

[Closed Beta] Flutter News Toolkit

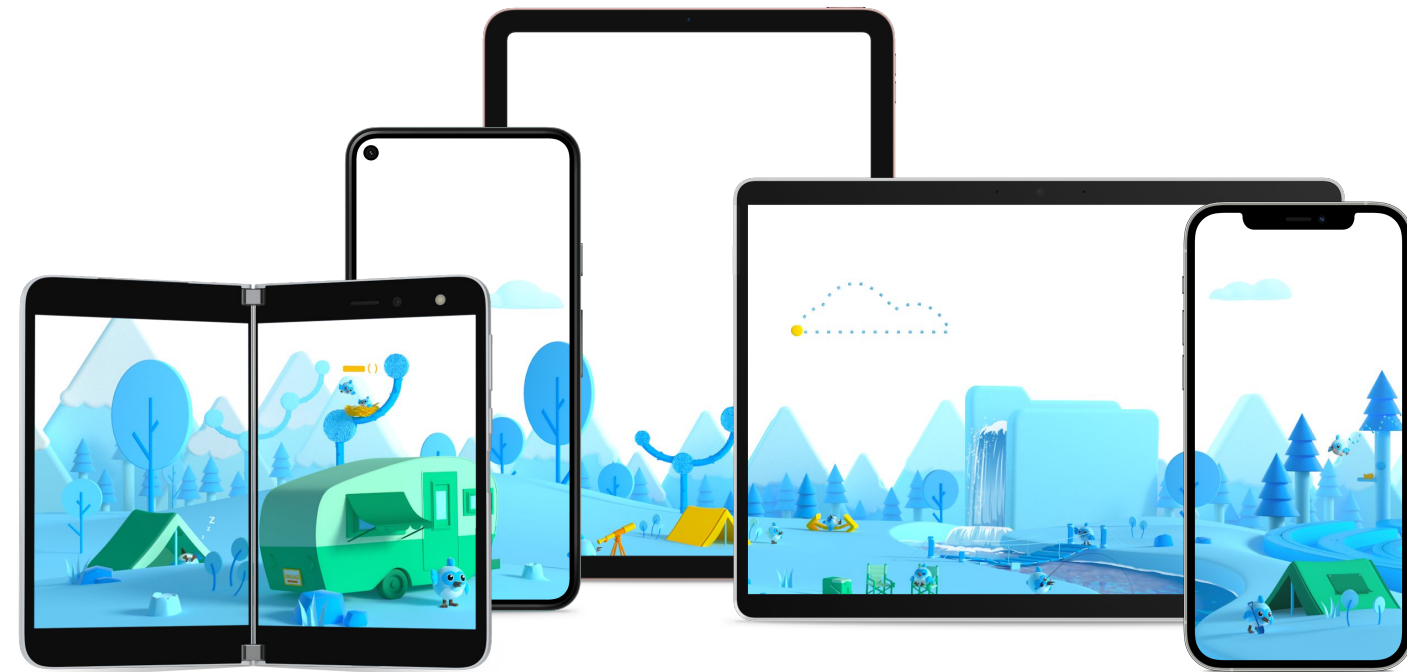
Oct 27th 2022 Publisher Webinar
@zoeyfan, @jenmargono

Agenda

Proprietary + Confidential

- Flutter basics
- Flutter partner showcase
- Flutter integration with other Google products
- **Flutter News Toolkit**
- **How to apply for closed beta**

What is Flutter?



Flutter is Google's portable
UI toolkit for building beautiful
multi-platform applications

Application Design Advantages

~~Where do you want your app to run?~~

What do you want to build?

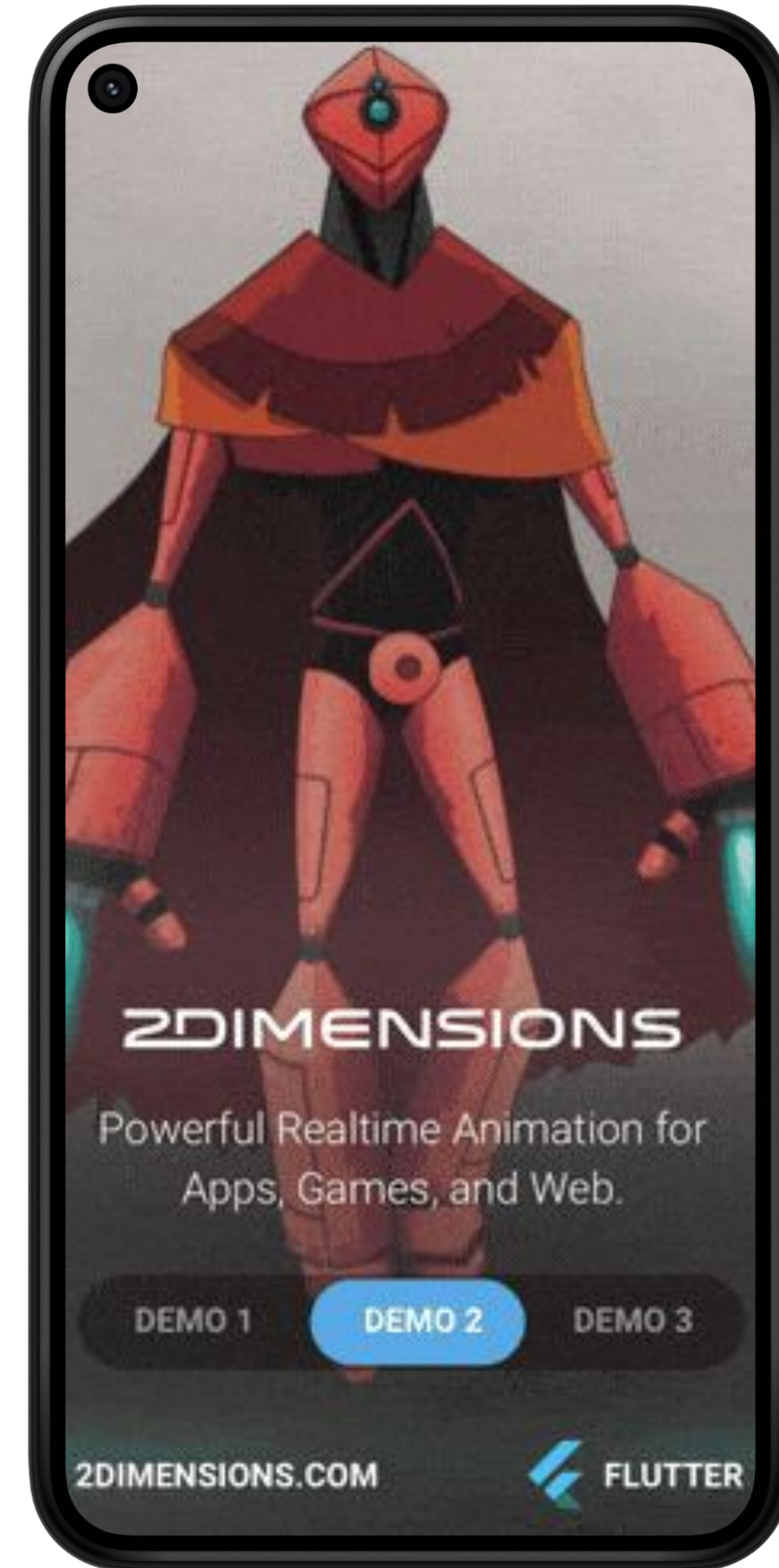
Flutter's 5 Foundational Pillars

At its core, Flutter is built to be:



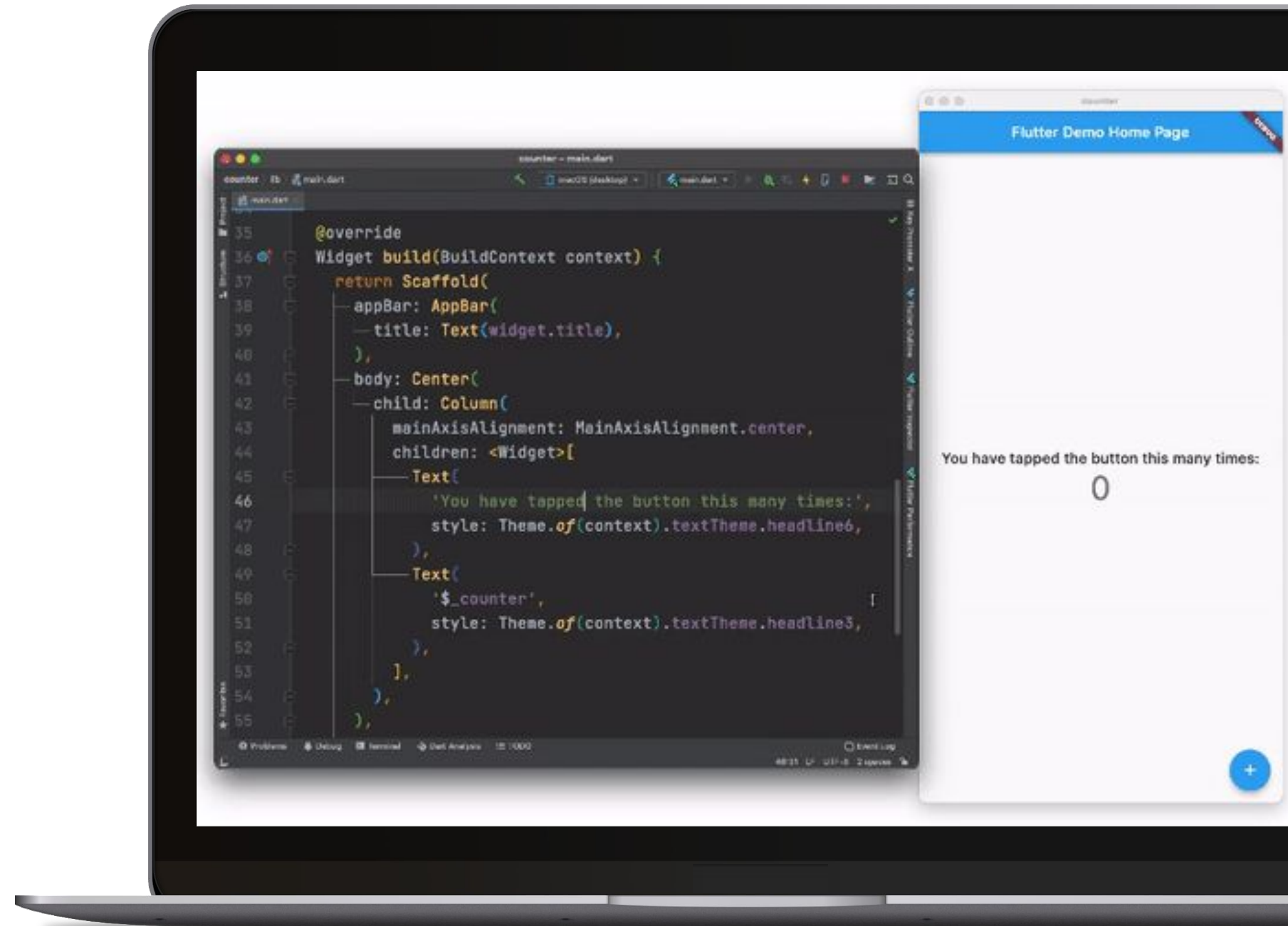
Fast

Take the speed
limiter off your app



Productive

Develop while your
app is running



Beautiful

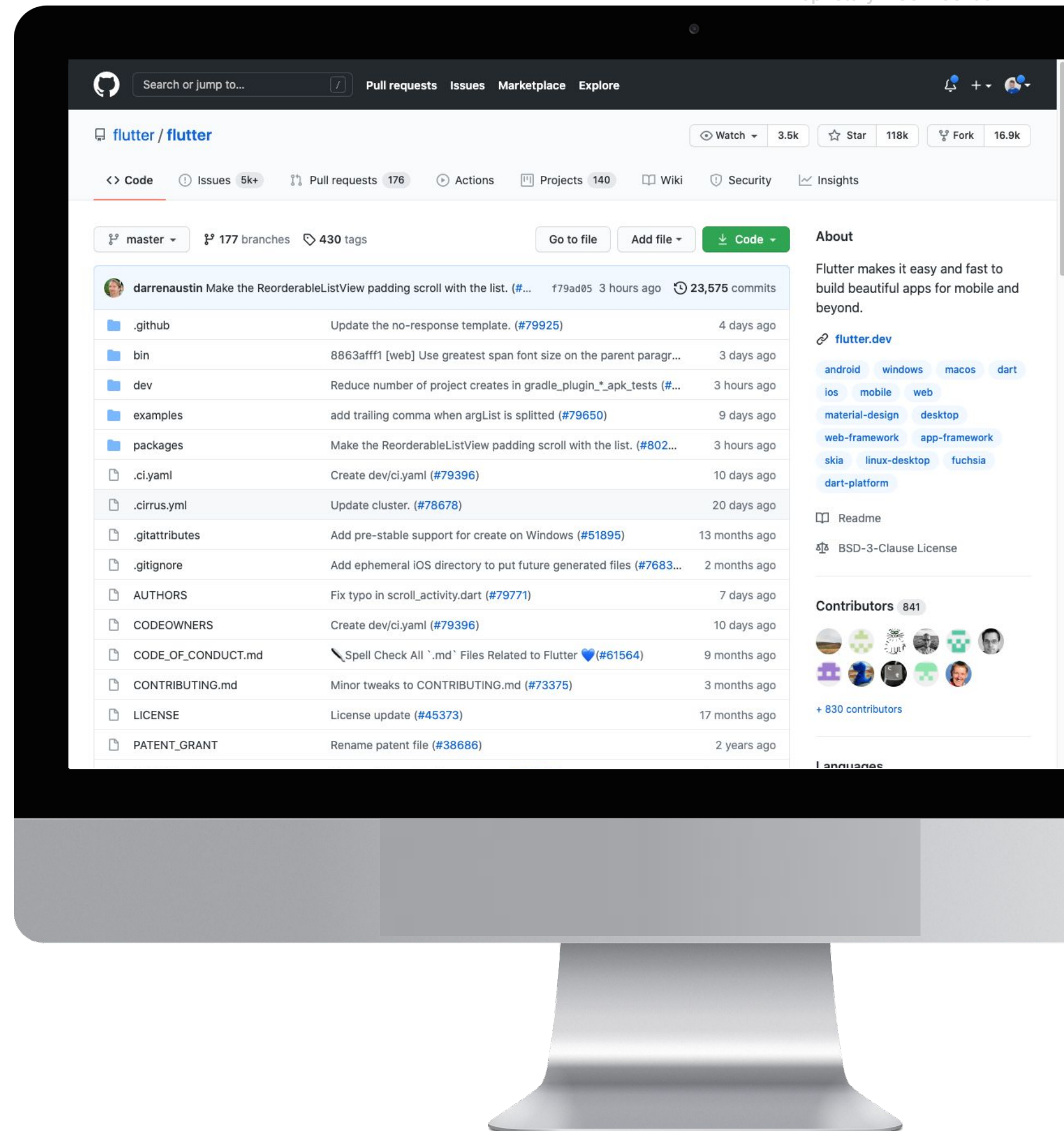
No compromises
for your designers



Open

Everything is free
and open source

Proprietary + Confidential



Portable

Same code,
runs everywhere



Mobile



Web



Desktop



Embedded

Flutter supports



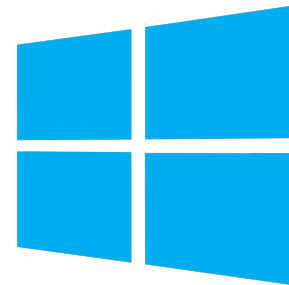
iOS
(stable)



Android
(stable)



Web
(stable)



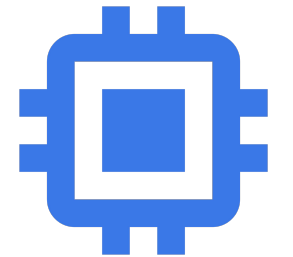
Windows
(stable)



Mac OS
(stable)



Linux
(stable)



Embedded
(Early stage)

from a single codebase



Dart is the secret sauce behind Flutter

Portable

Native performance:
Compile to machine code
or optimized JS

Extensive, consistent
multi-platform libraries

Productive

Stateful hot reload for
iterative development

Memory-isolated
concurrency

Robust

Sound, null-safe runtime
type system

Google-class scalability &
dependability

Flutter has strong market momentum

Users: Over 3 million active developers

GitHub Popularity: One of the [top 10](#) repos with [>139k stars](#)

Ecosystem: 23K+ packages

LinkedIn: [“Fastest growing skill among software engineers”](#)

StackOverflow Popularity: Voted in top [3](#) most loved frameworks globally

Proprietary + Confidential

ADT MAG
APPLICATION DEVELOPMENT TRENDS

AGILE ARCHITECT AI
CLOUD DATA
ENTERPRISE IOT
LOW CODE MOBILE
SECURITY WEB DE

LinkedIn Data Says Flutter Is Fastest-Growing Skill Among Software Engineers
By David Ramel • 03/29/2019

Flutter doubles down on 'write once, run anywhere' apps w/ web, desktop, more
Kyle Bradshaw - May 7th 2019 1:30 pm PT @SkyfiedDev

Google Dart tops GitHub's list of fastest growing languages in 2019
Published on November 11, 2019

Google's Flutter framework spreads its wings and goes multi-platform
Frederic Lardinois @frederic / 1:30 pm PDT • May 7, 2019

Programming languages: Python overtakes Java on GitHub as Google Dart use soars

FAST COMPANY

CO.DESIGN TECH WORK LIFE CREATIVITY IMPACT PODCASTS VIDEO NEWS RECOMMENDER SUBSCRIBE FASTCO WORKS

12-19-19 | 7:00 AM

The 14 most important design ideas of the decade, according to the experts
Designers and curators from Apple, Adobe, Pentagram, Wolff Olins, Cooper Hewitt, and more consider their industry's legacy in the 2010s.

FLUTTER/ DART

[Source Image: Google]

Distributing work in the world of computational art and design has been, on the one hand, facilitated by the web but also reset by the smartphone revolution. While in the beginnings of the public internet we were fighting just the browser wars, we now need to maintain code across multiple browsers and natively on iOS and Android, to start. [Flutter/Dart](#) points to one of the emerging ways by which we can design computational experiences that deploy to all platforms at once—this has the potential to not only save time, but it can ultimately free up our energies to get to the next level of design in the computational era. — John Maeda, chief experience officer, Publicis Sapient

www.fastcompany.com/90442092/the-14-most-important-design-ideas-decade-according-to-the-experts

> 3,000,000 developers in Flutter community

over 500,000 Flutter apps



Over 30 teams at Google use Flutter



Google AdMob



Google Shopping



Google Ads



Nest Hub

Google One



Cloud Search



Google Classroom



Google Analytics



Family Link

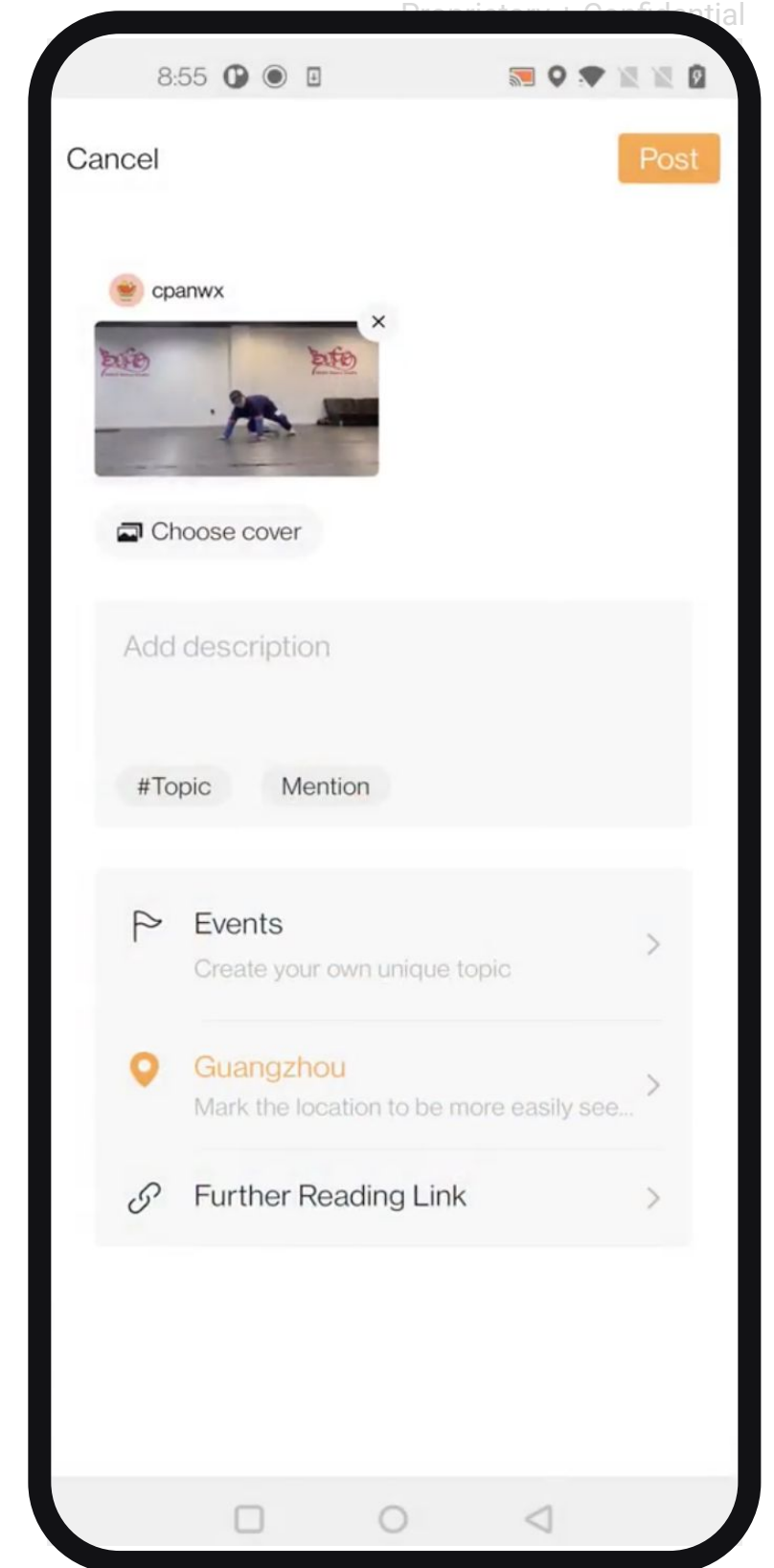
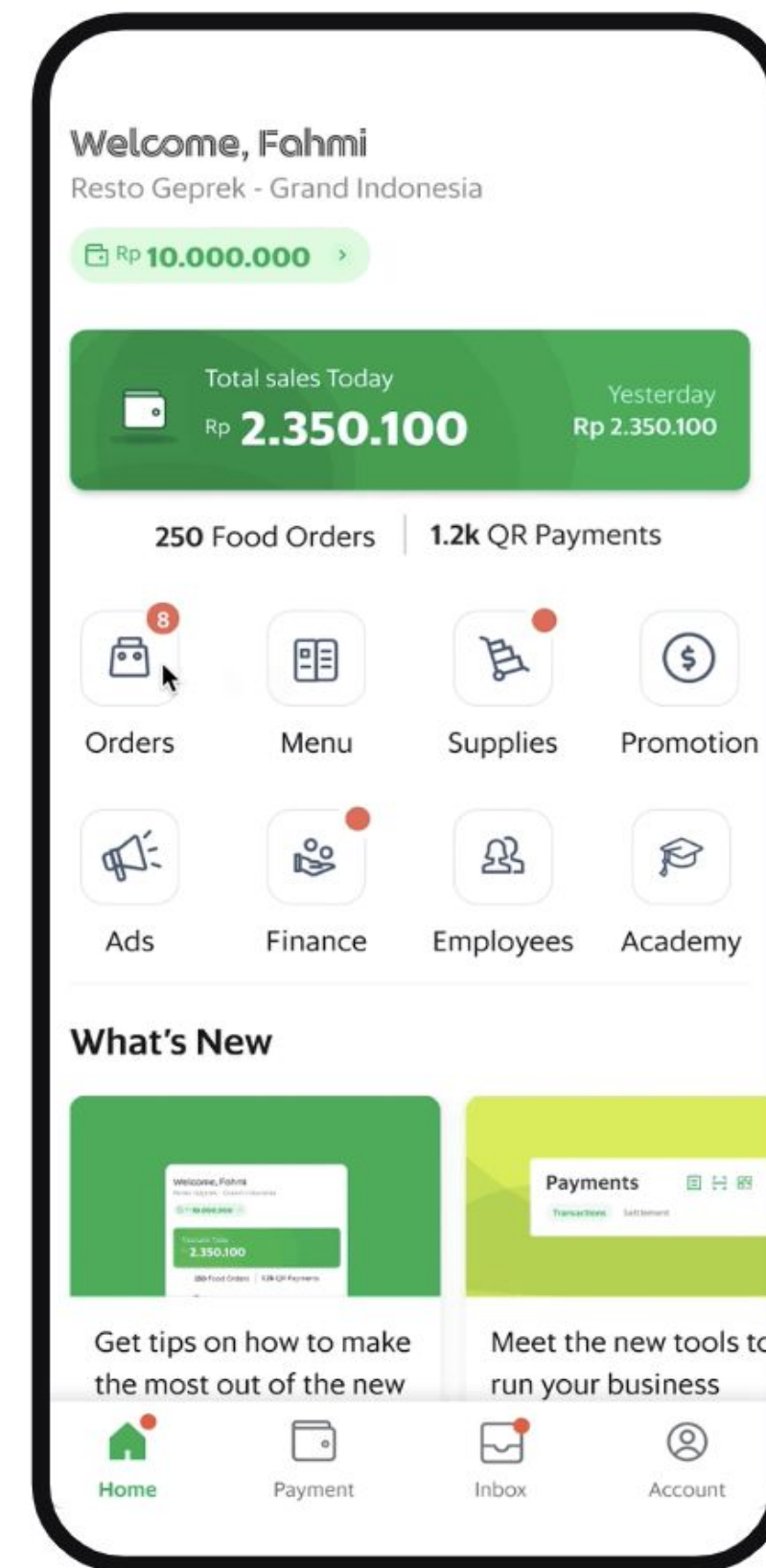
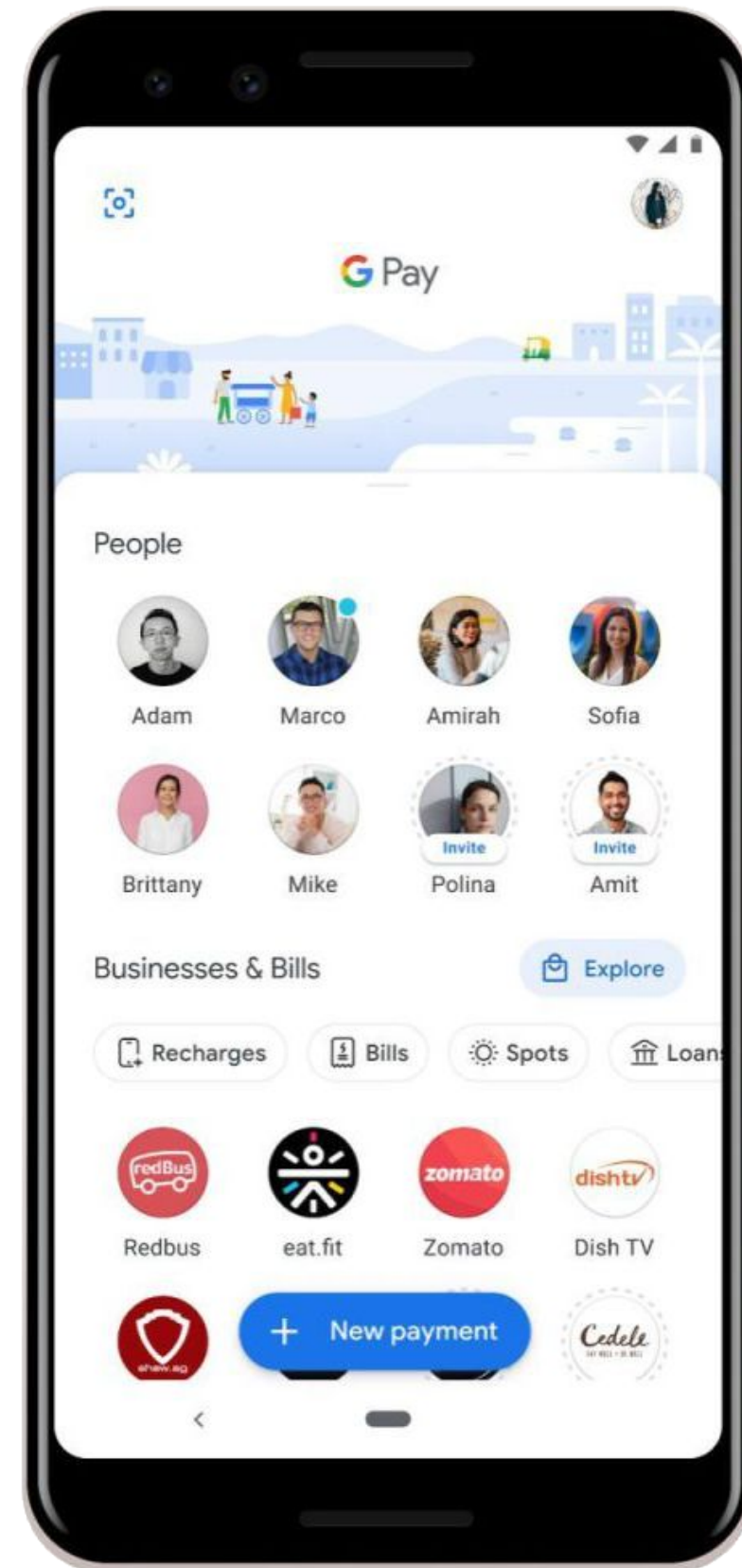
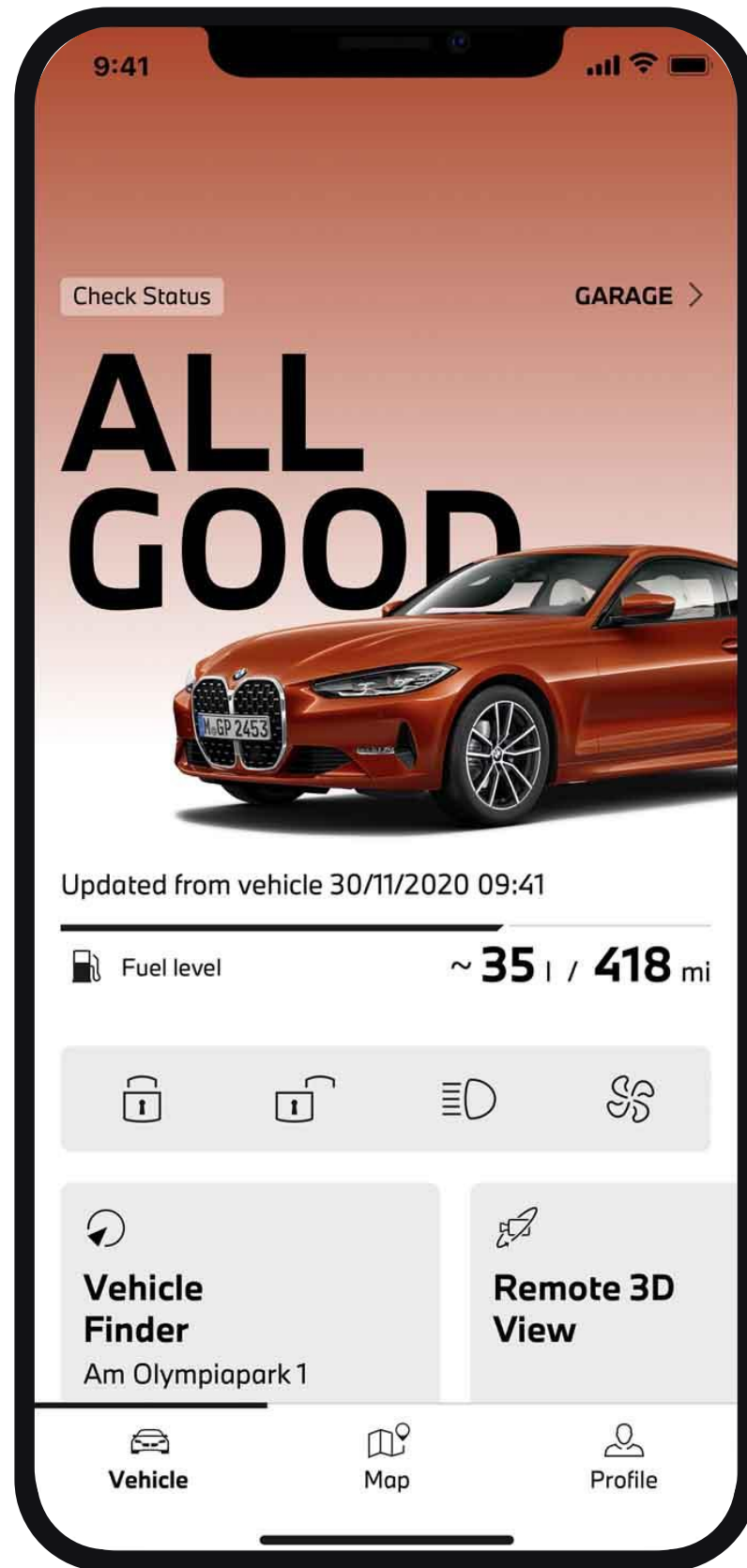


Blogger



Local Services

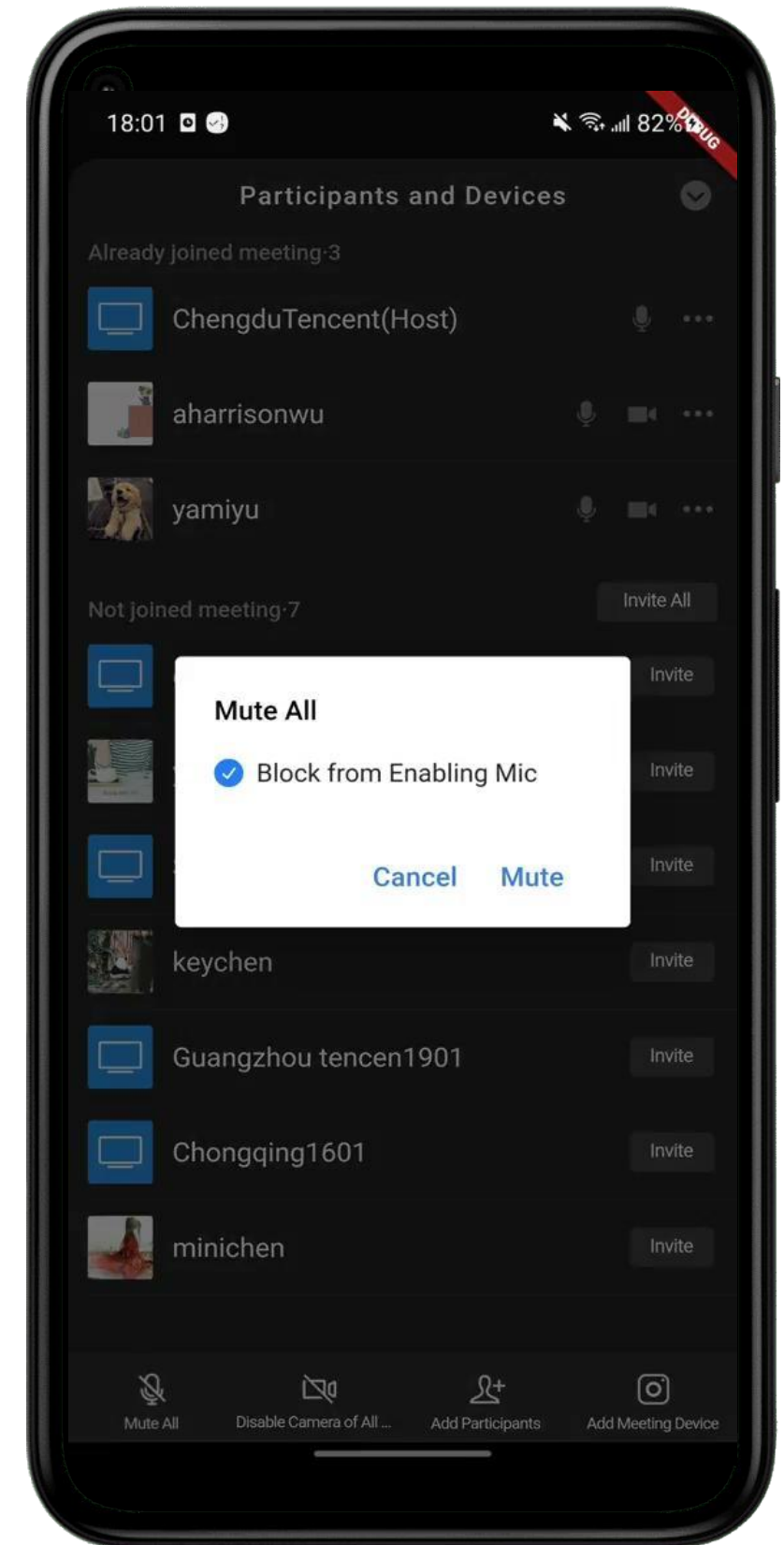
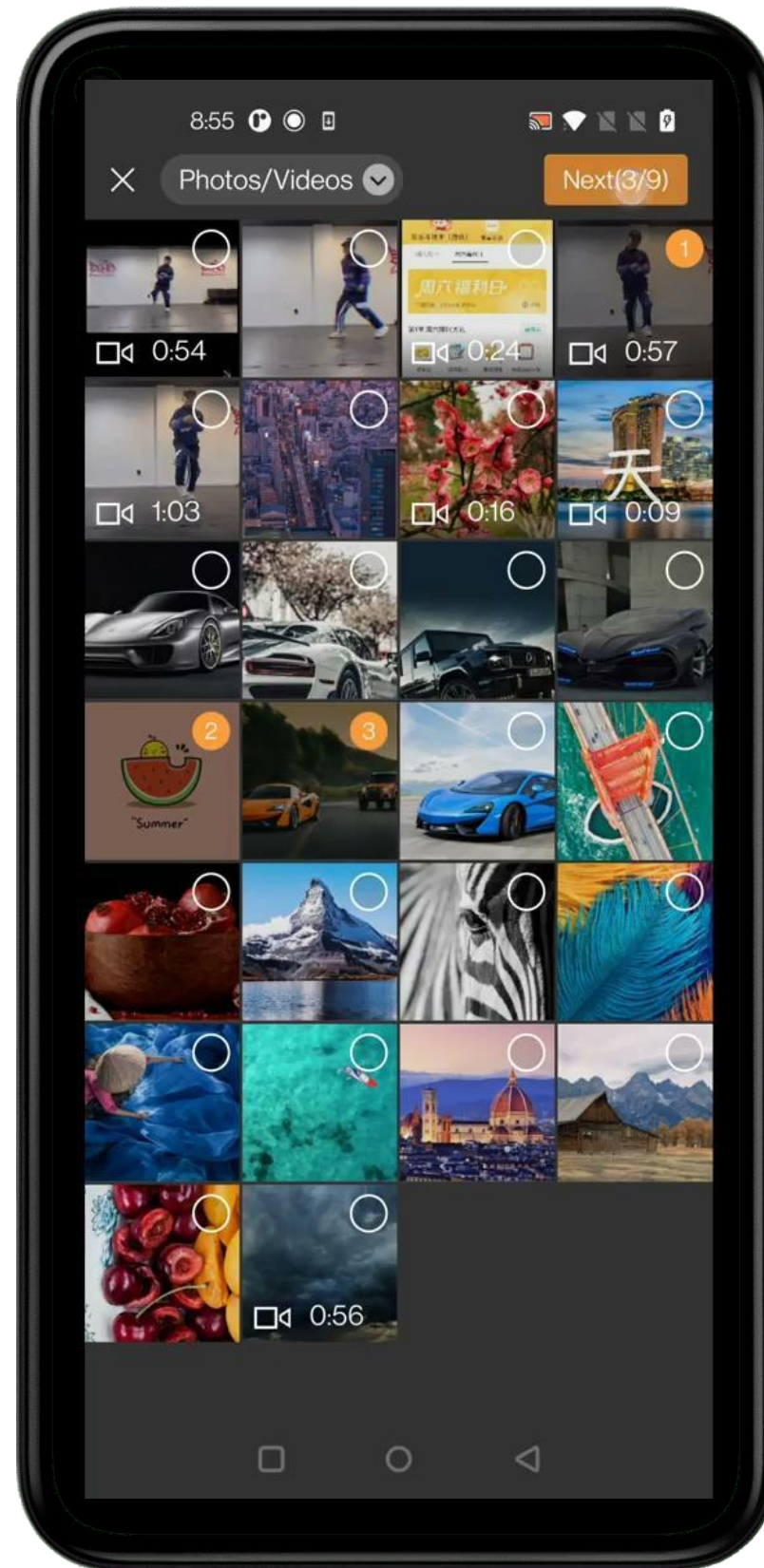
Partner Case Studies



BMW, Google Pay, Grab, and WeChat all use Flutter



**Wechat uses hybrid
development:
add Flutter modules to
existing apps**



Bytedance shipped > 90 apps in Flutter



- 33% increase in productivity
- 5% reduction in package size



More Developer Stories

<https://flutter.dev/showcase>

<https://flutter.dev/showcase/nubank>

<https://verygood.ventures/success-stories/new-york-times>

<https://flutter.dev/showcase/bytedance>

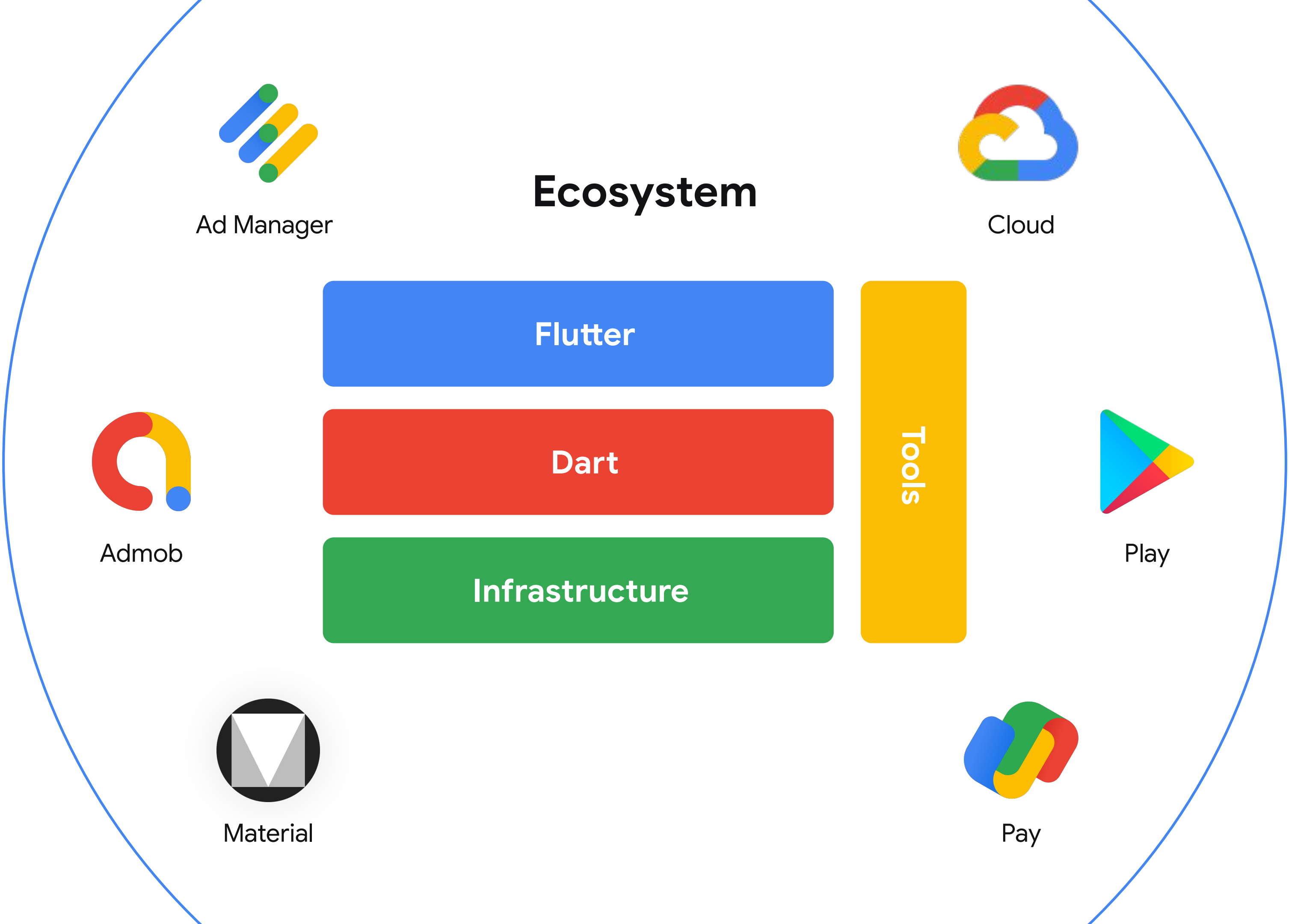
<https://docs.flutter.dev/clock>

<https://flutter.gskinner.com/flokk/>

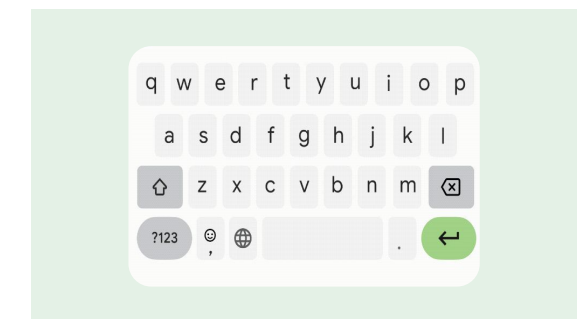
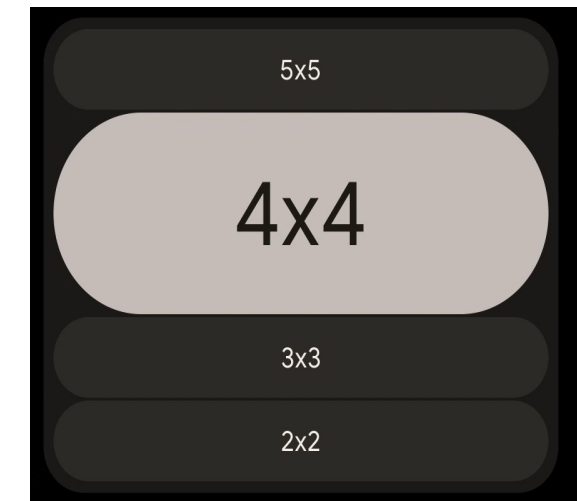
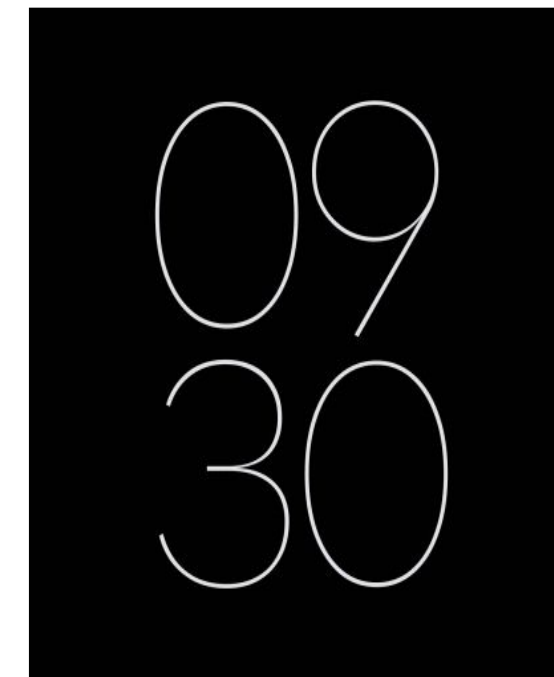
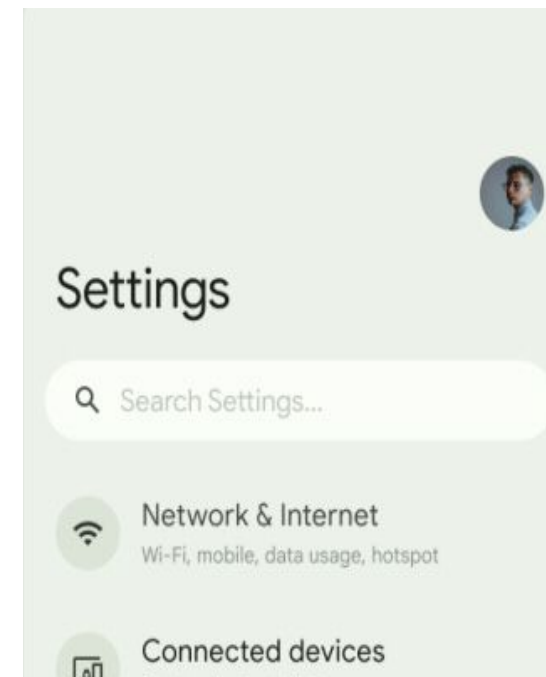
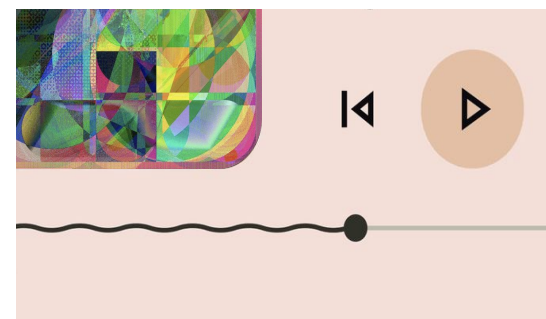
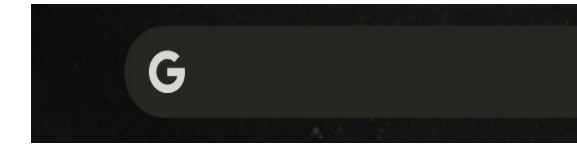
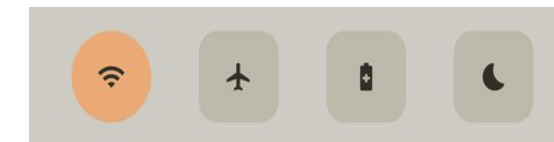
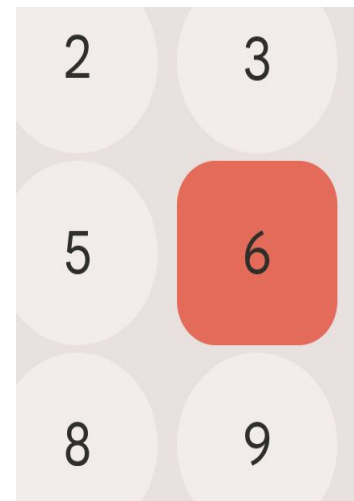
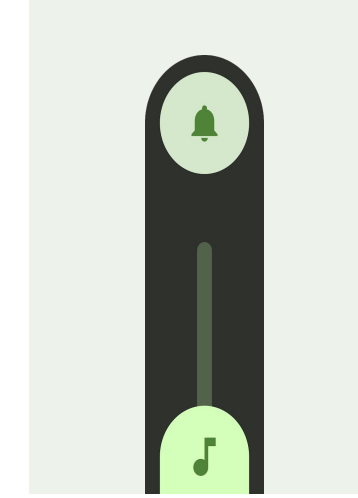
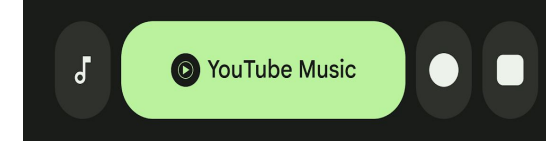
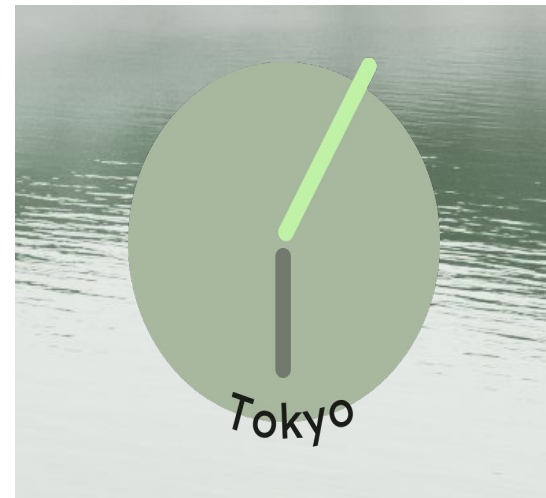


<https://www.youtube.com/watch?v=DVGIBU109nl>

Integration with other Google products

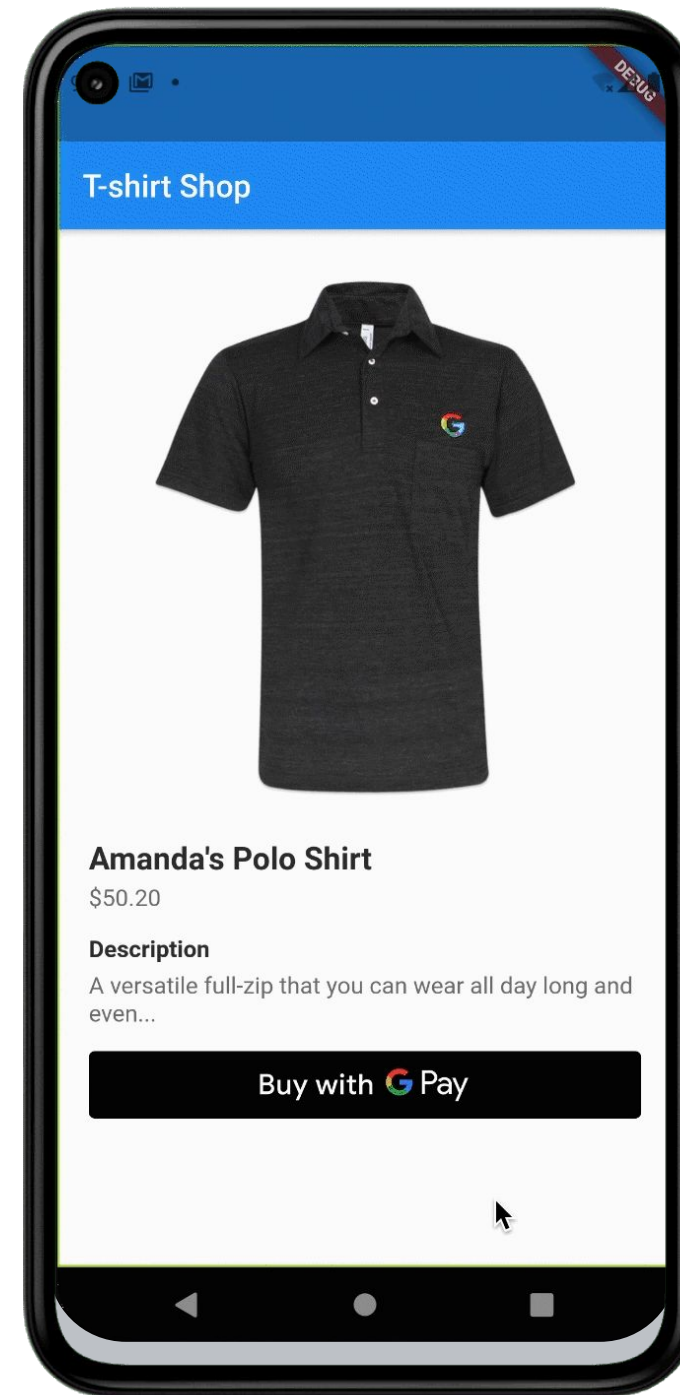


Flutter supports beautiful user interface with Material design

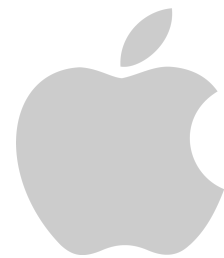


Flutter supports payment for physical goods

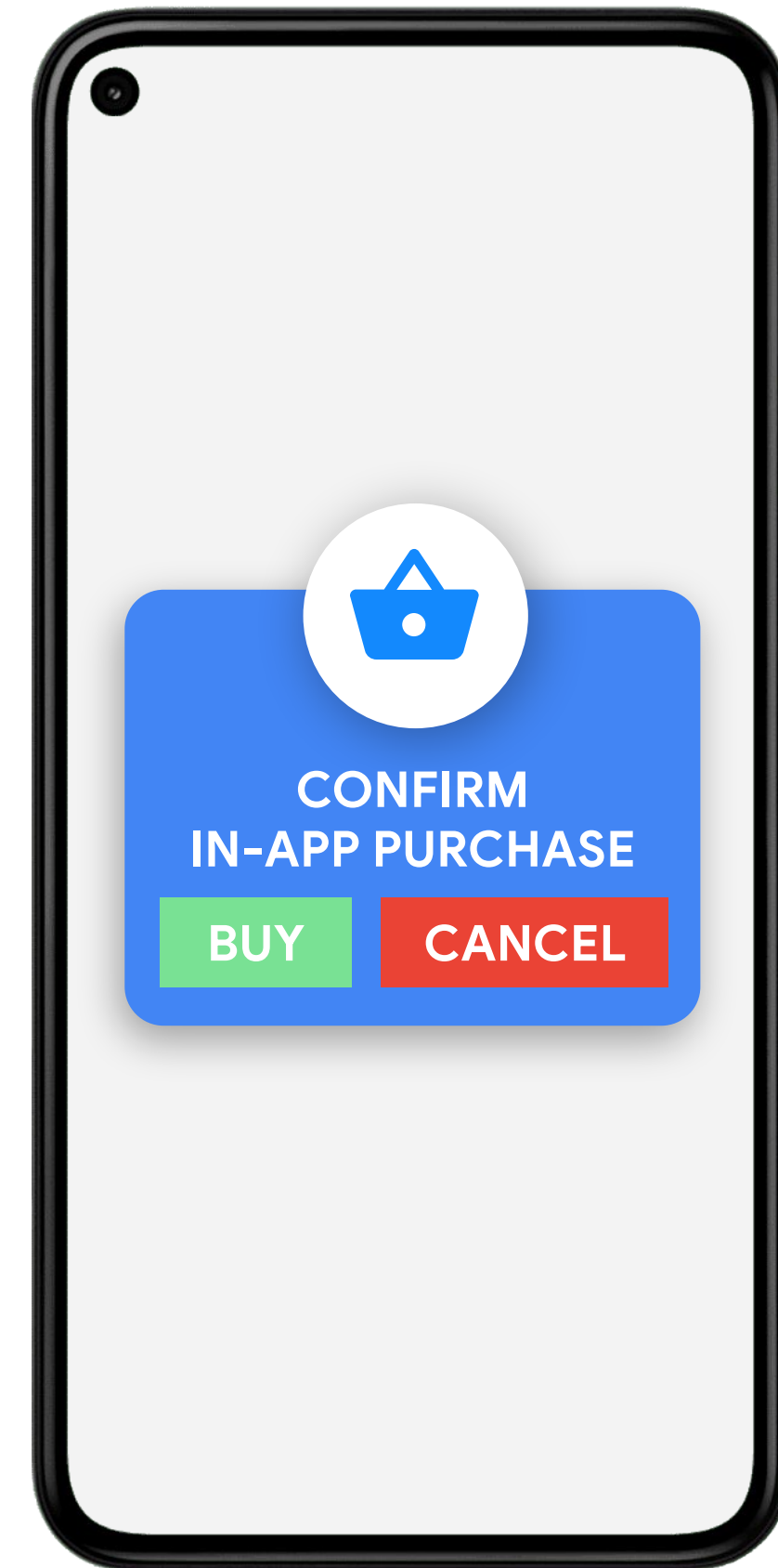
pub.dev/packages/pay



Flutter supports In-App Purchase for digital content and subscriptions



pub.dev/packages/in_app_purchase

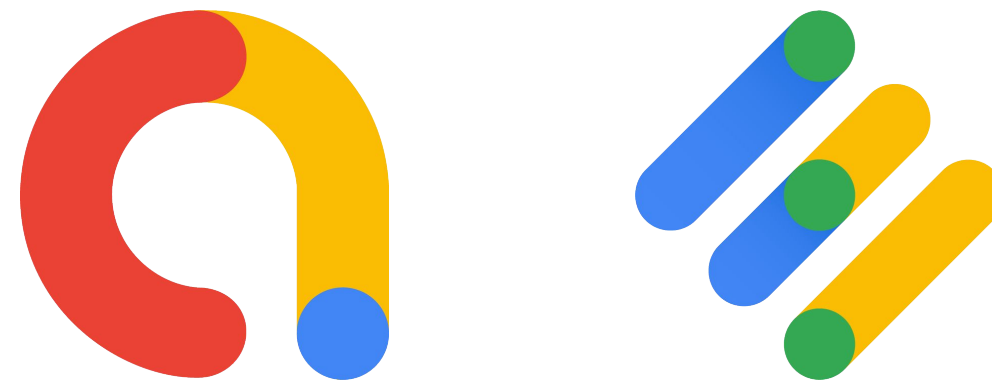


Flutter supports Firebase through FlutterFire plugins for many popular services



[FlutterFire Plugins](#)

Product	Plugin name	iOS	Android	Web	Other Apple (macOS, etc.)
Analytics	firebase_analytics	✓	✓	✓	beta
App Check	firebase_app_check	✓	✓	✓	beta
Authentication	firebase_auth	✓	✓	✓	beta
Cloud Firestore	cloud_firestore	✓	✓	✓	beta
Cloud Functions	cloud_functions	✓	✓	✓	beta
Cloud Messaging	firebase_messaging	✓	✓	✓	beta
Cloud Storage	firebase_storage	✓	✓	✓	beta
Crashlytics	firebase_crashlytics	✓	✓		beta
Dynamic Links	firebase_dynamic_links	✓	✓		
In-App Messaging	firebase_in_app_messaging	✓	✓		
Firebase installations	firebase_app_installations	✓	✓	✓	beta
ML Model Downloader	firebase_ml_model_downloader	✓	✓		beta
Performance Monitoring	firebase_performance	✓	✓	✓	
Realtime Database	firebase_database	✓	✓	✓	beta
Remote Config	firebase_remote_config	✓	✓	✓	beta



Flutter supports both AdMob and Google Ad Manager

`pub.dev/packages/google_mobile_ads`



Flutter News Toolkit

Saving news publishers 80% of work when developing applications for iOS and Android.

Apps have key advantages over mobile web

Growth

- Smartphones users spend 88% of the time using apps, compared with browsers¹; Consumers' record spent (143B) and demand for apps continues to grow²

Engagement

- Mobile apps can offer :
 - highly branded and seamless digital experience
 - features such as notification, personalization, offline access to keep users more engaged
- Mobile apps does not depend on SEO, therefore create a more loyal user group

Monetization

- Apps offer various Ads formats to monetize, and some formats are app only
- Personalized app experience allows more accurate Ads targeting
- Users spending more time in the app also creates more Ads and subscription opportunities
- **5% to 15% revenue uplift** after web clients adopt app strategies

1. <https://www.mobiloud.com/blog/mobile-apps-vs-mobile-websites>

2. <https://www.appannie.com/en/about/press/releases/mobile-outperformed-2020-expectations-with-consumers-spending-143b-on-apps/>

But, building mobile apps is not easy

Need Resources

- Investing in mobile requires expanding engineering/product team headcount or existing team scope
- Developing mobile apps traditionally requires iOS and Android developers who know multiple coding languages

Need Technical Expertise

- Publishers report lacking technical expertise to build mobile apps and facing a cold start problem for investing in mobile development

Need Product Insights

- Publishers developing mobile apps reported lacking product insights to build great mobile experiences to drive content engagement and user retention

We want to help news publishers to build apps and monetize more easily than ever

Flutter News Toolkit

The **Google Flutter team** and **Google News initiative** are co-funding the development of a **news toolkit**.

This template aims to **reduce typical news app development time by 80%**.

The Flutter News Toolkit:

- contains common news app UI workflows and core features built in Flutter and Firebase backend
- implements best app design practices based on [Google News Initiative research](#)
- allows publishers to monetize immediately with pre-built Google Ads and subscription services

Flutter News Toolkit Features

How does the Flutter News Toolkit work?

It is a **free, open-source code sample** that contains common UI and services News publishers want. It aims to reduce typical news app development time by 80%.

Publishers and developers have **full-control** and **complete freedom** to decide what features they want to use, remove, replace, and add.

Think of it like a resume template released by Google Docs...

FIRST LASTNAME

City, State | 123-123-4567 | Email Address | LinkedIn.com/in/customurl | Personal website or social media URLs

SUMMARY

Add a summary here.

PROFESSIONAL EXPERIENCE

MONTH YEAR – MONTH YEAR

Title, Company Name, City, State

- List accomplishments, not responsibilities
- Make sure they're written in a consistent form
- Use the active voice
- Quantify results wherever possible
- Match the language from the job description

MONTH YEAR – MONTH YEAR

Title, Company Name, City, State

- List accomplishments, not responsibilities
- Make sure they're written in a consistent form
- Use the active voice
- Quantify results wherever possible
- Match the language from the job description
- Add more if applicable

VOLUNTEER WORK

MONTH YEAR – MONTH YEAR

Position, Organization, City, State

SKILLS

Productivity Tools, Web Tools, Databases, Common Software, Commercial Technologies

EDUCATION

GRAD YEAR

School Name, State

Degree Type, Major, GPA (remove If it's not impressive)

Academic Honors

Proprietary + Confidential



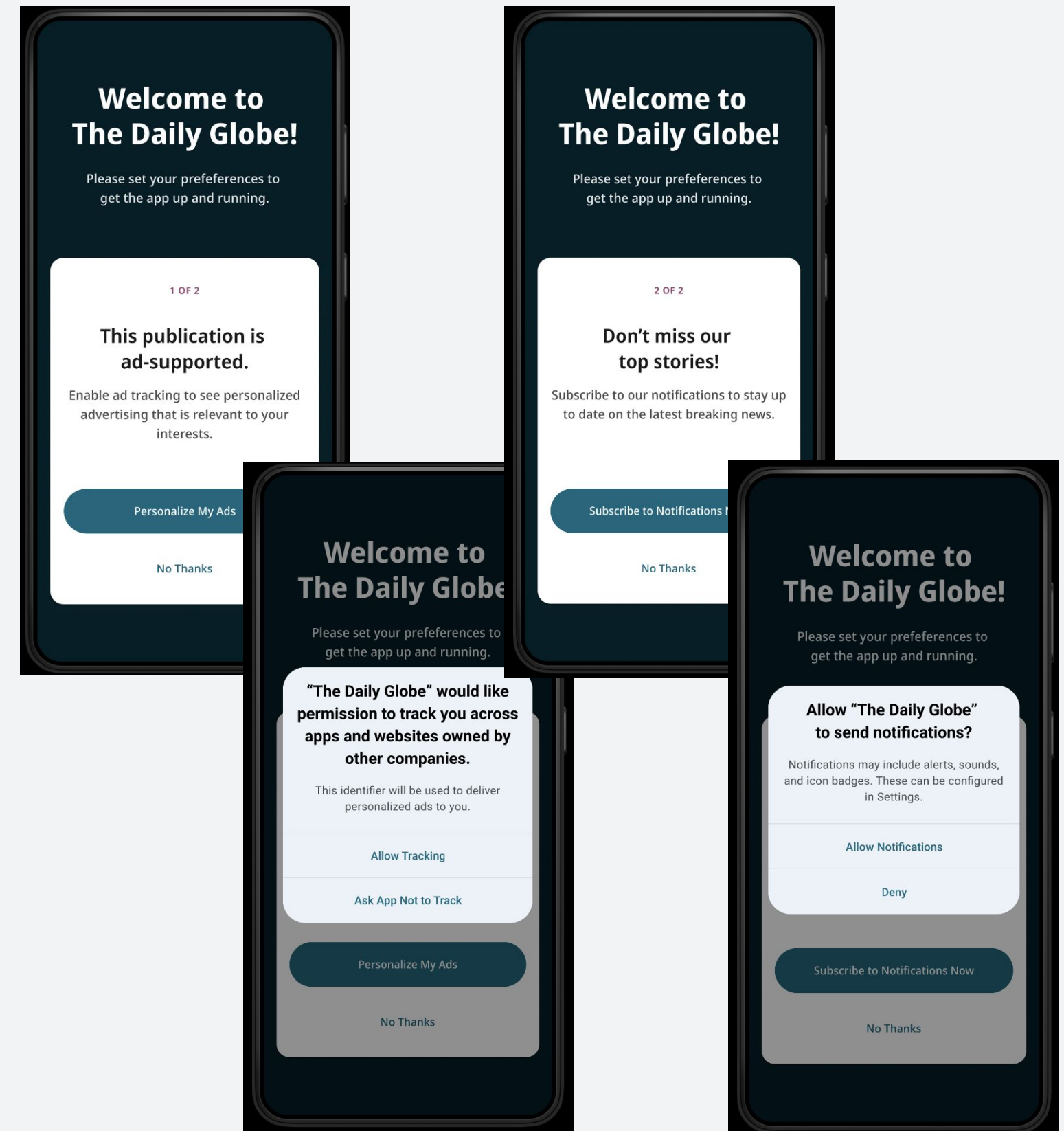
User Onboarding

Onboarding Permissions

- Ad Tracking Permissions
- Push Notifications

Account Creation

- Supports both social and email authentication for account creation and sign-on
- Onboarding permissions can be changed in account settings (notifications) or device settings (ad tracking permissions)



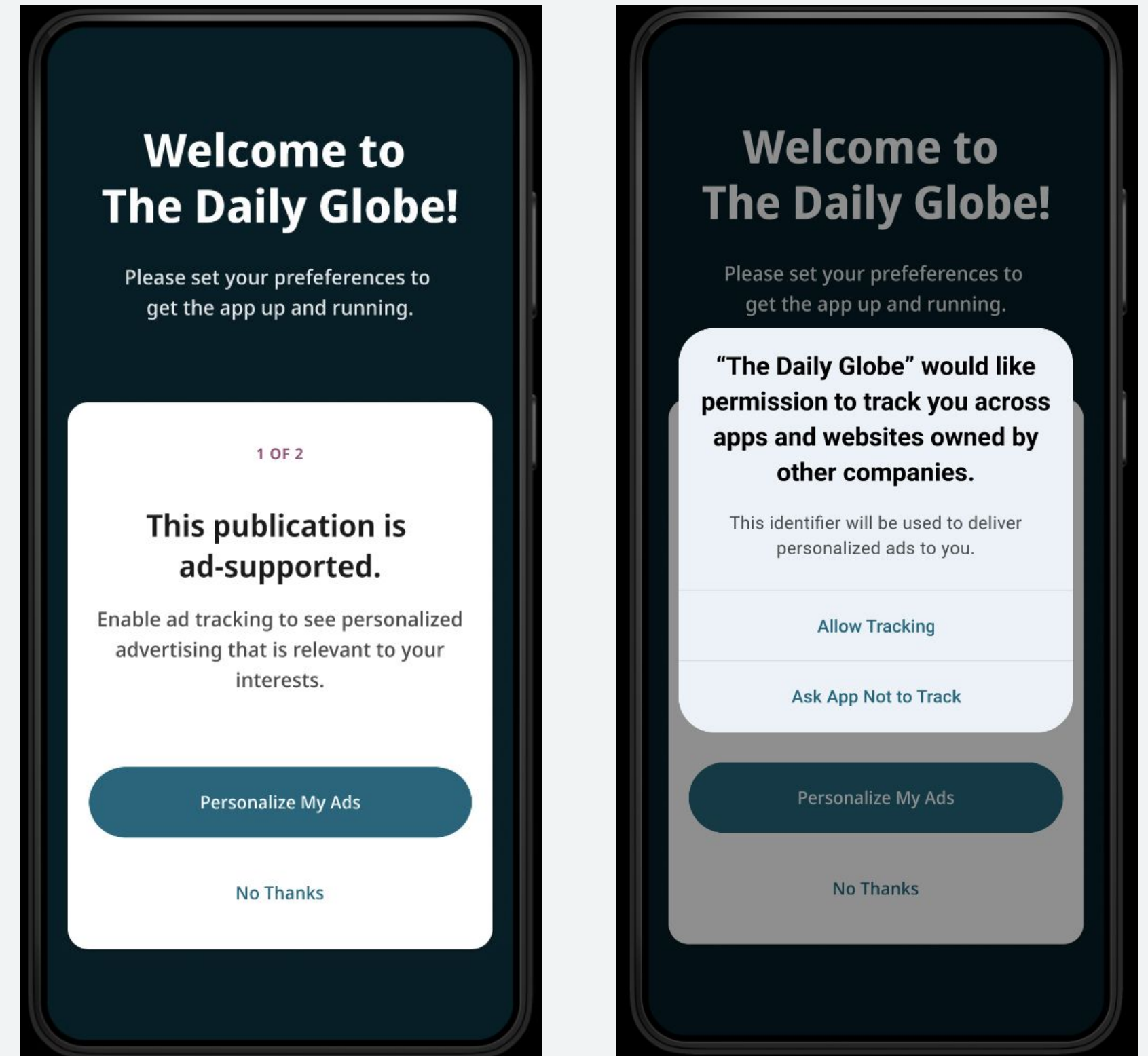
Onboarding Permissions

Ad Tracking Permissions

Flutter News Toolkit implements the Google Mobile Ads User Messaging Platform SDK (UMP SDK) to collect ad tracking permissions.

While Funding Choices is Google's solution to collect consent on the web, the UMP SDK is Google's solution to collecting consent on Android and iOS devices.

Once the user's consent is collected, it can be forwarded to the GMA SDK for determining how ad requests should handle ads personalization.



Onboarding Permissions

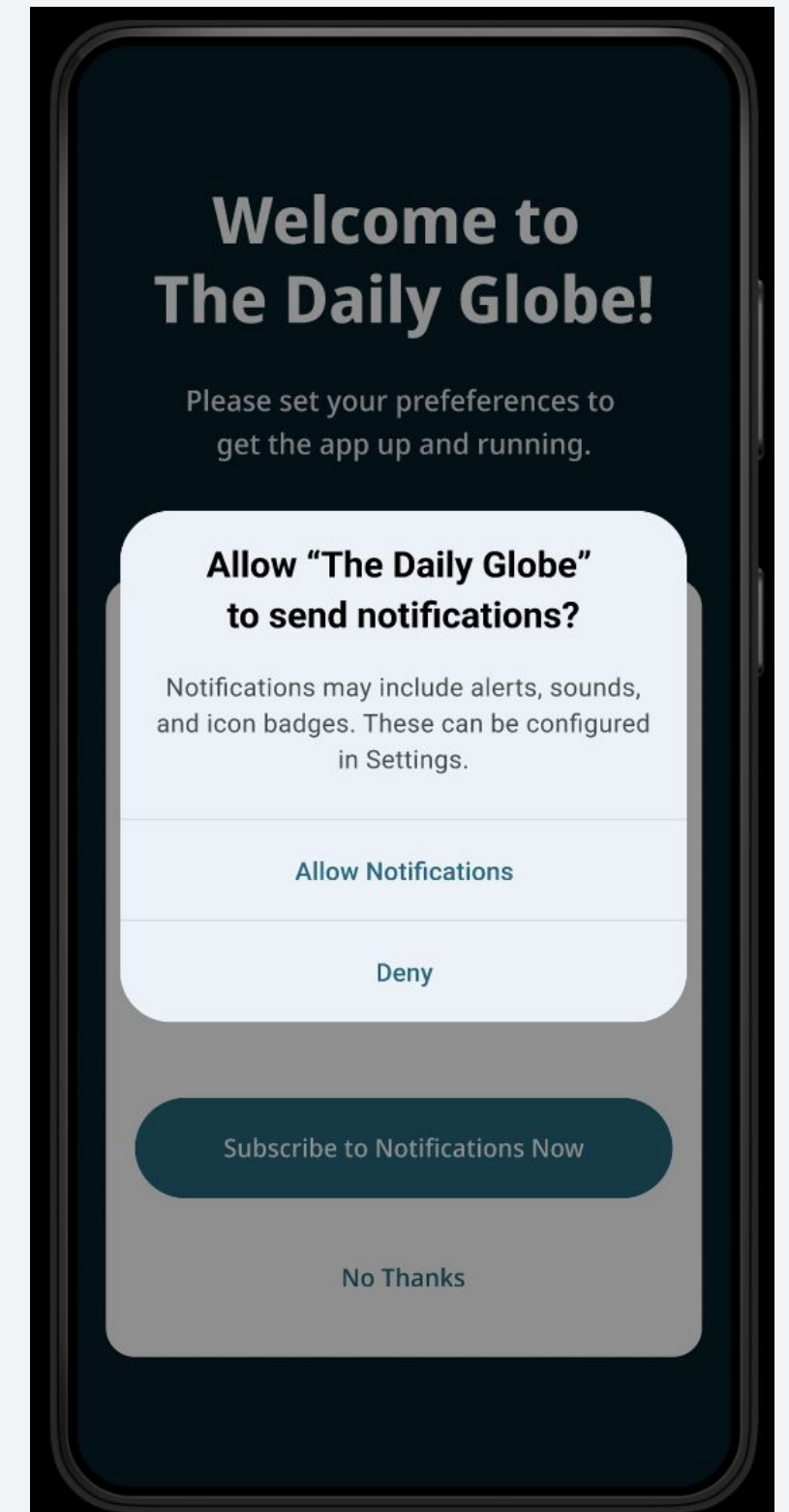
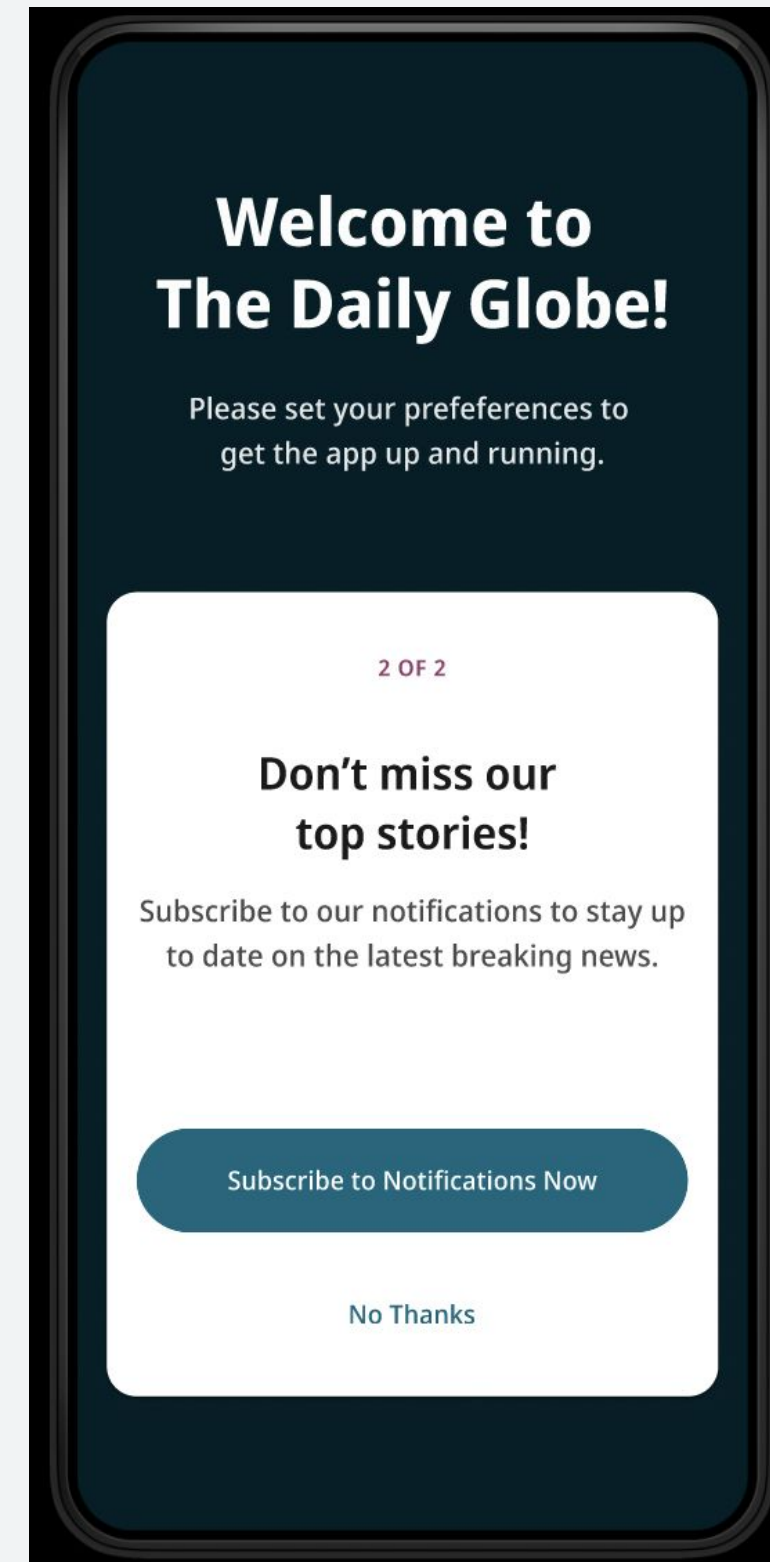
Push Notification Permissions

Push Notifications are implemented via Firebase Cloud Messaging (FCM).

Push notifications are a critical differentiator between mobile app and web sites for re-engaging users on content that is consumed on a regular basis.

Push notifications are only supported for mweb apps on Android. The timeline for supporting web push notifications on iOS is still TBD.

This feature has an example prompt with placeholder text that publishers will need to replace.



Account Creation

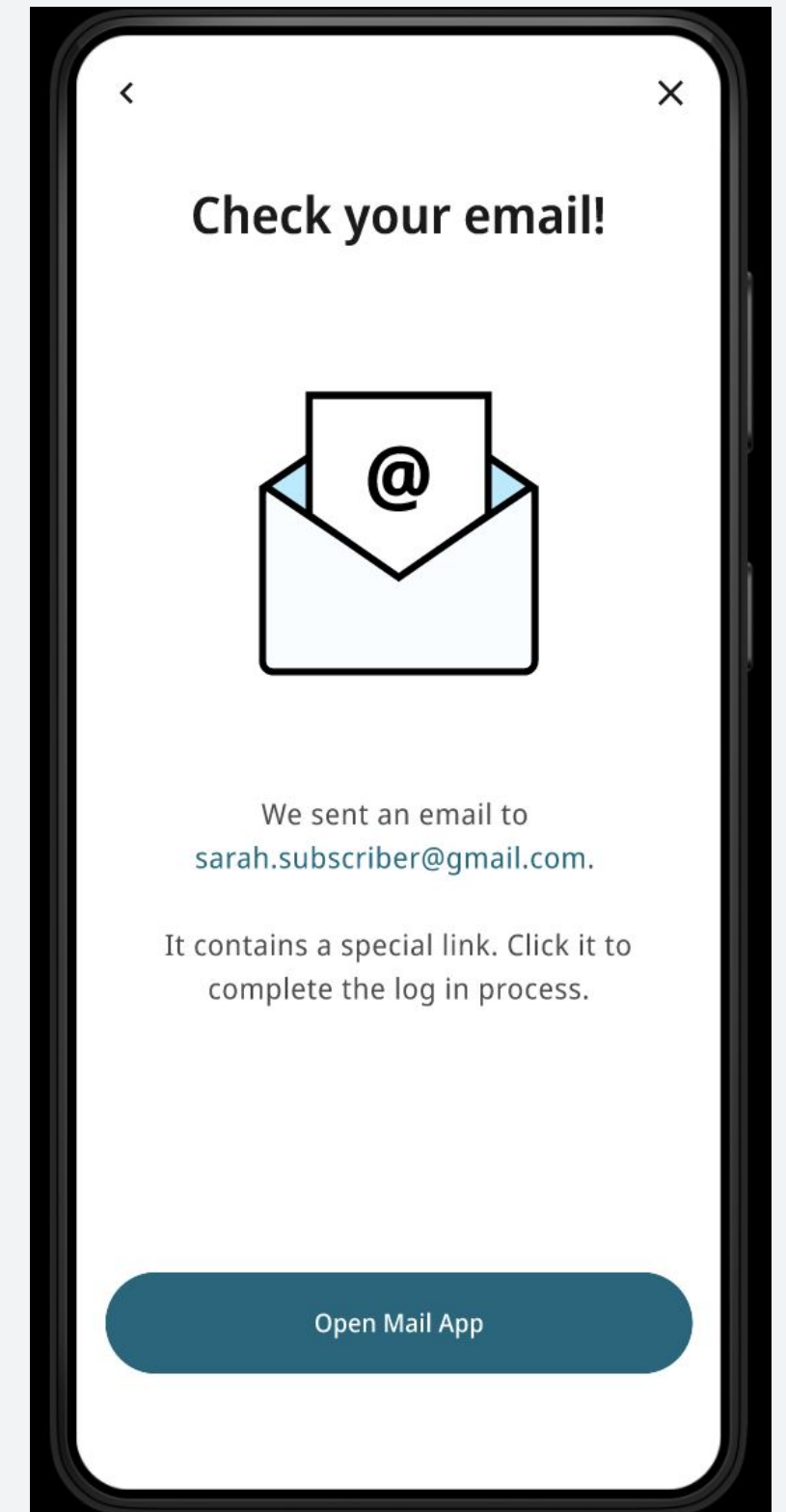
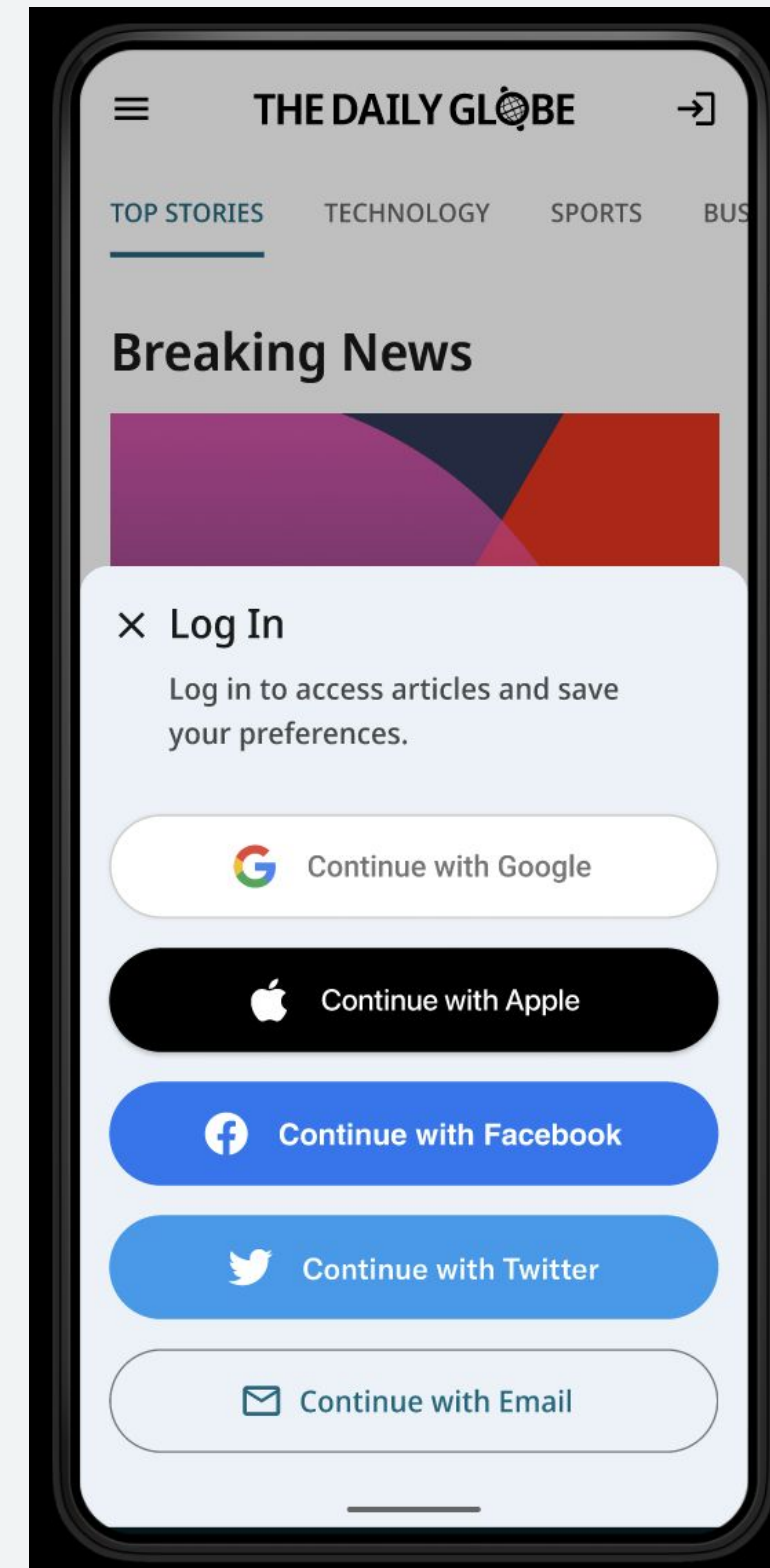
Account creation and authentication are supported via Firebase Authentication.

The template supports platform and social authentication for:

- Google
- Apple
- Facebook
- Twitter

Additionally, passwordless email account creation is supported by sending the user a email verification.

Firebase Authentication also supports anonymous authentication.



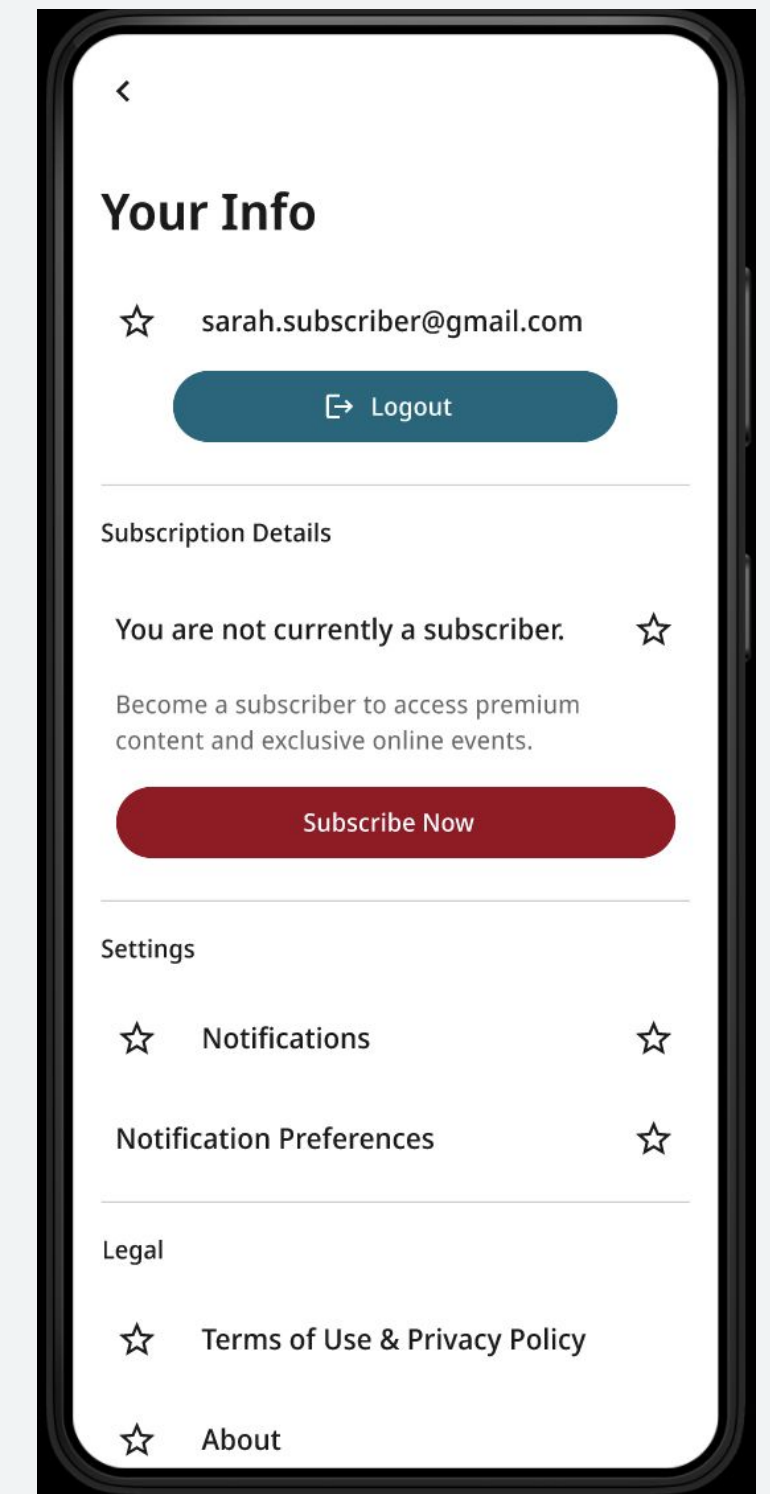
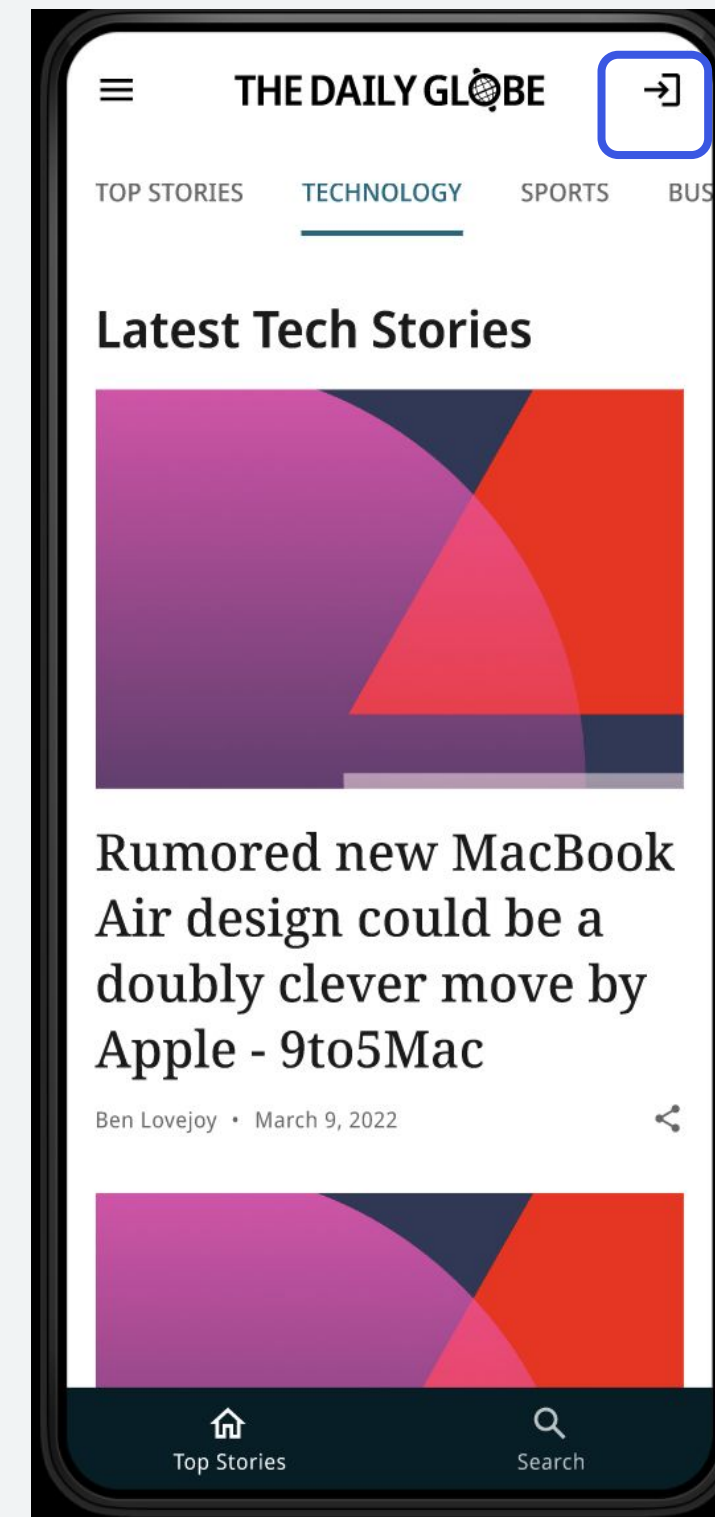
Account Settings

Core account settings such as sign-off and notification preference toggles are supported.

Ad tracking permissions can be toggled via the device's system settings.

The user's subscription status has also been implemented based on recommendations from the Google News Initiative.

Account settings also contain stubs for the Terms of Service & Privacy Policy where publishers can connect their documentation.

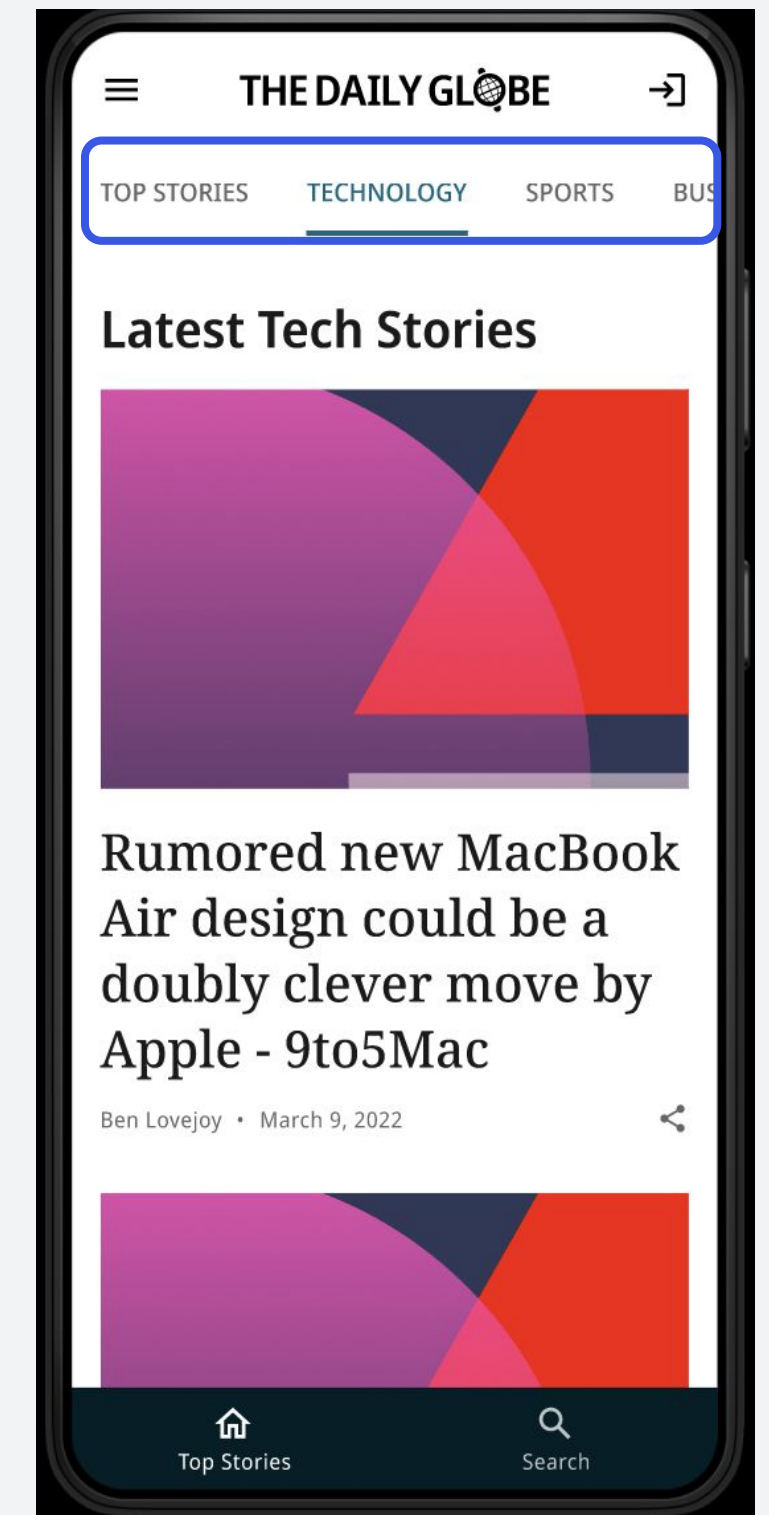
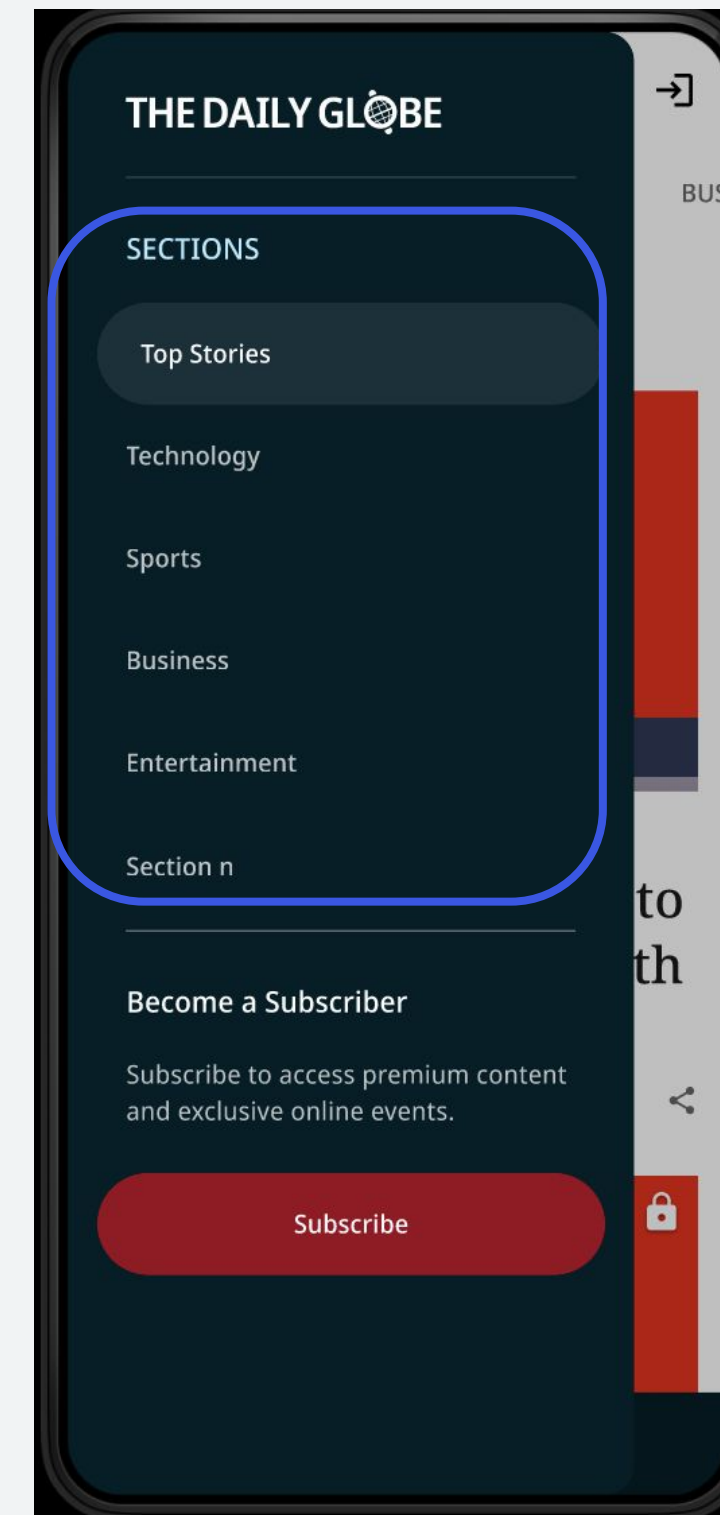


Navigation

Navigation can be accessed via a hamburger menu or through a section feed at the top of the main content feed.

Publishers can modify the section categories to match the categories or tags they have defined for their content.

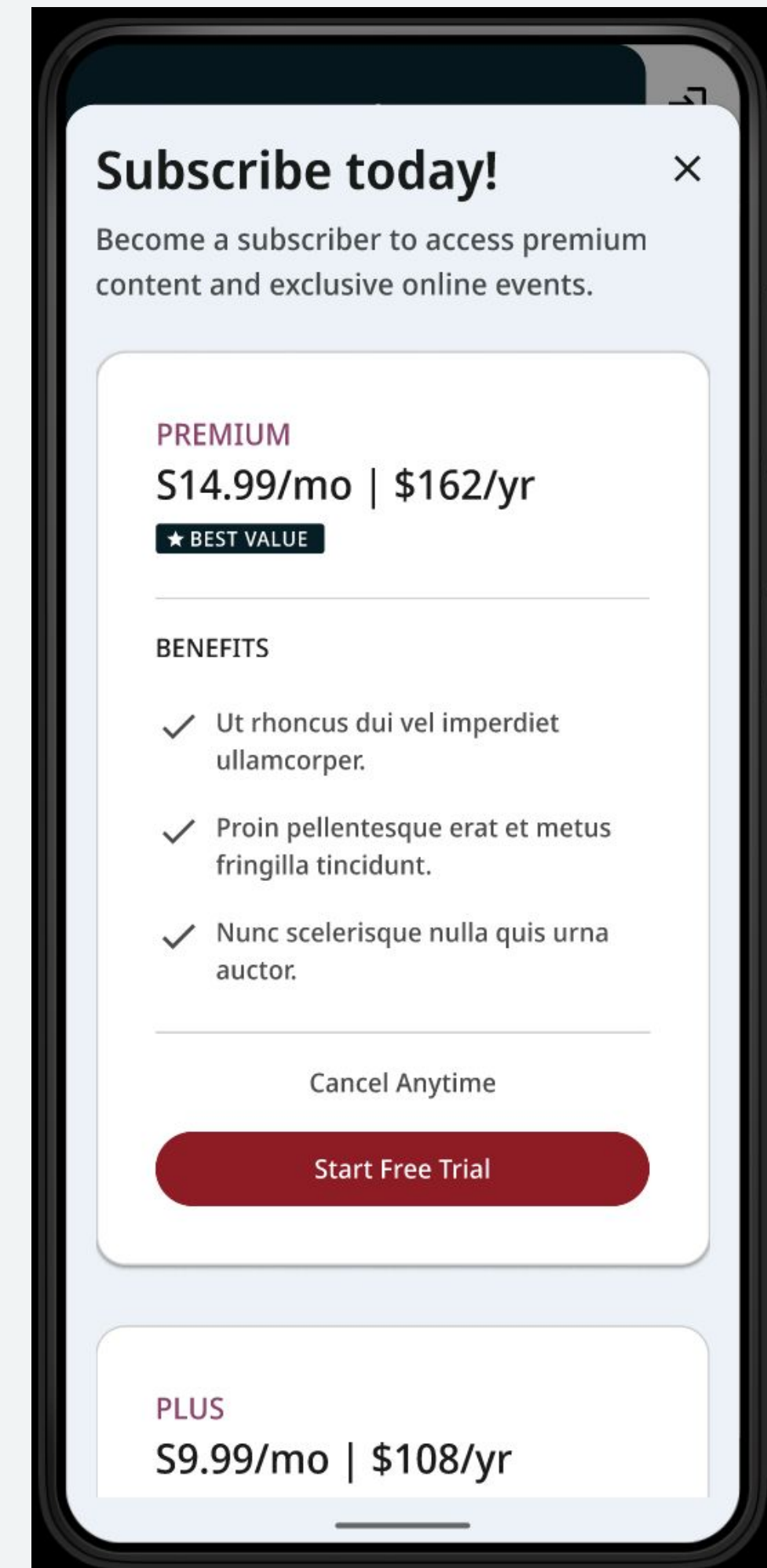
A subscription prompt has been implemented on the navigation menu per recommendations from the Google News Initiative



Subscriptions

Clicking on any of the subscribe buttons will open an overlay which presents the user with subscription options, leveraging Google In-App Purchase.

Publishers will need to modify the client mobile application to change the subscription tier options.



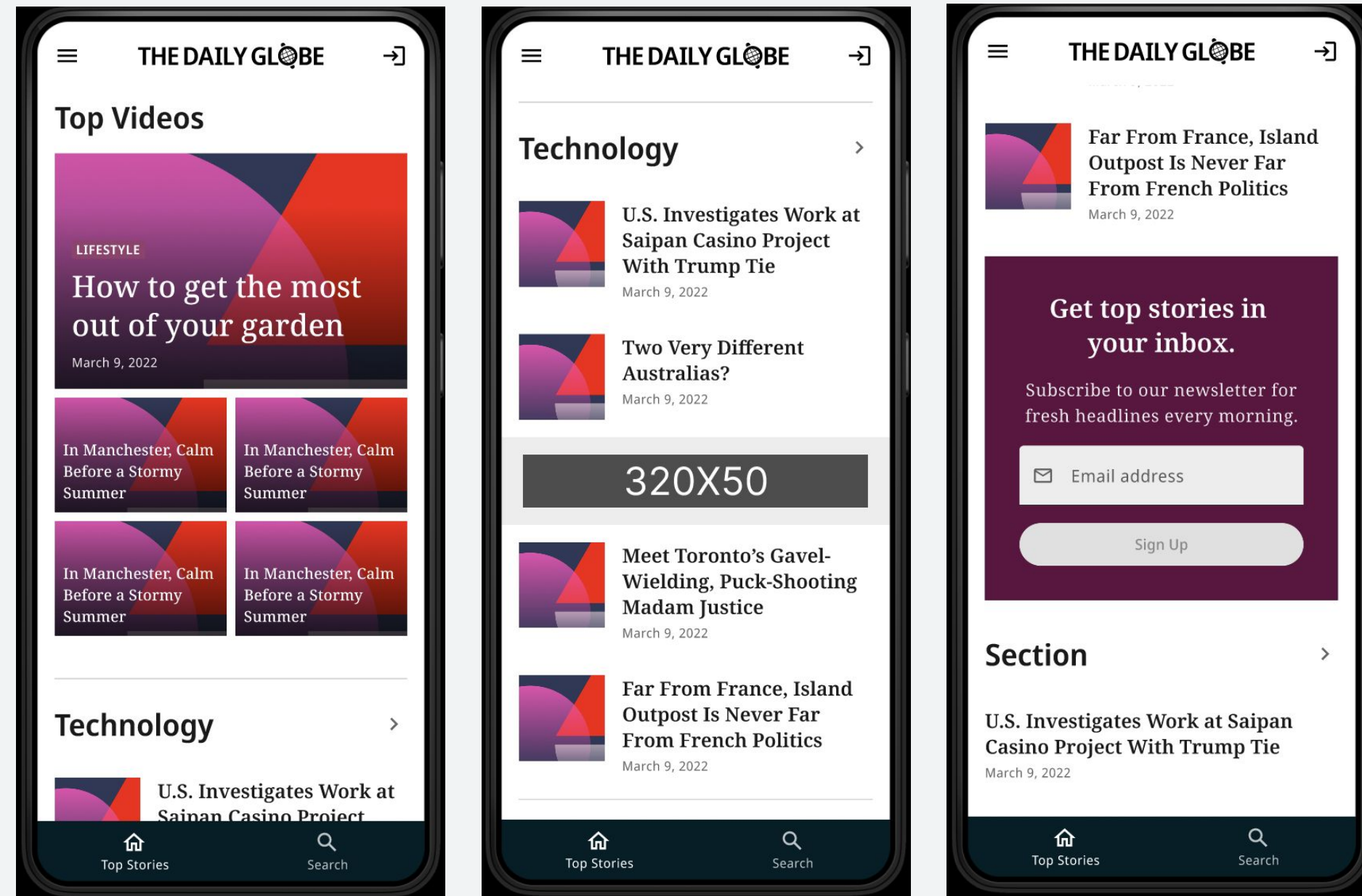
Content Feed

The content feed is implemented as a set of modular blocks, which can be configured on either the front end or backend:

- Article Groupings
- Inline Banners
- Inline Email Subscription Prompts

The configuration of the blocks in the feed are defined by the output of the backend API.

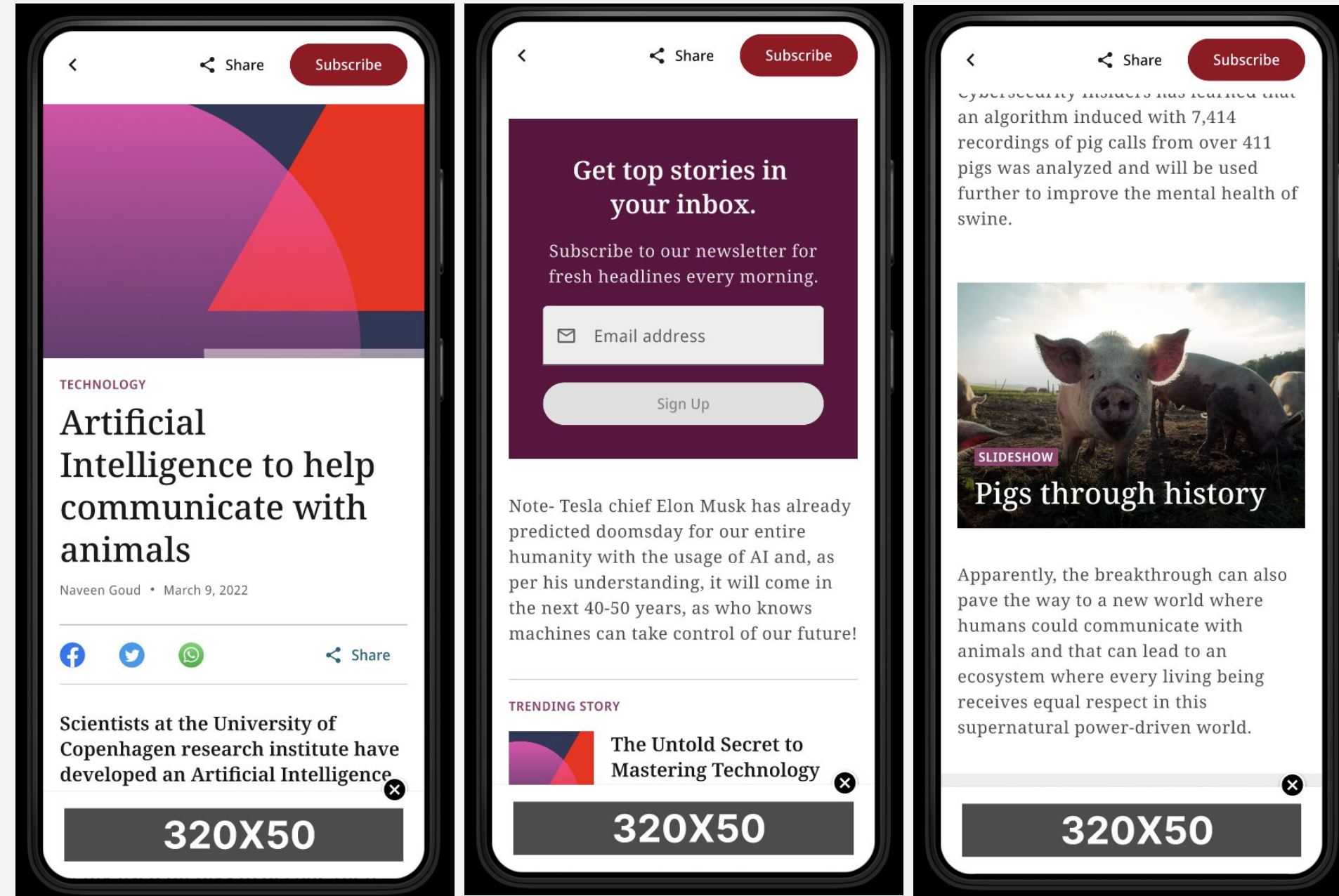
News article blocks, inline ad placements, and email subscription prompts have been implemented following best practices from the Google News Initiative News Consumer Insights [playbook](#).



Content Pages

The content pages are also implemented as a set of modular blocks, which can be configured on either the front end or backend:

- Article Headers
 - Metadata
 - Social Sharing
- Article Content
- Embedded Slideshows and Videos
- Sticky Banners
- Trending Stories
- Inline Email Subscription Prompts
- Commenting (Stubbed)

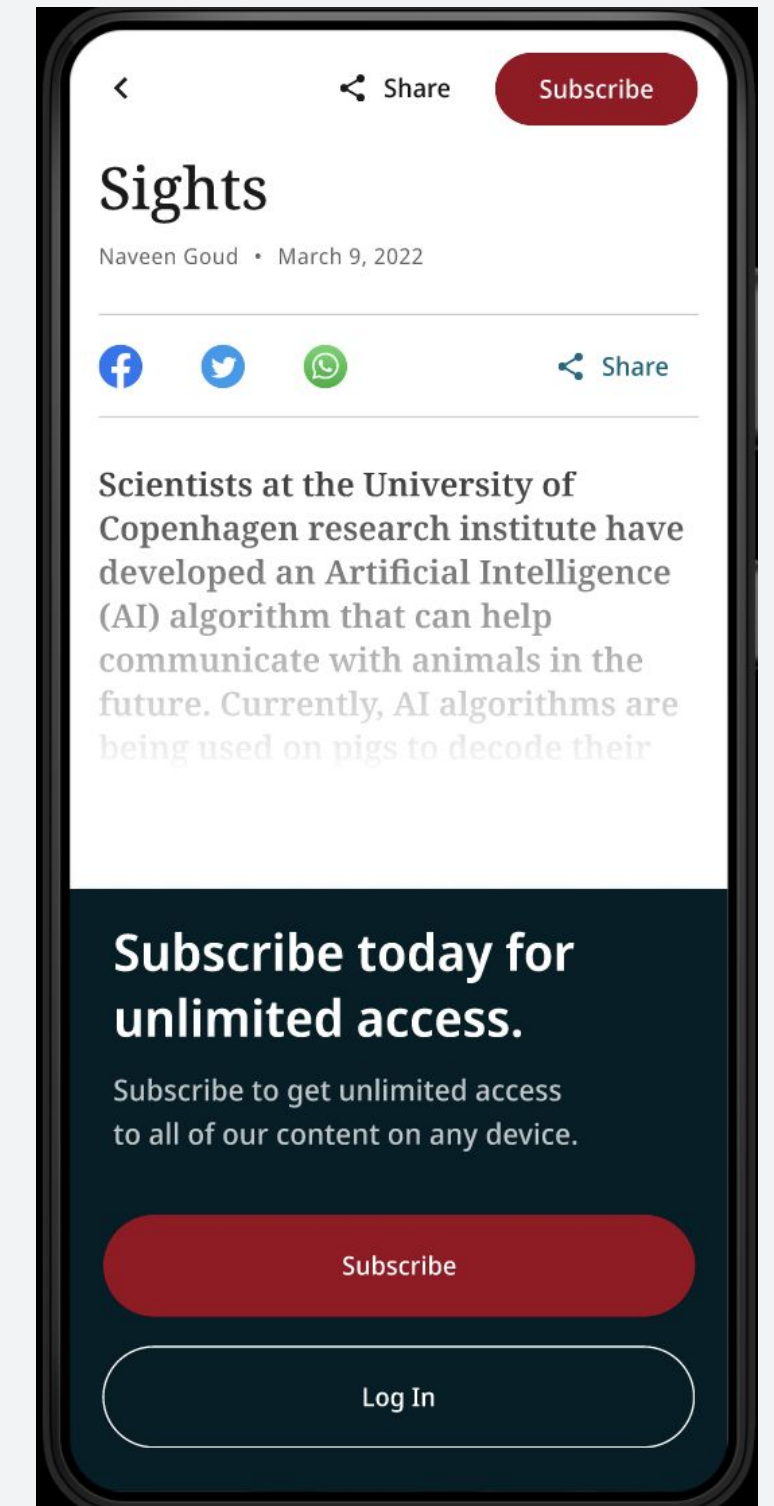
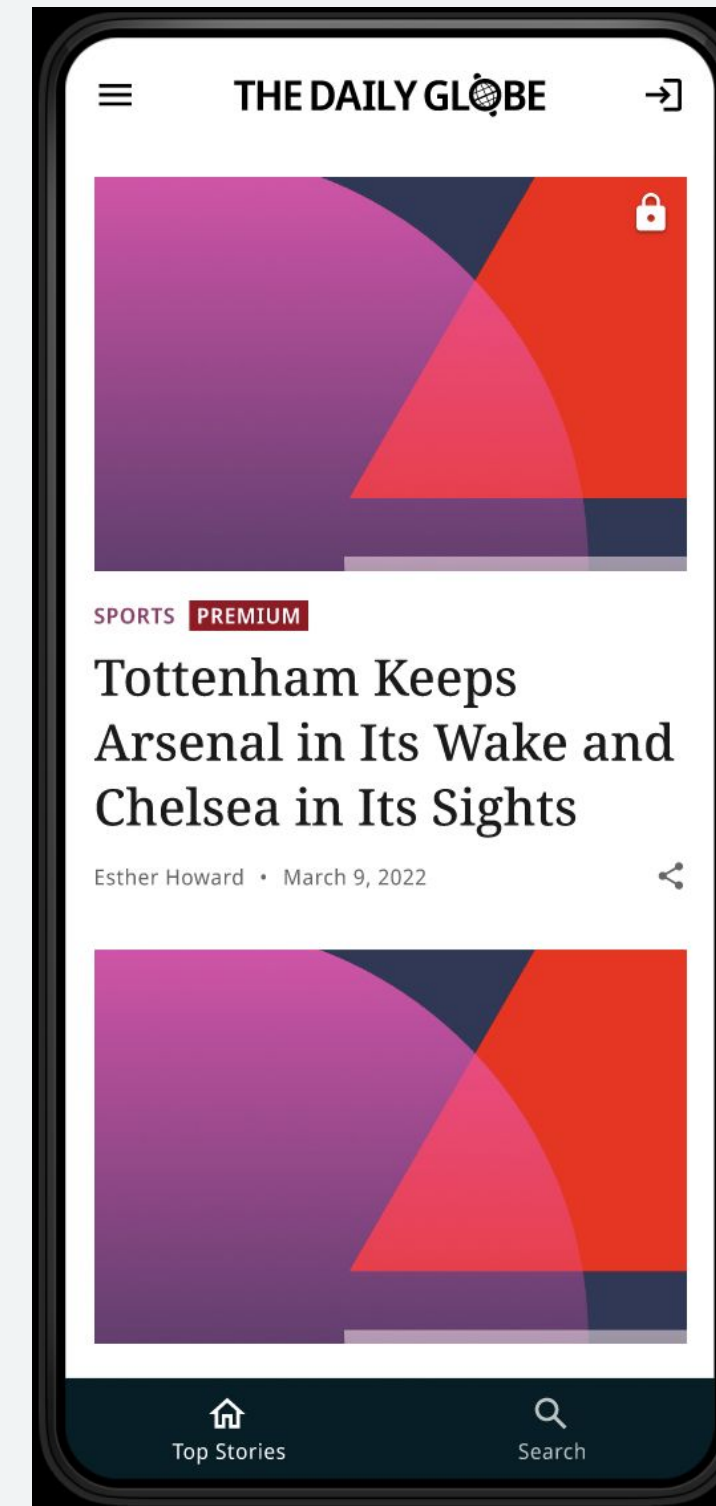


Premium Content

Premium content with paywall locking is supported.

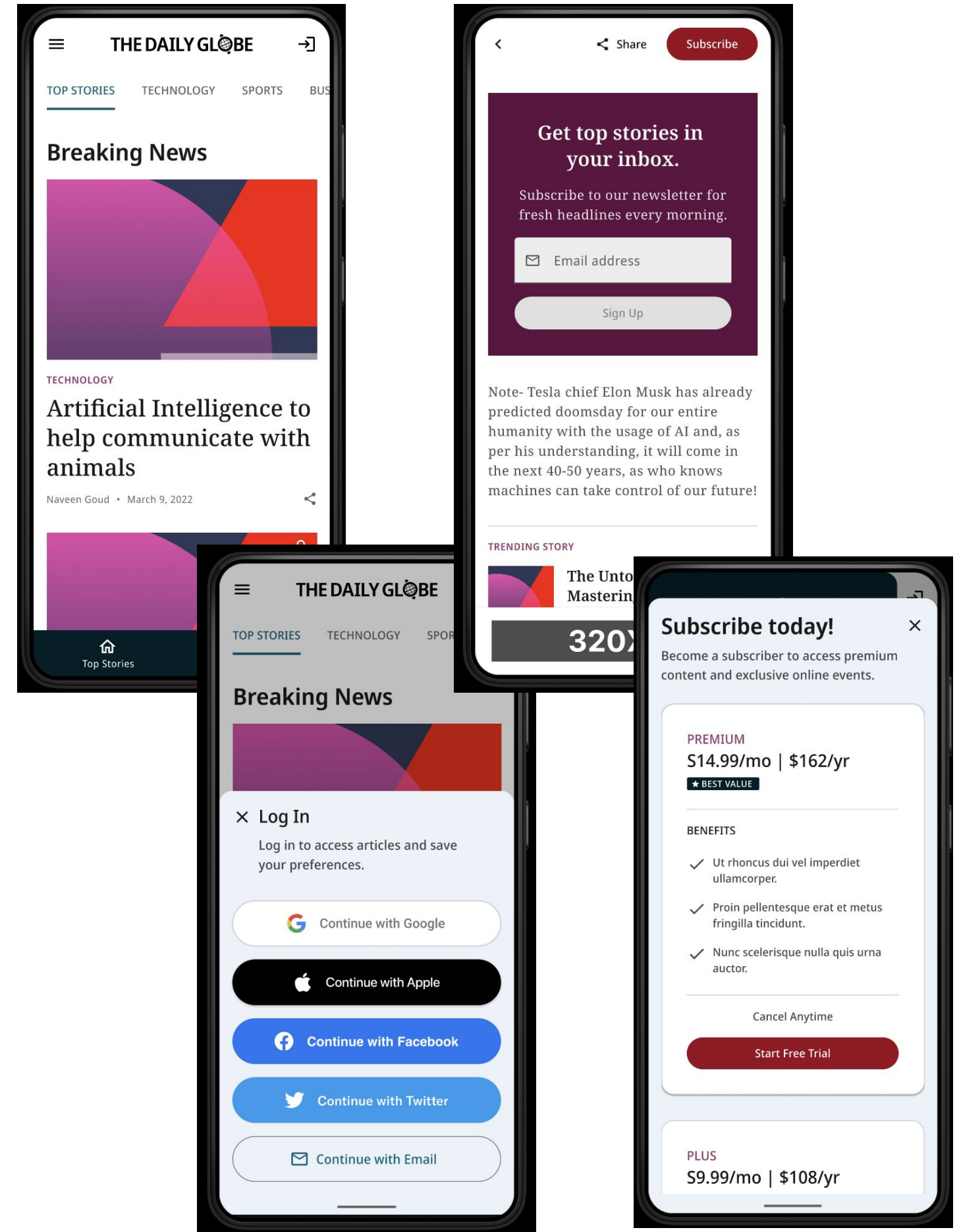
Daily free article limit functionality has been implemented in the client application, which publishers can change or remove.

If users try to access premium content and have exceeded their daily free article limit, the article will be obfuscated by a subscription prompt.

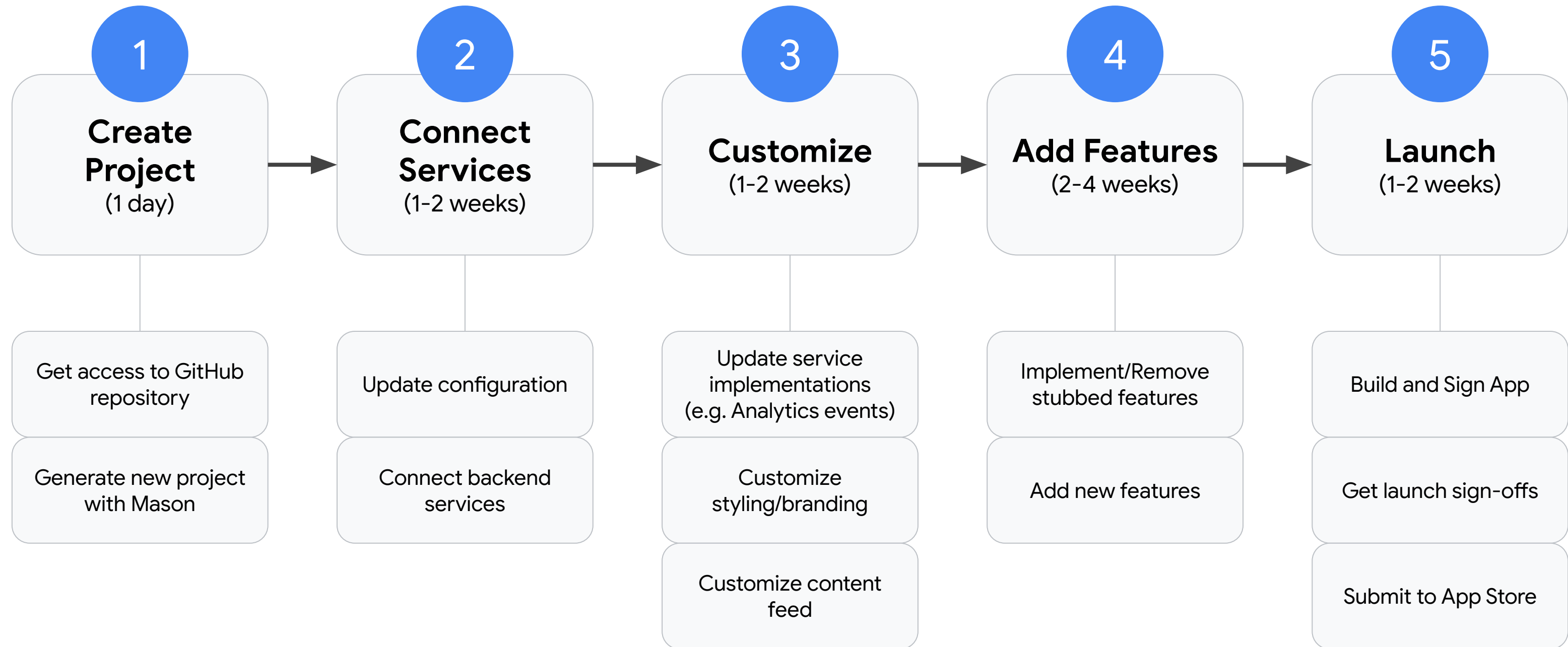


The template includes all the common UI workflows and core features

- ✓ Authentication (Passwordless Email/Google/Apple/Facebook/Twitter)
- ✓ Push Notifications
- ✓ App Tracking Permissions
- ✓ Google Ads Integration
- ✓ Google Analytics
- ✓ Subscriptions Support and In-App Purchasing Integration
- ✓ Newsletter Subscriptions
- ✓ Social Sharing
- ✓ Content Feed
- ✓ Search
- ✓ And more!

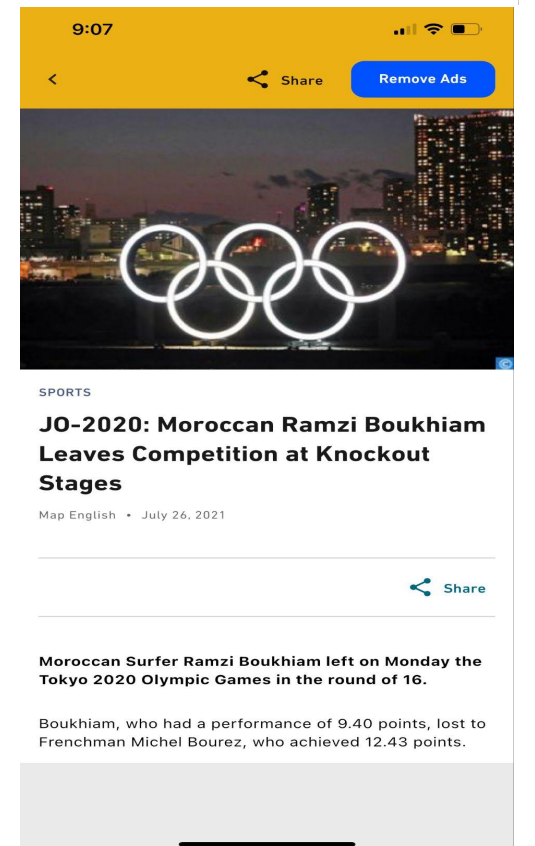
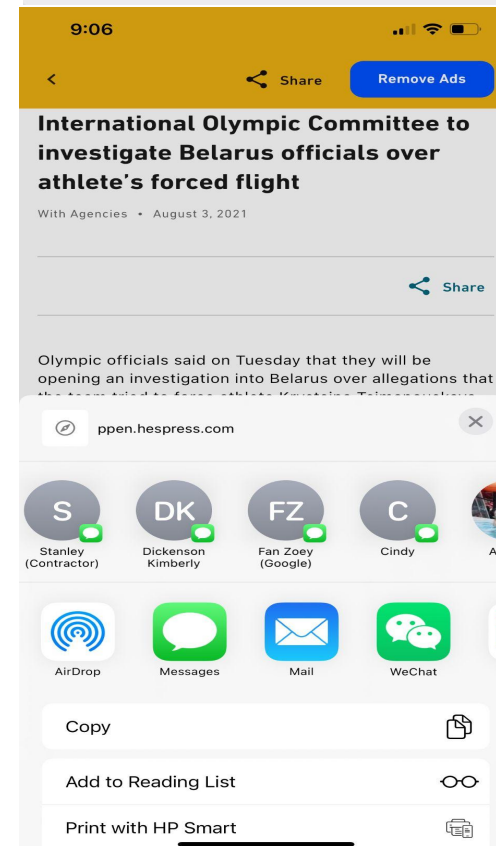
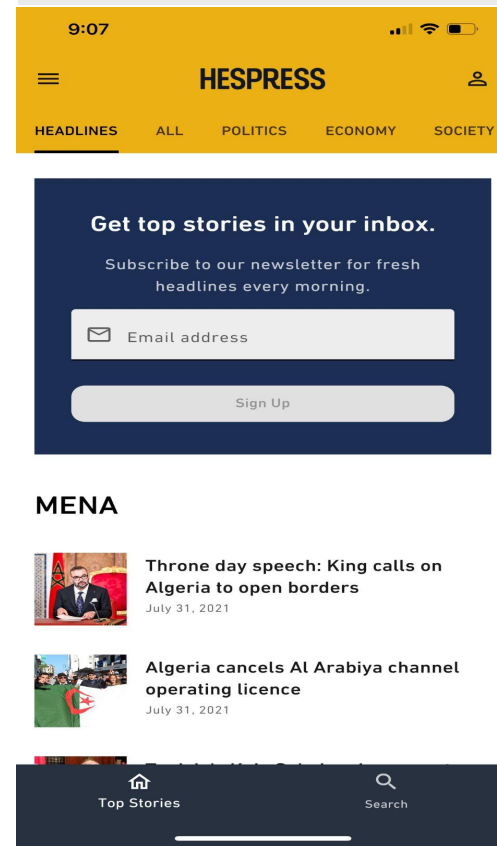
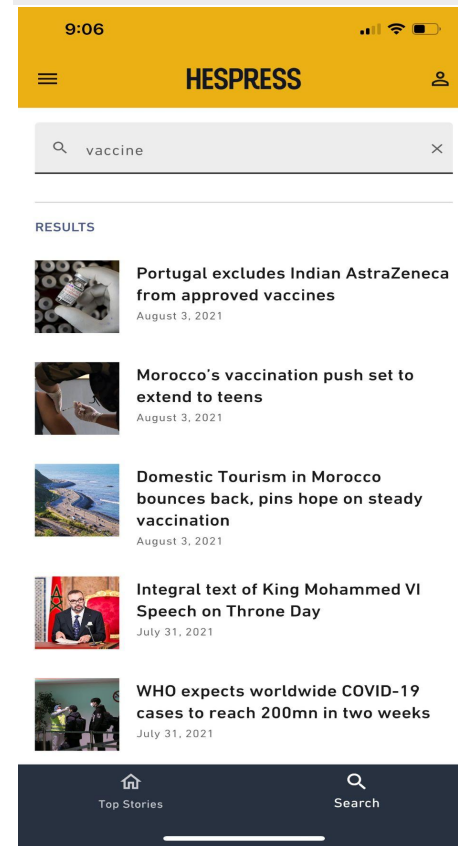
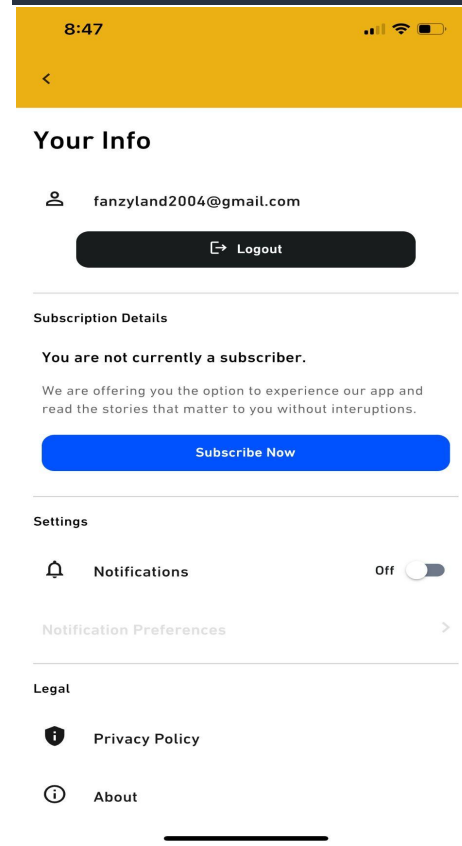
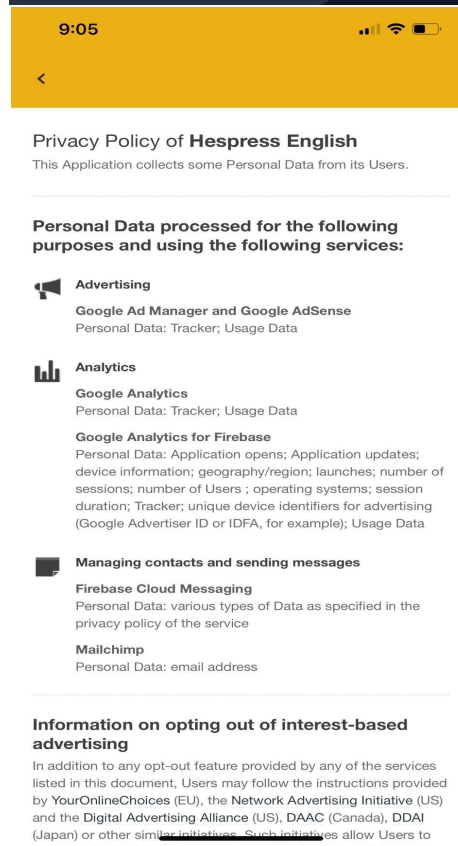
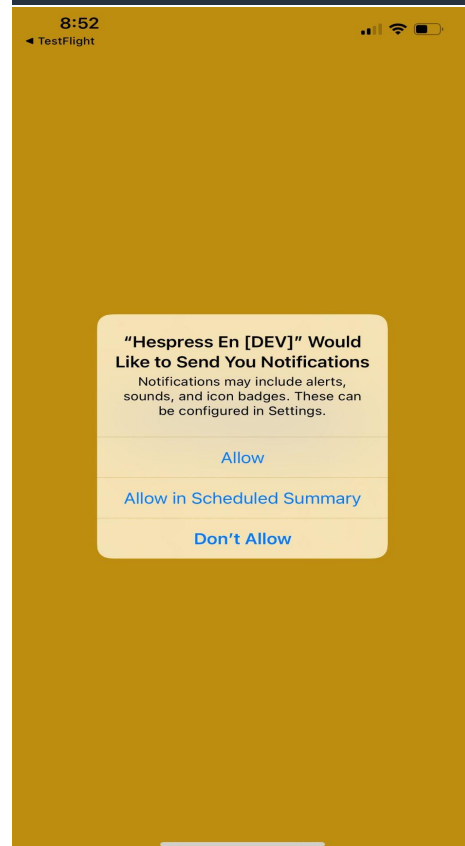
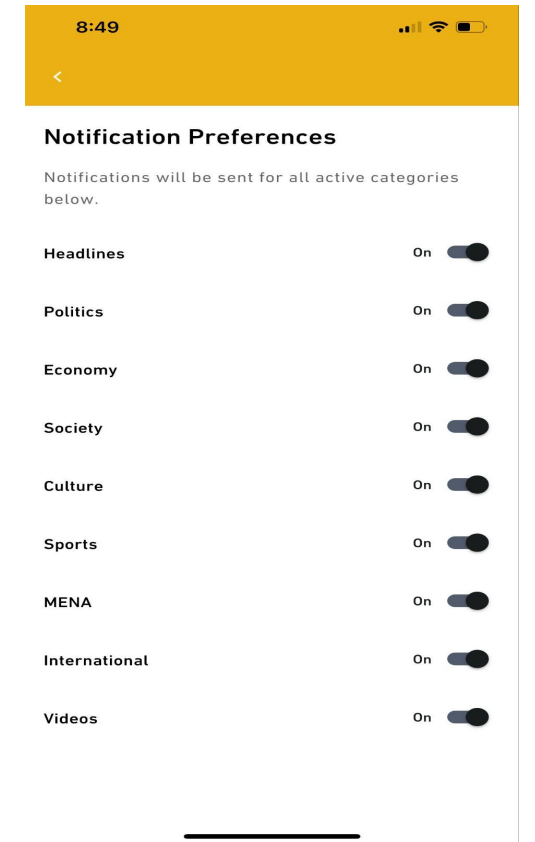
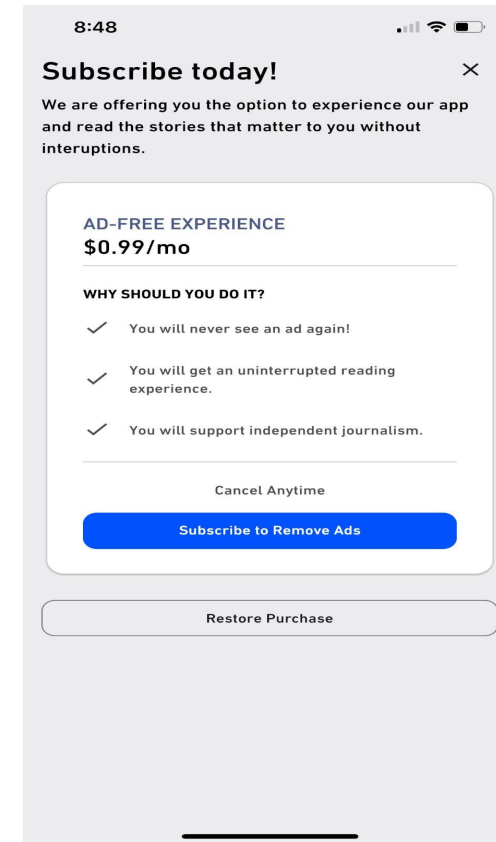
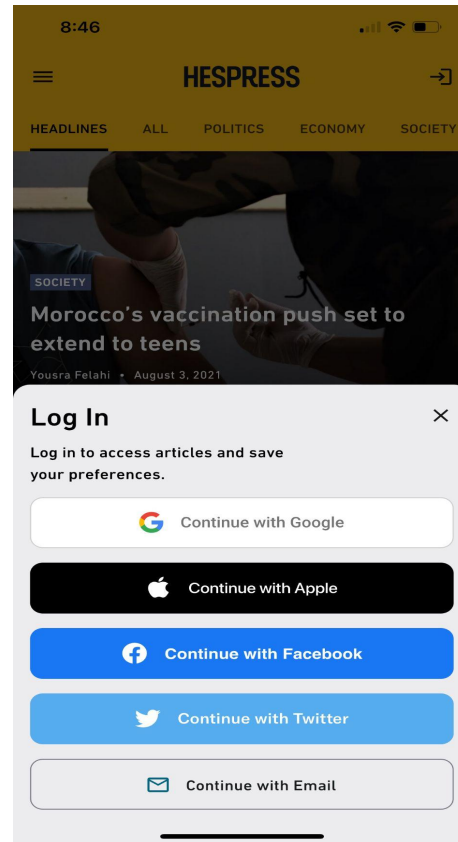
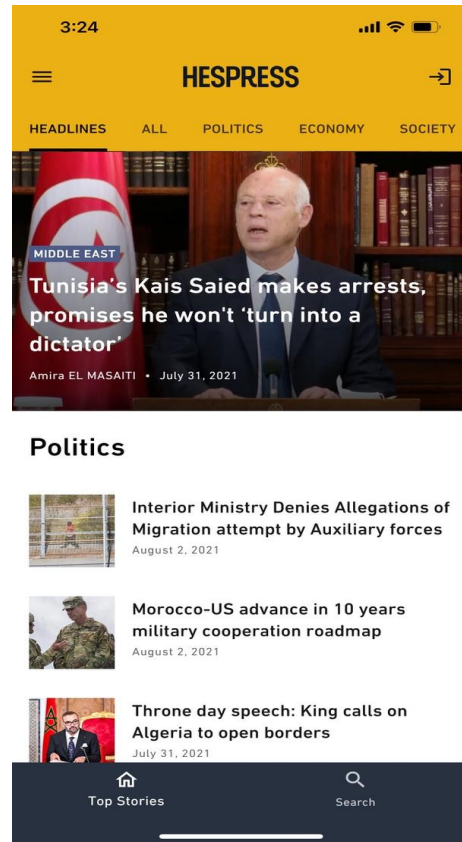
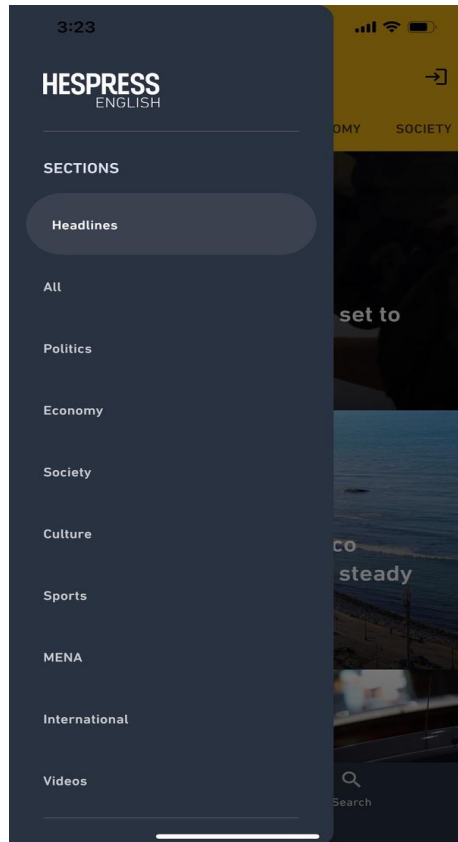
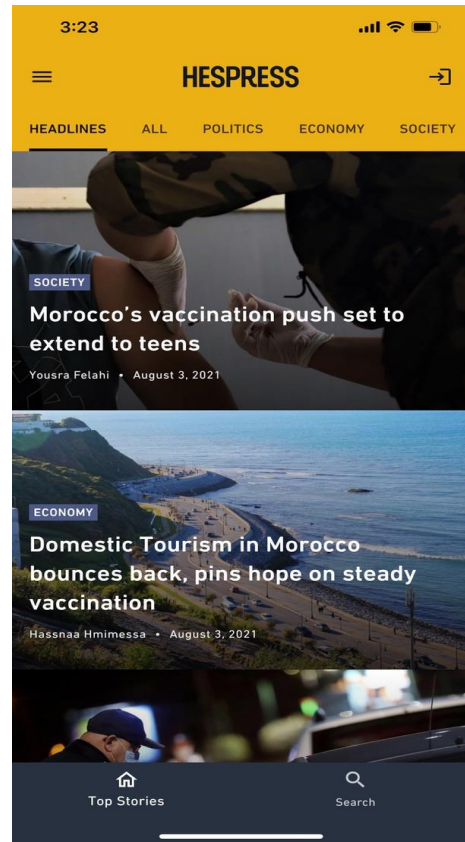


Big Picture on Deployment



Note: Time estimates are based on publishers having 2-3 Flutter developers.

Hespress developed their application within 6 weeks



Client Feedback:

“The news toolkit was intuitive to work with and customize to look and feel like a proper Hespress app. It contained all the core features, sections, and layouts that would be required for us. It helped us save months of development and optimized the whole process of revamping our English App while maintaining one code base instead of two.”

Here are the benefits publisher will get by joining the closed beta program now

- Access to **all source code for free**, and step-by-step guide for the Flutter news app template for free
- The ability to modify, delete or add new features as you wish
- **Monetize** with Google Mobile Ads (AdMob or Ad Manager), and subscription services from the get-go
- Get **high touch support from Google** in launching your custom app with **80% cost reduction** (we have seen publisher finish development within 6 weeks)
- The opportunity to be **featured in Google's marketing materials** to improve your brand recognition

Other questions:

- Please email flutter-news-core-group@google.com

Follow the steps below to submit applications

Prerequisites:

- Publishers who get access to the template can not share it outside their organization
- Publishers are encouraged to start development immediately, but **must inform** flutter-news-core-group@google.com **before launching** their app to avoid potential leak before Google's GA announcement
- Publishers understand that the app template may have bugs, and they are welcome to file bugs

Application process:

- Google representative fills out an [application form](#) on behalf of the publisher

Other questions:

- Please email flutter-news-core-group@google.com

Publishers can develop the apps themselves, or outsource the implementation to Flutter consulting partners

