

Brian Papa | iOS | theSkimm

brian@theskimm.com

@bpapa

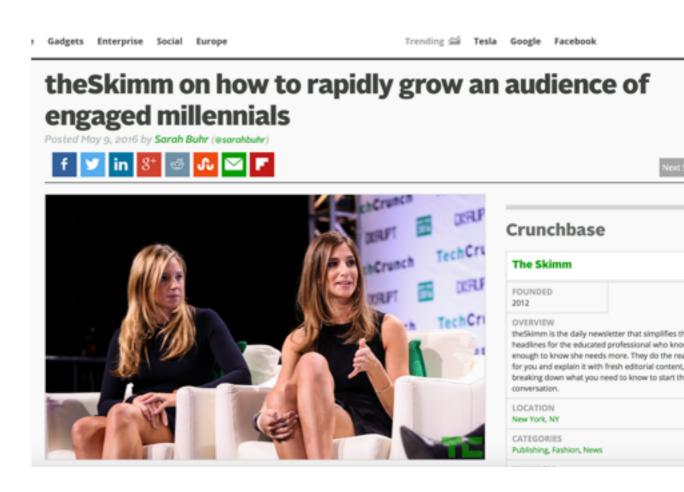
theSkimm makes it easier to be smarter by fitting news and information into your existing **routines**



• The Daily Skimm: email newsletter with over 4 million active subscribers

| < Inbox | $\langle \rangle$ |
|--|-------------------|
| theSkimm To: brian@theskimm.com | Details |
| Daily Skimm: I could be January 26, 2017 at 6:36 AN | |
| Is this email not dis View it in you | |
| SHARE THIS 💙 | SHARE THIS f |
| theSk | |
| Skimm for Ja | anuary 26th |
| INVITE FRI | |
| Skimm'd while warmii cords | ng up our vocal |
| | |

- The Daily Skimm: email newsletter with over 4 million active subscribers
- Over 16,000
 Skimm'bassadors around the country



- The Daily Skimm: email newsletter with over 4 million active subscribers
- Over 16,000 Skimm'bassadors around the country
- "No Excuses" campaign registered over 110,000 voters



• Launched April 2016





QUOTE OF THE DAY

"Human Alexa" — <u>What one girl's family started</u> <u>calling her</u>, so that the Amazon version wouldn't answer instead. 'Mmmhmm,' said girls named Siri everywhere.



BEING DIPLOMATIC

THE STORY

President Trump is taking a red pen to US foreign relations.

WHAT ARE YOU TALKING ABOUT?



- Launched April 2016
- Native Daily Skimm
 experience

theSkimm

SKIMM PICKS

TO GO: 💸 PONZI SUPERNOVA

You know the story of Bernie Madoff. But this podcast features Madoff himself, and goes behind-the-scenes into the biggest Ponzi scheme ever. It'll tide you over until



"Billions" comes back next month.

LISTEN

WATCH

Û

Φ

TO WATCH: 4 "SAVE THE LAST DANCE"

The movie that's like "Center Stage" meets "Step Up" is leaving Netflix next week. Bye, middle school. Get into it before it goes.



TO READ: 🏈 RATINGS POLITICS Ö Skimm Ahead Skimm Reads

- Launched April 2016
- Native Daily Skimm experience
- Curated Reads and Picks

| 🗙 Jan 20 | 017 | | | 9 | 2 Q | + |
|---------------------------|--|--------|--------------------|---------|---------|----------|
| s | м | т | w | т | F | s |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 ° |
| 29 | 30 | 31 | | | | |
| all-day | all-day Sam ET, ESPN. It's Rafael Nadal v Roger Federer. I | | | | | |
| 8:00 PM 9:00 PM | | SAG AW | vards nd TBS. T | he Gold | in 2 hr | , 32 min |

| • | Launched | April | 2016 |
|---|----------|-------|------|
| | | | |

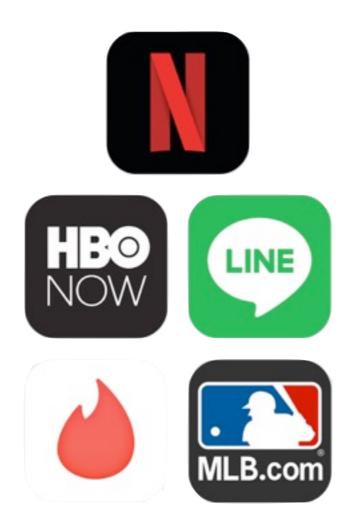
- Native Daily Skimm
 experience
- Curated Reads and Picks
- Skimm Ahead calendar service

| Today | Calendars | Inbox |
|-------|-----------|-------|
| | | |

| Cat | egories | | News | | = |
|--------|-------------------------|------------------------|---|-------------|---|
| | Pai | id | Free | Top Grossin | g |
| 1 | E | Nation News | nes – Breaking L nal & World New 👷 (485) | | OPEN |
| 2 | WSJ | Busine News | /all Street Journ ess & Markets N * (2,177) | | F GET In-App Purchases |
| 3 | _{the} Skimm | theSki News | | | *OPEN |
| 4 | wp | News | /ashington Post * (114) | Classic | *OPEN |
| 5 | wp | News | /ashington Post ✿ (503) | | ⁺ GET In-App Purchases |
| 6 | E | The Ed News | conomist for iPł * (12) | none | GET In-App Purchases |
| 7 | b | TheBla News ★★☆☆ | | | F GET In-App Purchases |
| Featur | red Ca | tegories | Top Charts | Q Search | Updates |

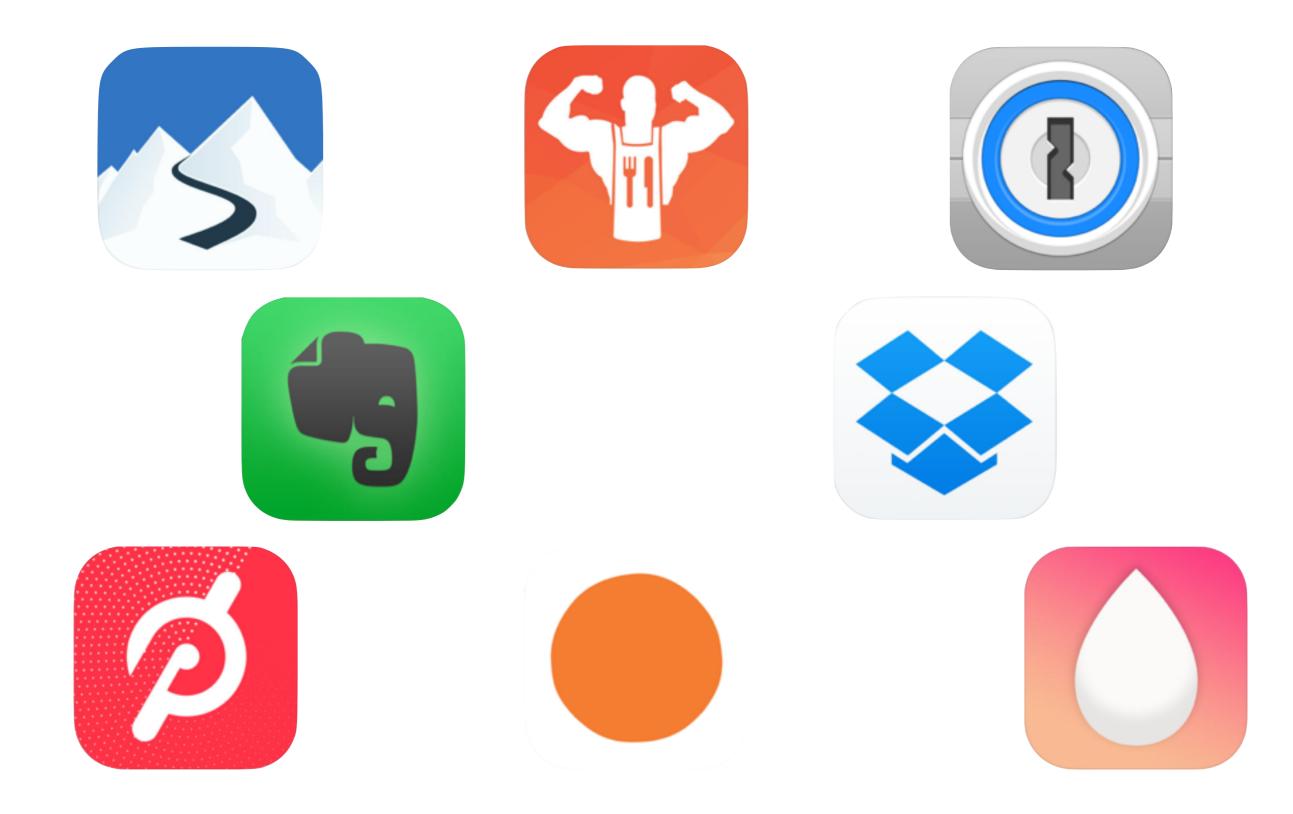
- Launched April 2016
- Native Daily Skimm
 experience
- Curated Reads and Picks
- Skimm Ahead calendar service
- Top Grossing news app

SUBSCRIPTIONS



"iPhone and iPad customers grew the App Store's subscription billings significantly in 2016 to \$2.7 billion, up 74 percent from 2015."

SUBSCRIPTIONS

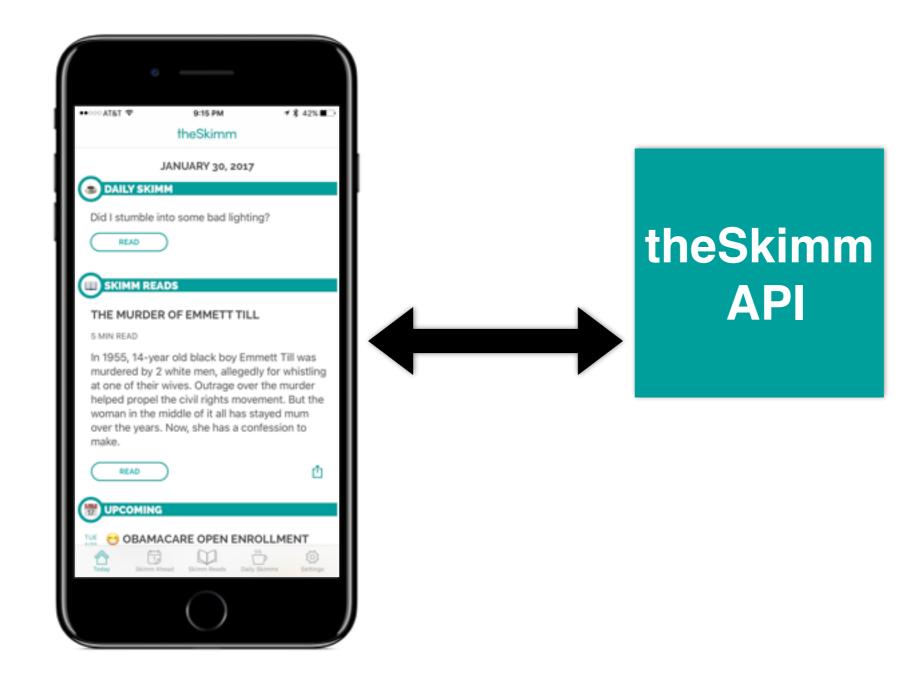


SUBSCRIPTIONS

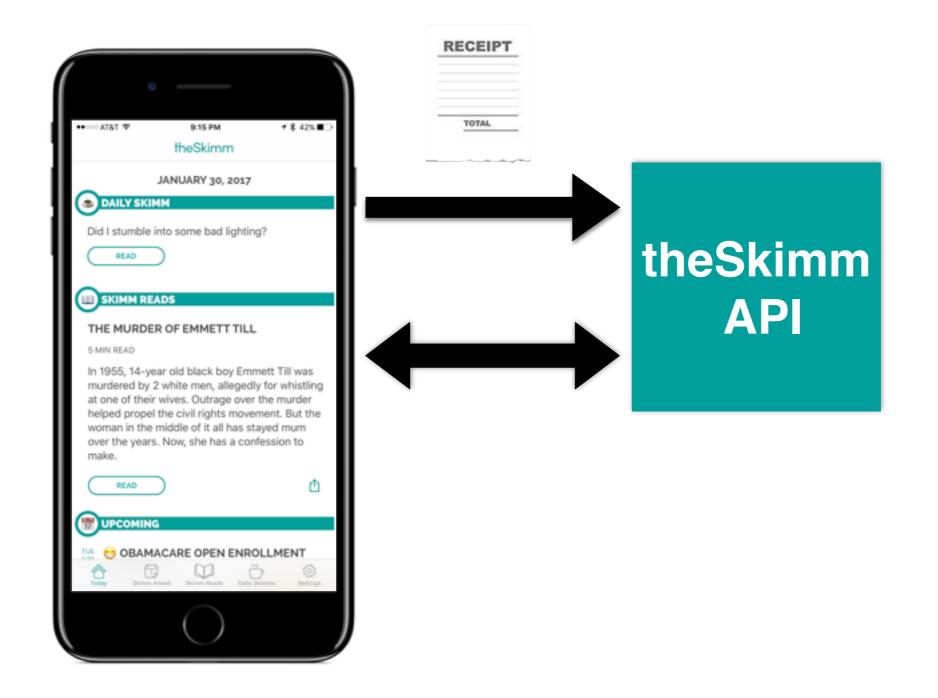


- Type of In-App Purchase
- Configure in iTunes Connect
- Implement using StoreKit APIs

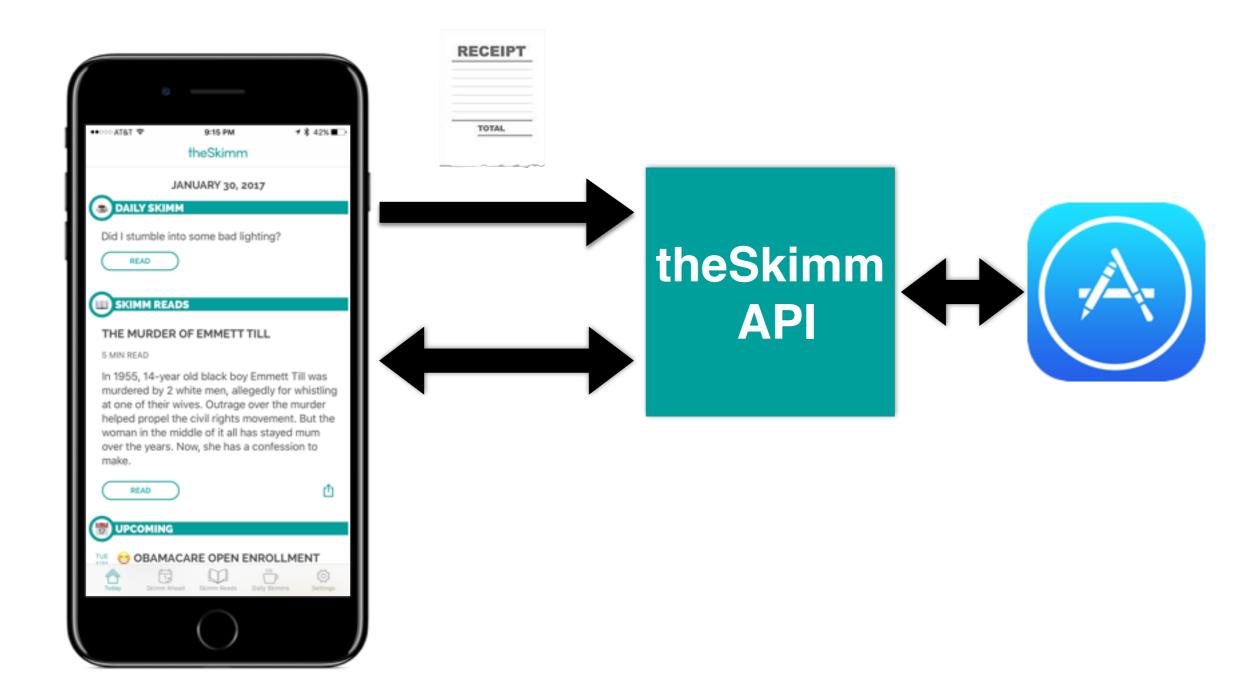
PROTECTING CONTENT



PROTECTING CONTENT



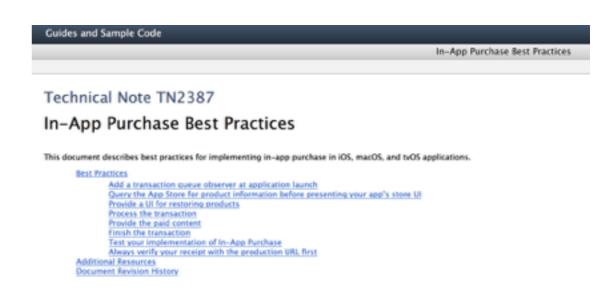
PROTECTING CONTENT



• In-App Purchase Programming Guide is out of date



- In-App Purchase Programming Guide is out of date
- TN2387



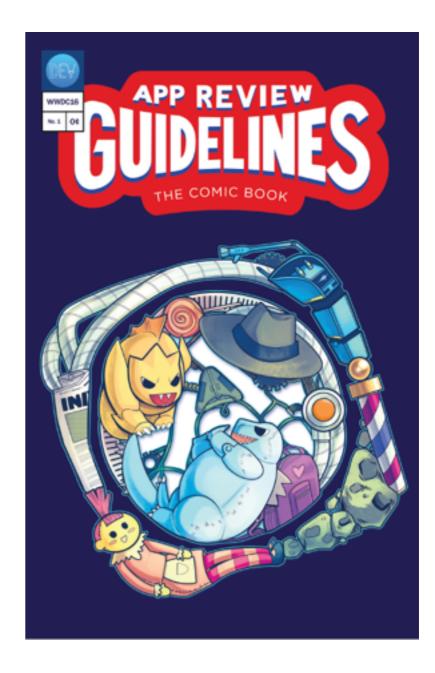
Best Practices

Below is a list of best practices that developers should follow when implementing in-app purchase.

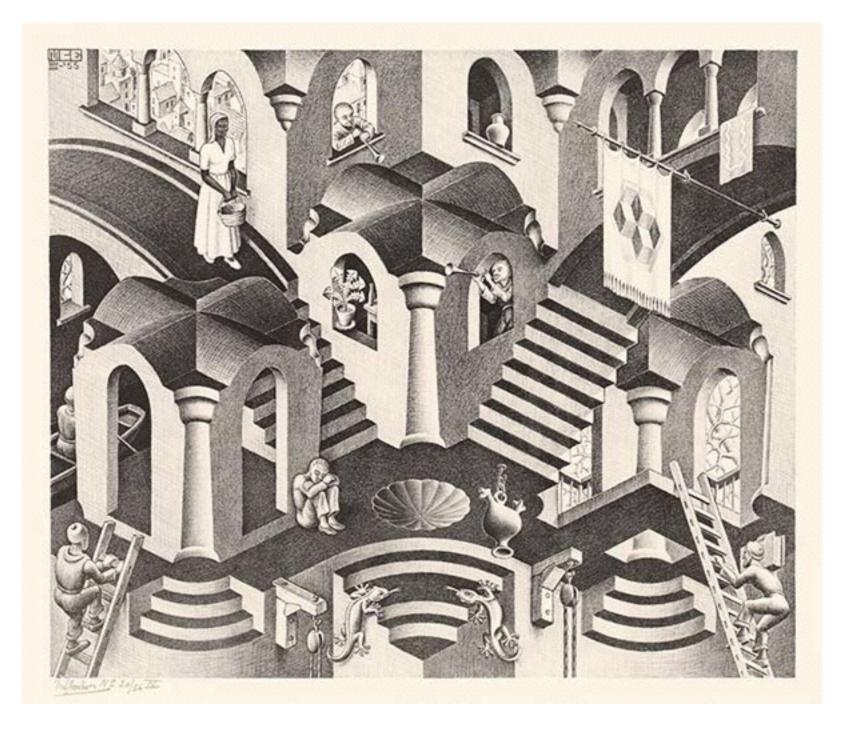
- In-App Purchase Programming Guide is out of date
- TN2387
- Automatic Sandbox accounts in TestFlight



- In-App Purchase Programming Guide is out of date
- TN2387
- Automatic Sandbox accounts in TestFlight
- Be careful with metadata rejections



APP ARCHITECTURE



APP ARCHITECTURE

- Reactive
- VIPER
- MVP
- MMVM
- MVEMJSUNP



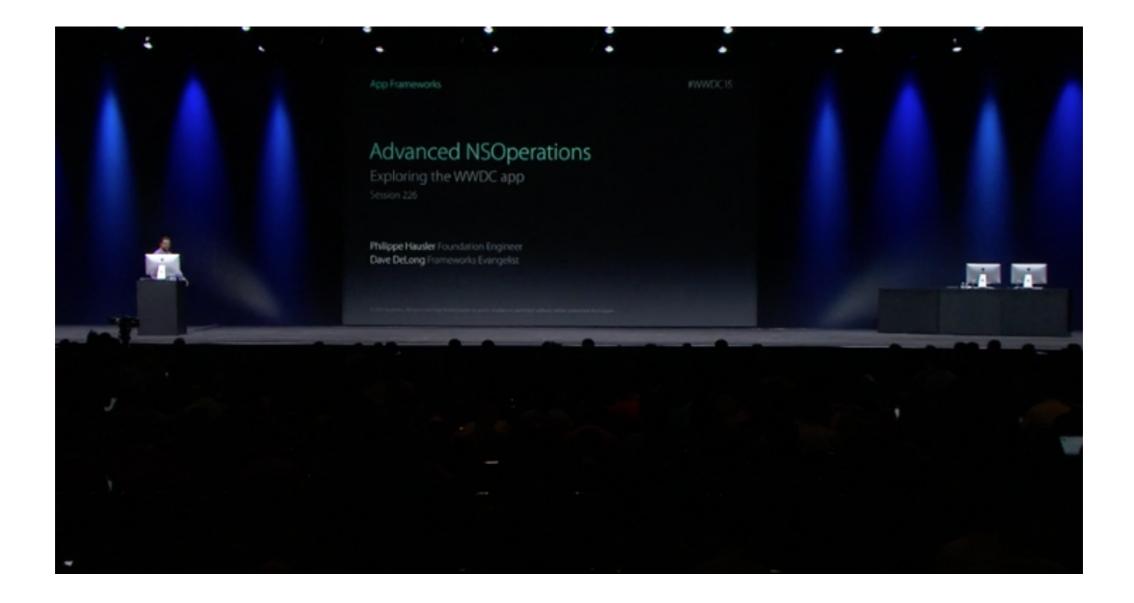




I'm announcing my new software pattern called LOLVC. It's an acronym short for "I'm laughing at you for thinking you're smarter than MVC"

| RETWEETS | LIKES 32 | 8 | 🔯 🕋 🧏 💹 🦾 🌌 |
|------------|-------------|------|-------------|
| 12:15 PM - | 7 Jan 2016 | | |
| • | 15 | 9 32 | ••• |

NSOperationQueue



Advanced NSOperations

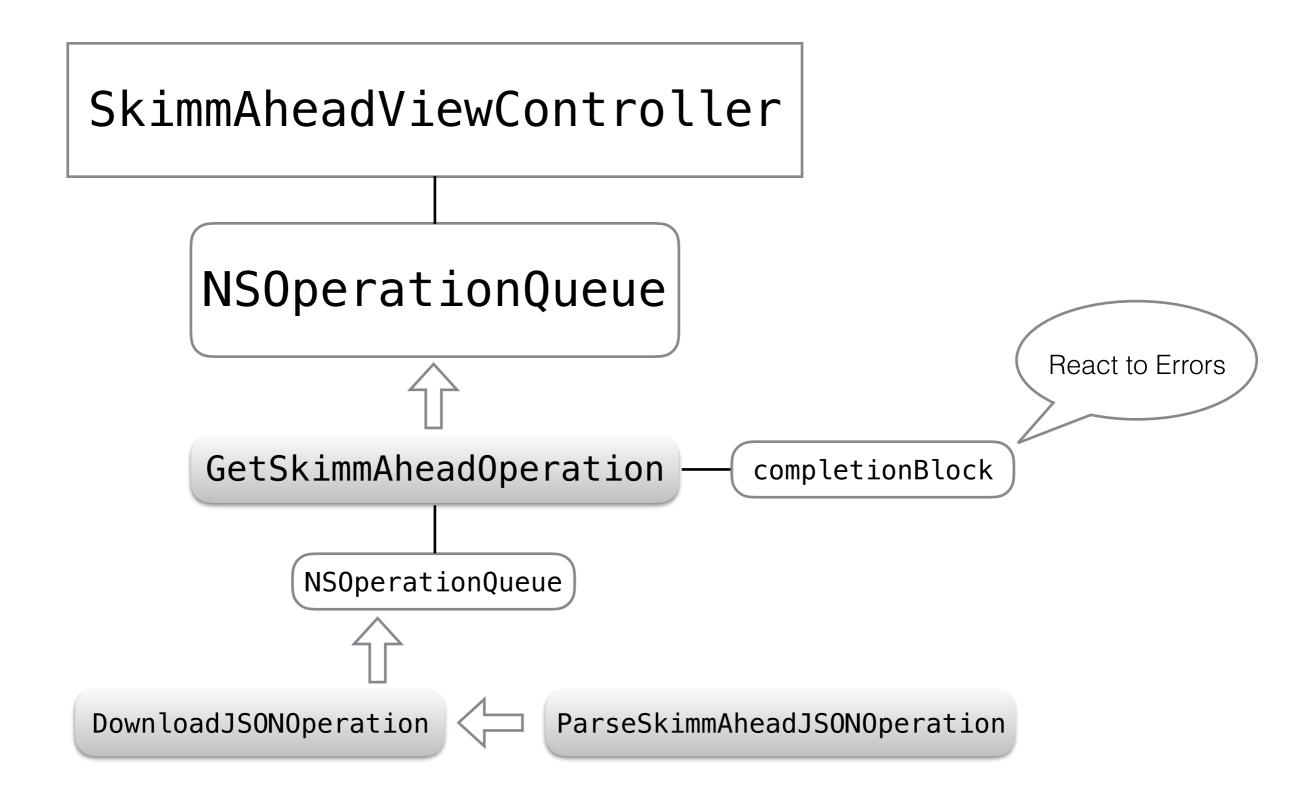
WWDC 2015

NSOPERATION

- Simple, well-known API override main, add to an NSOperationQueue
- Cancellable
- Supports dependencies between operations
- completion block
- NSOperations are abstract, add what you need in subclasses

NSOPERATIONS IN VIEW CONTROLLERS

- View Controllers have a reference to an NSOperationQueue
- Complicated model stuff / networking in NSOperation "get from/post to API" subclasses
- Inspect error custom property on completion
- Model changes are propagated to the UI via Core Data notifications



BUILDING INTERFACES



BUILDING INTERFACES

float insetFromEdge = 10.0; float sizeAdjustment = insetFromEdge * 2; UIImage * buttonImage = CITTARE imageNamed:@"info.png"]; CGRect buttonFrame = CGRectHake(applicationFrame.size.width-40, applicationFrame.size.height-40, buttonImage.size.width + sizeAdjustment, buttonImage.size.height + sizeAdjustment);

UIButton * infoButton = [[UIButton alloc] initWithFrame:buttonFrame]; infoButton.contentEdgeInsets = UIEdgeInsetsMake(insetFromEdge, insetFromEdge, insetFromEdge); infoButton.contentVerticOreateeButton UIControlContentVerticalAlignmentCenter; infoButton.contentHorizontalAlignment = UIControlContentHorizontalAlignmentCenter;

[infoButton setImage:buttonImage forStateUIControlStateNormal]; infoButton.adjustsImagedControlStateSutton

[infoButton addTarget:self action:@selector(toggle/iew:) forControlEvents:Set Button Target and Action

[mainView addSubview:infoButton]; [infoButton release, add Button to Window

USING STORYBOARDS

• Communicate!



brian 2:28 PM

Hey Rosa, I'm going to add a new button to the Skimm Ahead screen, are you working on anything there?



rosa 2:29 PM

Yeah, I'm changing the background color.

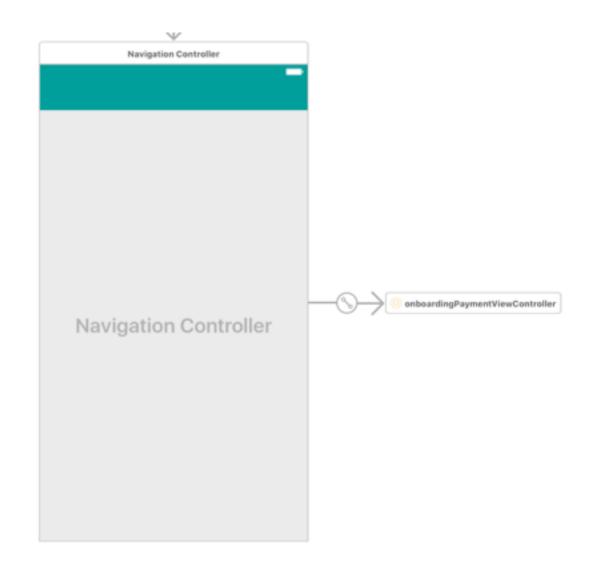


brian 2:29 PM

OK, I really wanted to get this done ASAP so let's pair up for a little bit later!

USING STORYBOARDS

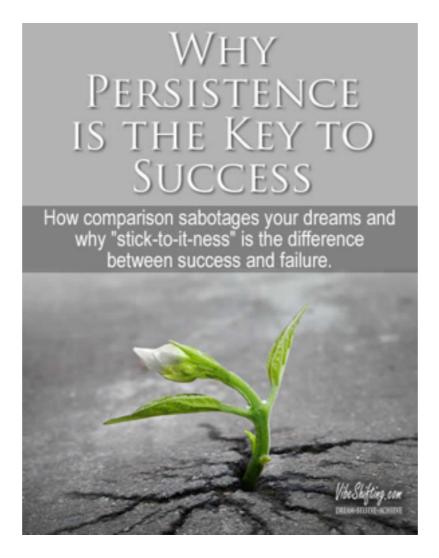
- Communicate!
- Use Storyboard references



USING STORYBOARDS

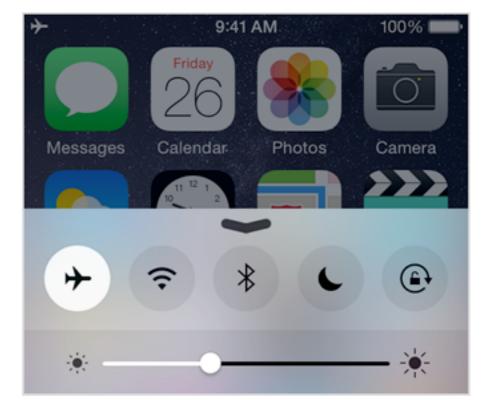
- Communicate!
- Use Storyboard references
- Don't spend too much time getting caught up in warnings

Navigation Controller Scene
onboardingPaymentViewController Scene
Daily Skimms Scene
Skimm Tab Bar Controller Scene
Skimm Reads Scene
Skimm Reads Scene
Reads Container View Controller Scene
Reads Table View Controller Scene
Navigation Controller Scene



• Great apps have a solid persistence strategy

- Great apps have a solid persistence strategy
- Users want to be able to use your app offline



- Great apps have a solid persistence strategy
- Users want to be able to use your app offline
- Extensions need to share data with an app.

| ios watchOS | OS watchOS tvOS macOS Cross-platform | | | S Filter | | |
|------------------------------|--------------------------------------|-----------------------------------|-------------------------------|-----------------------------|--|--|
| Application Extended | ension | | | | | |
| | | 9 | | | | |
| Action Extension | Audio Unit Extension | Broadcast UI Extension | Broadcast Upload Extension | Call Directory Extension | | |
| ٢ | | \bigcirc | \bigcirc | \otimes | | |
| Content Blocker Extension | Custom Keyboard Extension | Document Provider | iMessage Extension | Intents Extension | | |
| \otimes | C | C | | | | |
| Intents UI Extension | Notification | Notification Service Extension | Photo Editing Extension | Share Extension | | |
| | \bigcirc | | 17 | | | |

Core Data

CORE DATA

- Object graph and persistence framework
- Since 2005
- Updated annually (tons of great stuff in iOS 10 and Xcode 8)

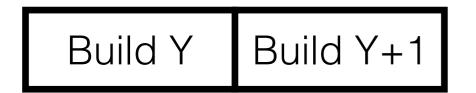
CORE DATA MIGRATIONS

- SQLite store
- Changes over time mean the underlying schema changes
- Core Data offers several ways to migrate data, automatic works in many cases but may need to create a mapping or write code
- But the best way is to not migrate at all

Version 1.x



Version 1.x



Version 1.x



Version 1.x

| Build Y Build Y+1 | Build Y+2 | Build Y+3 |
|-------------------|-----------|-----------|
|-------------------|-----------|-----------|

Version 1.x

| Build Y Build Y+1 | Build Y+2 | Build Y+3 | Build Y+4 |
|-------------------|-----------|-----------|-----------|
|-------------------|-----------|-----------|-----------|



We're hiring!

HR REVENUE PRODUCT ENGINEERING

http://theskimm.com/jobs

Brian Papa

brian@theskimm.com

@bpapa