



flight



A Week in the Life

Of an App Developer

Hemal Shah

Product Manager, Fabric | @hemal

Brian Swift

Product Manager, Fabric | @bswift

Making an app is hard



Daily app health check

Distribute beta builds

Debug production issues

Gather feedback

Manage beta groups

Review in-app events

Monitor stability alerts

Check for regressions

Monitor real-time app usage

Discover and install SDKs

Track payments and revenue

Review results of latest A/B test



faboric



A Week in the Life

Of an App Developer

Hemal Shah

Product Manager, Fabric | @hemal

Brian Swift

Product Manager, Fabric | @bswift



Hemal Shah

Product Manager, Fabric | @hemal

Brian Swift

Product Manager, Fabric | @bswift

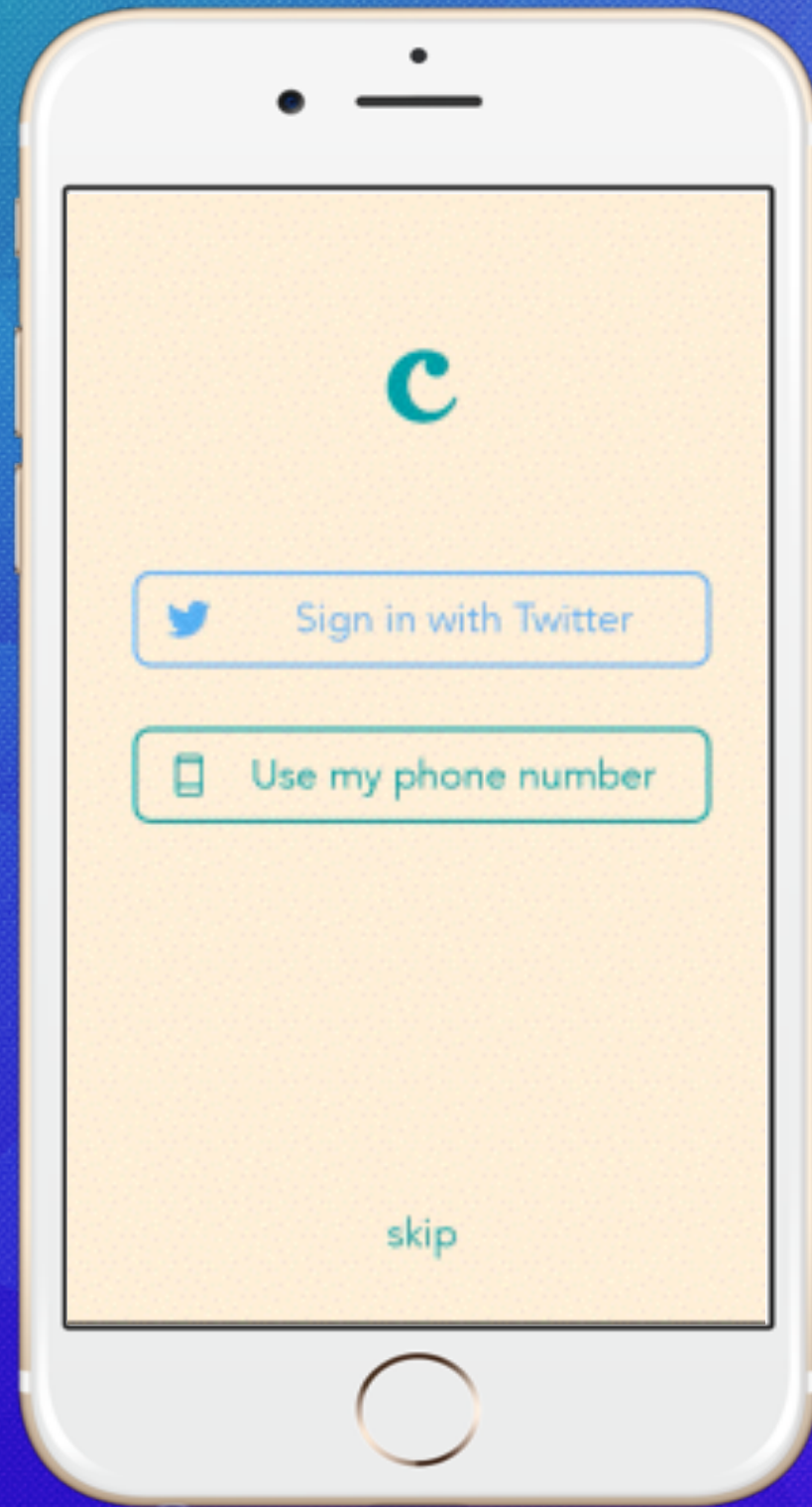


Hemal Shah

Developer, Cannonball

Brian Swift

Product Manager, Cannonball

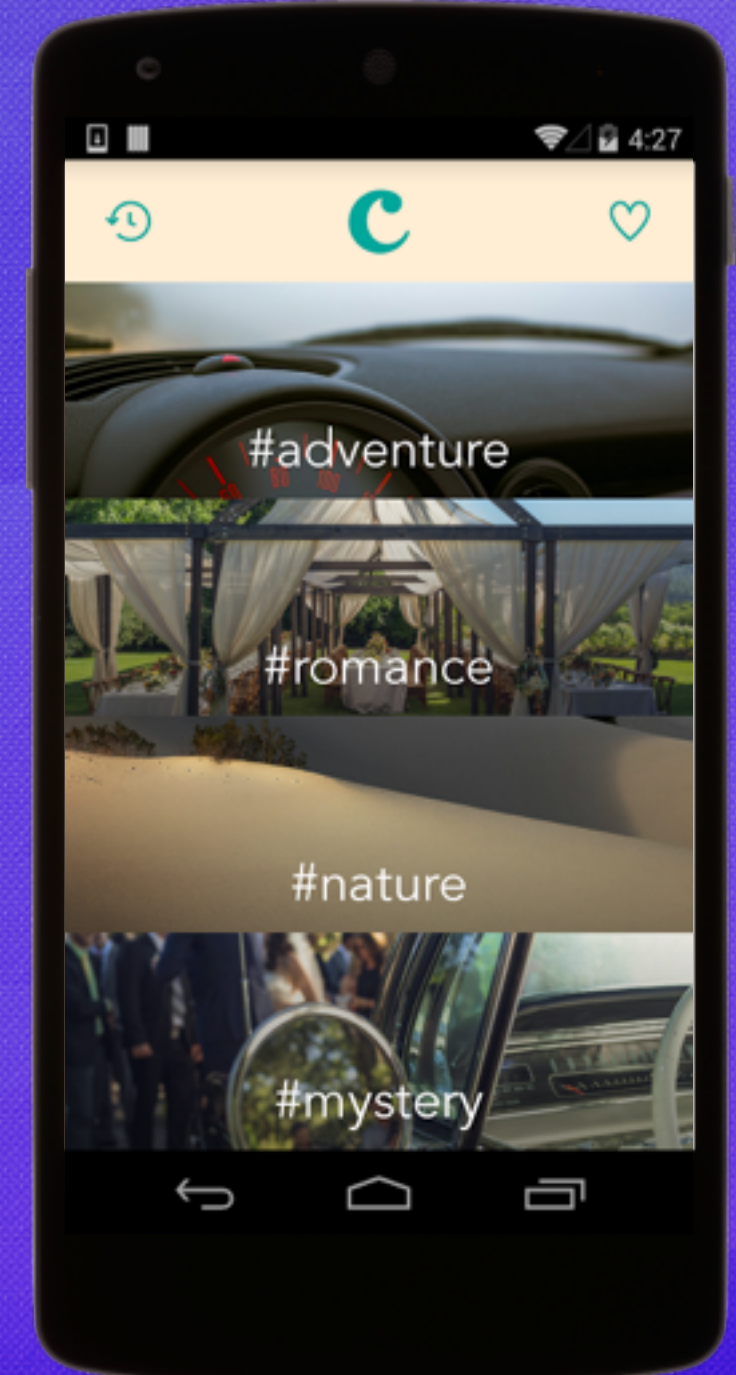
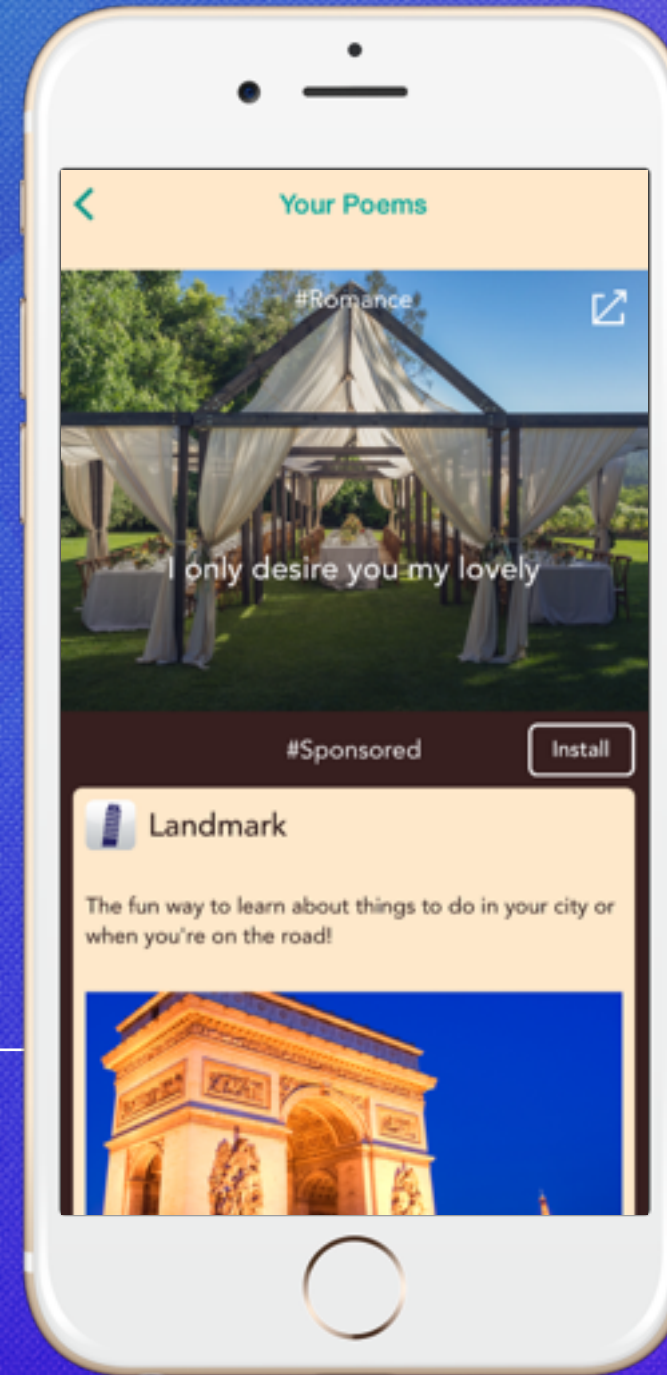




Cannonball

RELEASING A NEW FEATURE

Emoji Poems



What does our week look
like?

Backlog

Current

GET FEEDBACK

**PROD APP STATUS
CHECK**

FIX ISSUES

Backlog

GET FEEDBACK

FIX ISSUES

#SHIPIT

Current

**PROD APP STATUS
CHECK**

Backlog

FIX ISSUES

#SHIPIT

**COLLECT
PAYMENTS
\$\$\$**

Current

**PROD APP STATUS
CHECK**

GET FEEDBACK

Backlog

#SHIPIT

**COLLECT
PAYMENTS
\$\$\$**

Current

**PROD APP STATUS
CHECK**

GET FEEDBACK

FIX ISSUES

Backlog

**COLLECT
PAYMENTS
\$\$\$**

#SHIPIT

Current

**PROD APP STATUS
CHECK**

GET FEEDBACK

FIX ISSUES

Backlog

#SHIPIT

**COLLECT
PAYMENTS
\$\$\$**

Current

**PROD APP STATUS
CHECK**

GET FEEDBACK

FIX ISSUES

Monday

Feature vs. Fix

Tuesday

Feedback

Wednesday

Ship it

Thursday

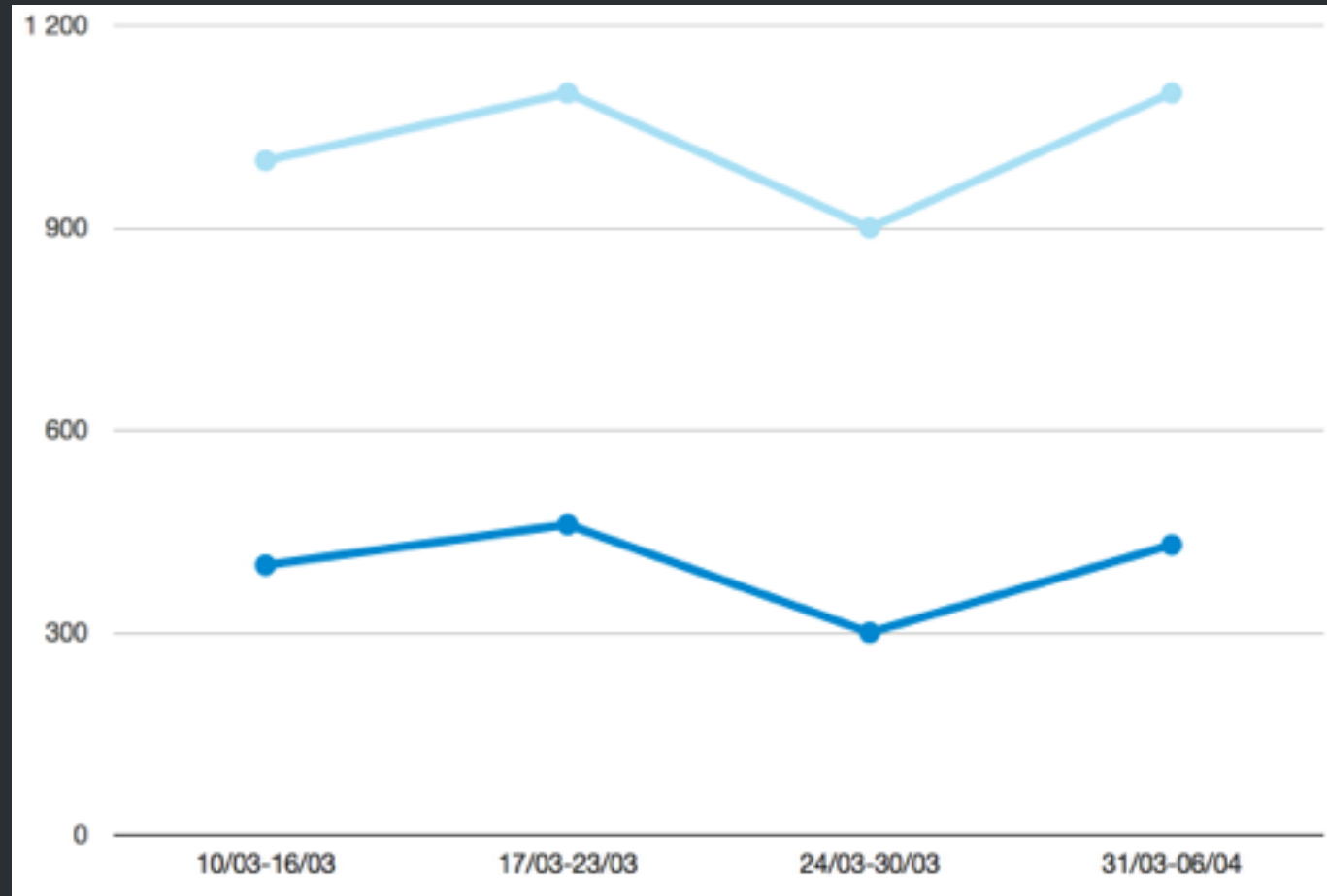
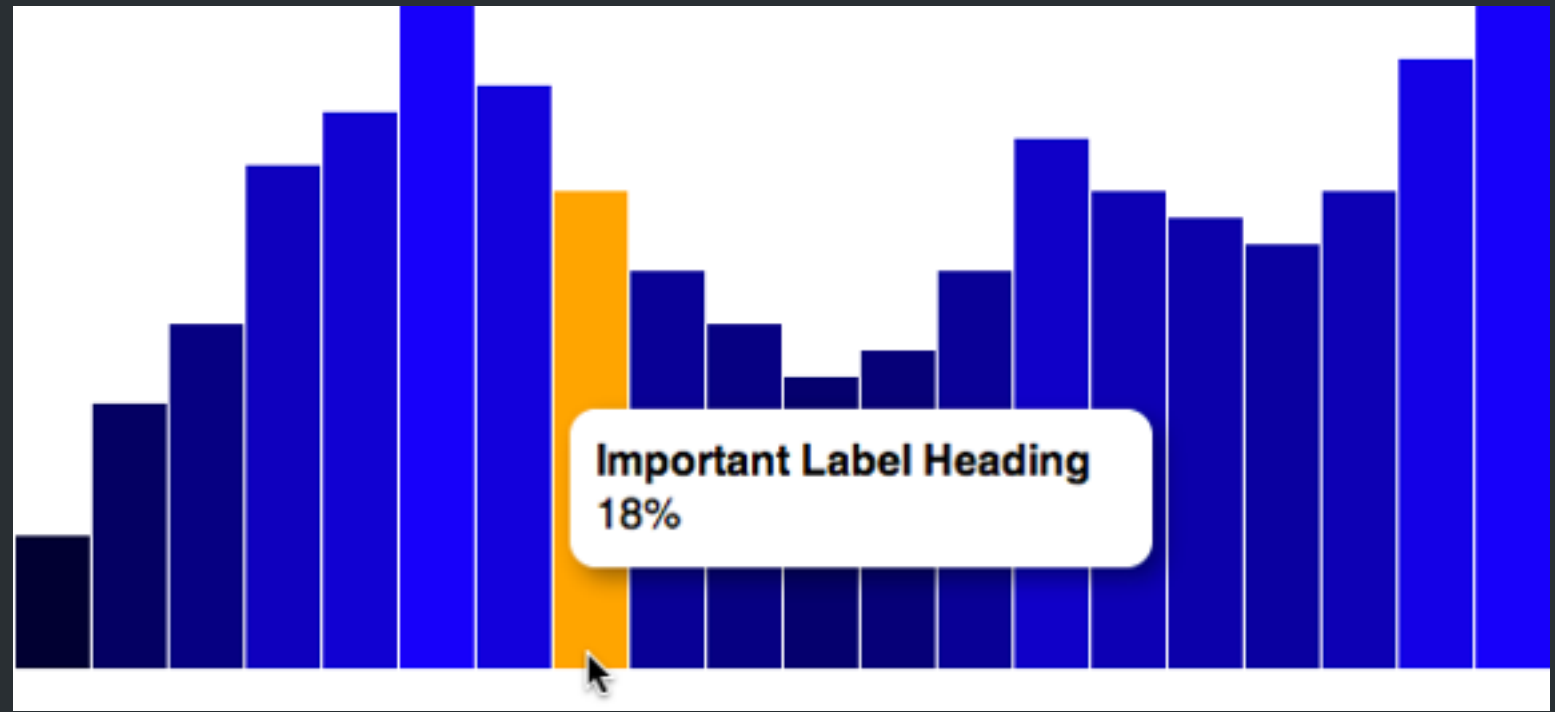
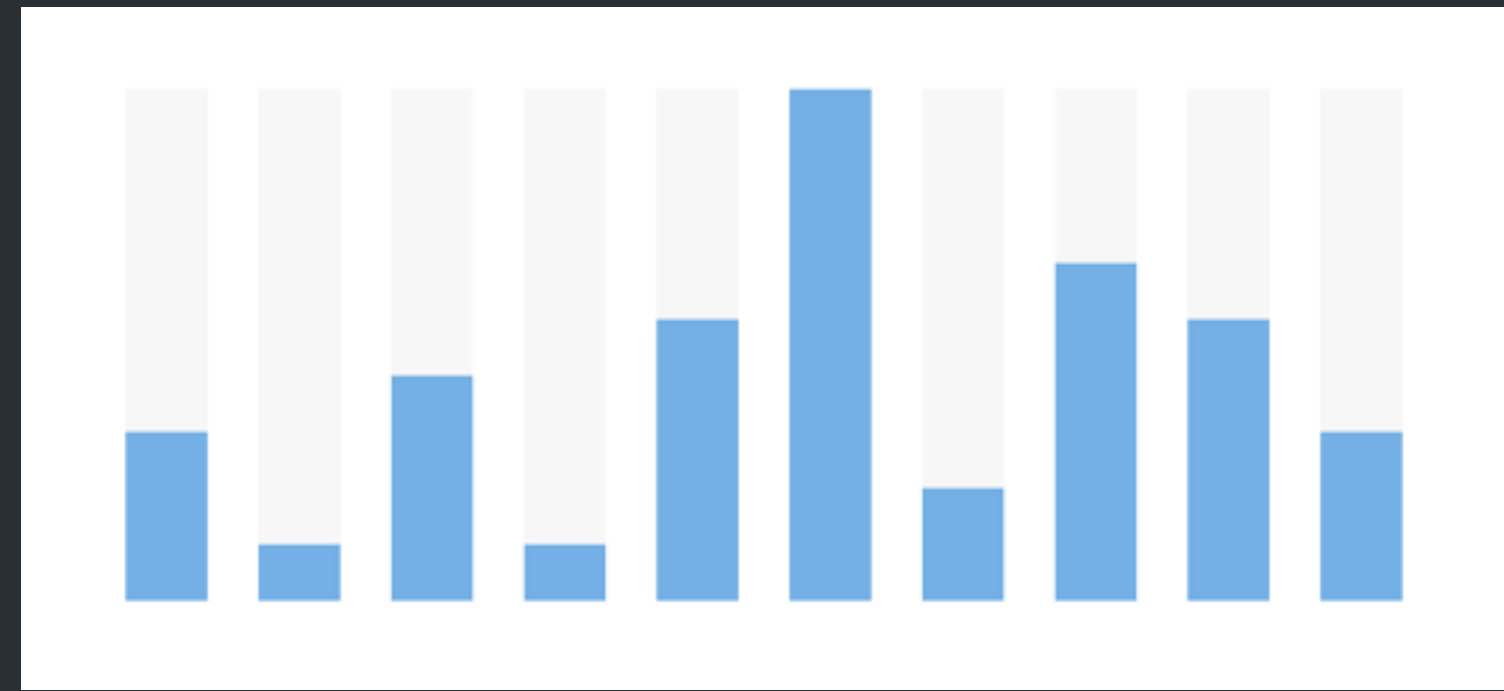
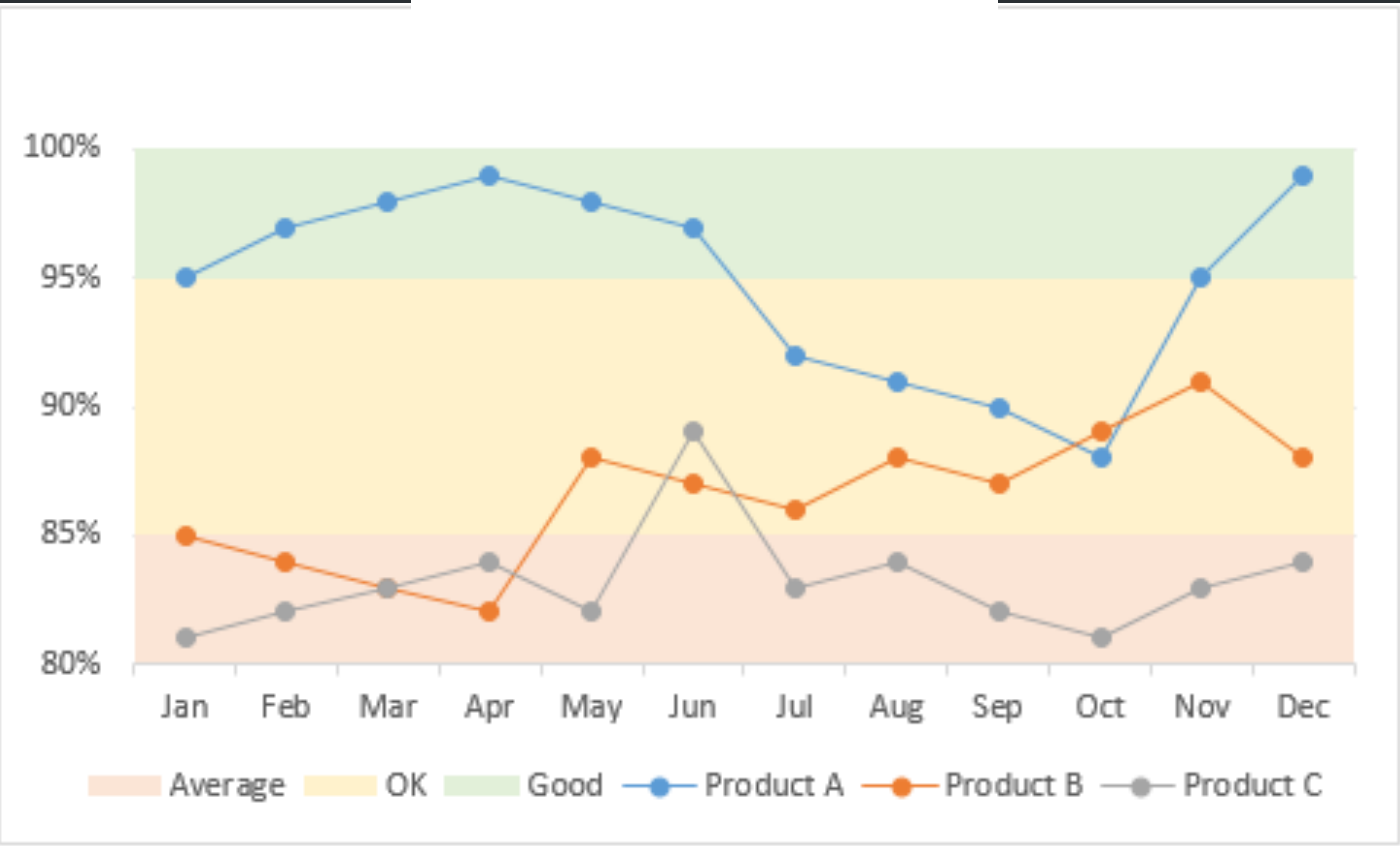
Monitor

Friday

#Beer

MONDAY

FEATURE VS. FIX



Quick

Clear

Confident



Cannonball

io.fabric.samples.cannonball

Jason Cannonball

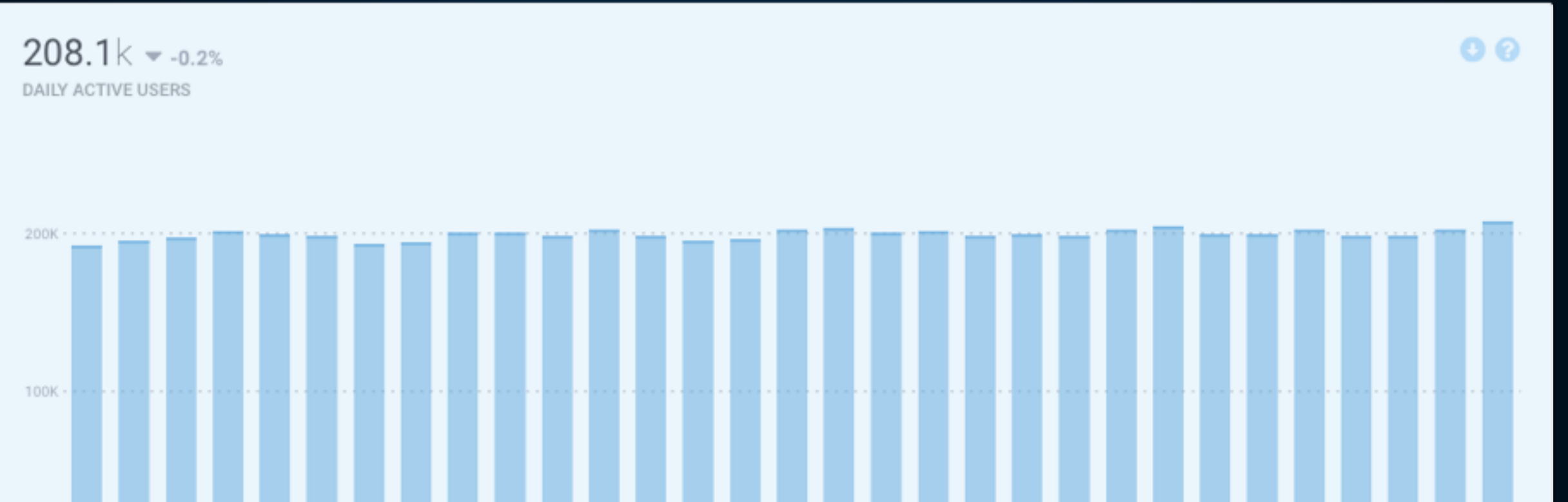
- Home
- Share
- Settings
- Twitter
- Dashboard
- Mobile

ACTIVE USERS ⓘ

82
RIGHT NOW



DAILY ACTIVE USERS ⓘ	DAILY NEW USERS ⓘ	MONTHLY ACTIVE USERS ⓘ	CRASH-FREE USERS ⓘ	SESSIONS ⓘ	PURCHASE ⓘ
208.1 k ▼ -0.2%	5.1 k ▼ -0.1%	656.1 k ▼ -0.2%	97.7% ▼ -0.2%	636.5 k	119.0 k ▼ -0.1%



◎ answers



Cannonball
io.fabric.samples.cannonball

Jason Cannonball

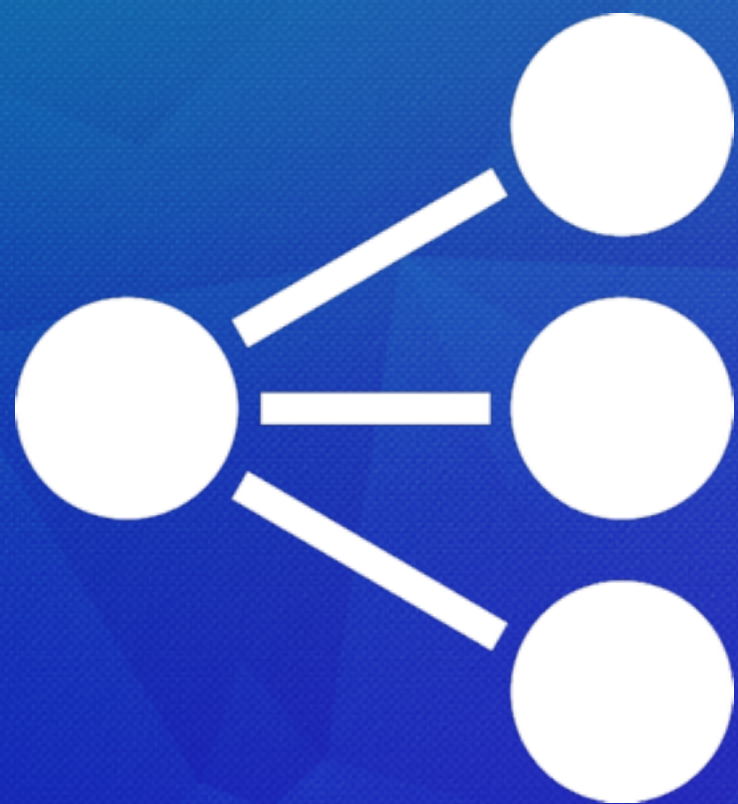
- Home
- Users
- Sessions
- Crashes
- Performance
- Alerts
- Settings
- Help



82
RIGHT NOW

DAILY ACTIVE USERS ?	DAILY NEW USERS ?	MONTHLY ACTIVE USERS ?	CRASH-FREE USERS ?	SESSIONS ?	SESSION LENGTH ?
2.1 k ▲ 1.7%	49 ▲ 0.8%	6.5 k ▲ 0.7%	96.6 % ▲ 1.0%	6.3 k ▲ 0.3%	2:03 MIN ▼ -0.4%





Beta

by **crashlytics**

0.9.2 (1)
Distributed 4:57pm 10.09.2014 Cannonball ===== -> v0.9.2 (2014-10-09) - Design

+ Add Testers Share Links

Search People

26 People 2 Groups 13 Invited 4 Accepted 8 Installed 1 Launch

Cannonball Team
6 Testers

Twitter Android Testers
23 Testers

Gthabit@twitter.com

André Pinter
apinter@twitter.com

Andy Piper
apiper@twitter.com

Nexus 5

Top Issues

PoemPopular.java line 112 io.fabric.samples.cannonball.activity...	10 CRASHES
PoemHistory.java line 259 io.fabric.samples.cannonball.activity...	7 CRASHES
PoemBuilder.java line 428 io.fabric.samples.cannonball.activity...	5 CRASHES
PoemHistory.java line 287 io.fabric.samples.cannonball.activity...	5 CRASHES

- pbowes@twitter.com 3 days ago
- Jason jstpierre@twitter.com Invited 3 days ago
- Jason jstpierre@twitter.com Installed 5 days ago

- ### Recent Developer Activity
- Cannonball Updated release notes 9 hours ago
 - Cannonball Updated release notes 10 hours ago
 - Cannonball Updated release notes



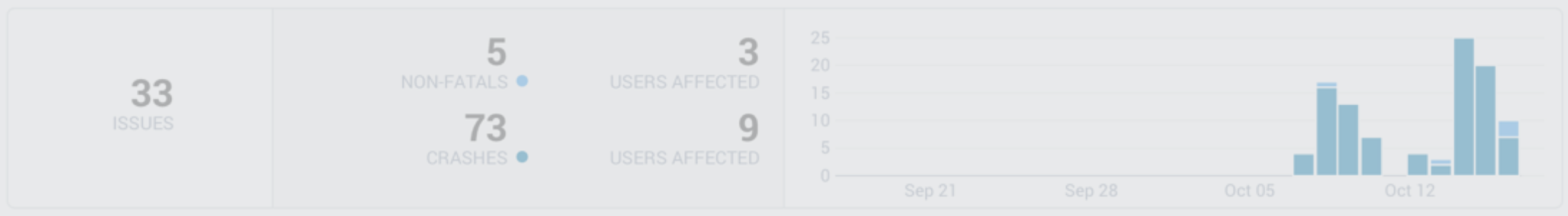
Beta

by crashlytics



All Versions Open Issues Crashes Or Non-Fatals All Time

Logs, keys, users...



<input type="checkbox"/>	#17	PoemPopular.java line 112	io.fabric.samples.cannonball.activity.PoemPopular\$3.success	0.9.2 (1)	10	7
					CRASHES	USERS

<input type="checkbox"/>	#11		io.fabric.samples.cannonball.activity.PoemPopular\$3.success	0.9.2 (1)	CRASHES	USERS
--------------------------	-----	--	--	-----------	---------	-------

<input type="checkbox"/>	#27	PoemHistory.java line 259	io.fabric.samples.cannonball.activity.PoemHistory\$SharePoemTask.doInBackground...	0.9.2 (1)	7	2
					CRASHES	USERS

<input type="checkbox"/>	#12	PoemBuilder.java line 428	io.fabric.samples.cannonball.activity.PoemBuilder.moveView	0.9.2 (1)	5	4
					CRASHES	USERS

<input type="checkbox"/>	#30	PoemHistory.java line 287	io.fabric.samples.cannonball.activity.PoemHistory\$SharePoemTask.doInBackground...	0.9.2 (1)	5	1
					CRASHES	USER

<input type="checkbox"/>	#16	TwitterCore.java line 96	com.twitter.sdk.android.core.TwitterCore.checkAuthenticated	0.9.2 (1)	4	3
					CRASHES	USERS

<input type="checkbox"/>	#33	PoemHistory.java line 271	io.fabric.samples.cannonball.activity.PoemHistory\$OnShareClickListener.onClick	0.9.2 (1)	4	2
					CRASHES	USERS



fabric.io

0.00% ROOTED | 12.84 GB FREE SPACE | 338.00 MB FREE RAM | 100.00% APP IN FOCUS | 100.00% PROXIMITY ON

Viewing latest crash (More details...)

Fatal Exception: java.lang.UnsupportedOperationException </> raw

- java.util.Collections\$UnmodifiableCollection.addAll (Collections.java:932)
- io.fabric.samples.cannonball.activity.PoemPopular\$3.success (PoemPopular.java:112)**
- com.twitter.sdk.android.core.Callback.success (Callback.java:23)
- retrofit.CallbackRunnable\$1.run (CallbackRunnable.java:45)
- android.os.Handler.handleCallback (Handler.java:733)
- android.os.Looper.loop (Looper.java:136)
- android.app.ActivityThread.main (ActivityThread.java:5001)
- java.lang.reflect.Method.invokeNative (Method.java)
- dalvik.system.NativeStart.main (NativeStart.java)

Show all 43 Threads

NOTES
No notes have been entered on this issue.

RELATED
There are no related issues

Start a conversation...

fabric.io

DEVICE

- Nexus 5
DEVICE
- Portrait
ORIENTATION
- On
PROXIMITY

OPERATING SYSTEM

- 4.4.4
ANDROID VERSION
- No
ROOTED
- Portrait
UI ORIENTATION

98%
BATTERY

18%
RAM


63%
DISKSPACE


Search **REGEX SUPPORTED!** Keys Logs


```
0 | 00:00:03:682 | D/Crashlytics Splash: user with active session
1 | 00:00:05:685 | D/Crashlytics ThemeChooser: clicked on Theme: nature
2 | 00:00:36:103 | D/Crashlytics PoemBuilder: clicked to save poem
3 | 00:00:36:131 | D/Crashlytics PoemBuilder: poem saved, receiver called
4 | 00:00:39:000 | D/Crashlytics PoemHistory: getting back to ThemeChooser
5 | 00:00:40:666 | D/Crashlytics ThemeChooser: clicked History button
6 | 00:01:01:301 | D/Crashlytics PoemHistory: getting back to ThemeChooser
7 | 00:01:02:866 | D/Crashlytics ThemeChooser: clicked Popular button
8 | 00:01:02:924 | D/Crashlytics PopularTweets: loading more tweets
9 | 00:01:05:637 | D/Crashlytics PopularTweets: scrolled to end of Tweet list
10 | 00:01:05:637 | D/Crashlytics PopularTweets: loading more tweets
11 | 00:01:05:763 | D/Crashlytics PopularTweets: scrolled to end of Tweet list
12 | 00:01:05:779 | D/Crashlytics PopularTweets: scrolled to end of Tweet list
13 | 00:01:05:935 | D/Crashlytics PopularTweets: scrolled to end of Tweet list
```

Download

DEVICE


 **Nexus 5**
DEVICE


 **Portrait**
ORIENTATION


 **On**
PROXIMITY

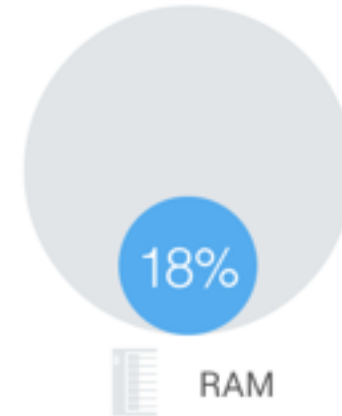


OPERATING SYSTEM

 **4.4.4**
ANDROID VERSION

 **No**
ROOTED

 **Portrait**
UI ORIENTATION



Keys Logs

COUNTDOWN_TIMER_REMAINING_SEC 29	LAST_TWITTER_SEARCH_RESULT_COUNT 5	SAVING_POEM_IMAGE th_nature_01	INACTIVE_ACCOUNT true
SAVING_POEM_TEXT which bluebird alive favorite how she like	SESSION_ACTIVATED true	THEME nature	WORD_BANK_COUNT_LOADED 13

Fatal Exception: java.lang.UnsupportedOperationException

</> raw

java.util.Collections\$UnmodifiableCollection.addAll (Collections.java:932)

io.fabric.samples.cannonball.activity.PoemPopular\$3.success (PoemPopular.java:112)

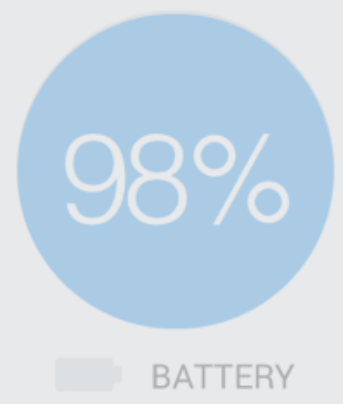
com.twitter.sdk.android.core.Callback.success (Callback.java:23)

retrofit.CallbackRunnable\$1.run (CallbackRunnable.java:45)



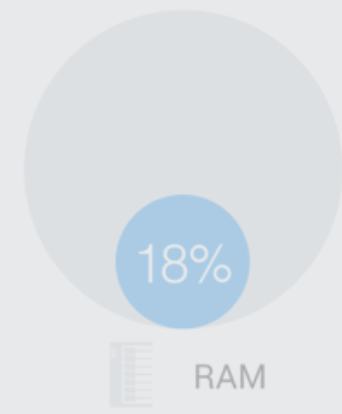
DEVICE

- Nexus 5
DEVICE
- Portrait
ORIENTATION
- On
PROXIMITY



OPERATING SYSTEM

- 4.4.4
ANDROID VERSION
- No
ROOTED
- Portrait
UI ORIENTATION



Keys Logs

```
COUNTDOWN_TIMER_REMAINING_SEC 29  
LAST_TWITTER_SEARCH_RESULT_COUNT 5  
SAVING_POEM_TEXT th_nature  
INACTIVE_ACCOUNT true  
SAVING_POEM_TEXT which bluebird alive favorite how she like  
SESSION_ACTIVATED true  
THEME nature 13
```

Fatal Exception: java.lang.UnsupportedOperationException

</> raw

```
java.util.Collections$UnmodifiableCollection.addAll (Collections.java:932)  
io.fabric.samples.cannonball.activity.PoemPopular$3.success (PoemPopular.java:112)  
com.twitter.sdk.android.core.Callback.success (Callback.java:23)  
retrofit.CallbackRunnable$1.run (CallbackRunnable.java:45)  
android.os.Handler.handleCallback (Handler.java:733)
```


Using Custom Logs

```
private
    TextView
    skipButton
    skipButton

    Crashlytics.log("Login: skipped login");
    startThemeChooser
    overridePendingTransition

}
```


Using Custom Keys

```
public void onClick(View v) {  
    Crashlytics.log("ThemeChooser: clicked on Theme: " + themeName);  
    Crashlytics.setString(App.CRASHLYTICS_KEY_THEME, themeName);  
    final Intent intent = new Intent(getBaseContext(), PoemBuilder.class);  
    intent.putExtra(PoemBuilder.KEY_THEME, theme);  
    startActivity(intent);  
}
```


Monday Review

Health check

Manage our beta release

Debug stability issue

Tuesday

FEEDBACK







Cannonball

0.9.9 (6)
Distributed S

+ Add Tester

Cannonball
5 Testers

Alex S
alex@

Andy P
apiper@

Bear D
bear@t

Brian S
bswift@

- Cannonball Team**
6 Testers
- Impacted Users**
0 Testers
- LATAM TEAM**
2 Testers
- Twitter Android Testers**
24 Testers
- Twitter iOS Testers**
51 Testers
- Twitter Testers**
4 Testers
- + New Group

Impacted Users

Alias: impacted-users

Delete

Add Testers...

example@example... +

Dsack@twitter... +

Gthabit@twitter... +

John egan
Jegan@twitter... +

Julia Martin
Juliam@twitter... +

+ Add testers from CSV







0.9.9 (5)
Distributed 12:09pm 03.11.2015

[Release Notes](#)
Live Release.

[+ Add Testers](#) [Share Links](#)

11 People 1 Group 4 Invited 3 Accepted 0 Installed 4 Launched

	Cannonball Team 3 Testers	
	Alex Singer alexs@twitter.com	
	Agustin Pesciallo apesciallo@twitter.com	
	Bear Douglas bear@twitter.com	
	Brian Swift bswift@twitter.com	
	Bernd Verst bverst@twitter.com	

TOP ISSUES FOR 0.9.9 (5)

PoemBuilderActivity.java line ... io.fabric.samples.cannonball.a...	5 CRASHES
TwitterCore.java line 232 com.twitter.sdk.android.core.T...	4 CRASHES

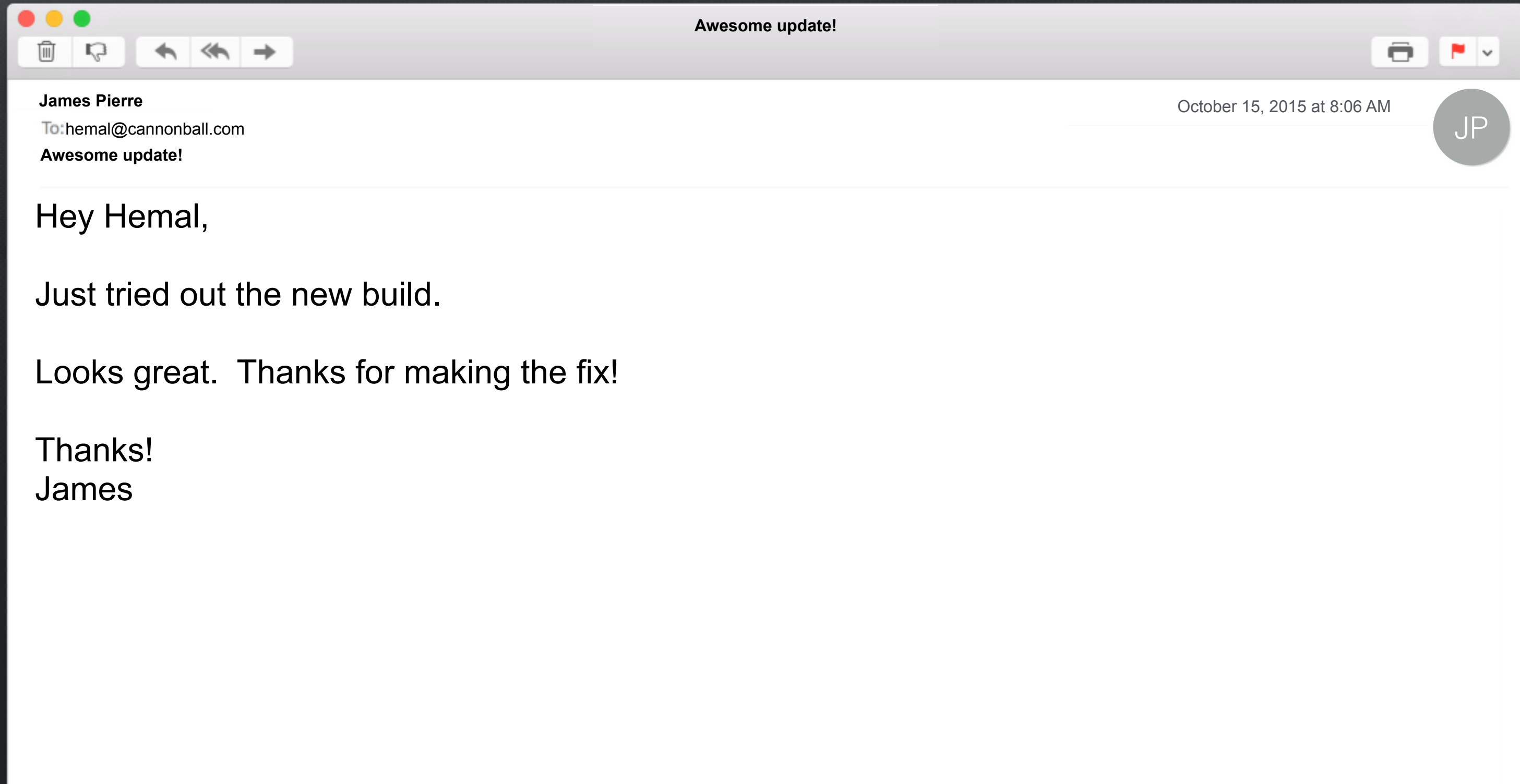
RELEASE SUMMARY

194 SESSIONS	2:11 HOURS TESTED
25.0% CRASH-FREE DEVICES	96.9% CRASH-FREE SESSIONS

RECENT TESTER ACTIVITY

	Agustin Pesciallo apesciallo@twitter.com	Installed a month ago
	Agustin Pesciallo	Installed

Feedback



Select Your Emoji



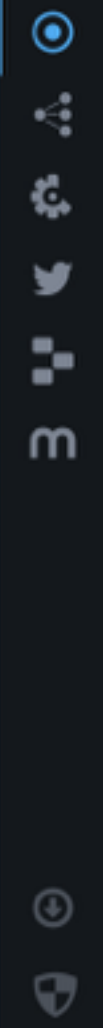
PURCHASE

BACK



Cannonball
io.fabric.samples.cannonball

Jeff Seibert
Cannonball



7,384
ACTIVE USERS RIGHT NOW



DAILY ACTIVE USERS
211.0k
▲ 2.8%

DAILY NEW USERS
5.0k
▲ 4.2%

MONTHLY ACTIVE USERS
665.3k
▲ 3.6%

CRASH-FREE USERS
96.3%
▲ 5.0%

SESSIONS
633.6k
▲ 7.0%

ADD AN EVENT

Answers Events

What would you like to track in Cannonball?

E-COMMERCE

CONTENT

USERS

GAMING

Purchase

Content View

Sign Up

Level Start

Add to Cart

Search

Log In

Level End



Answers Events

What would you like to track in Cannonball?

- Home
- Analytics
- Settings
- Twitter
- Dashboard
- Menu
- Help
- Security

E-COMMERCE

Purchase

Add to Cart

Start Checkout

CONTENT

Content View

Search

Share

Rated Content

USERS

Sign Up

Log In

Invite

GAMING

Level Start

Level End

Can't find what you need?

Use a Custom Event to track unique, important events in your app that you don't see covered above.

Custom Event

Using Answers Events

```
private
    TextView
    skipButton
    skipButton

    Answers.getInstance().logPurchase(new PurchaseEvent());
    startThemeChooser
        overridePendingTransition

}
```


Using Answers Events

```
private
    TextView
    skipButton
    skipButton

    Answers.getInstance().logPurchase(new PurchaseEvent()
        .putItemPrice(BigDecimal.valueOf(2.99))
        .putCurrency(Currency.getInstance("USD"))
        .putItemName("Smiles Emoji Pack")
        .putItemType("Emojis")
        .putItemId("smiles145")
        .putSuccess(true));

    startThemeChooser
        overridePendingTransition

}
```




Cannonball
io.fabric.samples.cannonball

Jeff Seibert
Cannonball

- Home
- Share
- Settings
- Twitter
- Dashboard
- Help
- Logout
- Security



DAILY ACTIVE USERS	DAILY NEW USERS	MONTHLY ACTIVE USERS	CRASH-FREE USERS	SESSIONS	PURCHASE
211.0k ▲ 2.8%	5.0k ▲ 4.2%	665.3k ▲ 3.6%	96.3% ▲ 5.0%	633.6k ▲ 7.0%	119.9k ▲ 4.0%

TODAY'S TOP EVENTS 4 EVENTS

Purchase		119.9k EVENT COUNT ▲ 4.0%	112.3k EVENT USERS ▲ 2.0%
----------	--	------------------------------	------------------------------

Log In		75.1k EVENT COUNT	28.2k EVENT USERS ▲ 1.0%
--------	--	----------------------	-----------------------------

Share		142.0k EVENT COUNT ▲ 3.0%	32.0k EVENT USERS ▲ 4.0%
-------	--	------------------------------	-----------------------------

Tuesday Review

Beta groups & feedback

Event tracking

Team collaboration

...Things Seem To Be Going Well



Wednesday

THE DOOMING TWEET



Israel Camacho

@rallat

@Cannonballapp sucks. Crashed when I made a poem! [#LetMeExplainYouAppDev](#)




11

★ 68





Cannonball

 io.fabric.samples.Cannonball

Stability Alert

Crash-Free Users has dropped to **52.3%**

This is below what we expected based on the value yesterday at this time.

[Launch Answers](#)

Answers
by Crashlytics

Copyright © 2014 Crashlytics. All Rights Reserved.  crashlytics

[Manage your email notification preferences](#)

#3467 NSTask+Convenience.m line 52
+[NSTask(Convenience) launchWithPath:workingDirectory:arguments:environment:completion:]

246 CRASHES
15 USERS



NOTES



Jeff Paret

10/13/14 6:32pm

This was a silly issue. If you're crashing on this, it's a server side regression that happens when you didn't feature switch your code properly. #fail

Leave a reply...



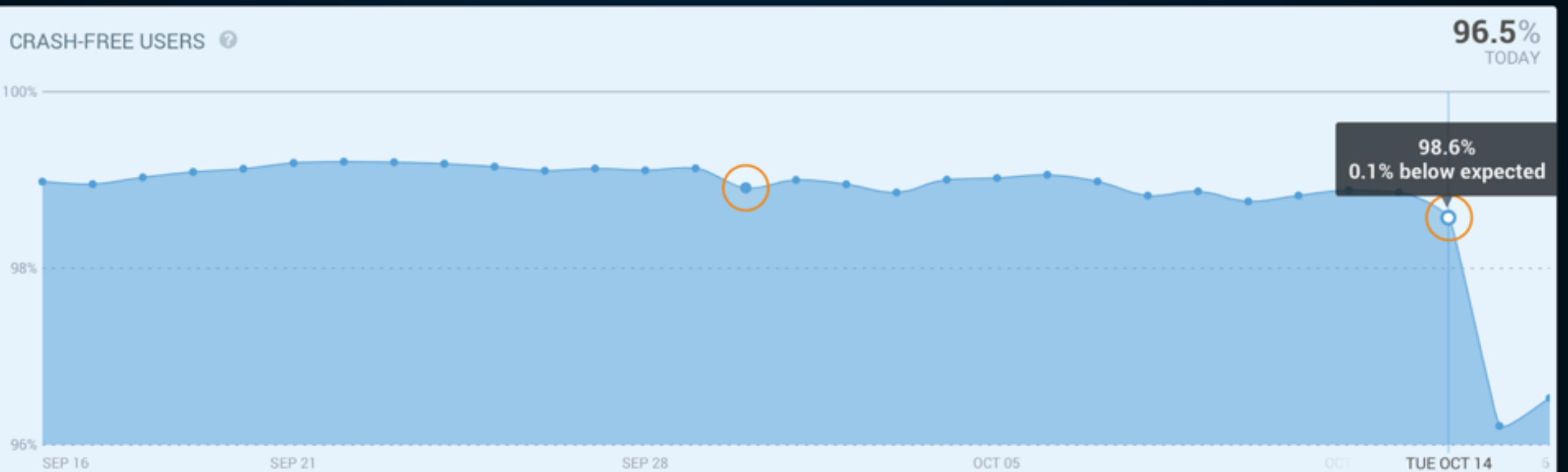
Cannonball 2.3.1
io.fabric.example.cannonball

Jeff Seibert
Twitter, Inc.

- Home
- Users
- Sessions
- Crashes
- Analytics
- Settings
- Help



Metric	Value	Change
DAILY ACTIVE USERS	78.0k	▲ 8.7%
DAILY NEW USERS	7.1k	▲ 11.2%
MONTHLY ACTIVE USERS	2.1M	▲ 3.8%
CRASH-FREE USERS	96.5%	▼ -2.6%
SESSIONS	248.2k	▲ 10.2%
PURCHASE	119.0k	▼ -0.1%



Message
Today 8:57 AM

I just saw a bad tweet go out about the app. Can you figure out what's going on and fix it NOW?!

Yup, on it. Opening my laptop now.

Issue fixed, was a minor backend issue. Added some extra logging so it won't happen again.

You rock! Thanks :)



Wednesday Review

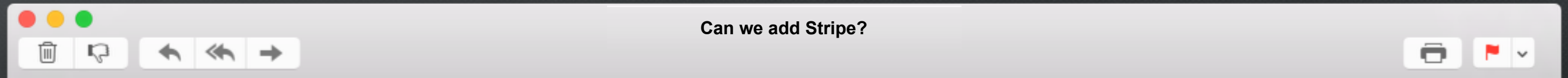
Critical alerting

Cross version issues

Real-time stability metrics

Thursday

ADDING A NEW SDK



Brian Swift

October 15, 2015 at 8:06 AM

BS

To: hemal@cannonball.com

Can we add Stripe?

Hey Hemal,

I just saw this cool payment SDK called Stripe at fabric.io/kits. It looks reputable since it's on Fabric, can you quickly add this in before we launch?

Thanks!

Brian



Stripe

+ Install Stripe SDK

Summary Install Features

Payments infrastructure for the internet

Whether you're building a marketplace, mobile app, online storefront, or subscription service, Stripe has the features you need.

Seamlessly integrated mobile payments

Lyft, Postmates, OrderAhead, Instacart, and thousands of other mobile applications use Stripe's native iOS & Android libraries to charge on the go. Even collect cards up front for seamless background billing later.

Our iOS libraries let you easily collect and process your customers' payment information. They also seamlessly integrate with Apple Pay, Apple's integrated payment framework. They remain backwards-compatible to iOS 5.0.

Accept payments from anyone, anywhere

Stripe currently supports businesses in the US, Canada, UK, Australia, and many European countries. You can instantly accept payments from around the world.



About Version 5.1.4

PLATFORMS
Android | iOS

COST
Free

AUTHOR
Stripe

LICENSE
Stripe

MIN SYSTEM REQUIREMENTS
iOS 8

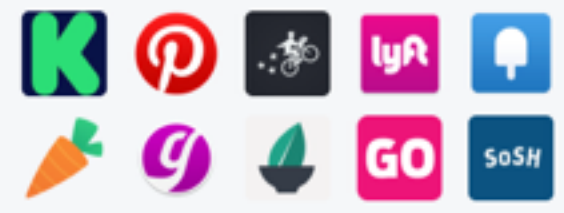
WEBSITE
<https://support.stripe.com>

DOCUMENTATION
[Class Reference Docs](#)

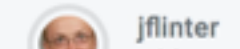
IRC
#stripe

TWITTER
[@stripe](#)

Top Apps Using this SDK



Top Contributors



Get started with Stripe in 2 steps.

Manage your entire toolset without ever having to leave your favorite coding environment. We will upload dSYMs, provision an account for you, and walk you through your first example. See it in action.



1 of 2 Initialize Stripe with Fabric

With Fabric, it takes just a few lines of code to get Stripe up and running in your app. Click to copy the highlighted lines and then paste them into your code.

<Your>AppDelegate.m

```
#import "AppDelegate.h"
#import <Fabric/Fabric.h>
#import <Stripe/Stripe.h>
@implementation AppDelegate

- (BOOL)application:(UIApplication *)application
didFinishLaunchingWithOptions:(NSDictionary *)launchOptions {
    [Fabric with:@[[STPAPIClient class]];
    return YES;
}

@end
```

Previous

Next

- 1 Initialize Stripe with Fabric
- 2 Verifying Installation

Android | iOS Free

AUTHOR Stripe LICENSE Stripe

MIN SYSTEM REQUIREMENTS iOS 8

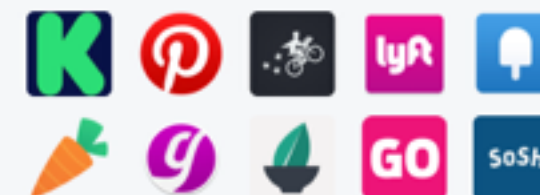
WEBSITE <https://support.stripe.com>

DOCUMENTATION [Class Reference Docs](#)

IRC #stripe

TWITTER @stripe

Top Apps Using this SDK



Top Contributors

- jflinter**
490 contributions
- phillco**
61 contributions
- saikat**
32 contributions

Collecting credit card information

At some point in the flow of your app, you'll want to obtain payment details from the user. There are three ways to do this. You can (in increasing order of complexity):

1. [Use Apple Pay framework to access your users' stored payment information](#)
2. [Use our pre-built form component, PaymentKit, to collect new credit card details](#)
3. [Build your own credit card form from scratch](#)

[Apple Pay](#) only supports certain US credit cards on the latest iOS devices. We recommend using Apple Pay in combination with option 2 or option 3 as a fallback on devices where Apple Pay is not available.

Test Mode

When you're using your test publishable key, our libraries give you the ability to test your payment flow without having to charge real credit cards.

On iOS8+, you can use our [ApplePayStubs](#) library to simulate the Apple Pay flow with test credit cards.

If you're building your own form or using PaymentKit, using the card number `4242424242424242` (along with any CVC and future expiration date) will accomplish the same effect.

You can learn more in our [testing documentation](#).

Using Apple Pay

With Apple Pay, you'll be able to access payment information stored on your customers' iOS devices.

Important note before starting

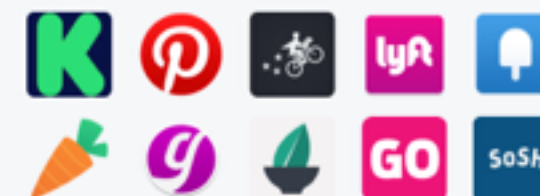
In order to use Apple Pay, you'll need to add the "Apple Pay" capability to your app in Xcode. This requires creating a merchant ID with Apple first, as explained in [this tutorial](#).

If you submit your app with Apple Pay code in it, but don't have the "Apple Pay" capability, Apple will send you a warning email. (They'll still accept your submission, though). To avoid triggering this warning unnecessarily, after installing our iOS library, you'll need to opt-in in order to use our Apple Pay components.

You'll first need to add `STRIPLE_ENABLE_APPLEPAY` to your app's build settings under "Preprocessor Macros."

PLATFORMS	COST
Android iOS	Free
AUTHOR	LICENSE
Stripe	Stripe
MIN SYSTEM REQUIREMENTS	
iOS 8	
WEBSITE	
https://support.stripe.com	
DOCUMENTATION	
Class Reference Docs	
IRC	
#stripe	
TWITTER	
@stripe	

Top Apps Using this SDK



Top Contributors

- jflinter**
490 contributions
- philco**
61 contributions
- saikat**
32 contributions

Cannonball

- Frameworks
 - Crashlytics.framework
 - DigitsKit.framework
 - Fabric.framework
 - MoPub.framework
 - TwitterCore.framework
 - TwitterKit.framework
- Cannonball
 - Models
 - Poem.swift
 - PoemPersistence.swift
 - Theme.swift
 - View Controllers
 - AboutViewController.swift
 - PoemCompos...ontroller.swift
 - PoemHistoryViewController.swift
 - PoemTimeline...ontroller.swift
 - SignInViewController.swift
 - ThemeChoose...ontroller.swift
 - Views
 - AppDelegate.swift
 - ColorConstants.swift
 - Main.storyboard
 - Images.xcassets
 - Resources
 - DigitsKitResources.bundle
 - MoPub.bundle
 - TwitterKitResources.bundle
 - Themes.json
 - Supporting Files
 - Info.plist
 - CannonballTests
 - PoemPersistenceTests.swift
 - CannonballTests.swift
 - Supporting Files
 - Products
 - Cannonball.app
 - CannonballTests.xctest

```
//
// Copyright (C) 2014 Twitter, Inc. and other contributors.
// Licensed under the Apache License, Version 2.0 (the "License");
// you may not use this file except in compliance with the License.
// You may obtain a copy of the License at
//
// http://www.apache.org/licenses/LICENSE-2.0
//
// Unless required by applicable law or agreed to in writing, software
// distributed under the License is distributed on an "AS IS" BASIS,
// WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
// See the License for the specific language governing permissions and
// limitations under the License.
//

import UIKit
import Fabric
import Crashlytics
import TwitterKit
import DigitsKit
import MoPub

@UIApplicationMain
class AppDelegate: UIResponder, UIApplicationDelegate {

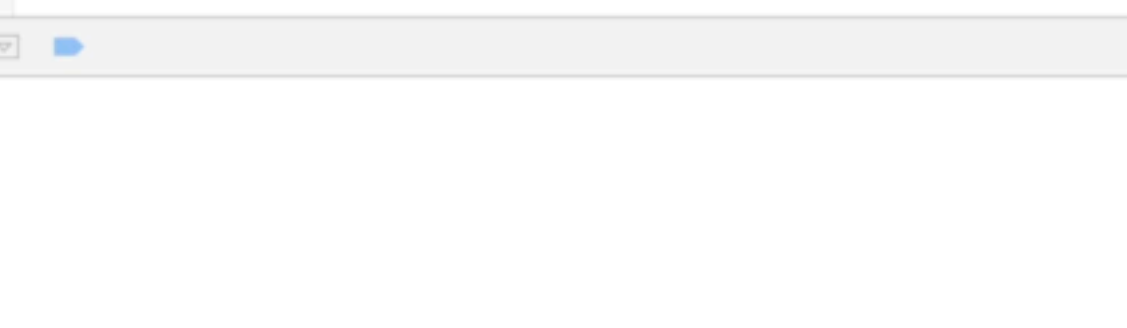
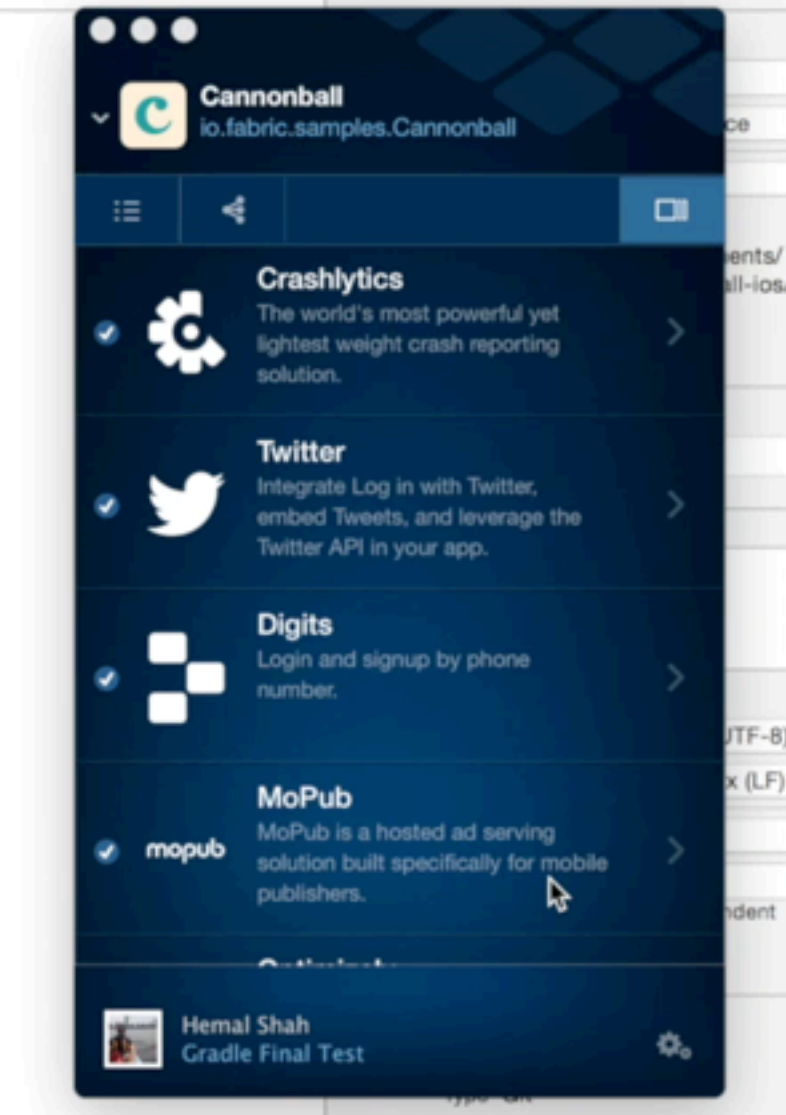
    var window: UIWindow?

    func application(application: UIApplication, didFinishLaunchingWithOptions launchOptions: [NSObject : AnyObject]?) -> Bool {
        // Developers: Welcome! Get started with Fabric.app.
        let welcome = "Welcome to Cannonball! Please onboard with the Fabric Mac app. Check the instructions in the README file."
        assert(NSBundle.mainBundle().objectForKey("Fabric") != nil, welcome)

        // Register Crashlytics, Twitter, Digits and MoPub with Fabric.
        Fabric.with([Crashlytics.self, Twitter.self, Digits.self, MoPub.self])

        // Check for an existing Twitter or Digits session before presenting the sign in screen.
        if Twitter.sharedInstance().sessionStore.session() == nil && Digits.sharedInstance().session() == nil {
            let storyboard = UIStoryboard(name: "Main", bundle: nil)
            let signInViewController: AnyObject! = storyboard.instantiateViewControllerWithIdentifier("SignInViewController")
            window?.rootViewController = signInViewController as? UIViewController
        }

        return true
    }
}
```



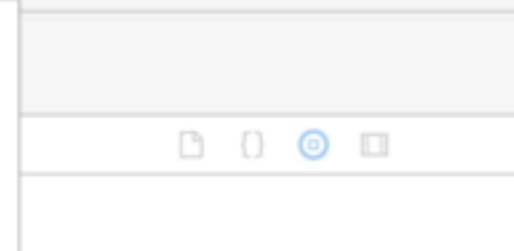
```
Oct 15 18:34:41 Cannonball[13920] <Error>: CGContextSaveGState: invalid context 0x0.
If you want to see the backtrace, please set CG_CONTEXT_SHOW_BACKTRACE environmental
variable.
Oct 15 18:34:41 Cannonball[13920] <Error>: CGContextTranslateCTM: invalid context
0x0. If you want to see the backtrace, please set CG_CONTEXT_SHOW_BACKTRACE
environmental variable.
Oct 15 18:34:41 Cannonball[13920] <Error>: CGContextRestoreGState: invalid context
0x0. If you want to see the backtrace, please set CG_CONTEXT_SHOW_BACKTRACE
environmental variable.
2015-10-15 18:34:41.639 Cannonball[13920:5694451] [Crashlytics] Version 3.3.4 (82)
```

Current Branch master

Version ad36180

Status No changes

Location /Users/hshah/Documents/workspace/cannonball-ios/Cannonball/AppDelegate.swift



Hemal Shah

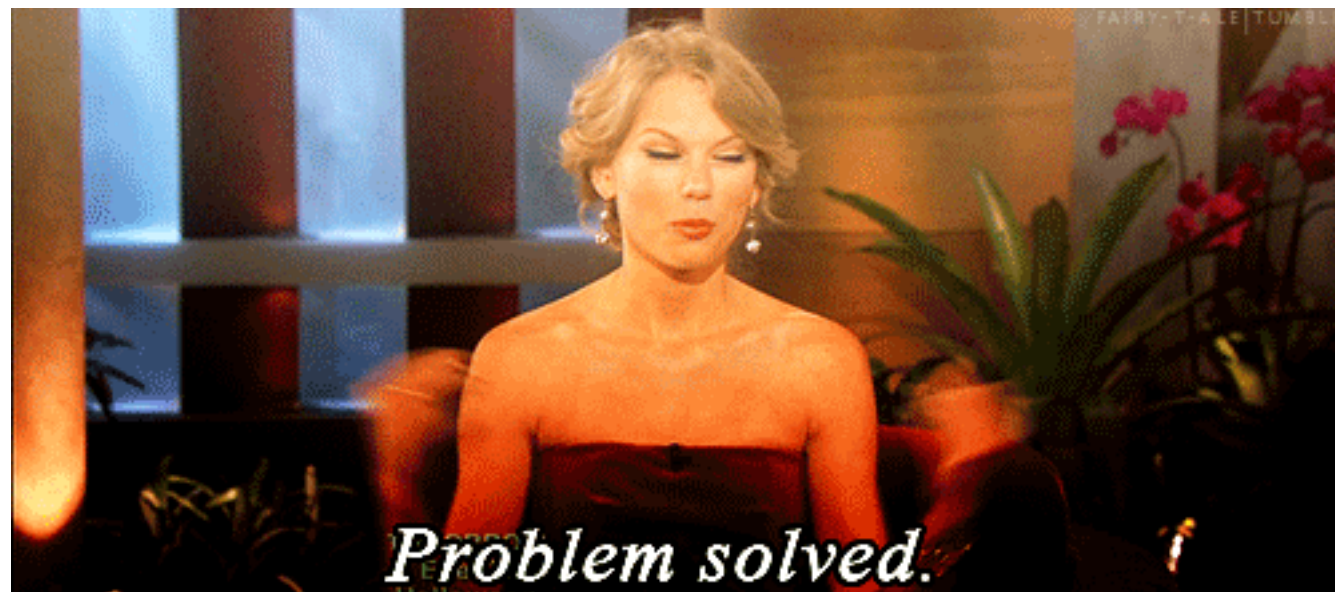
October 15, 2015 at 4:12 PM

HS

To: brian@cannonball.com

Can we add Stripe?

Done. Open your Fabric dashboard...



fabric.io

Cannonball
iOS io.fabric.samples.Cannonball

Hemal Shah
Cannonball

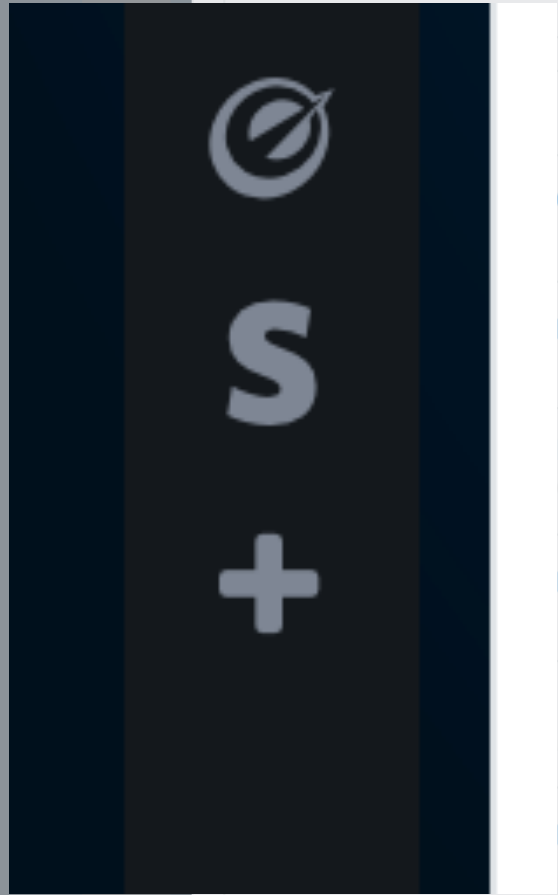
All Versions | Open Issues | All Time

Keys, notes, users...

36 ISSUES | 158 CRASHES | 54 USERS AFFECTED

Sep 13 | Sep 20 | Sep 27 | Oct 04 | Oct 11

	vController.swift line 69 l.SignInViewController.(signInWithPhone (Cannonball.SignInViewCon...	1.1 (2)	41 CRASHES	1 USER
	poserViewController.swift line 158 l.PoemComposerViewController.countdownView (Cannonball.PoemC...	1.1 (2)	18 CRASHES	11 USERS
	ateUtil _relativeTimeAgoStringForDate:withFormatForSeconds:secon...	1.0 (6)	16 CRASHES	5 USERS
	poserViewController.swift line 242 l.PoemComposerViewController.collectionView (Cannonball.PoemCo...	1.2 (1)	11 CRASHES	3 USERS
	tion sendAction:to:from:forEvent:]	1.1 (2)	8 CRASHES	6 USERS
	poserViewController.swift line 233 l.PoemComposerViewController.(collectionView (Cannonball.PoemC...	1.2 (1)	7 CRASHES	4 USERS
<input type="checkbox"/>	#31 PoemComposerViewController.swift line 240 Cannonball.PoemComposerViewController.collectionView (Cannonball.PoemCo...	1.1 (2)	6 CRASHES	1 USER
<input type="checkbox"/>	#22 CoreFoundation -[NSObject(NSObject) doesNotRecognizeSelector:]	1.1 (2)	6 CRASHES	5 USERS
<input type="checkbox"/>	#7 Cannonball -[DGTConfirmViewController localizedFootnoteString]	1.0 (6)	6 CRASHES	4 USERS



Thursday Review

Seamless kit installation

Kit feature tutorials

Kit dashboards

Friday

PREPARE FOR RELEASE



Cannonball

API Key Build Secret

47 Team Members

20 Apps

Invite

Add New Email

Add

Send invites

marketer@twitter.com



product_manager2@twitter.com



jeffparet@twitter.com



salesperson@twitter.com



APPLICATIONS

Determine which activated apps your invites will have access to.

Deselect All



Fastfile.rb

```
1  lane :release do
2    #Version Increment
3    increment_version_number
4    commit_version_bump
5    push_to_git_remote
6
7    #Building and Signing
8    cert
9    sigh
10   gym
11
12   #Upload and Notify
13   crashlytics
14   slack
15 end
16
```

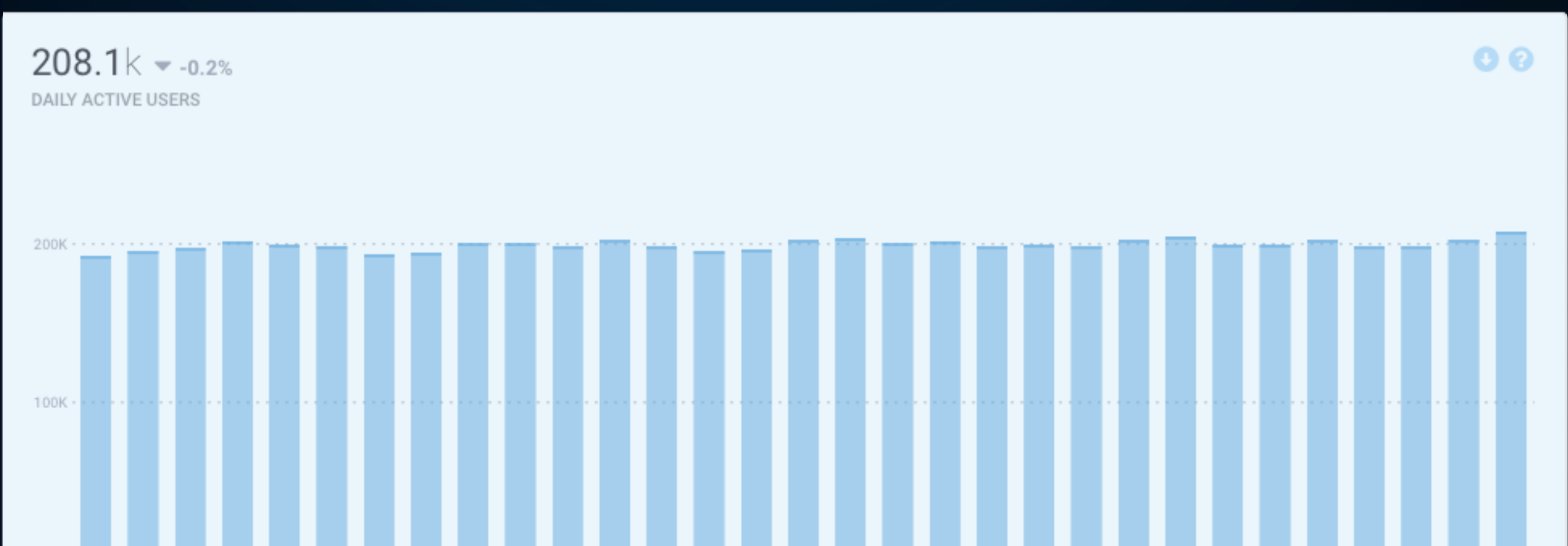

I



-
-
-
-
-
-
-
-
-
-
-



DAILY ACTIVE USERS	DAILY NEW USERS	MONTHLY ACTIVE USERS	CRASH-FREE USERS	SESSIONS	PURCHASE
208.1k ▼ -0.2%	5.1k ▼ -0.1%	656.1k ▼ -0.2%	97.7% ▼ -0.2%	636.5k	119.0k ▼ -0.1%



Customer email outreach

Push notifications

Voice communication

Daily app health check

Distribute beta builds

Phone number login

Debug production issues

Gather feedback

Manage beta groups

Review in-app events

Monitor stability alerts

Data storage

User outreach

User experience

Check for regressions

Monitor real-time app usage

Discover and install SDKs

Promoted installs

Game analytics

Track payments and revenue

Review results of latest A/B test



User re-engagement







faboric

Thank You

@hemal

@bswift