Existing way for users to sign-in or sign-up

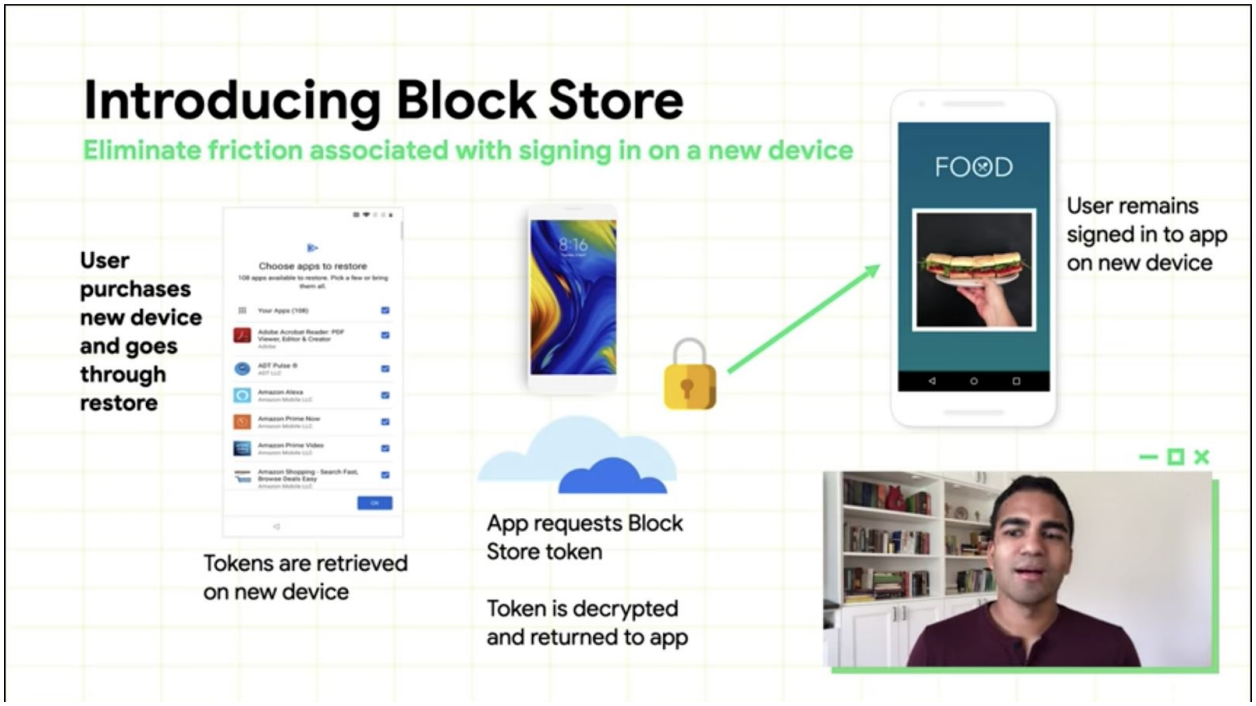
1. Email and Password
2. Sign-in with Google Account
    a. It allows us to use Google Account for sign-in and sign-up
3. Smart Lock (to save and retrieve passwords) -> Credential API
    a. https://developers.google.com/identity/smartlock-passwords/android
    b. Frictionless way for sign-in between app and chrome
4. Android Autofill
    a. https://developer.android.com/guide/topics/text/autofill
    b. Available from Android Oreo
    c. Low touch way to remember and fill in passwords
    d. Users should go to setting and enable it

Two Key Challenges

1. Developer complexity vs. User complexity
    a. What to implement and how to make it simple? - developers' viewpoint
    b. Users still use conventional way, but there are many reasons.

Google's effort to make it reliable and trustable -> One tap and Block Store

1. One tap
    a. **Cross-Platform Sign-In** for web and Android, supporting and streamlining multiple types of credentials
    b. New users can sign up with one tap -> and they get a secured token.
    c. Sign up once, and sign in everywhere using his or her Google Account.
    d. All of the interfaces are the same in every frontend, to reduce friction and confusion for users.
2. Block Store
    a. **New token-based sign-in mechanism** built on top of backup and restore
    b. Background
        i. Users have to sign in to a multitude of apps on first day
        ii. And they also have to remember the password. (not having the password stored… maybe they just don't trust the platform?)
    c. Once users sign up, the app stores the user token to the Block Store, with no consent required.
    d. Token is encrypted and stored locally on the device.
    e. If users enable cloud backup, token is end-to-end encrypted and stored in the cloud.
    f. For new phone purchase, his or her device retrieves the stored token.
    g. The app requests the Block Store token, and password is decrypted and returned to the app. -> Users don't need to sign in again on the new device.
3. How to bring it together?


Introducing Block Store
Eliminate friction associated with signing in on a new device
User purchases new device and goes through restore
Choose apps to restore
Tokens are retrieved on new device
App requests Block Store token
Token is decrypted and returned to app
FOOD
User remains signed in to app on new device

4. Wrap Up

# Wrap Up

- One Tap and Block Store will be part of the unified Google Identity Services (GIS) Library
- Block Store tokens will be retrievable using One Tap
- Google Sign in and Smart Lock for Passwords will be replaced by GIS