June 2022

Scaling your app's release process

Neil Kimmett

classpass

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classpass

@neilkimmett

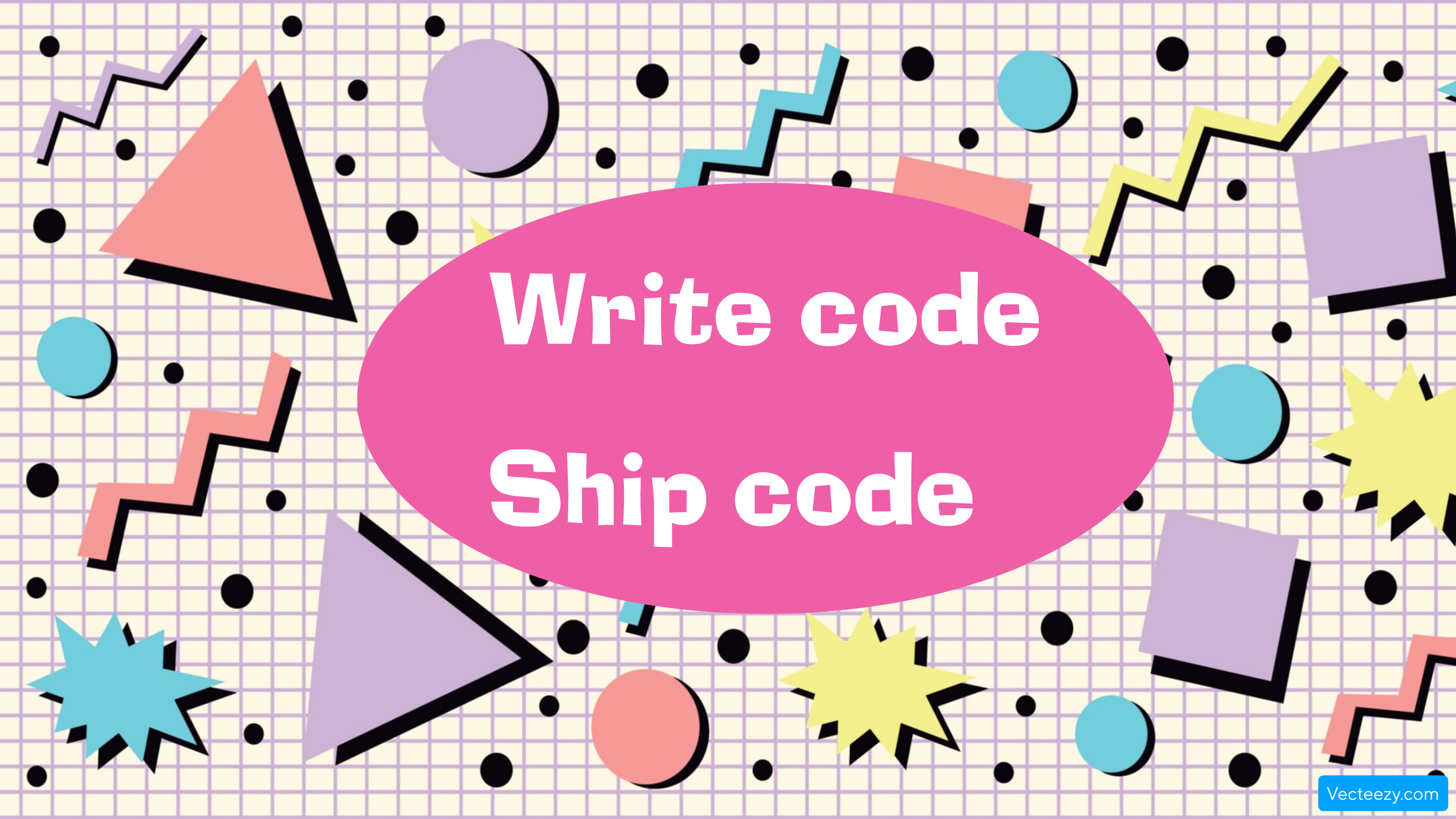
👋 hello

🇬🇧 from Southampton
🗽 live in NYC

📱 Director of Eng @ ClassPass

Write code

Ship code



Vecteezy.com

```
    return(rc);

    }


  if (!LoadString(hinst, IDS_REGKEY, rgchSubKey, sizeof
rgchSubKey) != 0) {
    strcpy(rgchSubKey, "3D Movie Maker");
}

  wsprintf(rgchKey, "SOFTWARE\\Microsoft\\Microsoft Kids\\
%s", rgchSubKey);

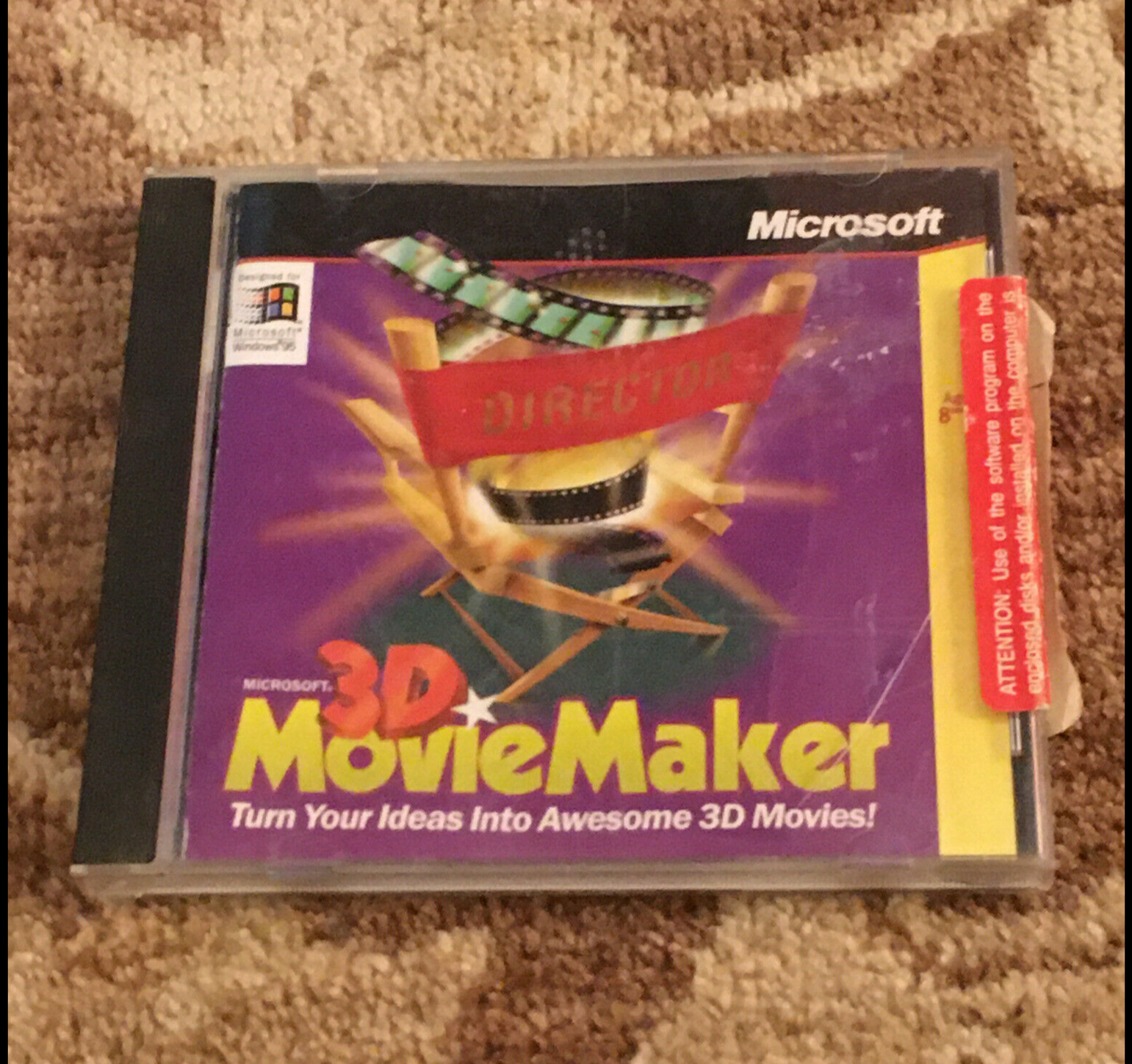
  DeleteRegKeyValue32(HKEY_CURRENT_USER, rgchKey,
"HomeDirectory");

  DeleteRegKeyValue32(HKEY_CURRENT_USER, rgchKey,
"SwitchResolution");

  DeleteRegKeyValue32(HKEY_CURRENT_USER, rgchKey,
"UserData");

  DeleteRegKeyValue32(HKEY_CURRENT_USER, rgchKey,
"GreaterThan8bppMsg");
```

Microsoft
Disk 1 - Setup
MS-DOS Series
Disk format: High-density (1.44 MB)
Version 6.22
Setup Instructions:
1. Have two blank disks ready for installation.
2. Exit Windows.
3. Insert this disk in drive A or drive B.
4. Type a:setup or b:setup and press ENTER.
Disk Assy 147-095-496
© 1981-1994 Microsoft Corporation. All rights reserved.
Microsoft® MS-DOS® 6.22
Step-Up
Operating System Upgrade
Microsoft® Windows® 95
Upgrade
Disk 1 - Setup
Windows Series
Disk format: High-density (DMF)
Setup Instructions:
1. Start Microsoft Windows.
2. Insert Disk 1 - Setup in drive A.
3. In Program Manager, click File, and then click Run.
4. Type a:\setup and press ENTER.
Disk Assy 050-031-935
© 1981-1995 Microsoft Corporation. All rights reserved.
Microsoft® Office
Professional
Disk 1 - Setup
Windows Series
Disk format: High-density (DMF)
Version 4.3
Setup Instructions:
1. Start Microsoft Windows.
2. Insert Disk 1 - Setup in drive A.
3. From Program Manager, select File menu and choose Run.
4. Type a:\setup and press ENTER.
Disk Assy 050-031-934
© 1983-1994 Microsoft Corporation. All rights reserved.


Microsoft
DIRECTOR
MICROSOFT 3D
MovieMaker
Turn Your Ideas Into Awesome 3D Movies!
ATTENTION: Use of the software program on the

PC WORLD
The Computer Superstore
EXIT
ENTRANCE
ECH GUYS
RIPSPEED
BIKEHUT

Sound
Speakers
Ipod's
MP3/MP4 Players
Sound Cards
PC WORLD
THE COMPUTER SUPERSTORE
: here to help
The Best Of Both Worlds
Internet prices to take home today
5000 COMPUTER PRODUCTS
Laptops
Training Centre
LOW PRICES EVERYDAY
ON OVER
5000 COMPUTER PRODUCTS
In Car Navigation
Beat the Credit Crunch
0% APR
Speakers
Xbox 360
£229
Save £60
PLAY HARD

(modem dials)

(modem dials)

5G
Health
App Store

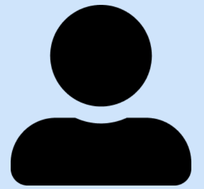
What it means to ship an app

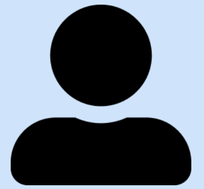
How ClassPass has evolved our process

How you can design your process

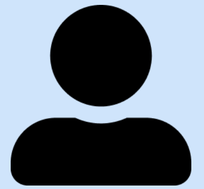
What it means to ship an app

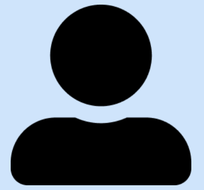
Deploying web code





Deploying web code





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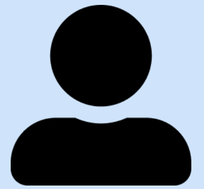

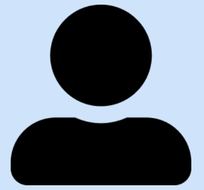

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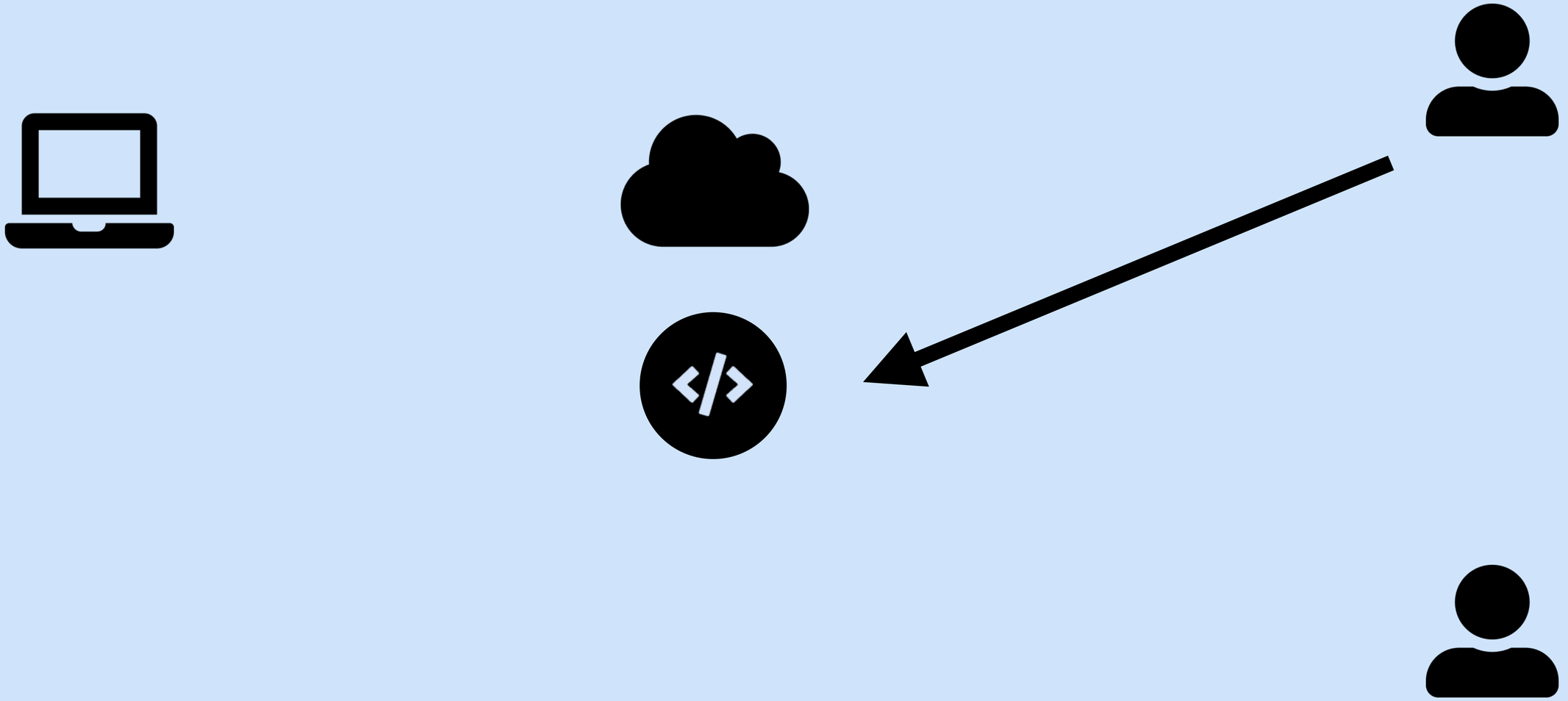

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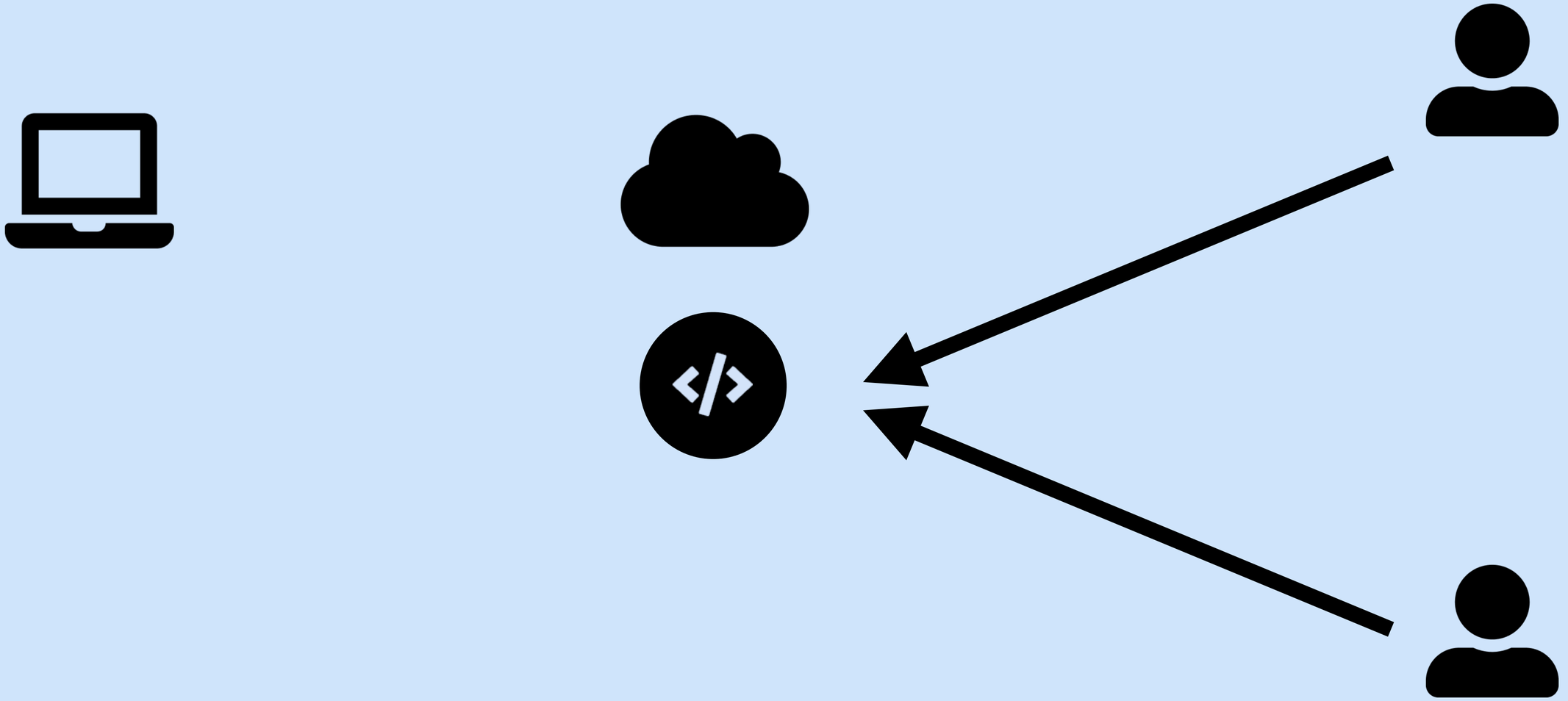

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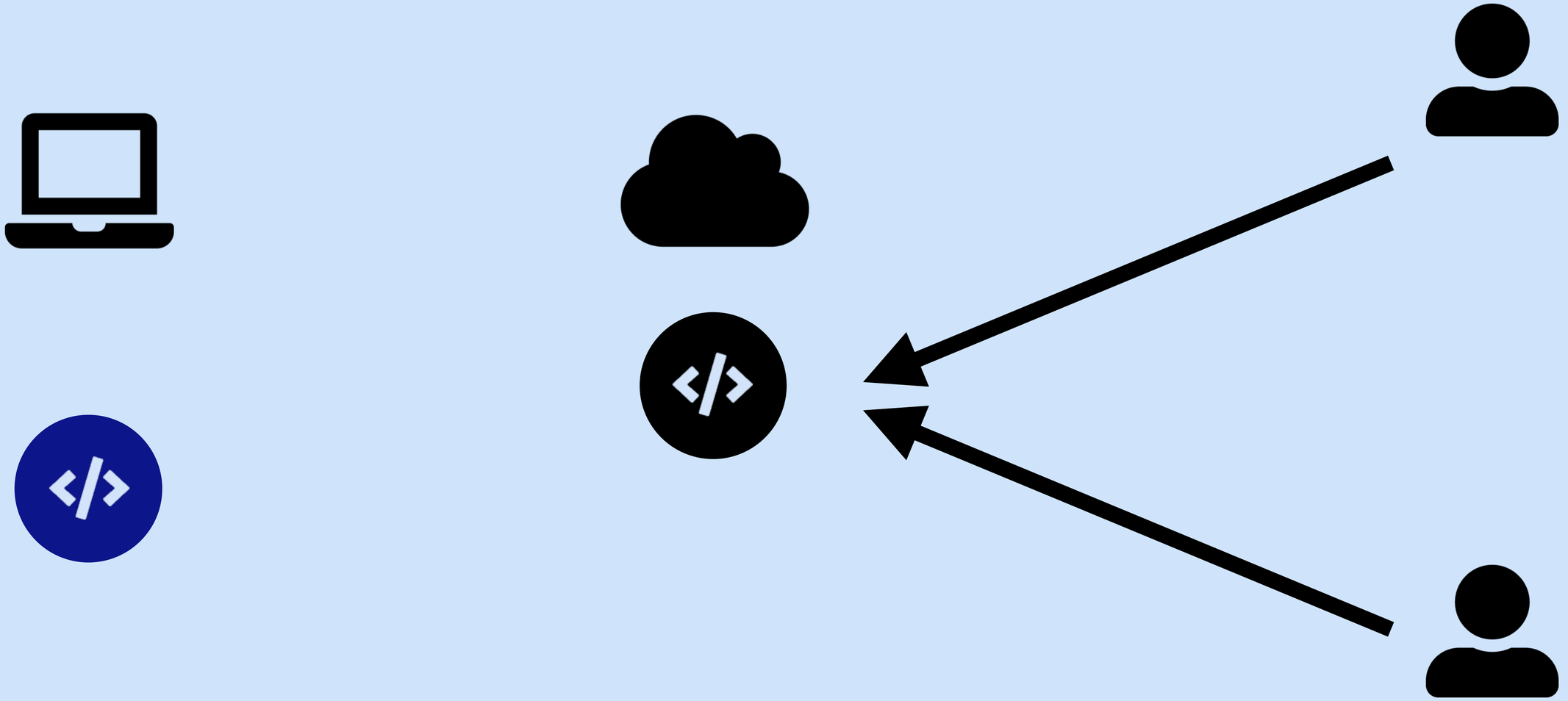

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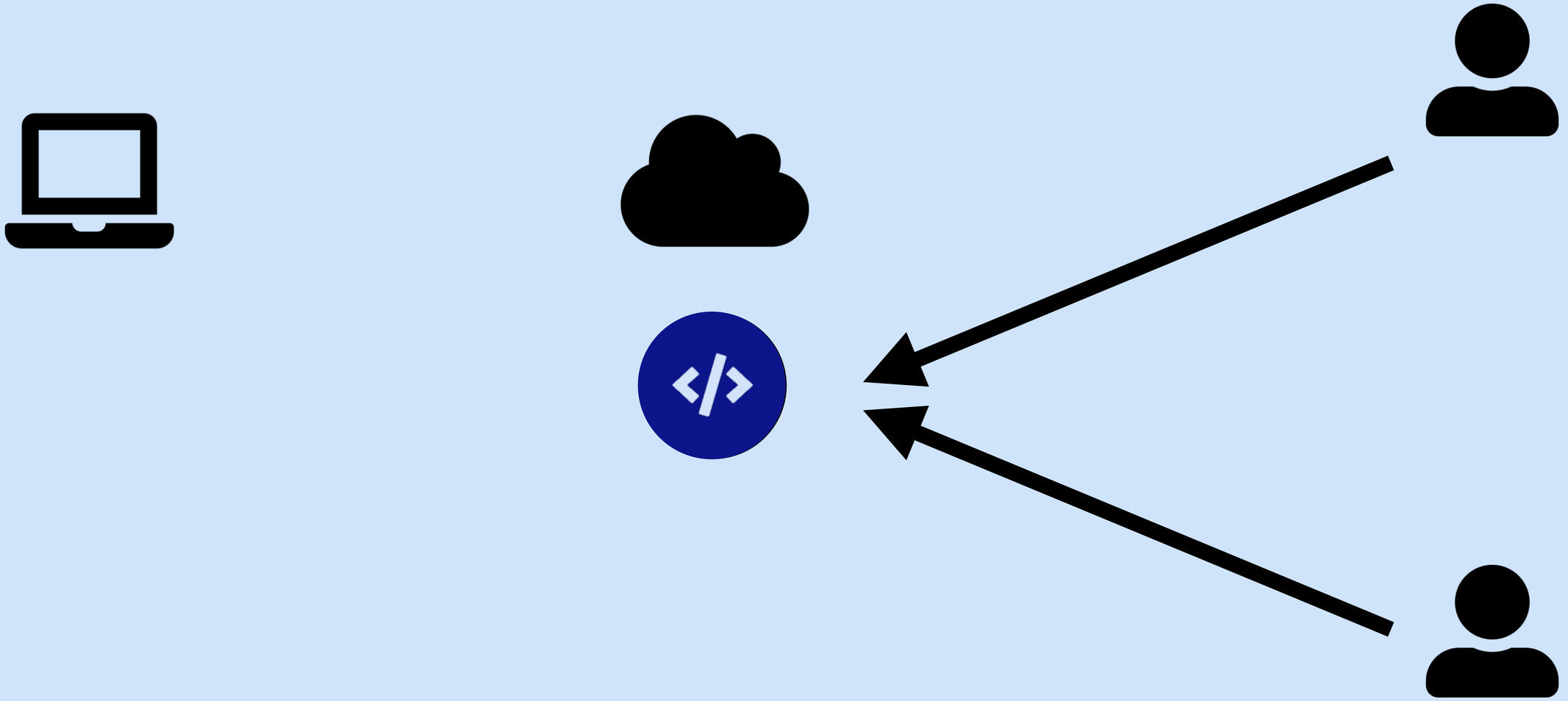
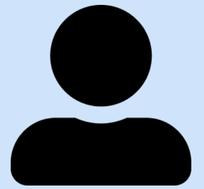
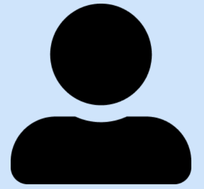
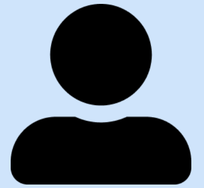


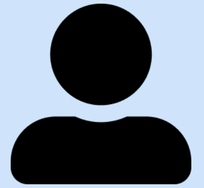
Deploying app code





Deploying app code





Deploying app code

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Deploying app code

Their Businesses Went Virtual. Then Apple Wanted a Cut.

After Airbnb and ClassPass began selling virtual classes because of the pandemic, Apple tried to collect its commission on the sales.

CNBC

Apple removes police-tracking app used in Hong Kong protests from its app store

Apple's 'unwritten rules' spark discontent for some app developers

Bloomberg

Match Sues Google Over App Store Billing Rules

ars TECHNICA

Apple won’t let Facebook tell users about 30-percent Apple tax on events

Facebook says “small businesses will keep 100% of the revenue” on Android.

userwithhighexpectations, 08/01/2019

Would be 5 stars

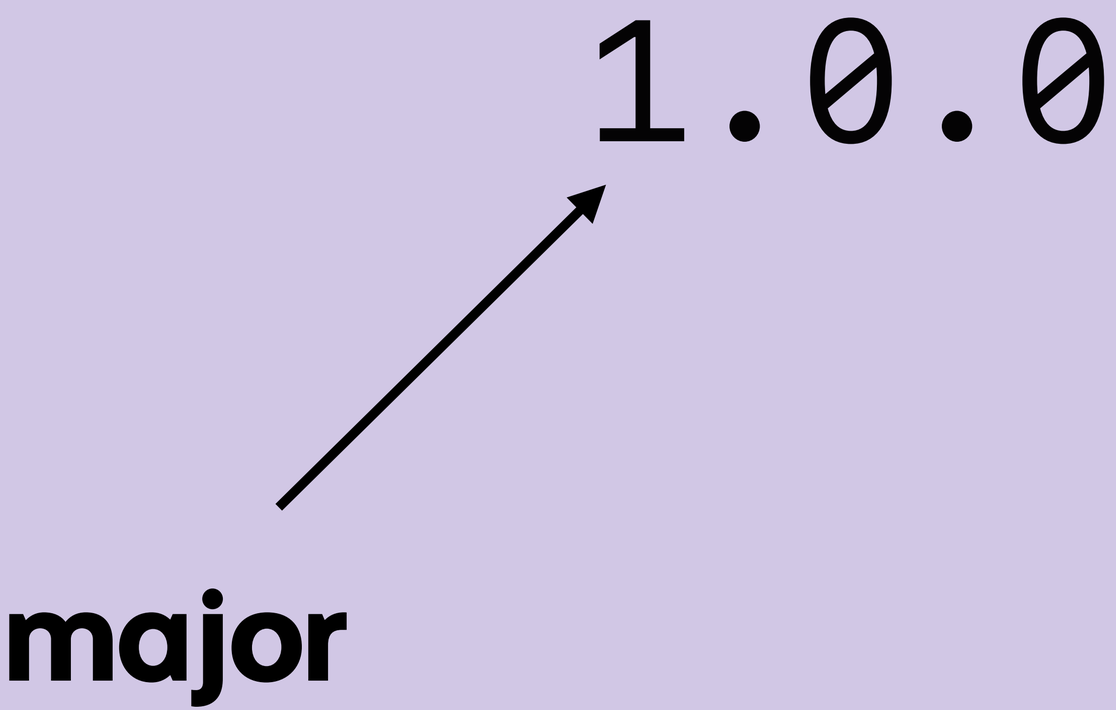
...if it weren't for that one pesky bug that only affects me!

What can we do about it?

Start small

1.0.0

1.0.0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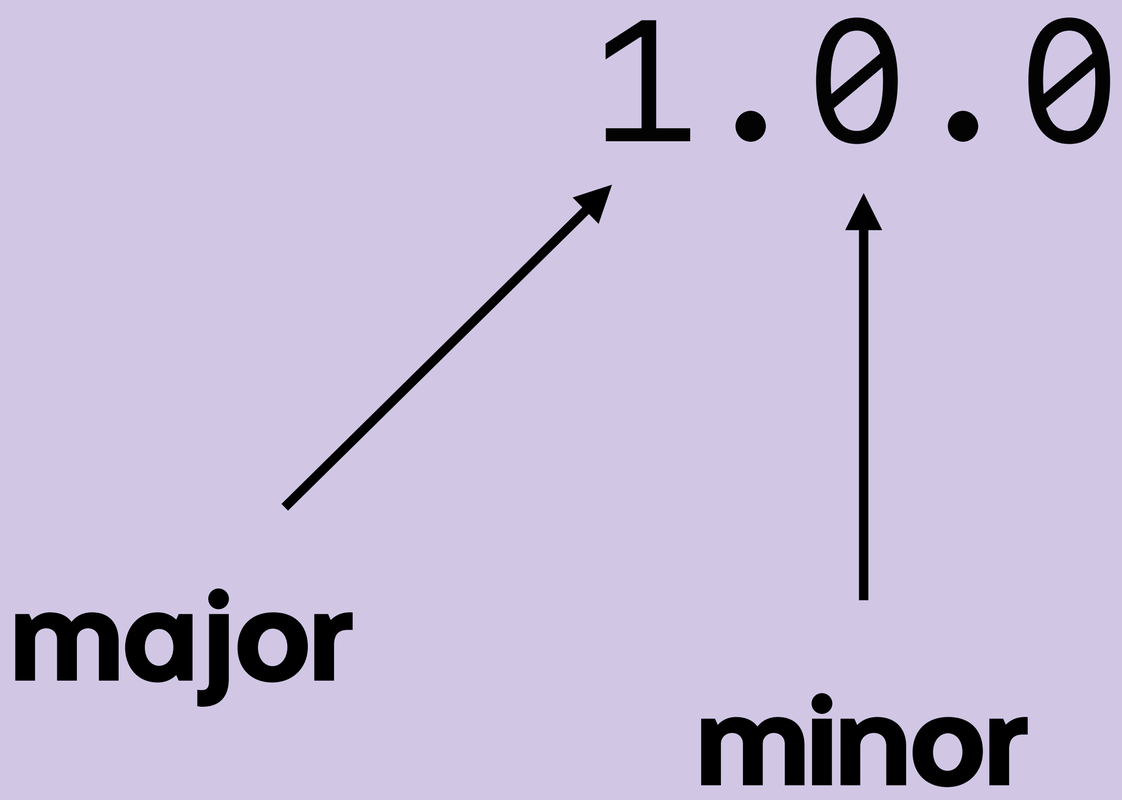
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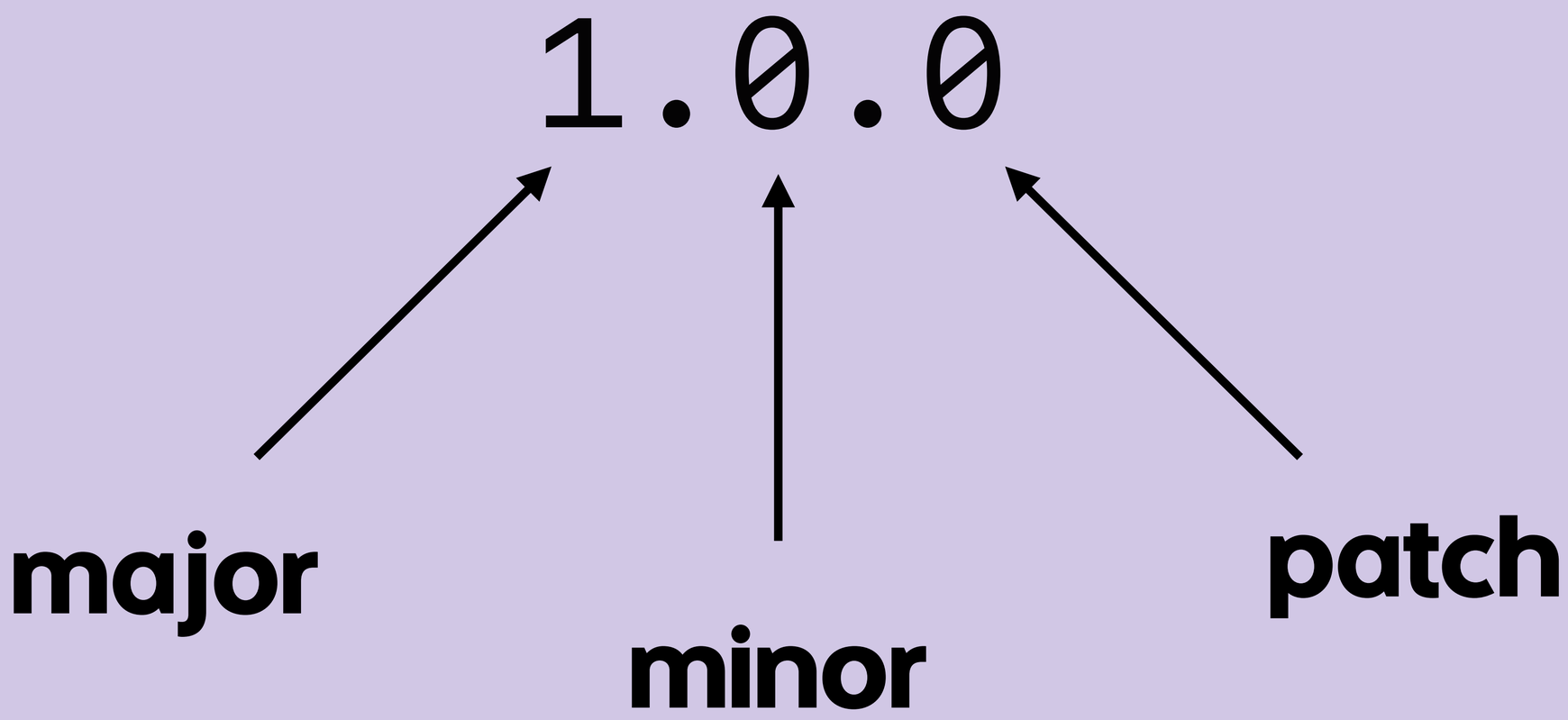
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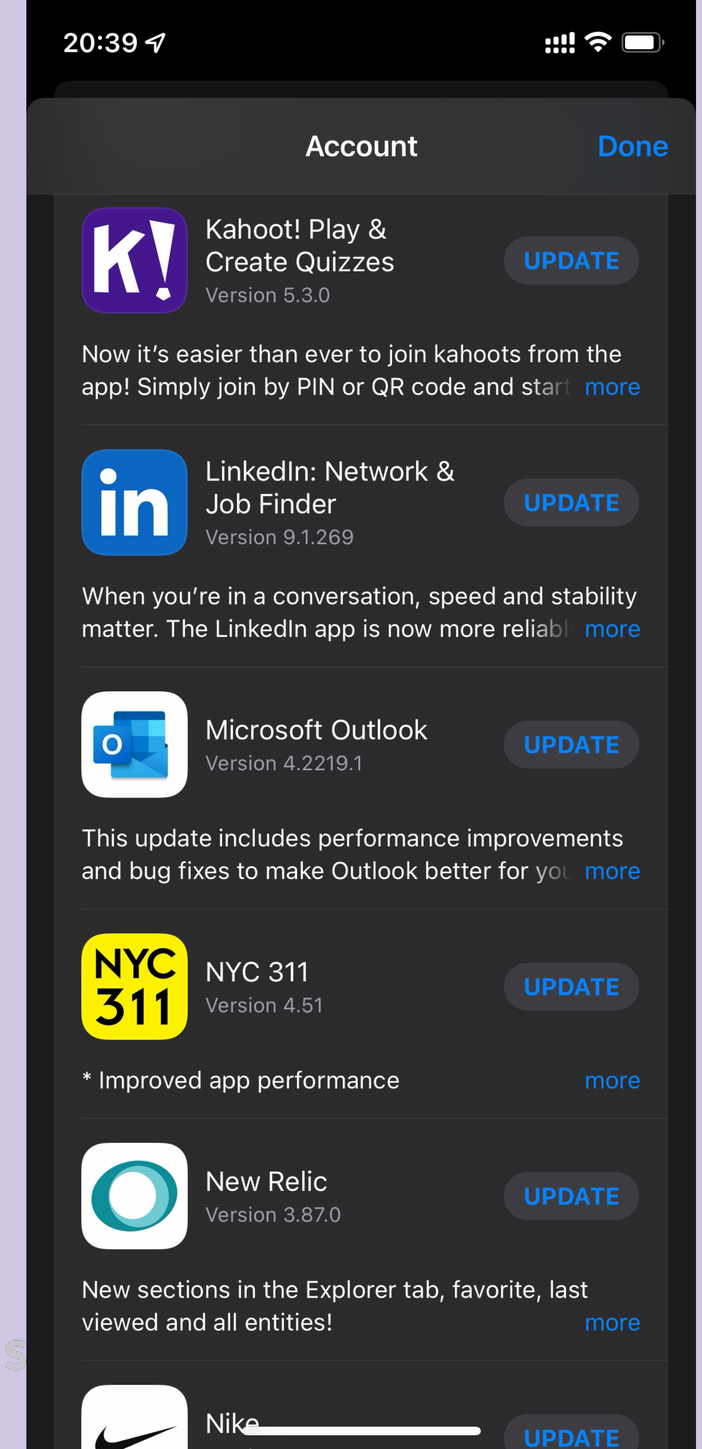
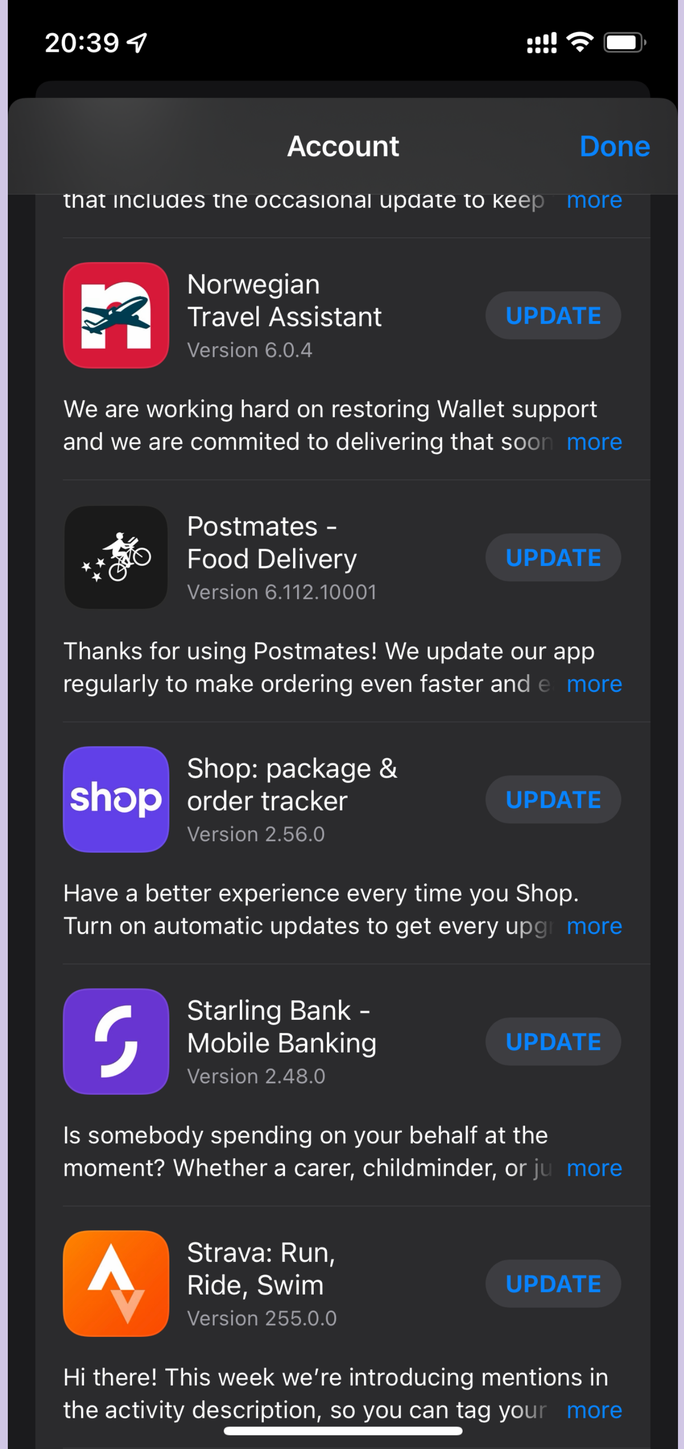

20:39
Account
Done
Kahoot! Play & Create Quizzes
Version 5.3.0
UPDATE
Now it's easier than ever to join kahoots from the app! Simply join by PIN or QR code and start more
LinkedIn: Network & Job Finder
Version 9.1.269
UPDATE
When you're in a conversation, speed and stability matter. The LinkedIn app is now more reliabl more
Microsoft Outlook
Version 4.2219.1
UPDATE
This update includes performance improvements and bug fixes to make Outlook better for you more
NYC 311
Version 4.51
UPDATE
* Improved app performance more
New Relic
Version 3.87.0
UPDATE
New sections in the Explorer tab, favorite, last viewed and all entities! more
Nike
UPDATE


20:39
Account
Done
that includes the occasional update to keep more
Norwegian Travel Assistant
Version 6.0.4
UPDATE
We are working hard on restoring Wallet support and we are commited to delivering that soon more
Postmates - Food Delivery
Version 6.112.10001
UPDATE
Thanks for using Postmates! We update our app regularly to make ordering even faster and e more
Shop: package & order tracker
Version 2.56.0
UPDATE
Have a better experience every time you Shop. Turn on automatic updates to get every upgr more
Starling Bank - Mobile Banking
Version 2.48.0
UPDATE
Is somebody spending on your behalf at the moment? Whether a carer, childminder, or ju more
Strava: Run, Ride, Swim
Version 255.0.0
UPDATE
Hi there! This week we're introducing mentions in the activity description, so you can tag your more

20:39
than ever
Done
ply join by PIN or QR
LinkedIn: Network & Job Finder
Version 9.1.269
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NYC 311
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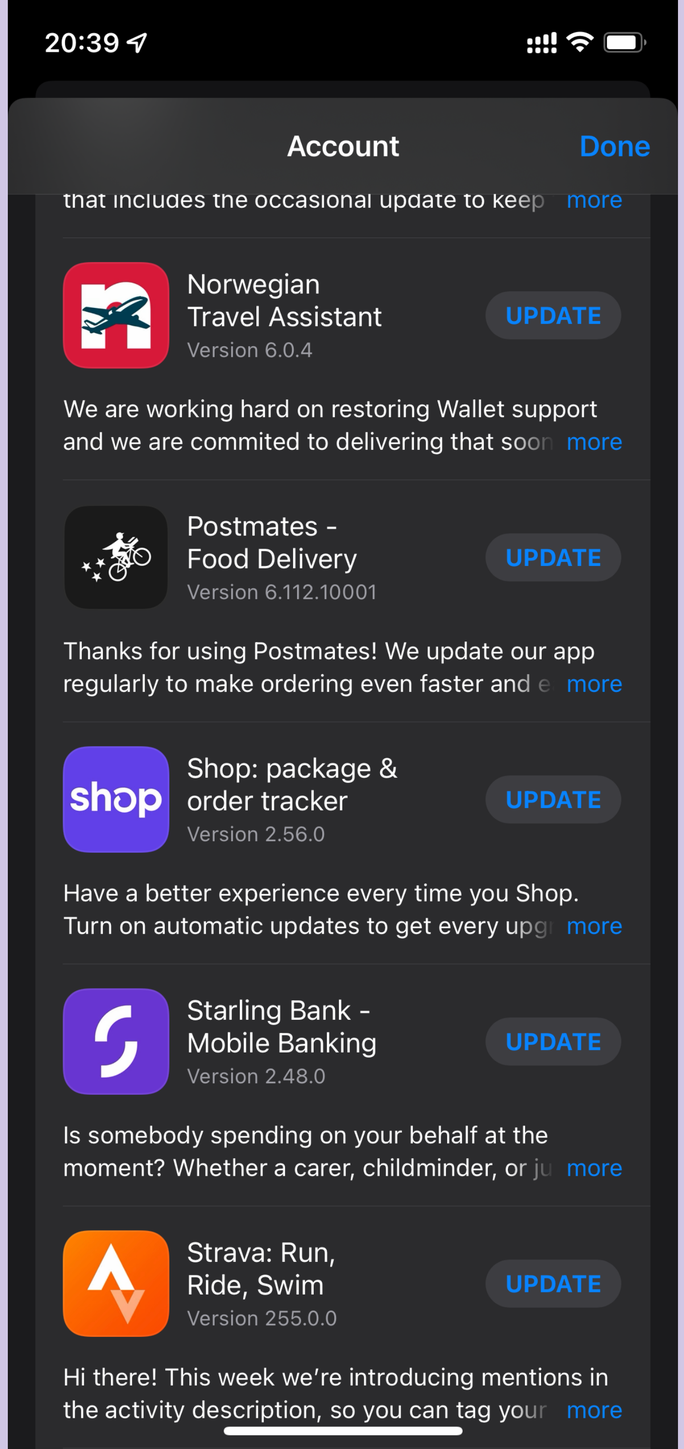
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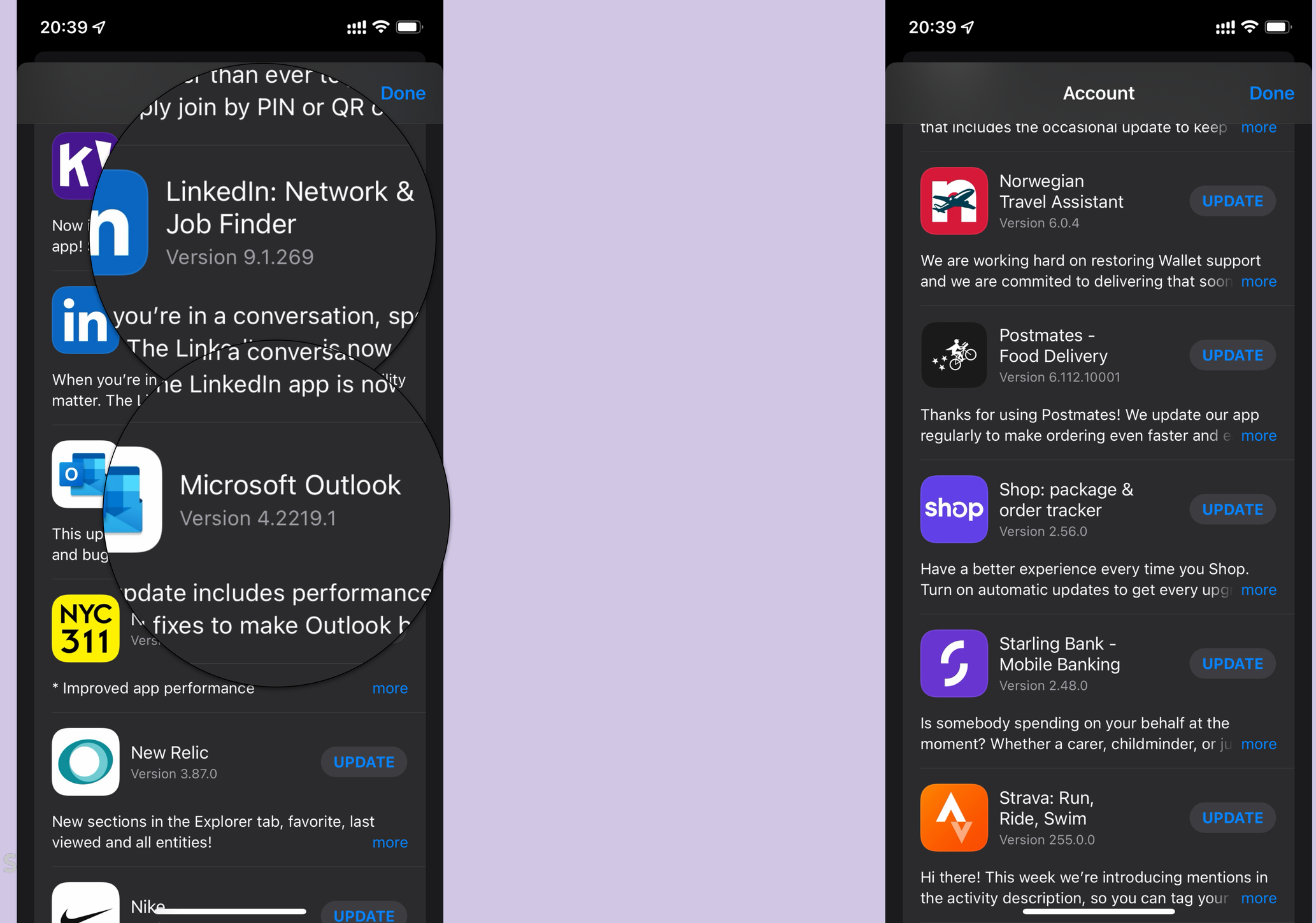
20:39
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Version 9.1.269
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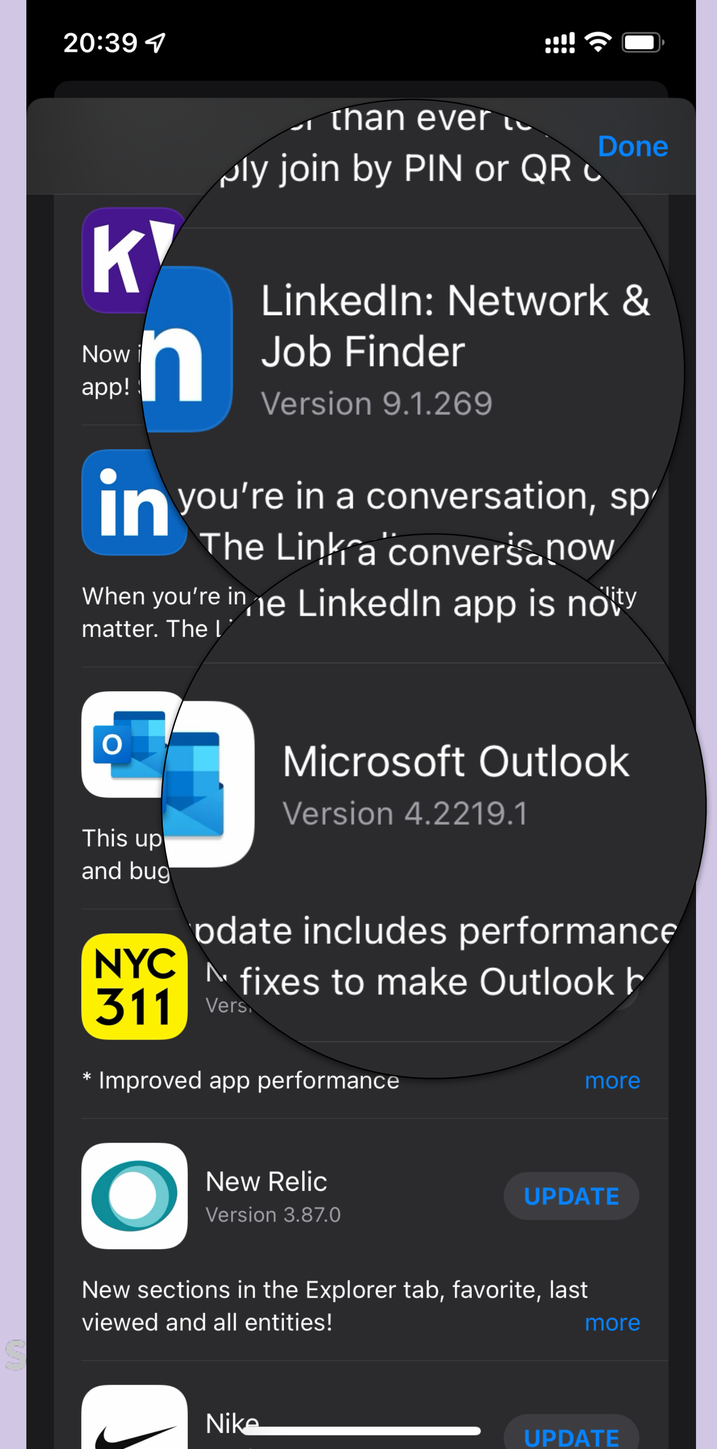
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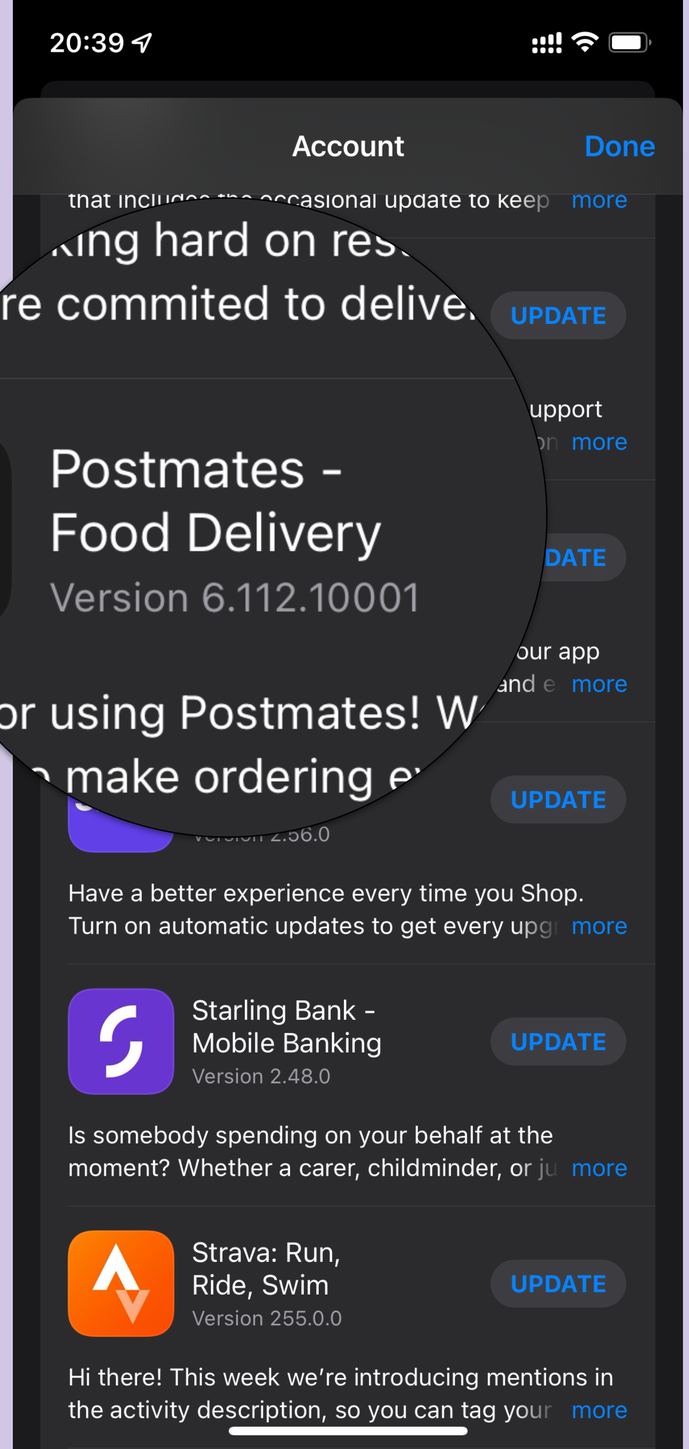
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Strava: Run, Ride, Swim
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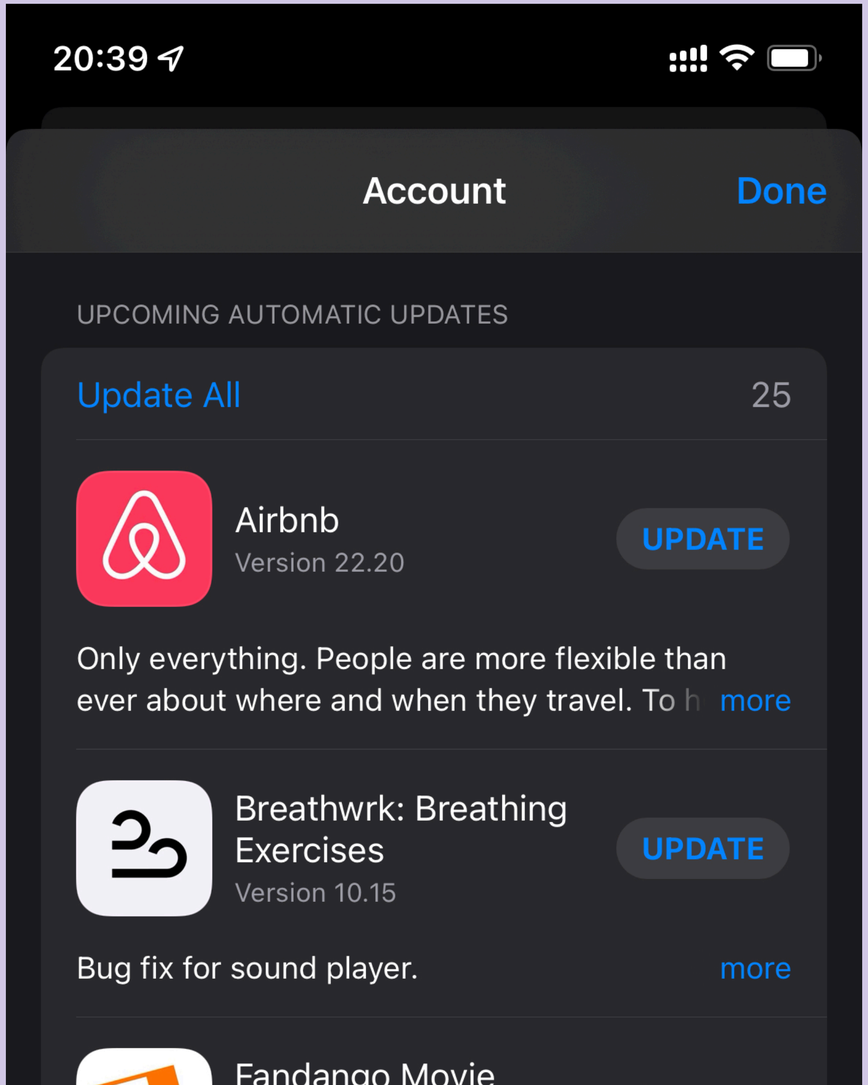
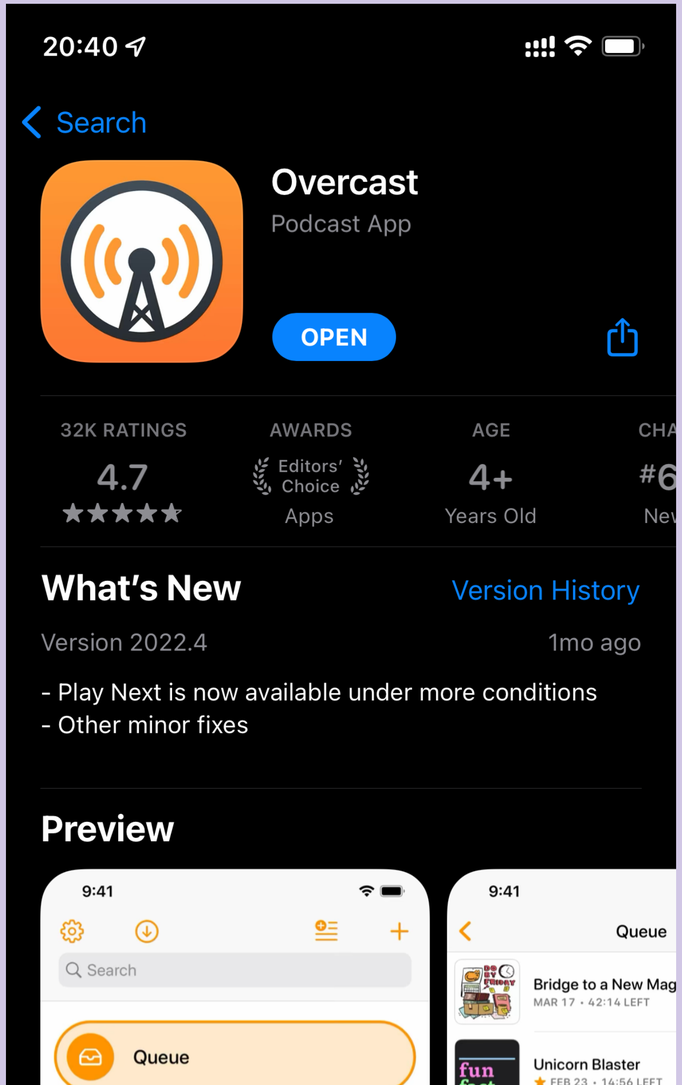
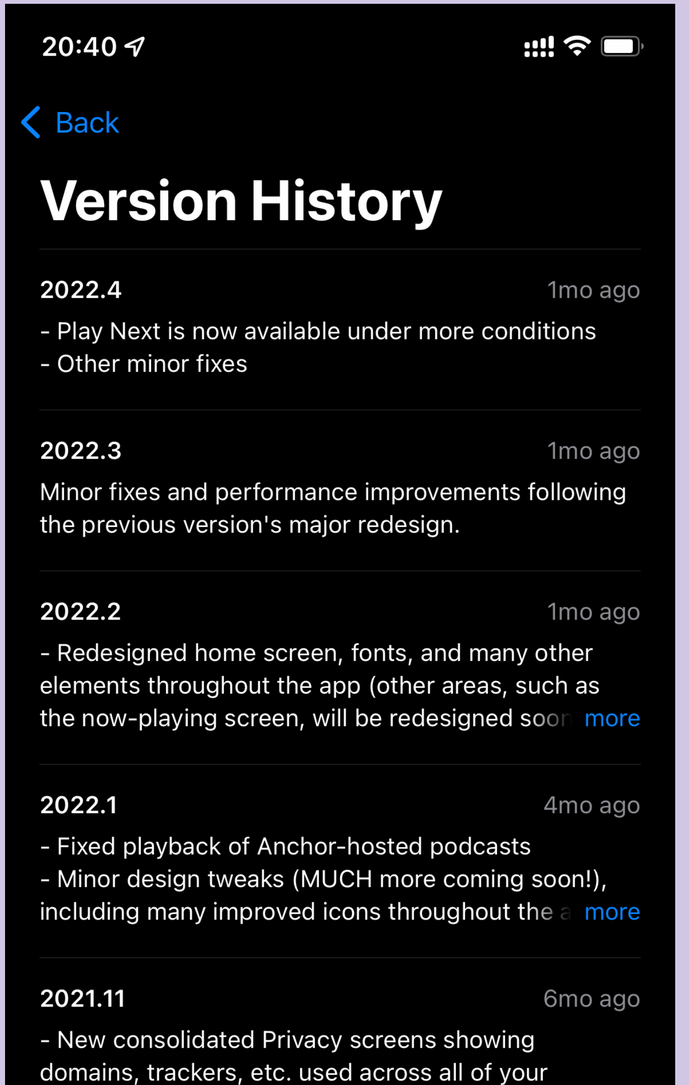
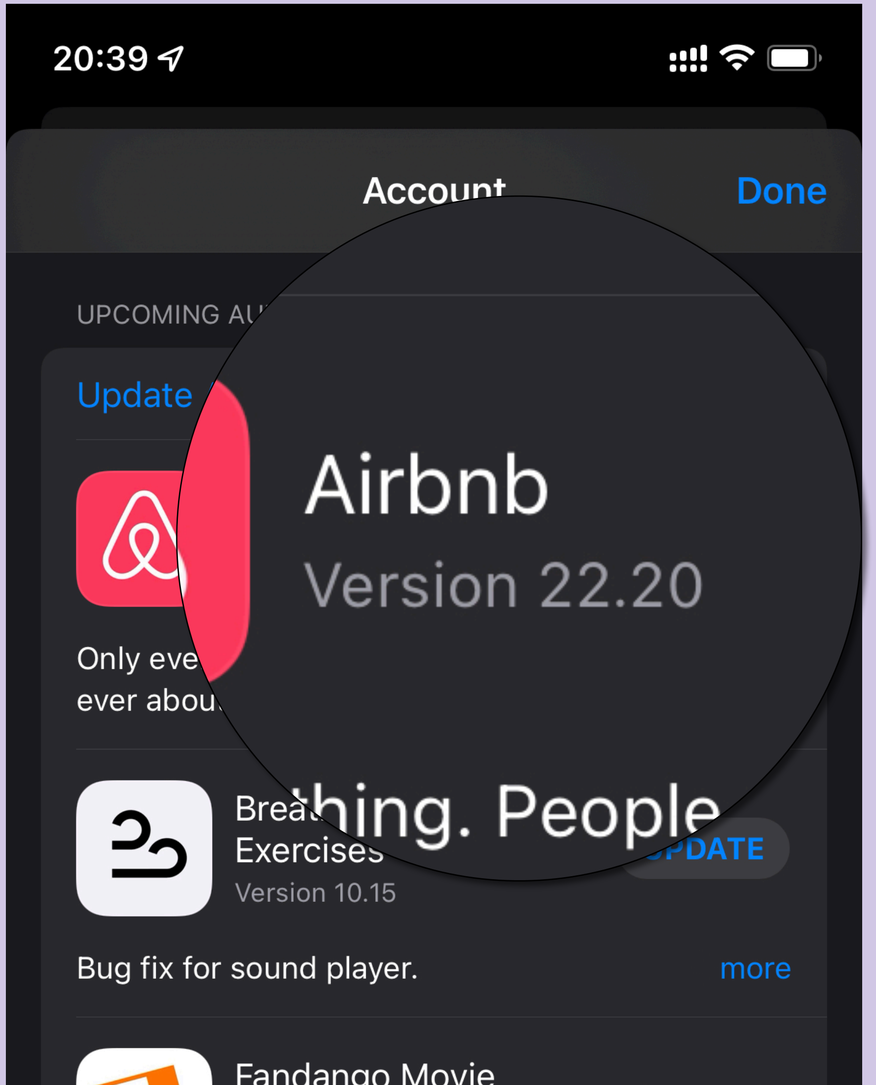
Versioning strategy

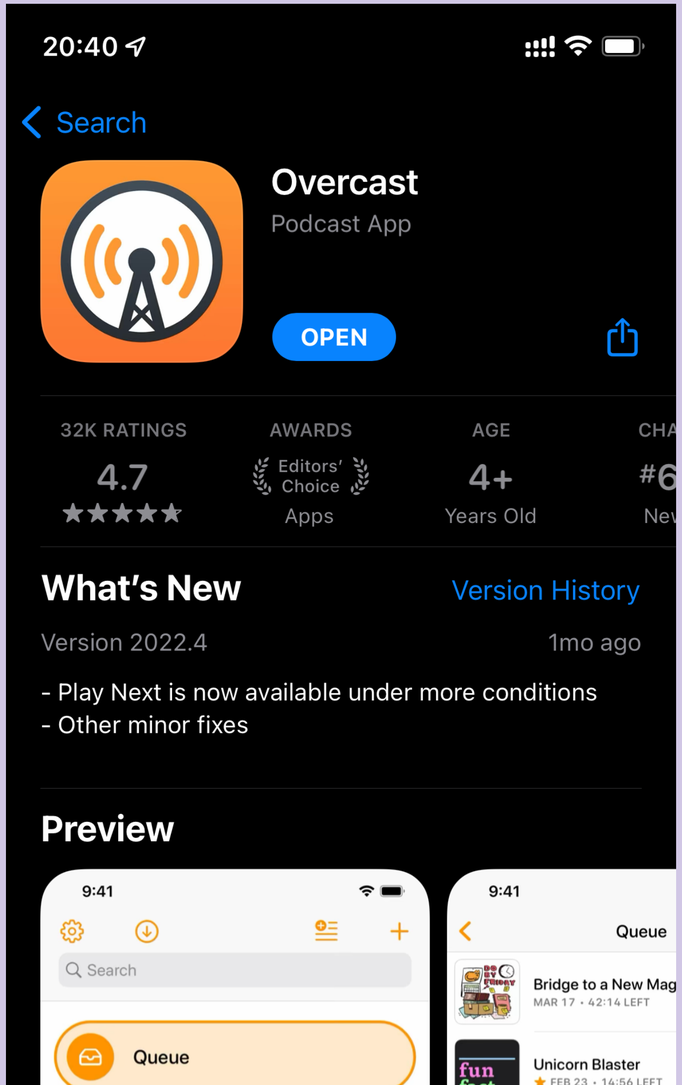


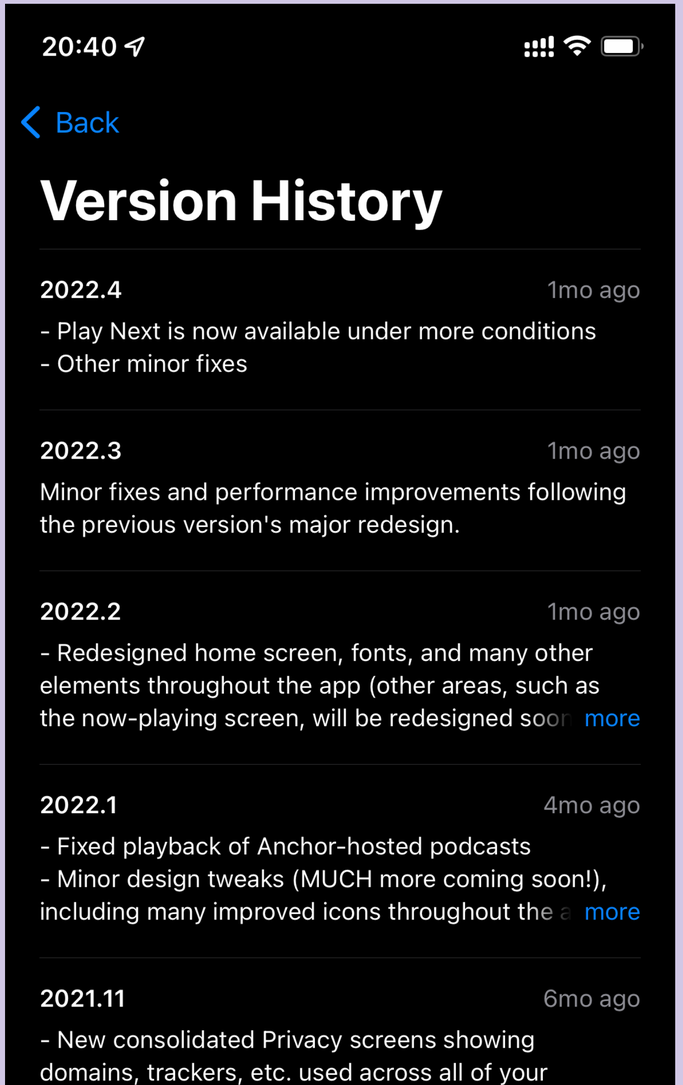




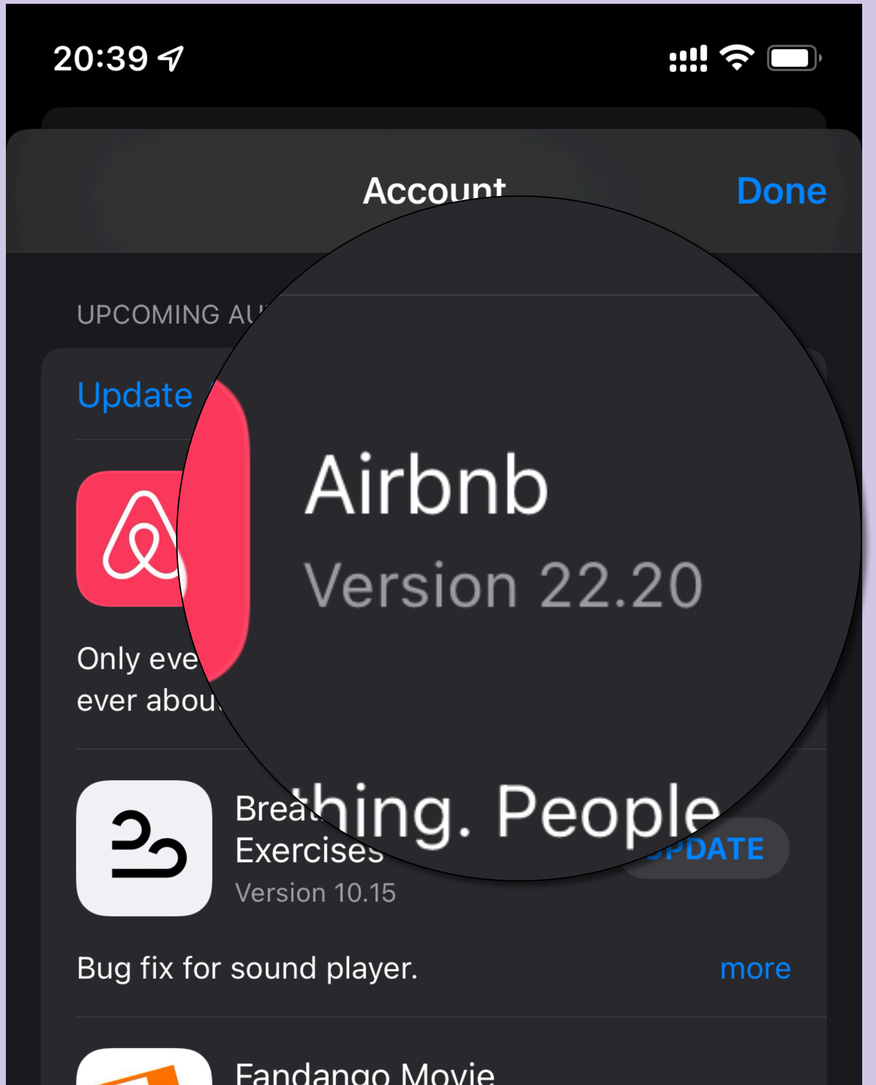
Versioning strategy

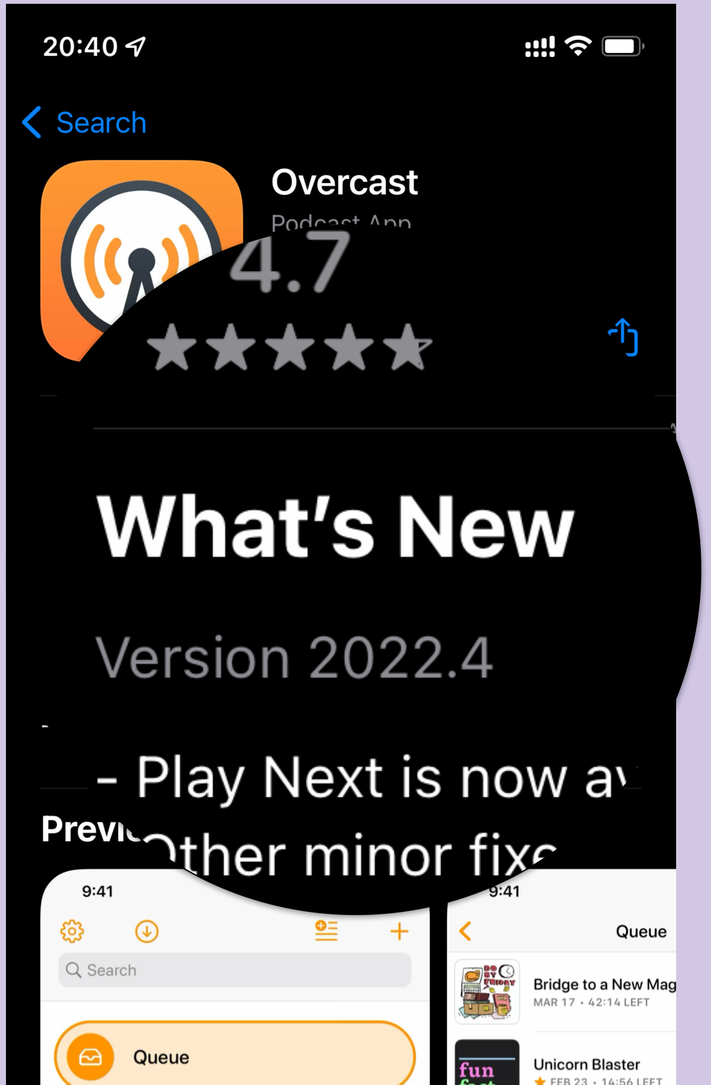


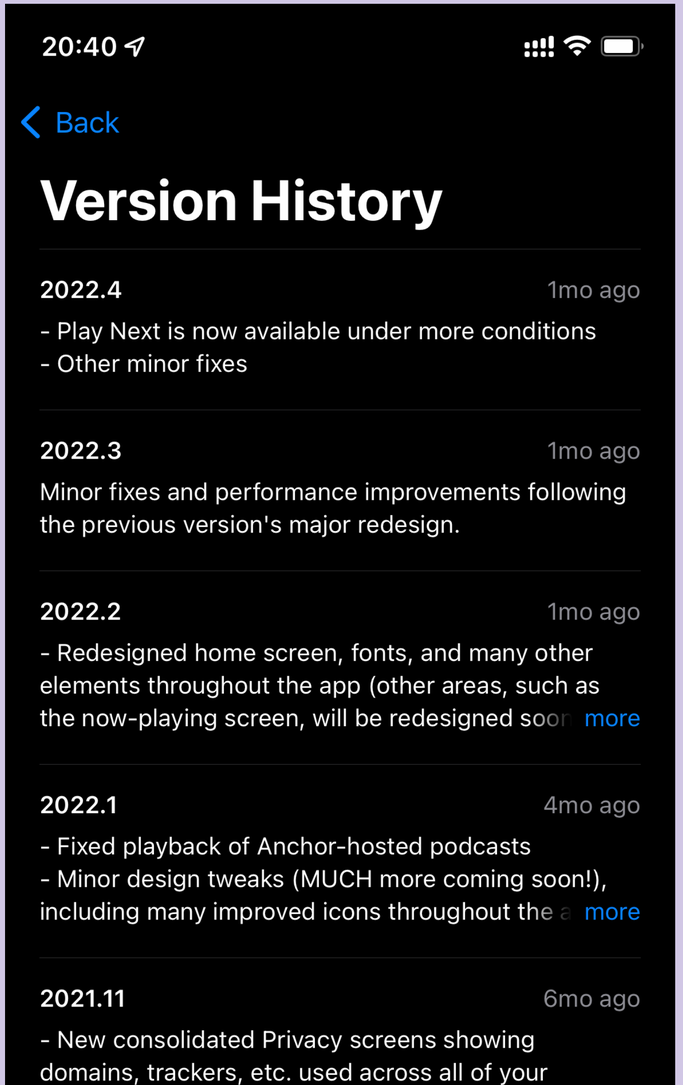




Versioning strategy



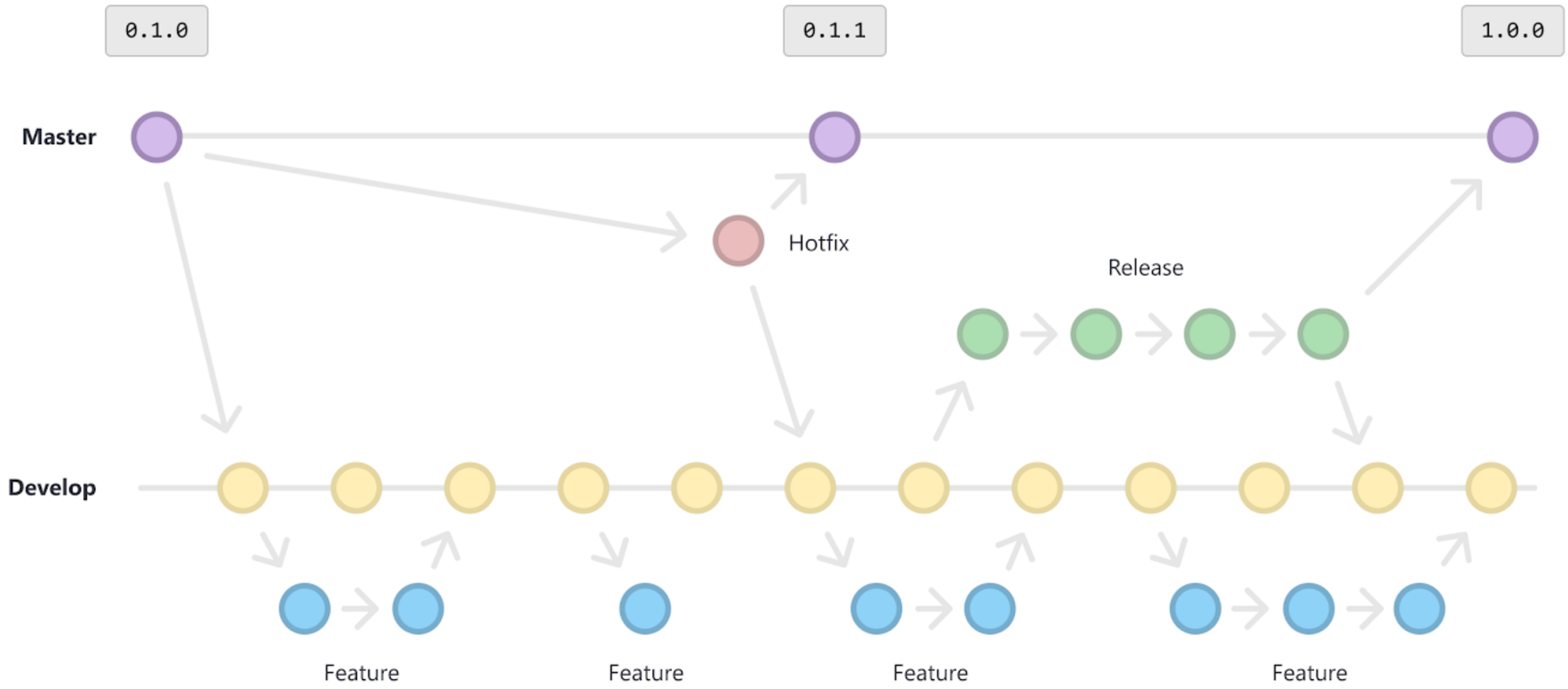




Branching strategy

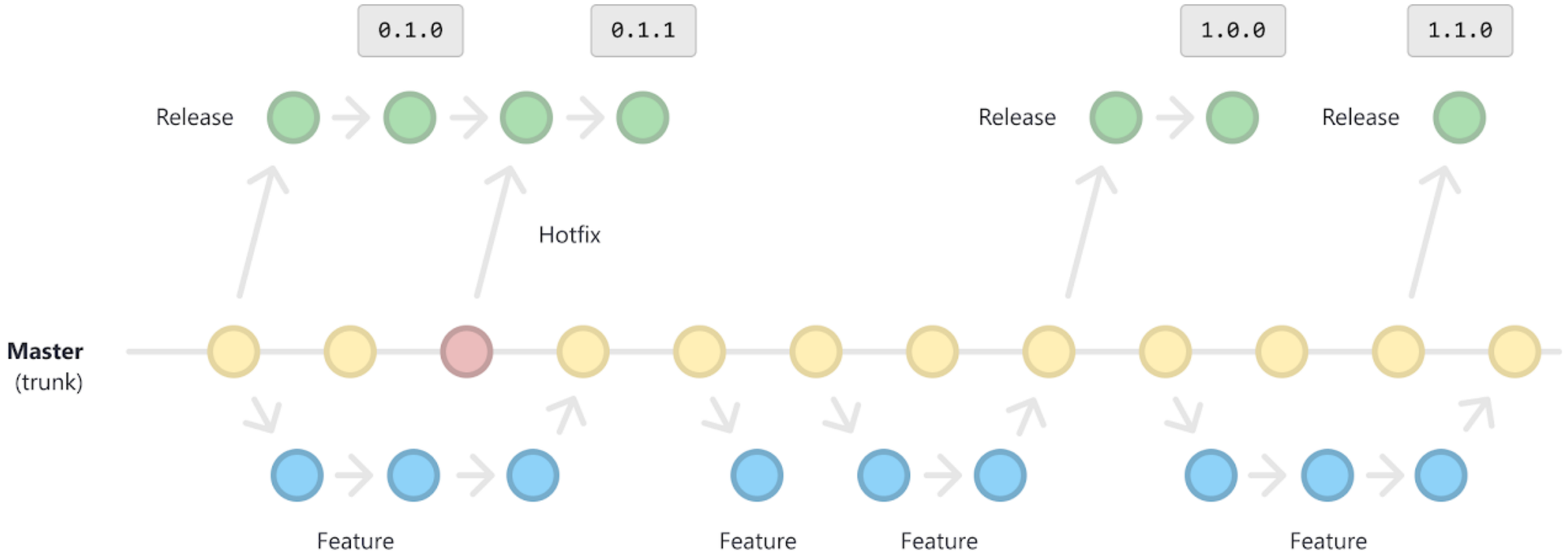
Branching strategy

GitFlow



Branching strategy

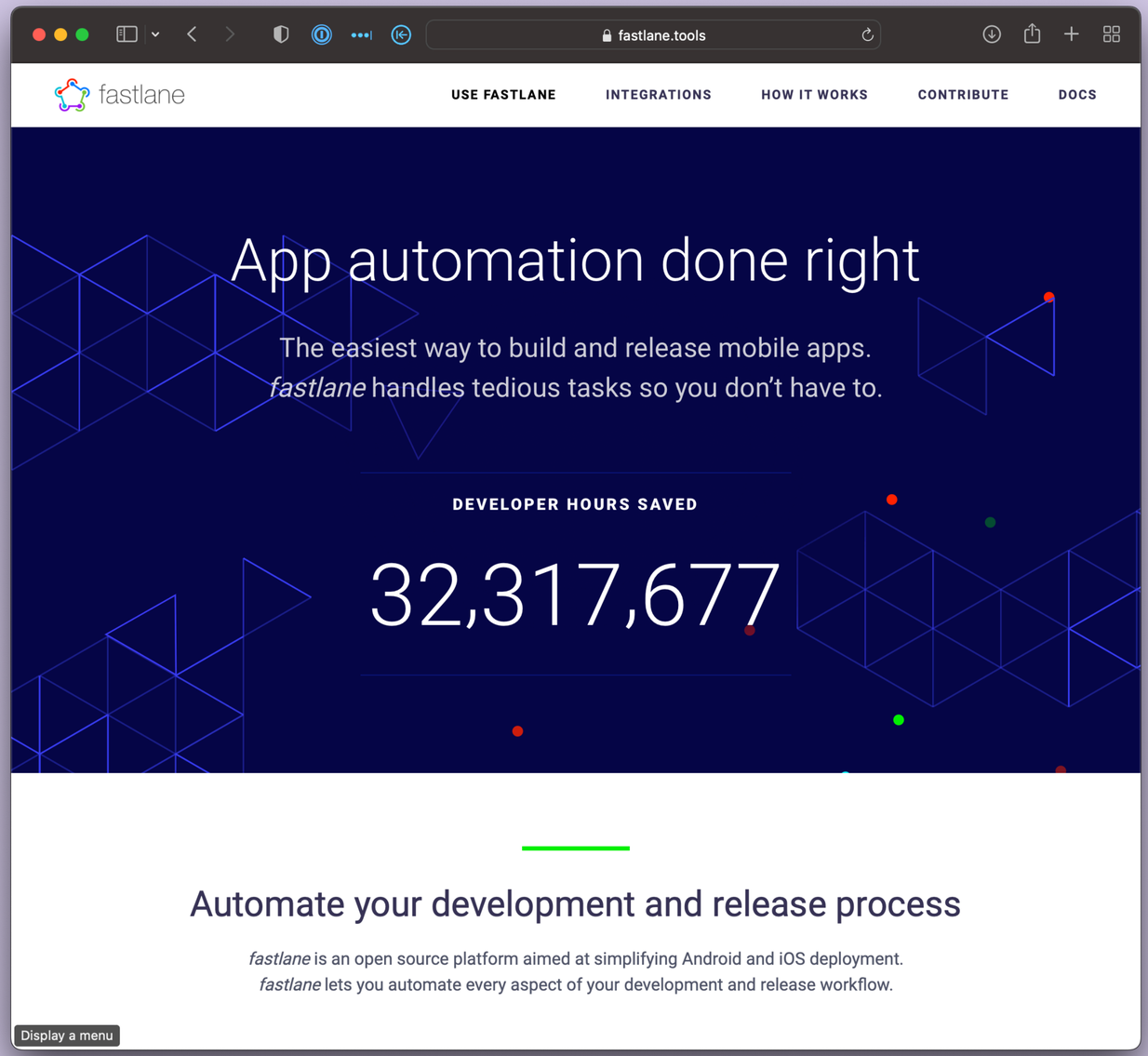
Trunk



Automate some stuff

fastlane

fastlane.tools



Introduce process as you go

Create a release checklist ✅

Create a release checklist ✅

Release Checklist

Blue text indicates an iOS specific task.
Green text indicates an Android specific task.

{platform} - {version} - {engineer name}

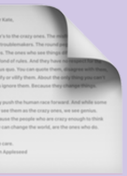
Pre-Release Checklist

- [x] ~~Ensure you have a task in your sprint with 5 story points.~~
- [ ] Pin this into **#topic-release-[ios|android]** and remove old release pins.
- [ ] Ensure you communicate in **#guild-mobile** the Release Branch creation date a couple days before you create the Release Branch. A release is great news and the entire team loves to hear about it.
- [ ] Sync with your PM if we need to update the app Description. If needed, your PM will own the English copy and translations.
- [ ] Ensure Pull Requests for your version are merged into **develop**.
- [ ] Ensure no JIRA tickets with this fix version are in Needs QA or Dev Complete
- [ ] Create the release branch using the release script.
    - [ ] Ensure version bump PR has been merged into **develop**
- [ ] Slack folks who contributed features to this release to test their feature on the RC
- [ ] Release TestFlight build for QA through AppStore Connect, this is required to test ApplePay at the moment.
    - [ ] For questions related to “Does your app use encryption?” select ‘Yes’.
    - [ ] For questions related to “Does your app qualify...” select ‘Yes’.
    - [ ] For questions related to “Have you added or...” select ‘No’.

Post-Release Checklist

- [x] ~~Update Mobile Release Planning doc with release date~~
- [ ] Send email to engineering@classpass.com and mnakano@classpass.com once we’ve rolled out to 100% with the release notes, see this template.
- [ ] Check metrics in Firebase Crashlytics for performance and adoption
- [ ] Check metrics in Firebase Crashlytics for performance and adoption
- [ ] Create tickets for crashes that have been introduced in this version and update the release channel to indicate crash free users from Firebase for the next 3 days. For example: **5.5.0 - Rolled out to 10% (98.1% crash free users)- Owner: Neil**
    - [ ] Day 1 after release
    - [ ] Day 2 after release
    - [ ] Day 3 after release
- [ ] Ensure user no-crash rate is higher than 99%
    - [ ] If user no-crash rate is lower than 99% create hotfix
    - [ ] Create JIRA tickets in the appropriate boards for any new crashes
- [ ] Inform **#guild-mobile** of the good news/bad news
- [ ] If this release is time sensitive, you can release fully after at LEAST 1 day of no crashes. If not time sensitive, coordinate with Product to determine how much longer to wait until full release.
- [ ] Updated Checklist document (this document) with possible improvements

Create a planning sheet 📄



Create a planning sheet 📄

Platform	Version	Release Manager	Code Complete	Branch Cut	Regression Testing	Target Submit	Target Release	ACTUAL Submit	ACTUAL Release	Type/Time Sensitive?	Description
iOS	7.8.0	Bassel / Jess	Fri 4/15/22	Wed 4/20/22	Wed 4/20/22	Mon 4/25/22	Tue 4/26/22	Wed 4/27/22	Mon 5/2/22		- Home SwiftUI Polish [Activation] - Native Immediate Trial Upgrade Add Credits Tab [Growth]
iOS	7.8.1	Zach						Wed 5/11/22	Thu 5/12/22		- MiniCardViewModel Crash Hotfix
Android	5.32.0	Clayton lead / Lillian Stephen supporting	Fri 4/22/22	Tue 4/26/22	Wed 4/27/22	Fri 4/29/22	Mon 5/2/22		Fri 5/6/22	Rollout paused	- Some Home Analytics [Activation]
Android	5.32.1	Stephen									- Home List Fragment Crash - App Freezes on Keyword Search when it enters an error s
iOS	7.9.0	Jorge / Lillian	Fri 5/6/22	Tue 5/10/22	Wed 5/11/22	Fri 5/13/22	Mon 5/16/22	Mon 5/16/22	Fri 5/20/22		- New Profile Screen [Activation] - Accessibility [N+1]
Android	5.33.0	Richard / Dan	Fri 5/13/22	Tue 5/17/22	Wed 5/18/22	Fri 5/20/22	Mon 5/23/22				- Some Home Analytics [Activation] - Search spot filter [N+1] - Native Immediate Trial Upgrade Add Credits Tab [Growth]
iOS	7.10.0	Luis / Lillian	Fri 5/27/22	Tue 5/31/22	Wed 6/1/22	Fri 6/3/22	Mon 6/6/22				- Post-attendance [Activation][TBD] - Cancellation flow improvements [Growth][TBD] - Search spot filter [N+1][TBD]
Android	5.34.0	Rich / Madhu lead Lillian supporting	Fri 6/3/22	Tue 6/7/22	Wed 6/8/22	Fri 6/10/22	Mon 6/13/22				- Subset of post-attendance scope [Activation] - Quickbook modal [N+1][TBD] - New Profile Screen [Activation][TBD] - Cancellation flow improvements [Growth][TBD] - Spot filter modal [N+1]
Android	5.34.1	Richard									- Android 12 [TBD]
iOS	7.11.0	Irvin / Dan	Fri 6/17/22	Tue 6/21/22	Wed 6/22/22	Fri 6/24/22	Mon 6/27/22				- New sign up flow [Growth][TBD] - Availability in Search [N+1][TBD] - Quickbook modal [N+1][TBD] - Phase 1

Run regular retrospectives 🔄

Run regular retrospectives 🔄

- Talk about your **feelings**
- Discuss **what's working** and **what isn't**
- Continuously **improve** your process
- Check out **retrospectivewiki.org** for format ideas

Release strategies

Release strategies

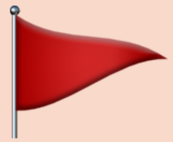
Release strategies 🚢

- **Feature** based releases ✨
    - Keep developing features, release when **ready**

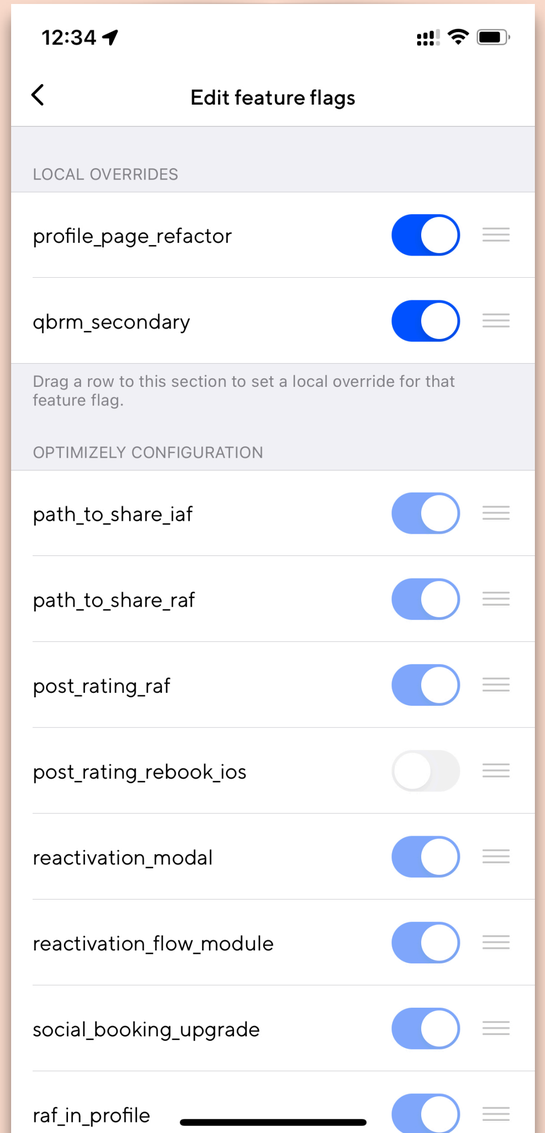
Release strategies 🚢

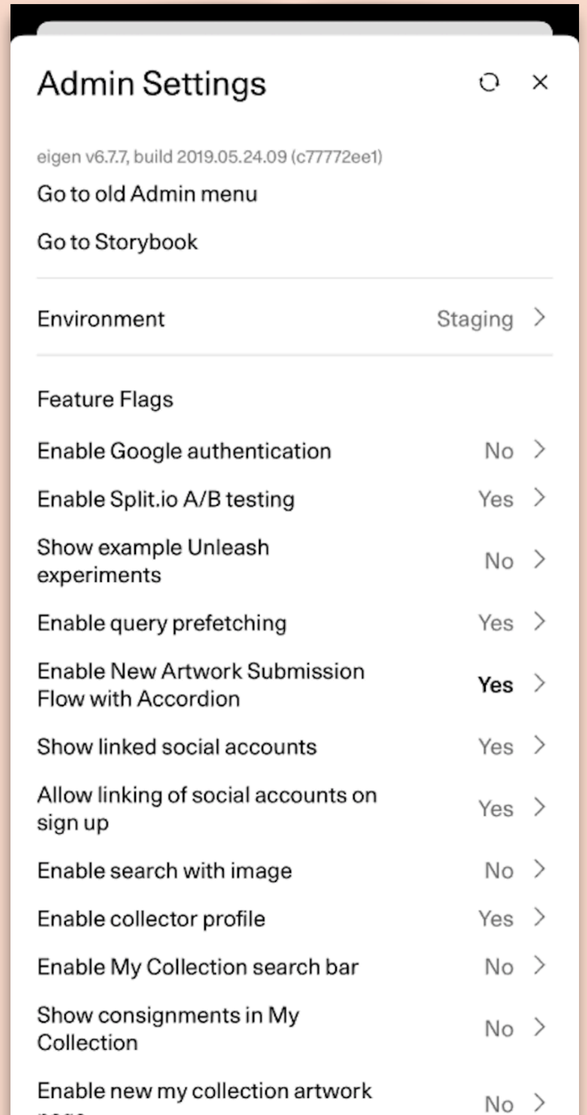
- **Feature** based releases ✨
  - Keep developing features, release when **ready**
- **Release train** 🚂
  - **Regular** release cadence
  - If feature isn’t ready in time, it misses the train and catches the next one

Tools to join the big leagues

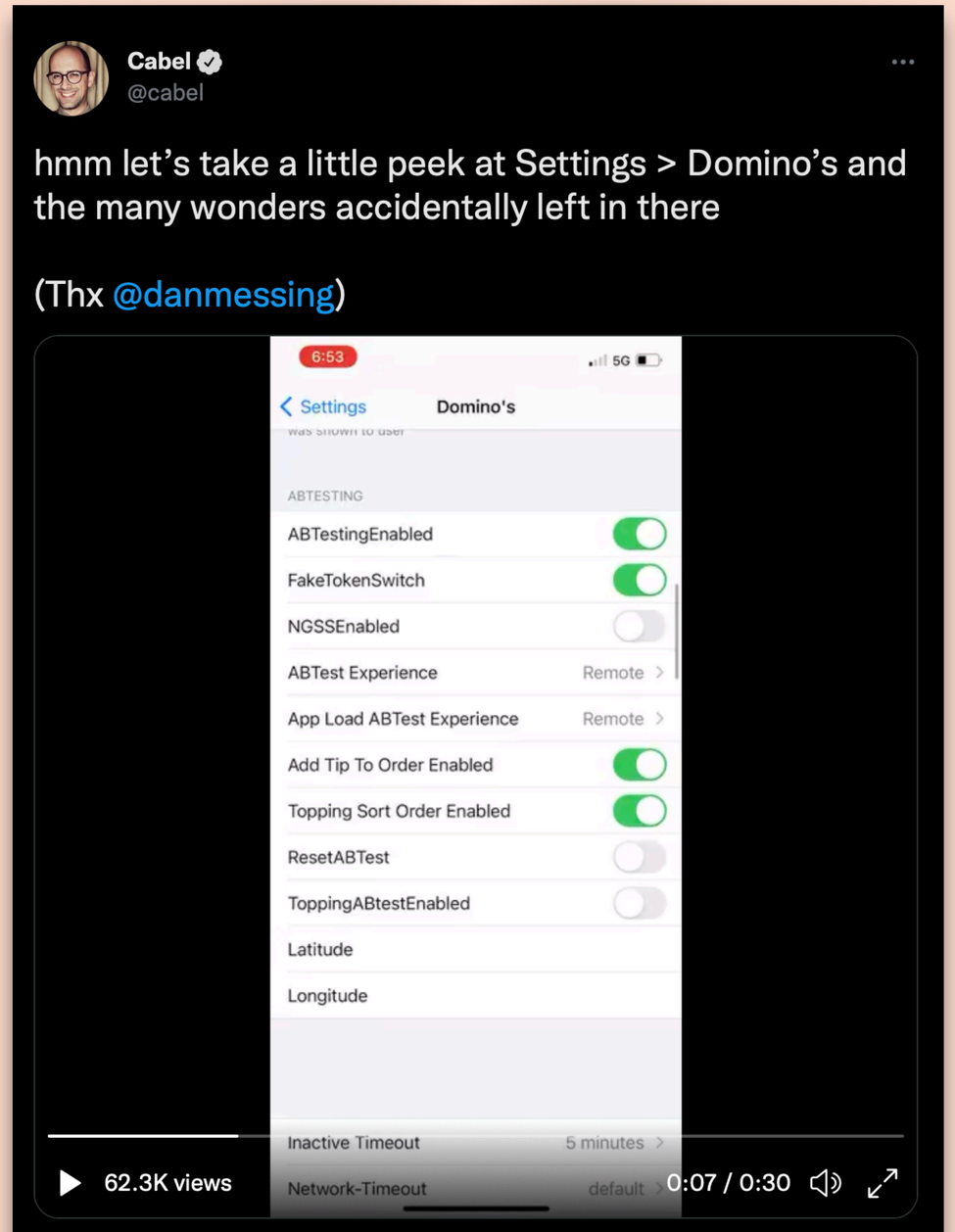
Feature flags 

Feature flags 🚩



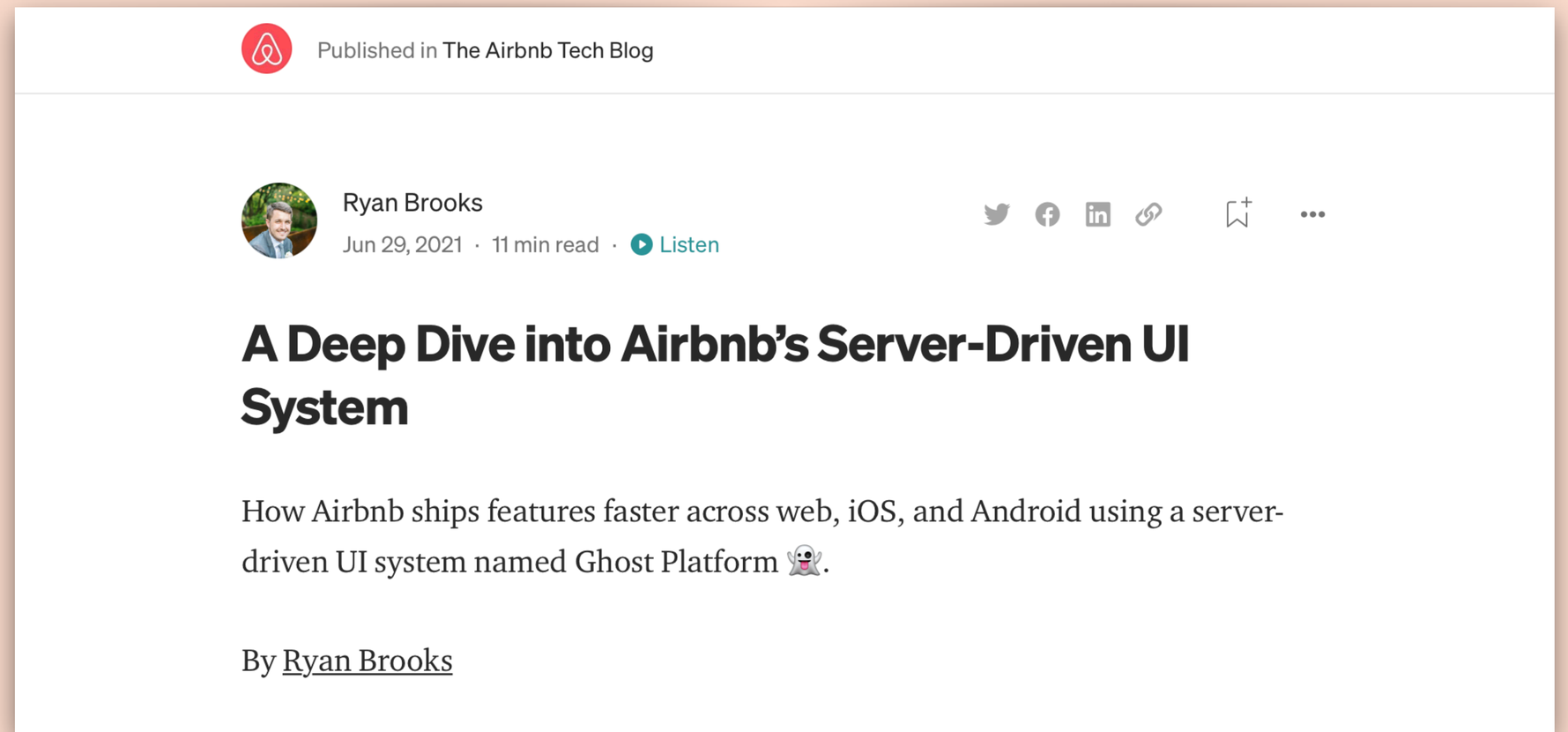


Feature flags 🚩



Server driven UI ☁️

Server driven UI



Published in The Airbnb Tech Blog

Ryan Brooks

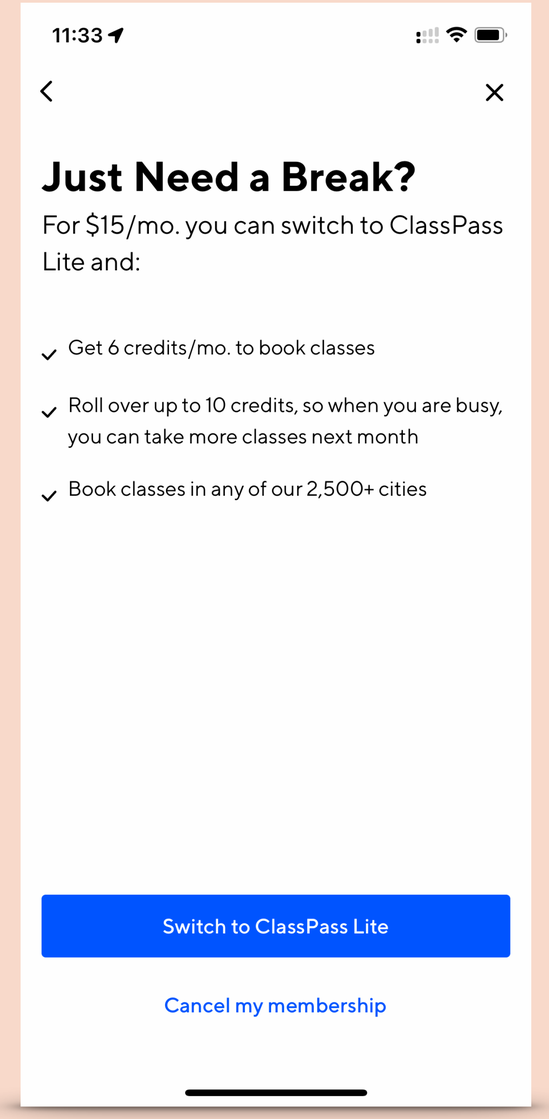
Jun 29, 2021 · 11 min read · Listen

A Deep Dive into Airbnb's Server-Driven UI System

How Airbnb ships features faster across web, iOS, and Android using a server-driven UI system named Ghost Platform 👻.

By Ryan Brooks

ClassPass cancel flow

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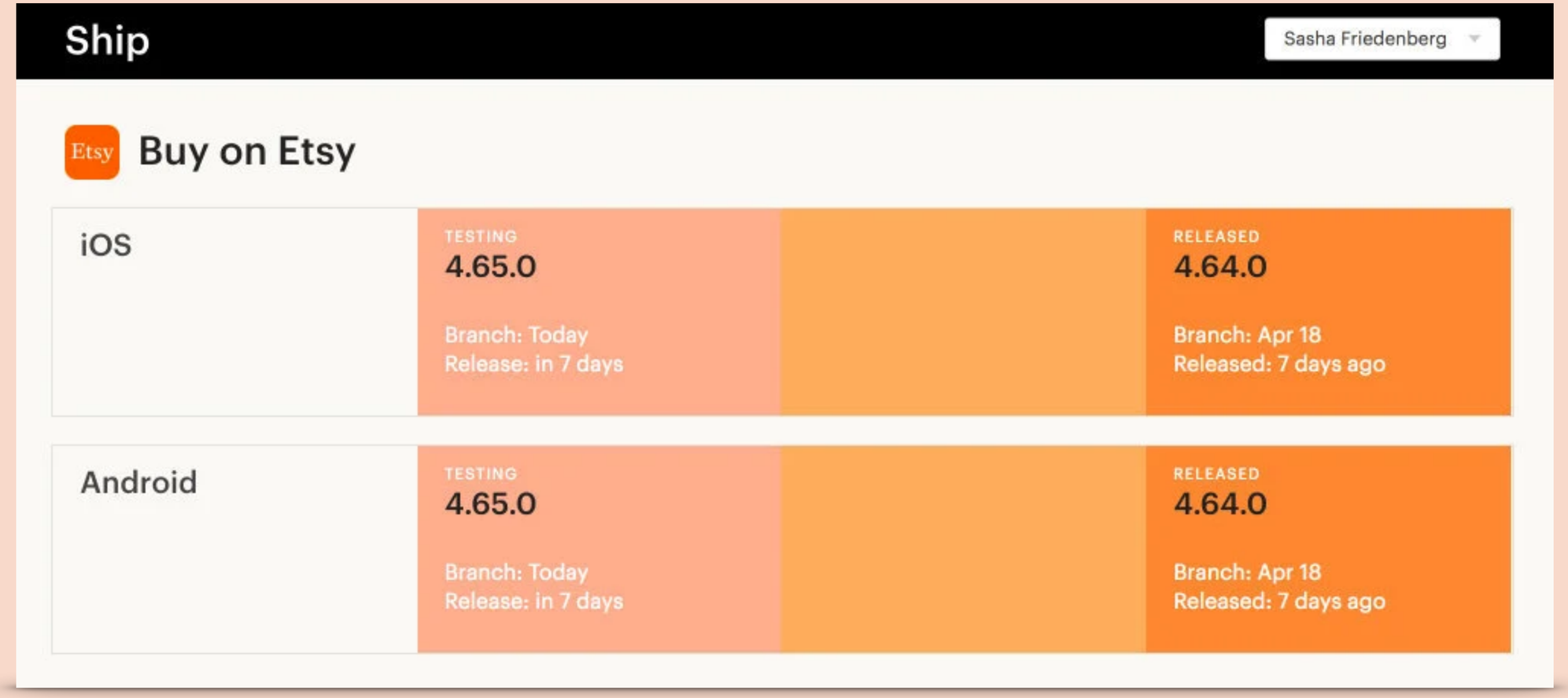
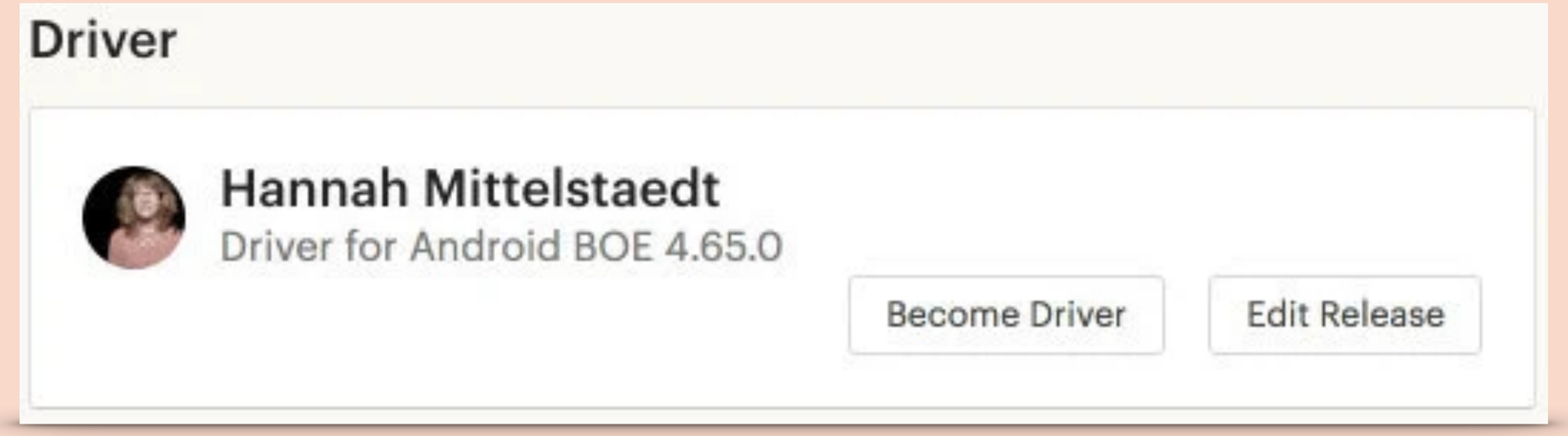
  "ctas" : [
    {
      "message" : "Switch to ClassPass Lite",
      "type" : "button",
      "step_id" : "confirm-lite-plan",
      "spacing" : "spacing-large"
    },
    {
      "message" : "Cancel my membership",
      "type" : "link",
      "step_id" : "view-membership-benefits",
      "spacing" : "spacing-regular"
    }
  ],
  "items" : [
    {
      "message" : "Get 6 credits/mo. to book classes",
      "spacing" : "spacing-regular",
      "type" : "checkmark"
    },
    {
      "message" : "Roll over up to 10 credits, so when you are busy, you can take more classes next month",
      "spacing" : "spacing-regular",
      "type" : "checkmark"
    },
    {
      "message" : "Book classes in any of our 2,500+ cities",
      "spacing" : "spacing-regular",
      "type" : "checkmark"
    }
  ],
  "header" : "Just Need a Break?",
  "step_id" : "offer-lite-plan"
}
```

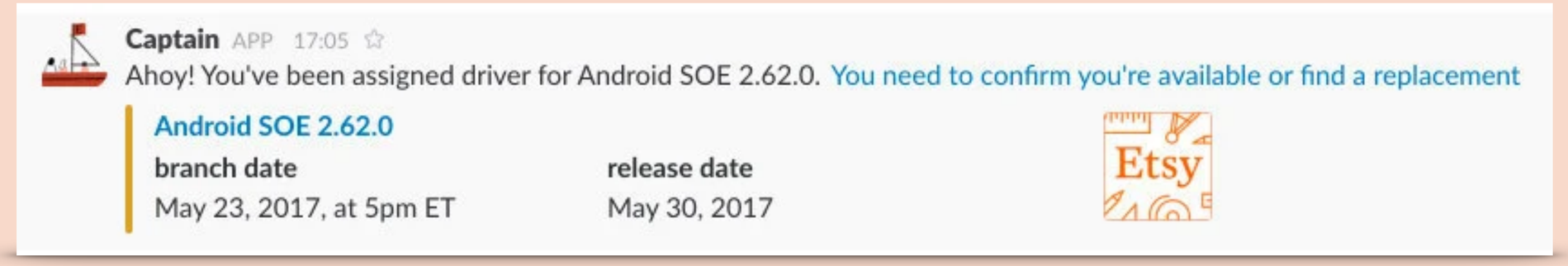
Build an internal tool

Build an internal tool



Build an internal tool

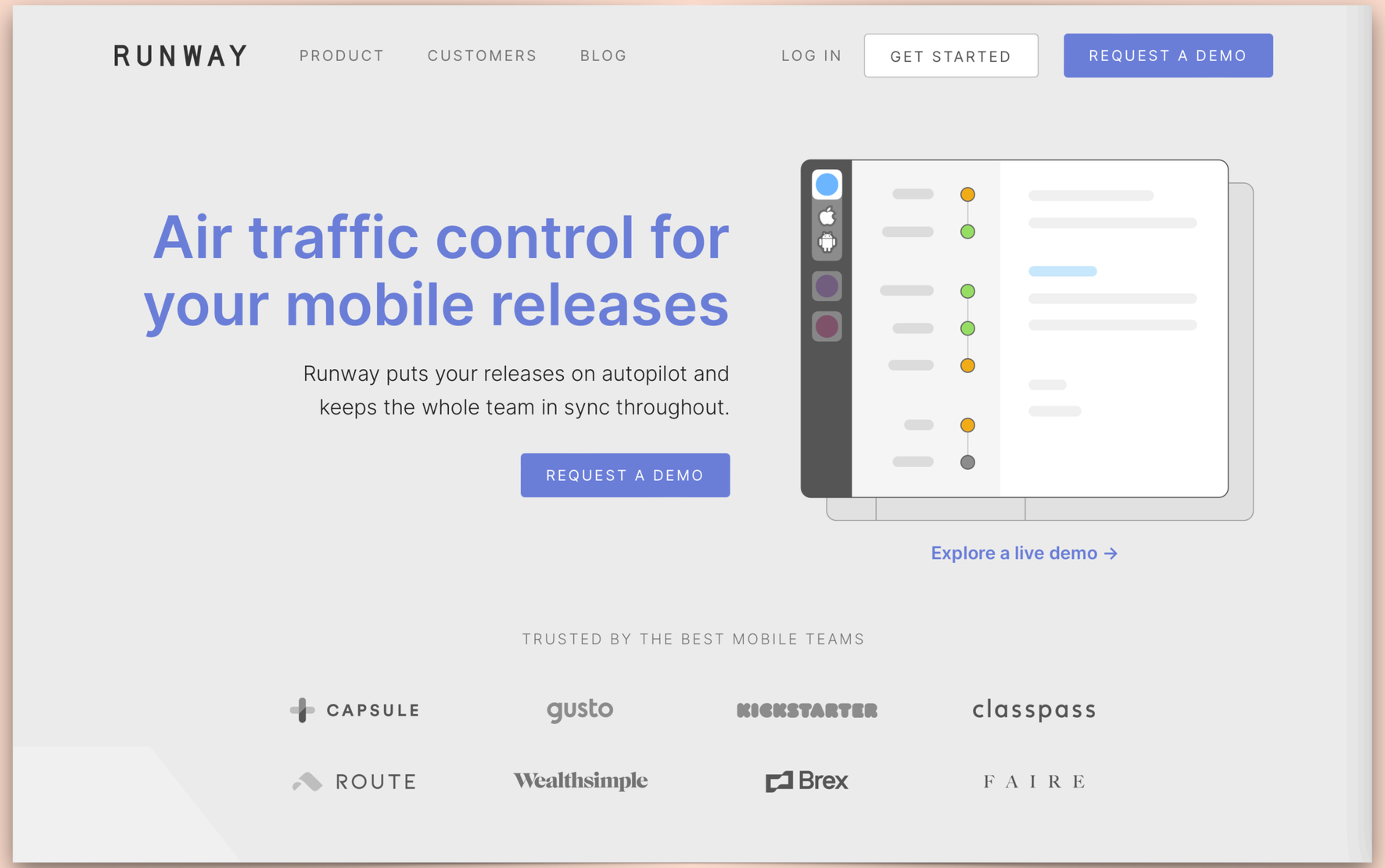




Buy a tool

Buy a tool

runway.team



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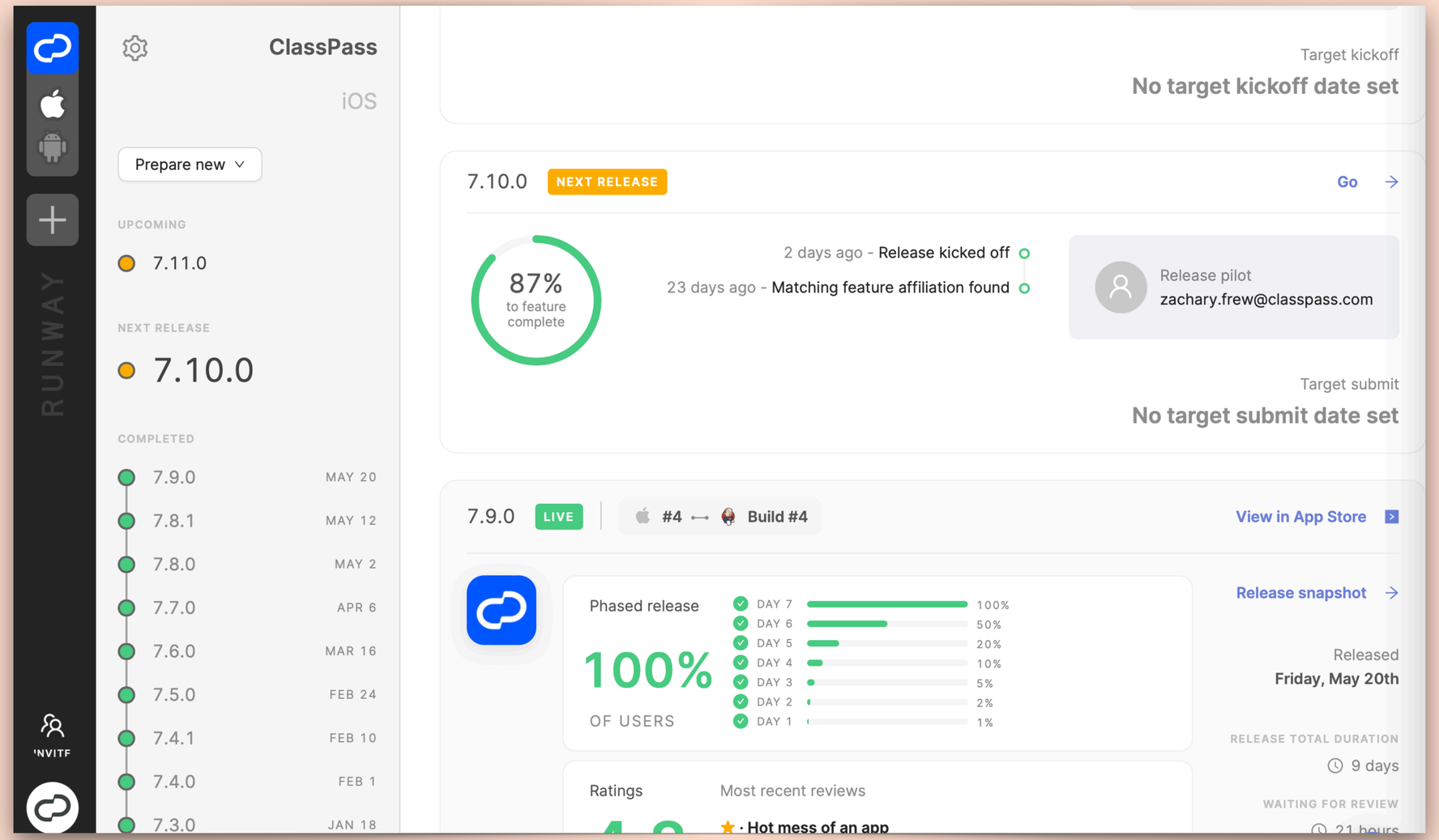

Buy a tool

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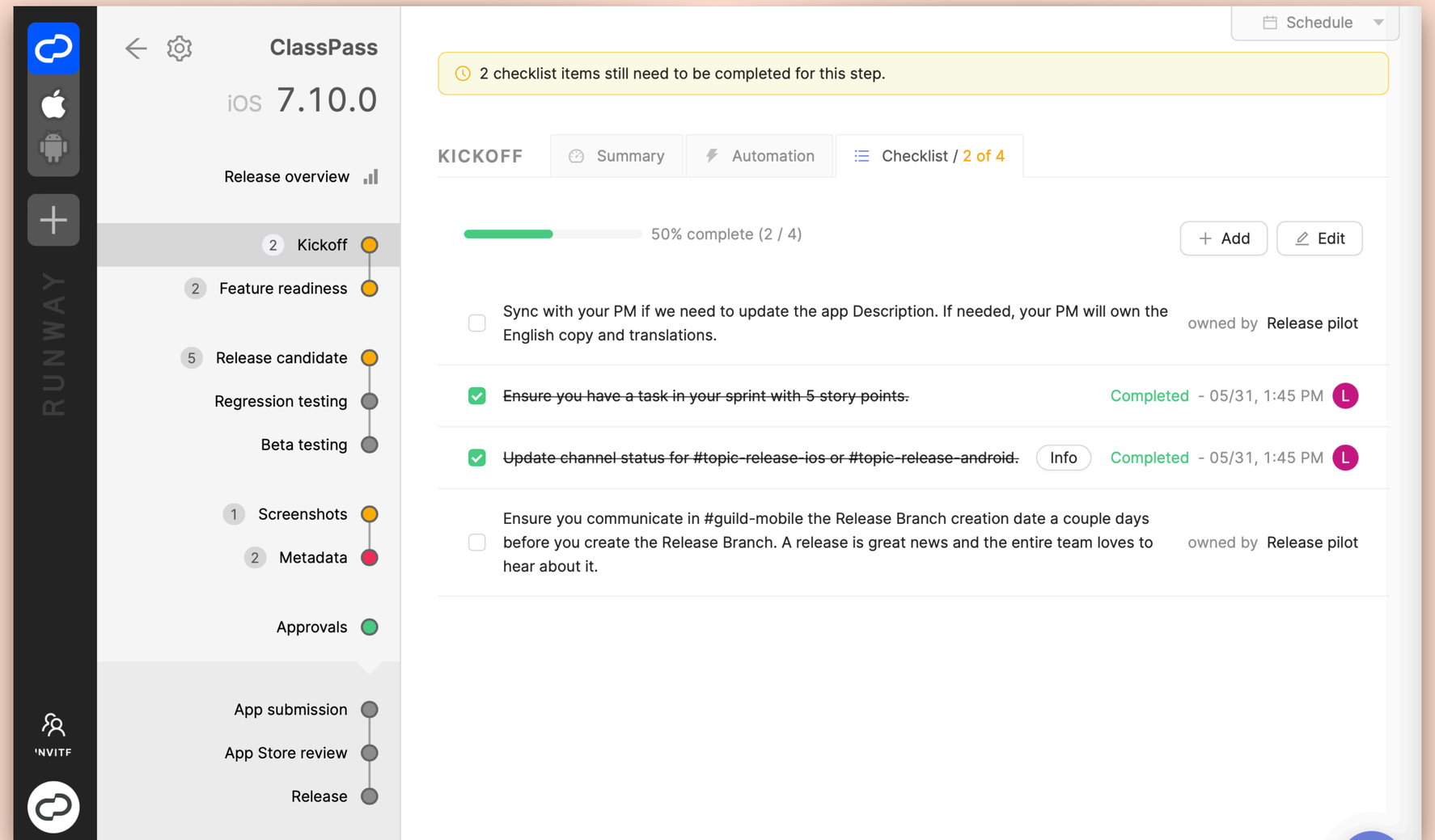

Start small

Introduce process **as you go**

Add tooling **where needed**