profile picture of Elisa Beckett (@elisabeckett), and a blue button labeled "Continue as Elisa".

SSO

Illustrative Mock
NOT ready to build

The image illustrates the Single Sign-On (SSO) feature for Instagram. On the left, two smartphones are shown. The left phone displays the Instagram mobile app's main feed with several travel-related posts. The right phone shows a direct message thread between two users, with messages like "lmao", "hahahah omg", and "My friend Sarah will love this". On the right side of the image is a screenshot of the Instagram.com website's login page. A modal window is open, prompting the user to "Sign into instagram.com with facebook.com". It shows the user's profile picture and name, "Elisa Becket", along with her email address, "elisa.beckett@gmail.com". A blue button labeled "Continue as Elisa" features the Facebook logo. Below the modal, there are fields for "Phone number, username" and "Password", and links for "Log In", "OR", "Log in with Facebook", and "Forgot password?". At the bottom of the page, there are links for "Don't have an account? Sign up" and "Get the app." with download links for the App Store and Google Play.

Instagram

Sign into instagram.com with facebook.com

Elisa Becket elisa.beckett@gmail.com

Continue as Elisa

Log In OR Log in with Facebook

Forgot password?

Don't have an account? [Sign up](#)

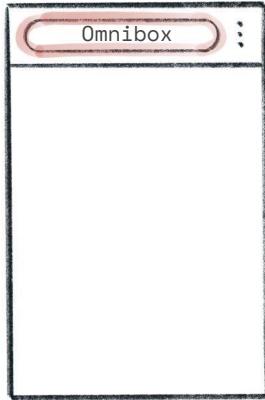
Get the app.

Download on the [App Store](#) GET IT ON [Google Play](#)

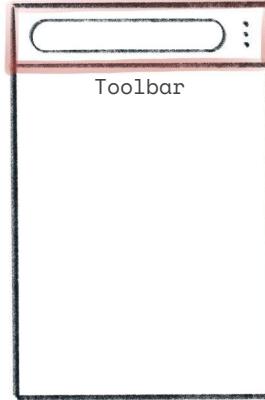
Meta About Blog Jobs Help API Privacy Terms Top Accounts Hashtags Locations Instagram Lite Contact Uploading & Non-Users

Dance Food & Drink Home & Garden Music Visual Arts

English ▾ © 2022 Instagram from Meta



Omnibox



Toolbar



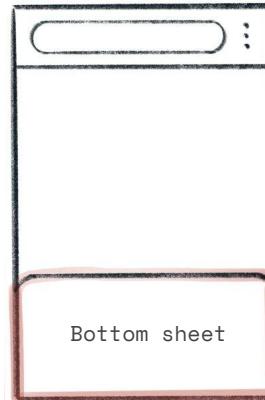
Messages



Keyboard accessory



Infobar

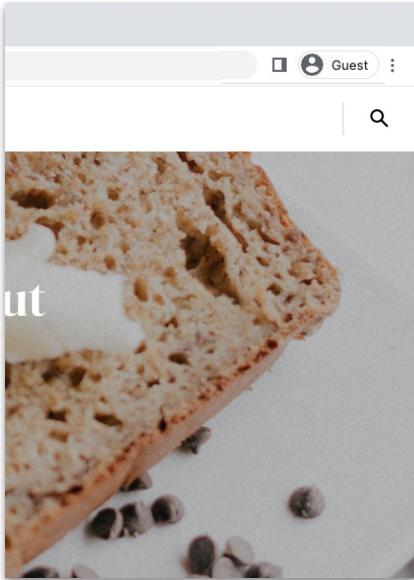
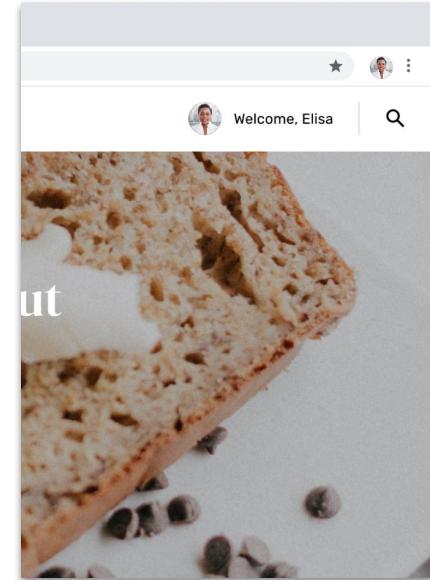


Bottom sheet



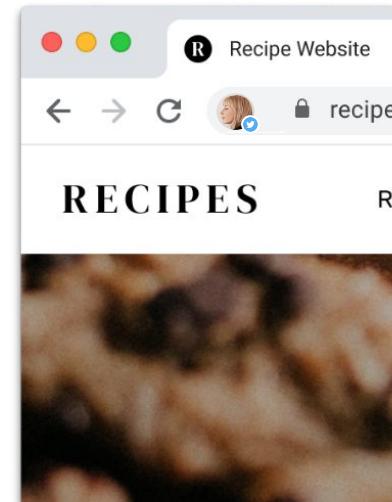
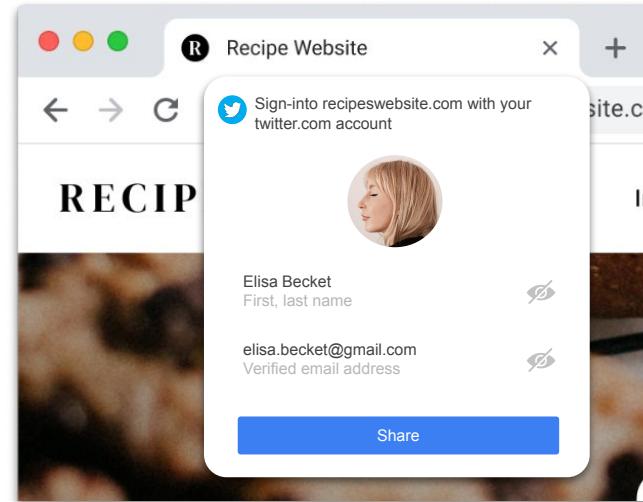
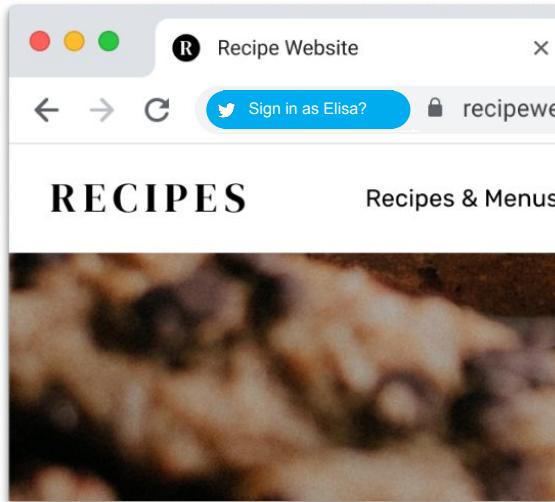
Inline UI

Enterprise Profile Identity

A modal dialog box titled "Sign-in to Work" with the URL "https://work.com". It features a "COPORATE" logo and a "Sign in to your work account" message. Below this is an "Email address" input field containing a placeholder "Email address". Underneath the input field are links for "Forgot email?" and "Create account". A blue "Next" button is located at the bottom right of the dialog.

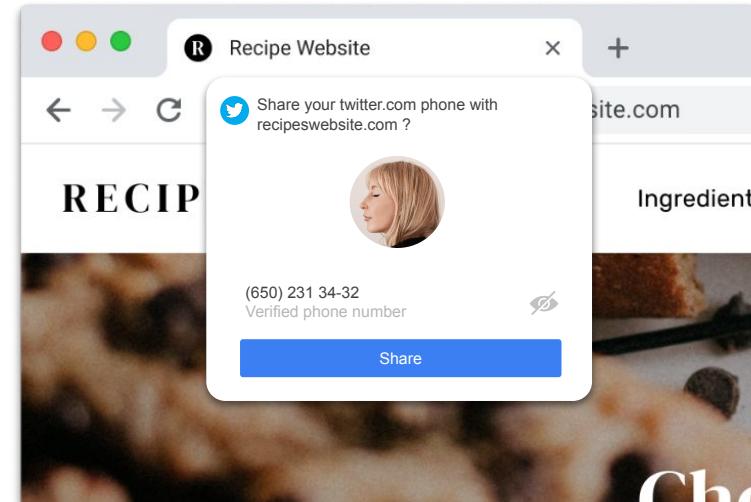
load enterprise policies?

Site Identity



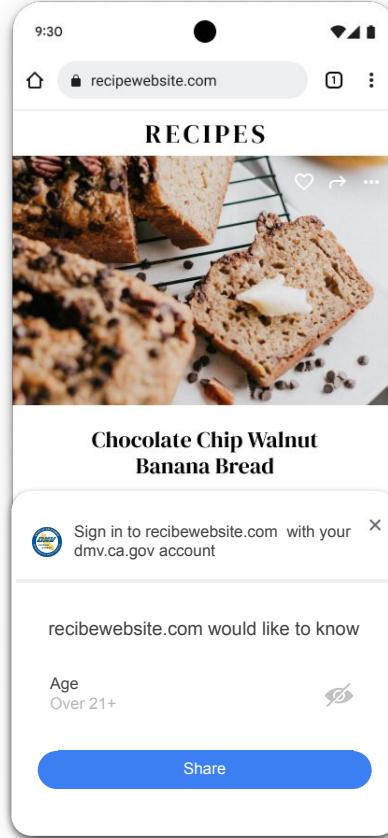
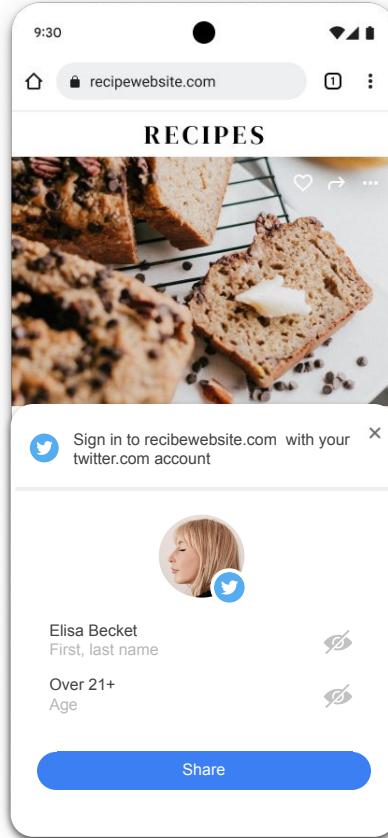
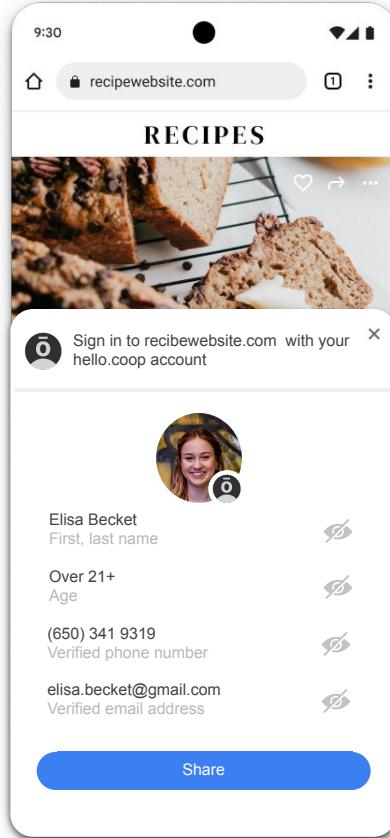
Incremental Disclosure

[Issue #242](#)

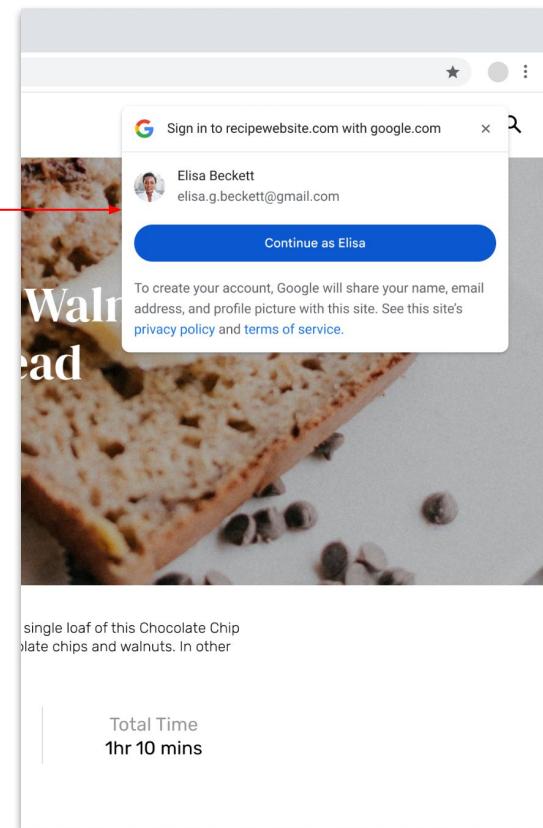
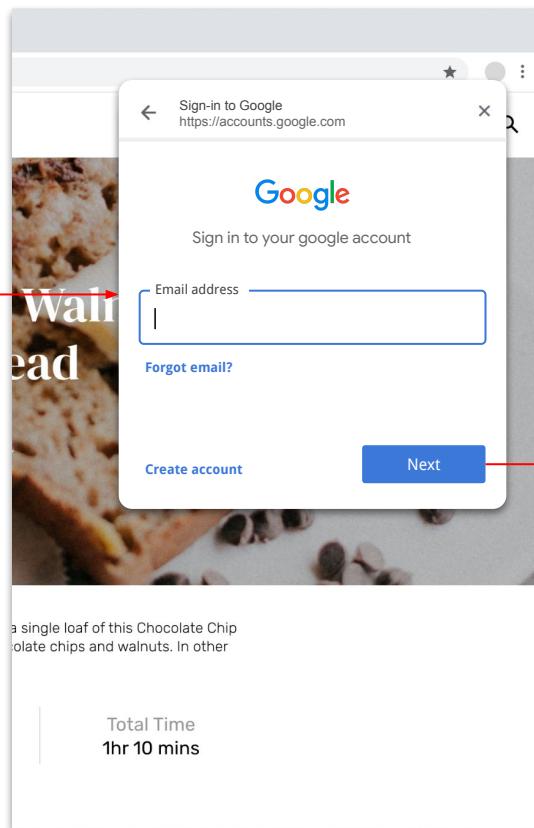
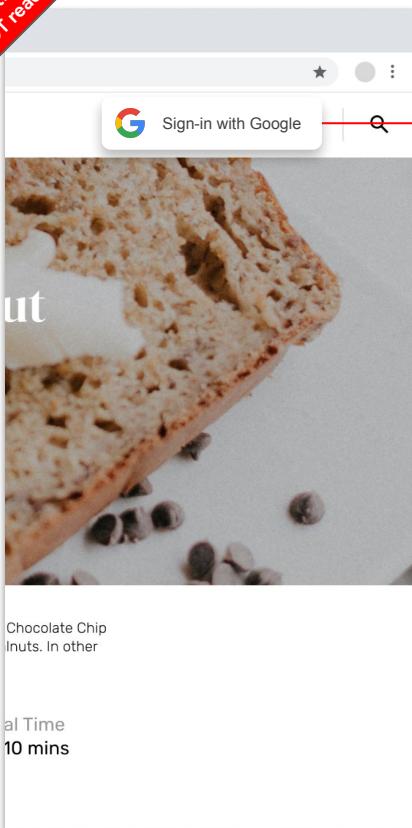


Selective Disclosure

[Issue #242](#)



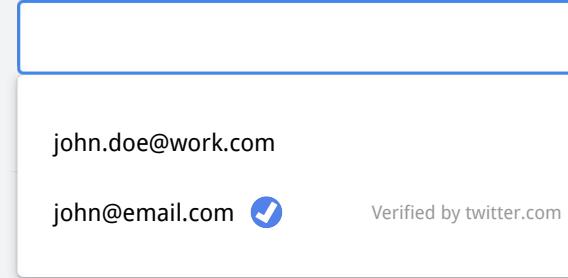
Sign-in to IDP



Autocomplete

Websites annotate their forms accepting providers:

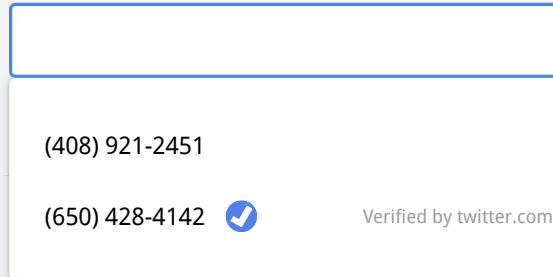
```
<form providers="https://twitter.com">  
  <input type="email">  
  <input type="tel">  
</form>
```



A screenshot of a web browser showing an email input field with an open dropdown menu. The dropdown contains two suggestions: "john.doe@work.com" and "john@email.com". The second suggestion is preceded by a blue circular icon with a white checkmark. To the right of the suggestions, the text "Verified by twitter.com" is displayed.

john.doe@work.com

john@email.com ✓ Verified by twitter.com



A screenshot of a web browser showing a phone number input field with an open dropdown menu. The dropdown contains two suggestions: "(408) 921-2451" and "(650) 428-4142". The second suggestion is preceded by a blue circular icon with a white checkmark. To the right of the suggestions, the text "Verified by twitter.com" is displayed.

(408) 921-2451

(650) 428-4142 ✓ Verified by twitter.com

The Pull Model

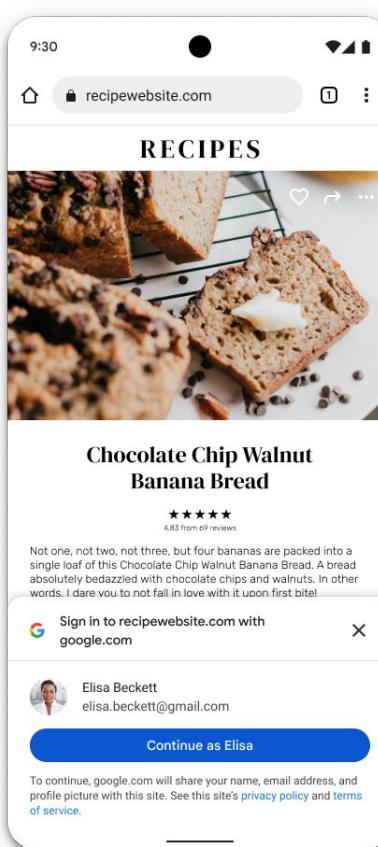
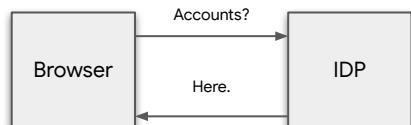
On demand, the browser makes an HTTP request to the IDP that returns the user's accounts.

Pros

Simple to implement. Always in Sync.

Cons

Latency. **Timing Attacks.**



The Push Model

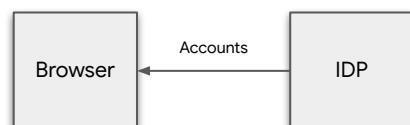
Ahead of time, the IDP saves in the browser the user's accounts.

Pros

Better UX. No attacks. Allows multiple IDPs.

Cons

Can be out of sync, so UI needs to degrade gracefully when it does. IDP announces all accounts rather than only the ones that would use federation.



We still have more questions than answers, but we think we got a good baseline to work from.

WDYT?

WDYT?