

# What's New with Wallet & Apple Pay

Session 704

Nick Shearer iOS Apps and Frameworks  
Leo Cantelmo Watch SW Engineer

# Overview

# Overview

Update from Wallet

---

WatchKit

---

Extensions

---

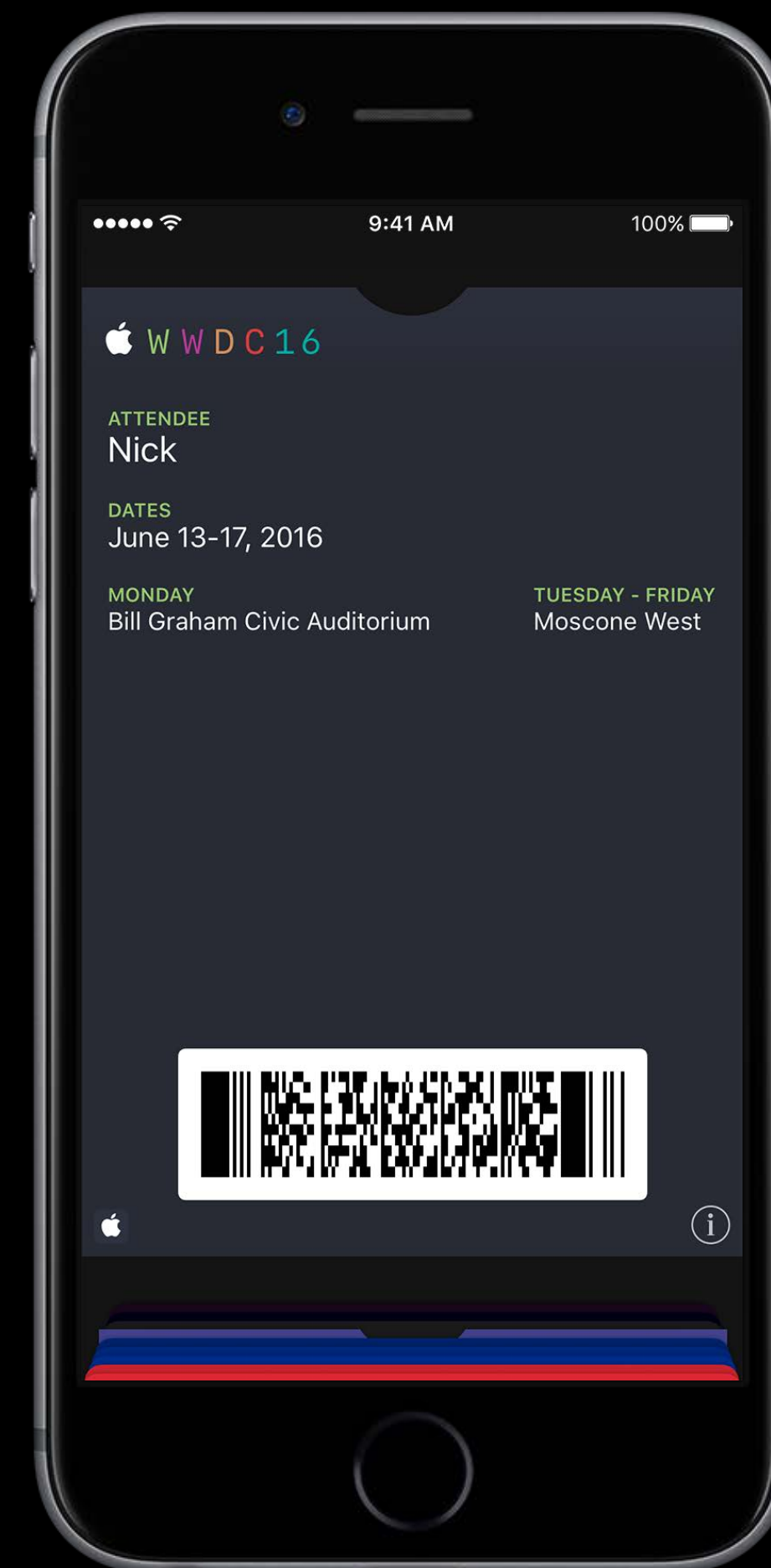
Testing Apple Pay

# Update from Wallet

What's New with PassKit

# Wallet

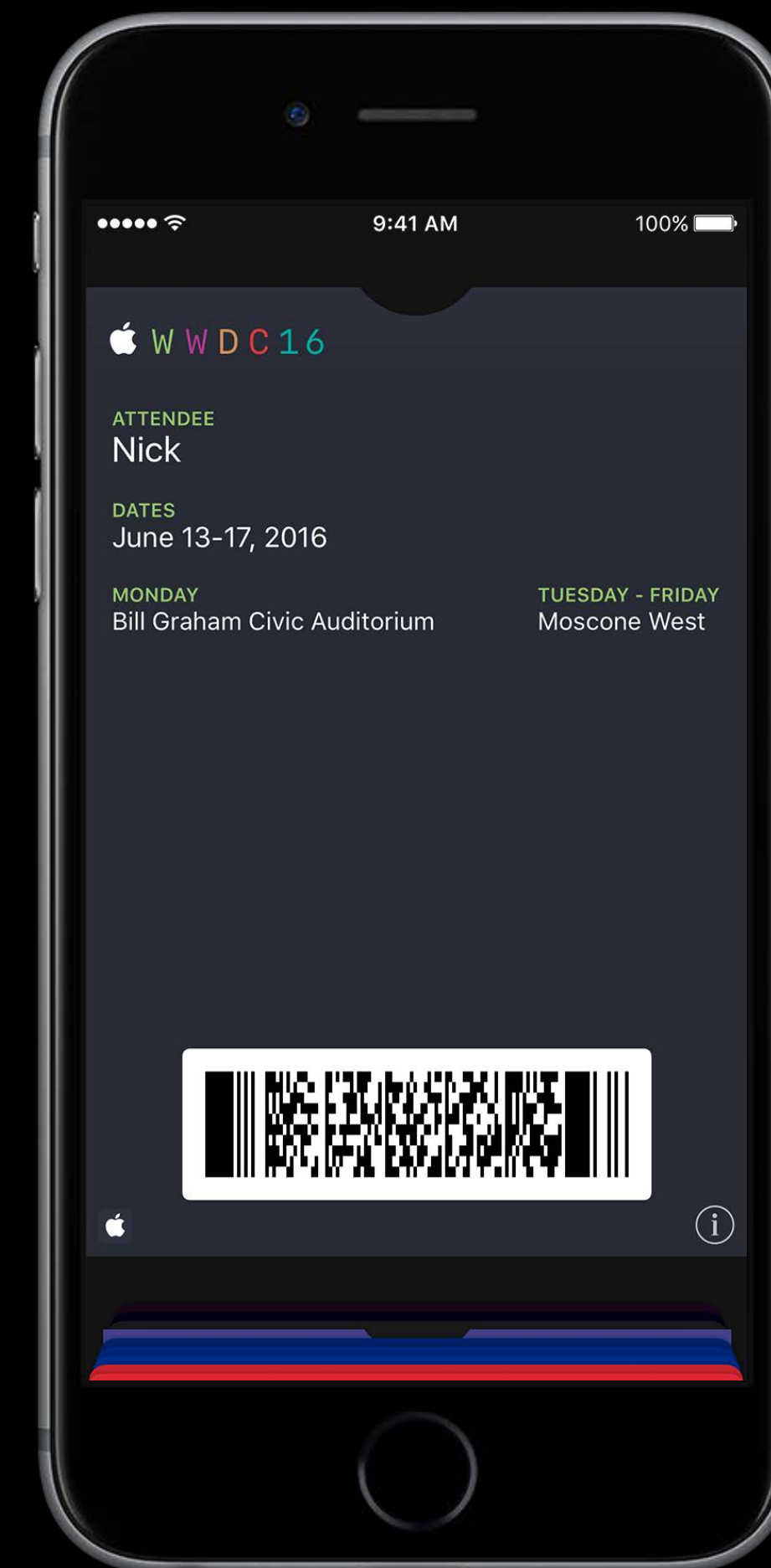
Not just Apple Pay



# Wallet

Not just Apple Pay

There's no better time to start using passes

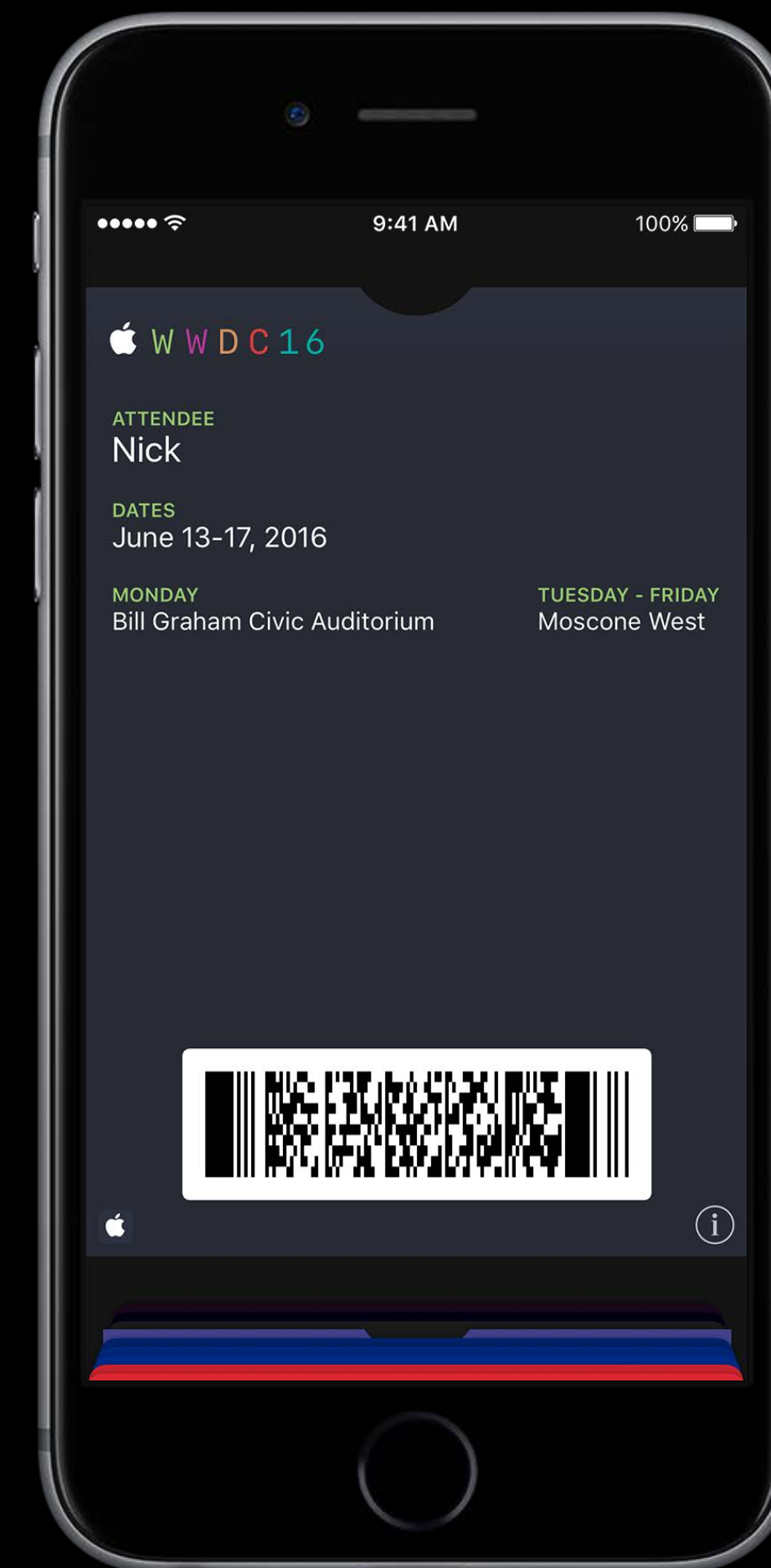


# Wallet

Not just Apple Pay

There's no better time to start using passes

More users are engaging with Wallet than ever



# Passes

## Recap



# Passes

## Recap

Gift cards, boarding passes, rewards cards, event tickets, membership cards, and more...

# Passes

## Recap

Gift cards, boarding passes, rewards cards, event tickets, membership cards, and more...

Distribute passes from app, e-mail, SMS, web link, or QR code

# Passes

## Recap

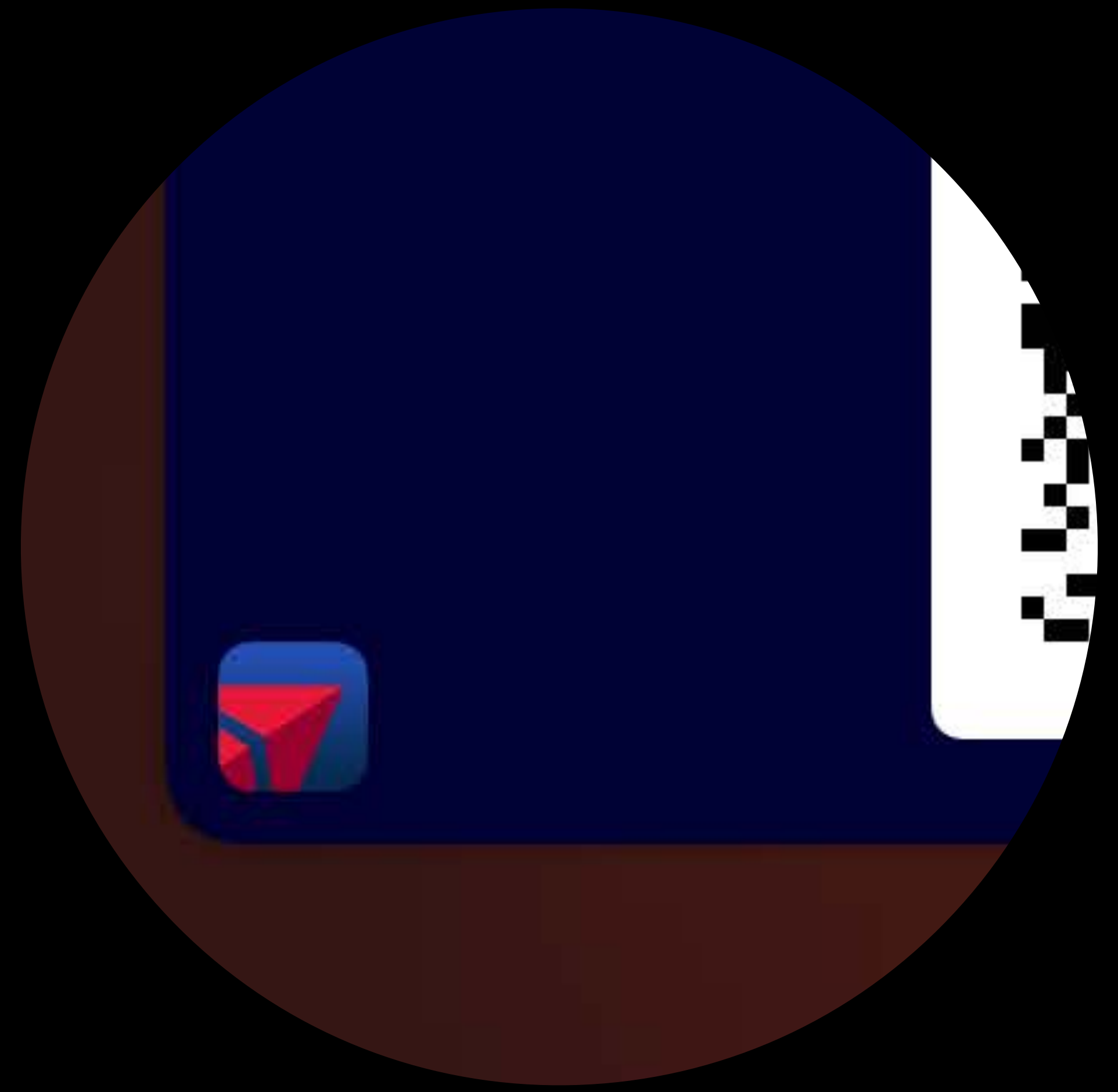
Gift cards, boarding passes, rewards cards, event tickets, membership cards, and more...

Distribute passes from app, e-mail, SMS, web link, or QR code

Update your passes remotely through web services

# Passes

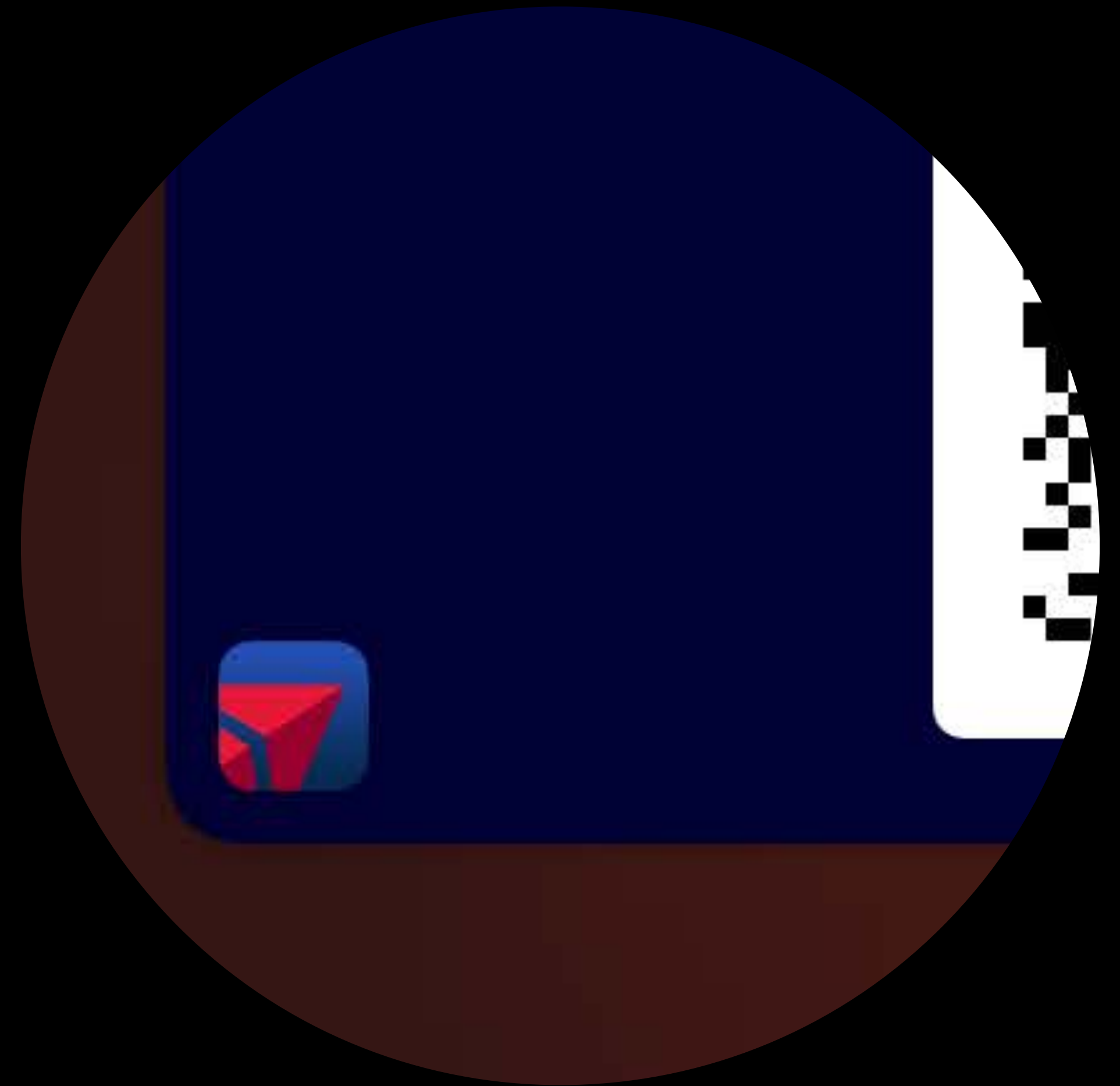
App placement



# Passes

App placement

App icons and shortcuts now have front placement

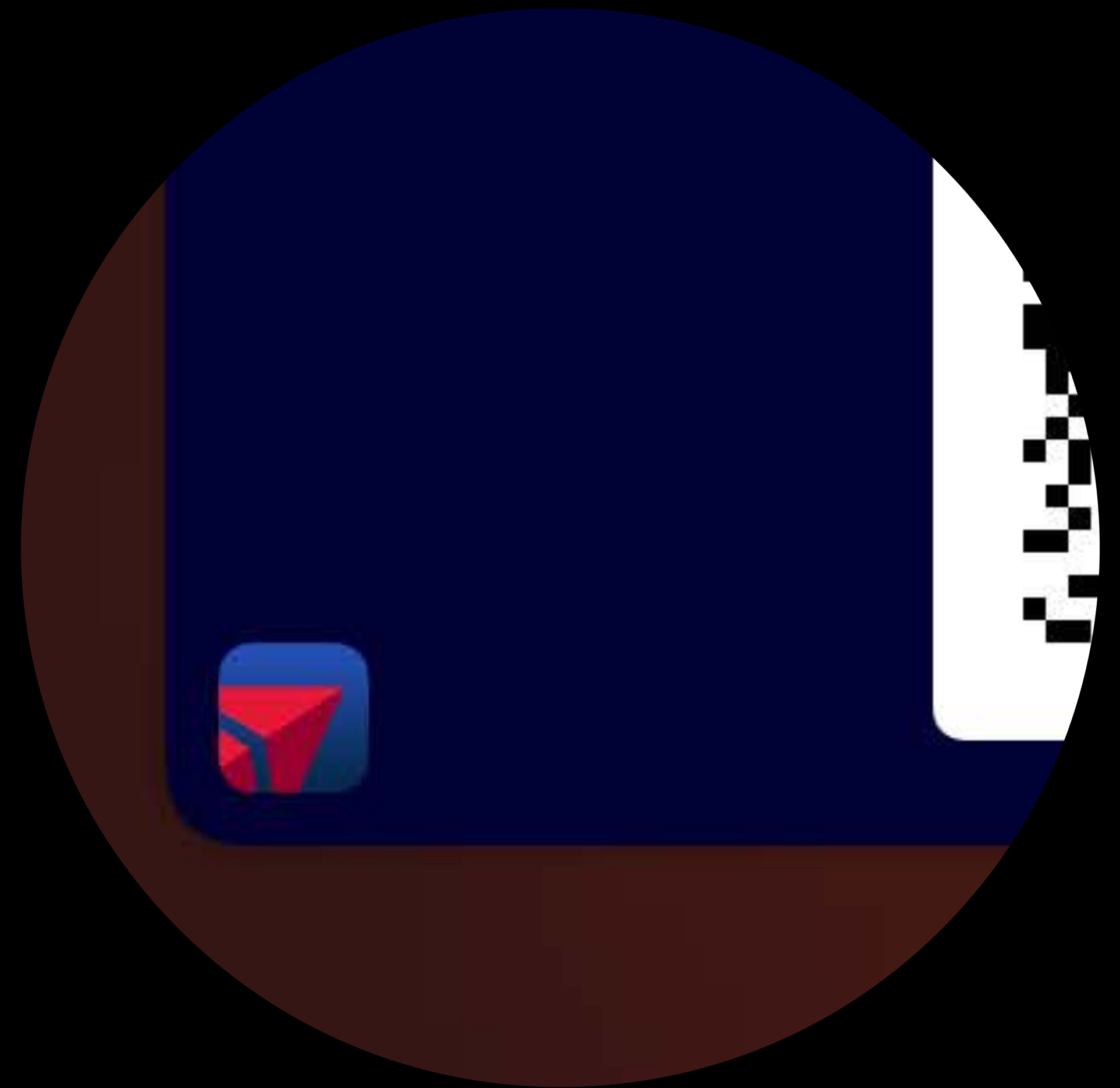


# Passes

## App placement

App icons and shortcuts now have front placement

Deep link directly into your app, or the App Store



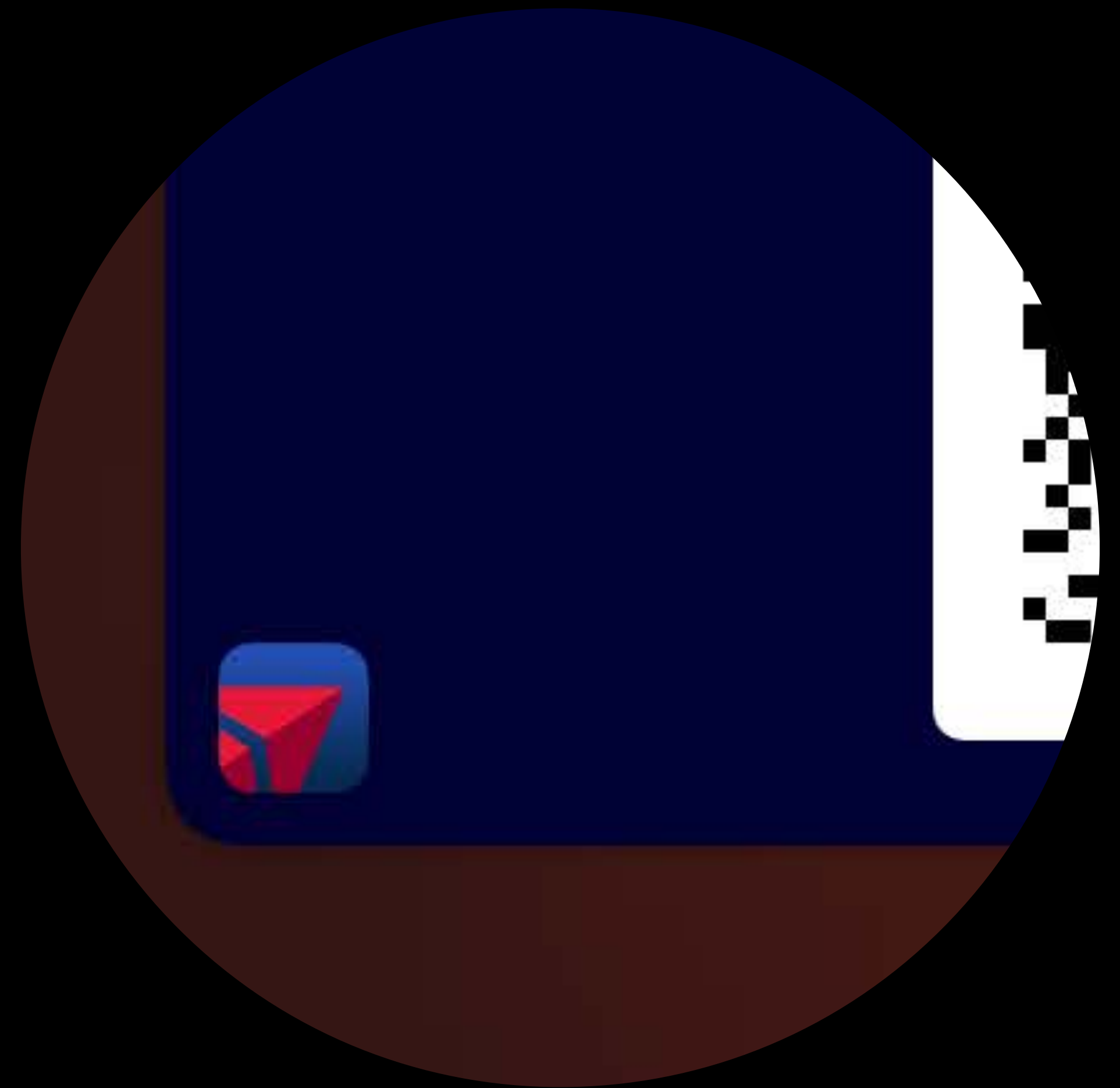
# Passes

## App placement

App icons and shortcuts now have front placement

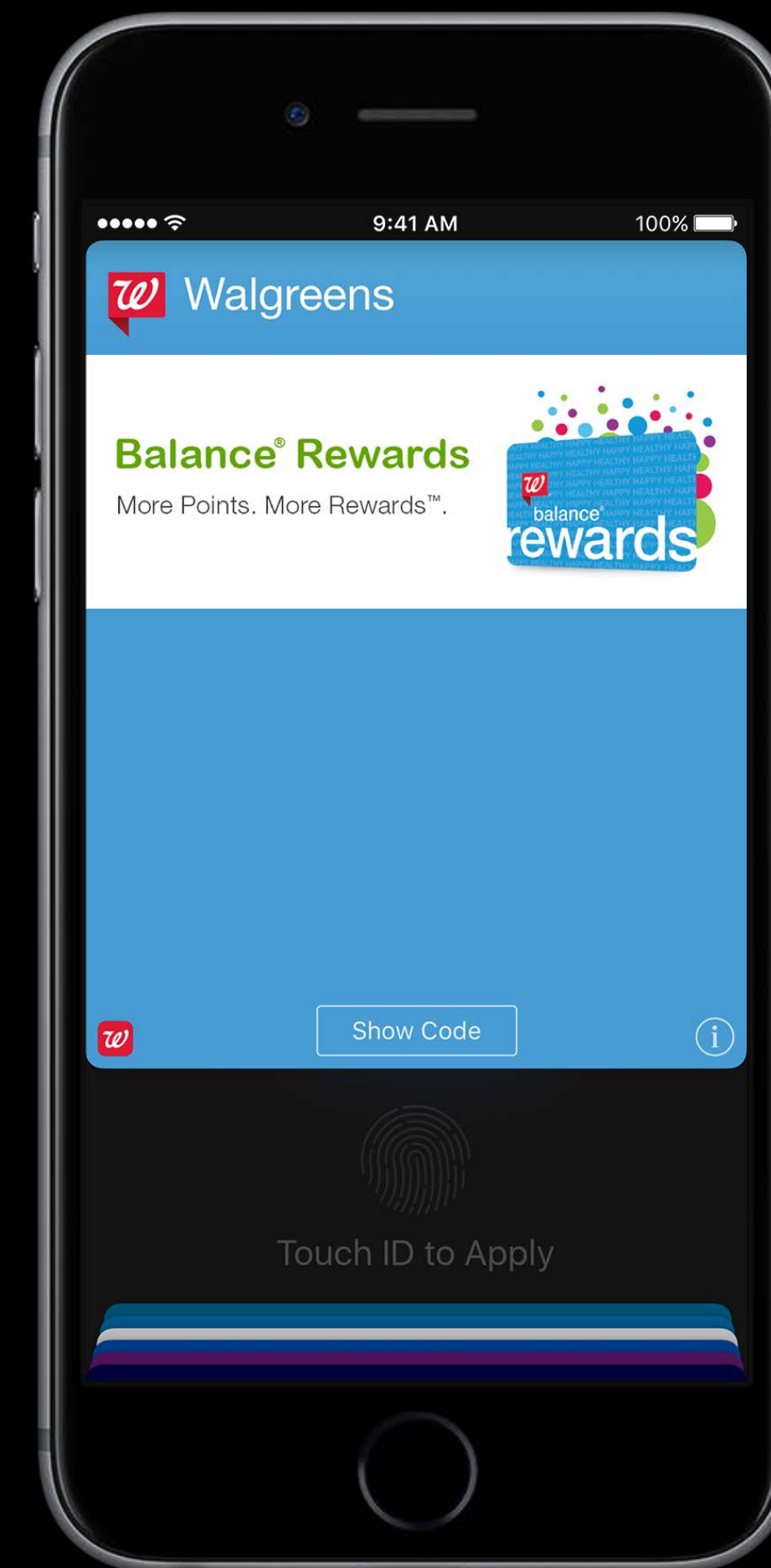
Deep link directly into your app, or the App Store

Great for gift card top-up



# Passes

Value-added services

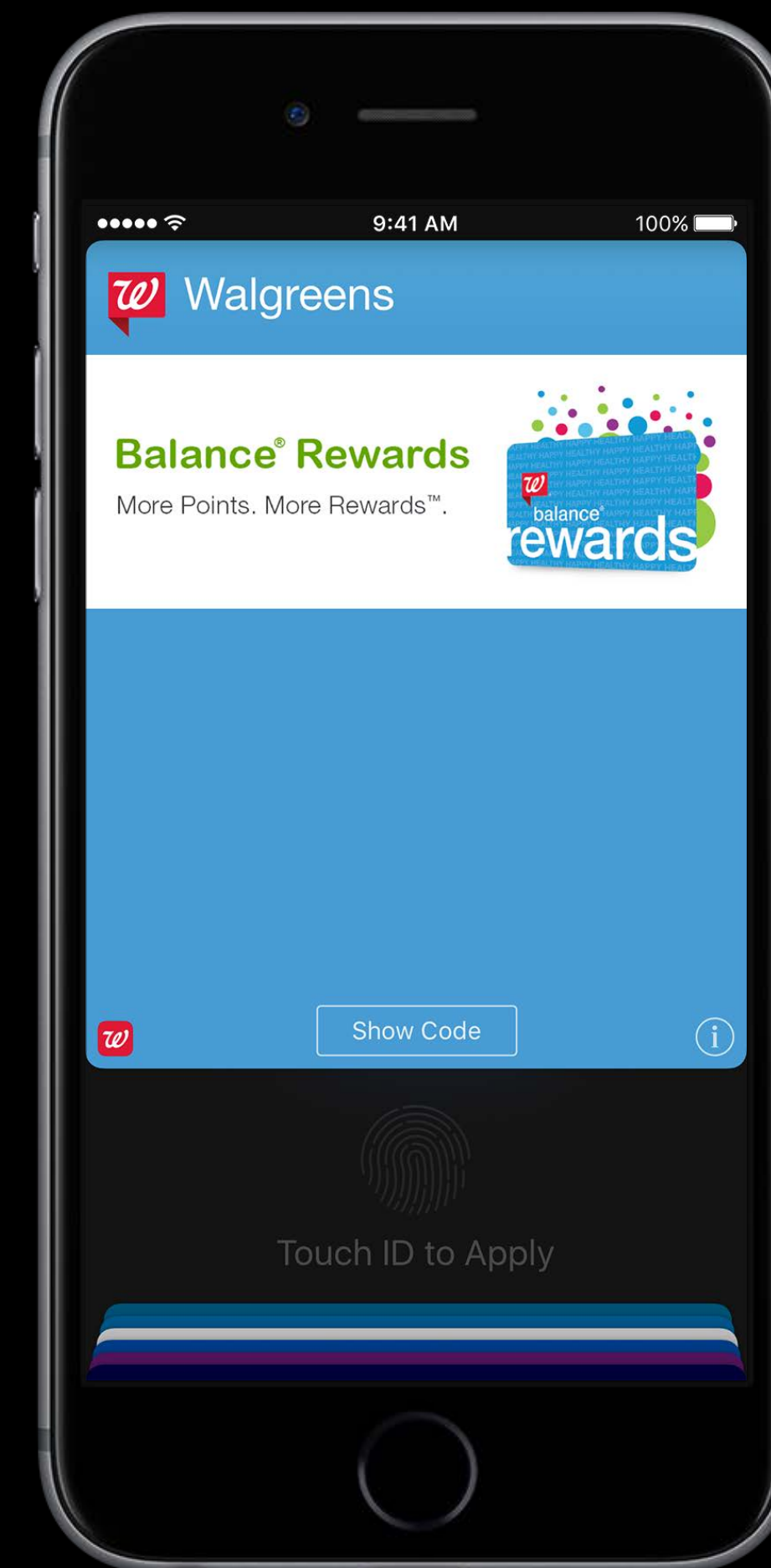




# Passes

Value-added services

Passes can transmit secure information over NFC

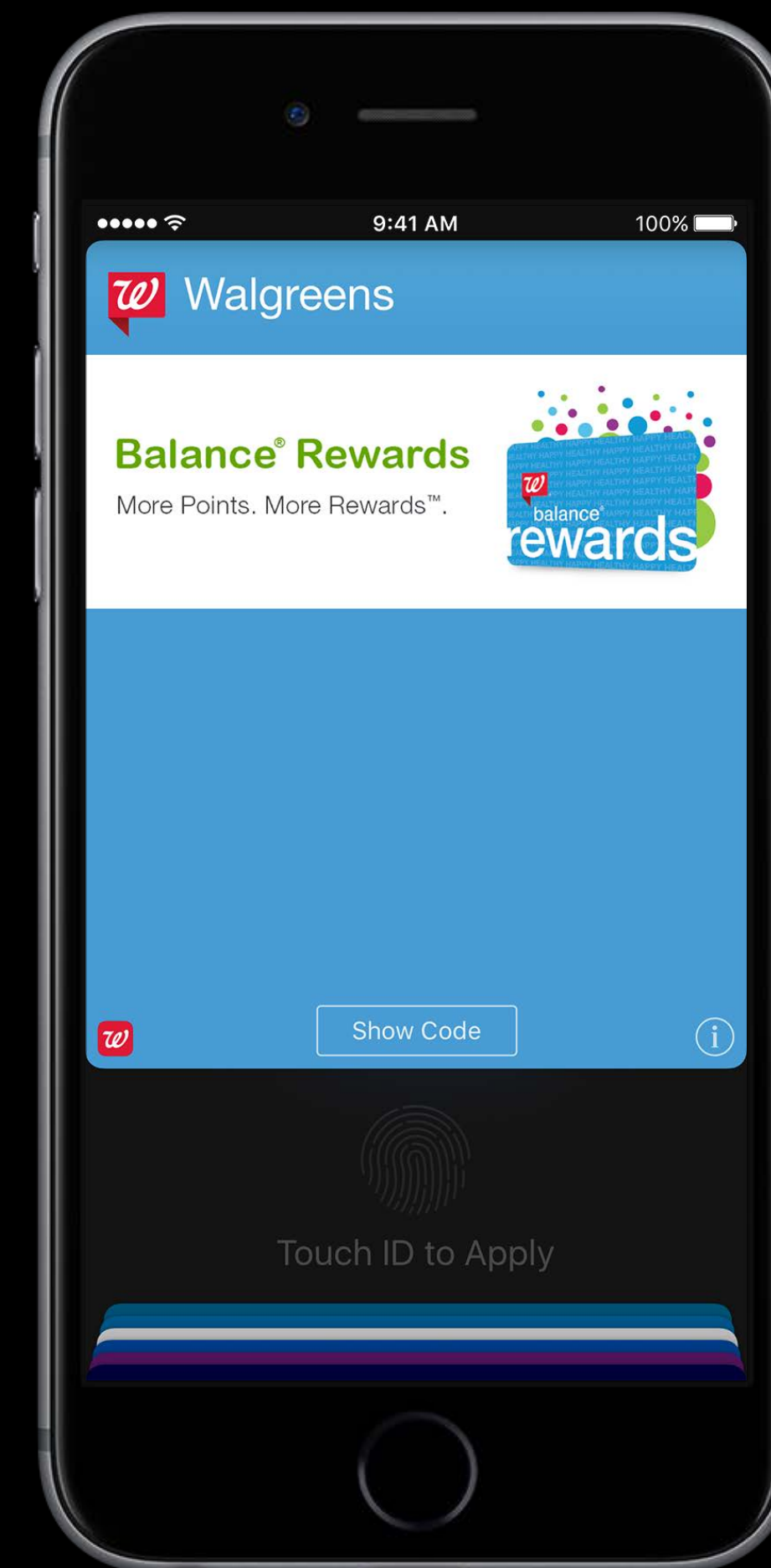


# Passes

Value-added services

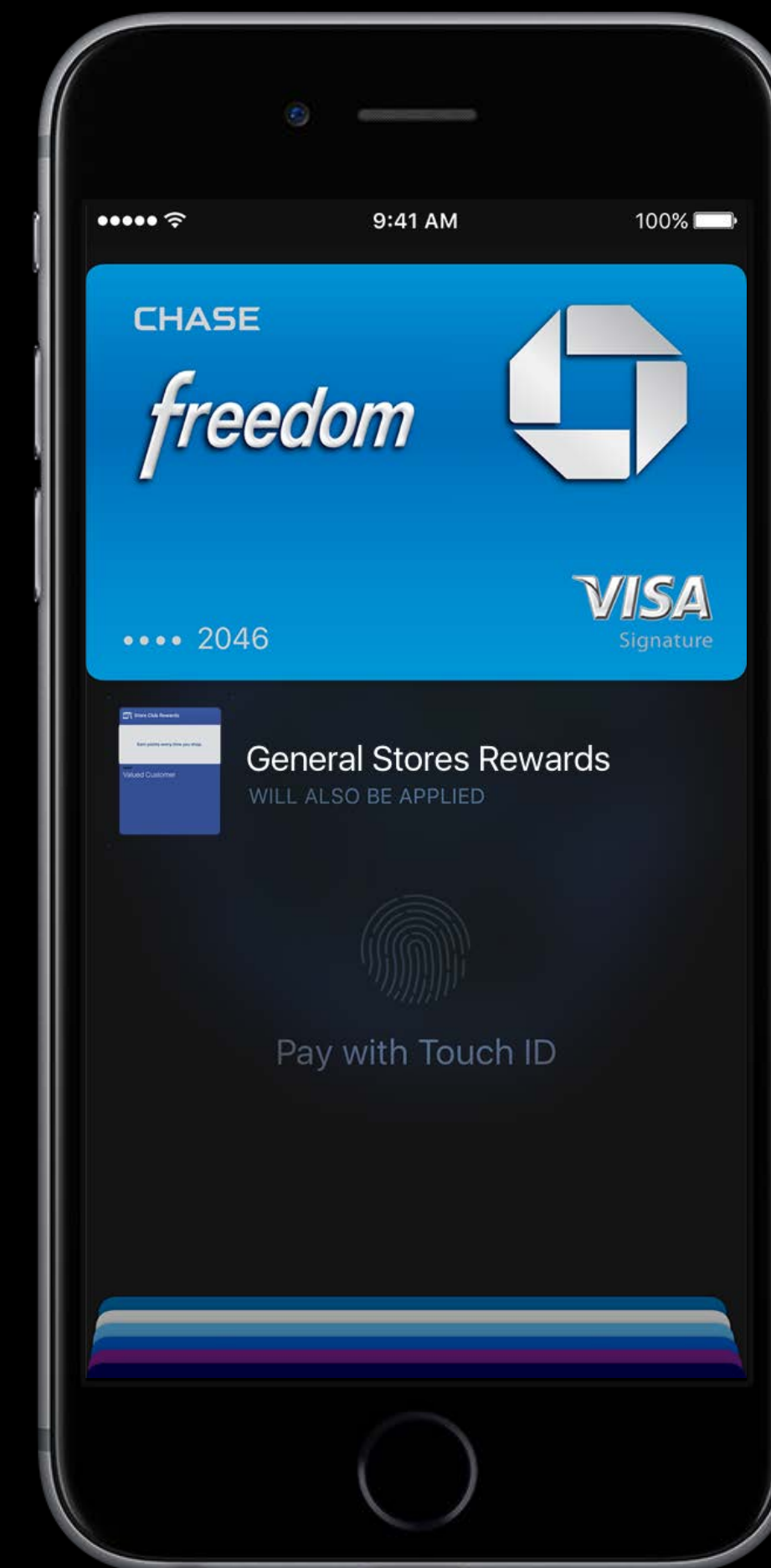
Passes can transmit secure information  
over NFC

Support coming from many PoS systems



# Passes

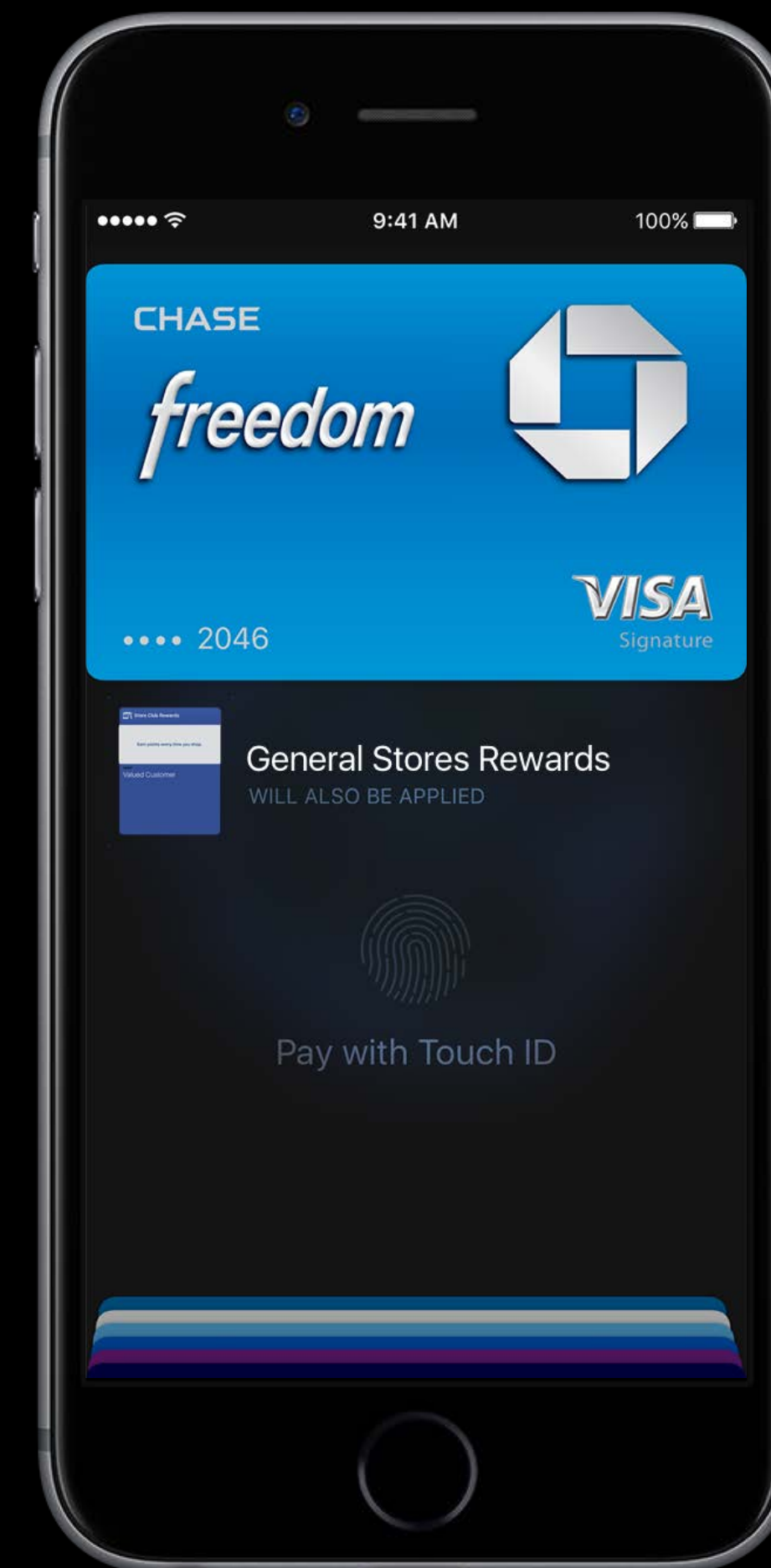
Value-added services



# Passes

Value-added services

"One Tap" experience



# Passes

Value-added services

"One Tap" experience

Deeply integrated into the purchase process



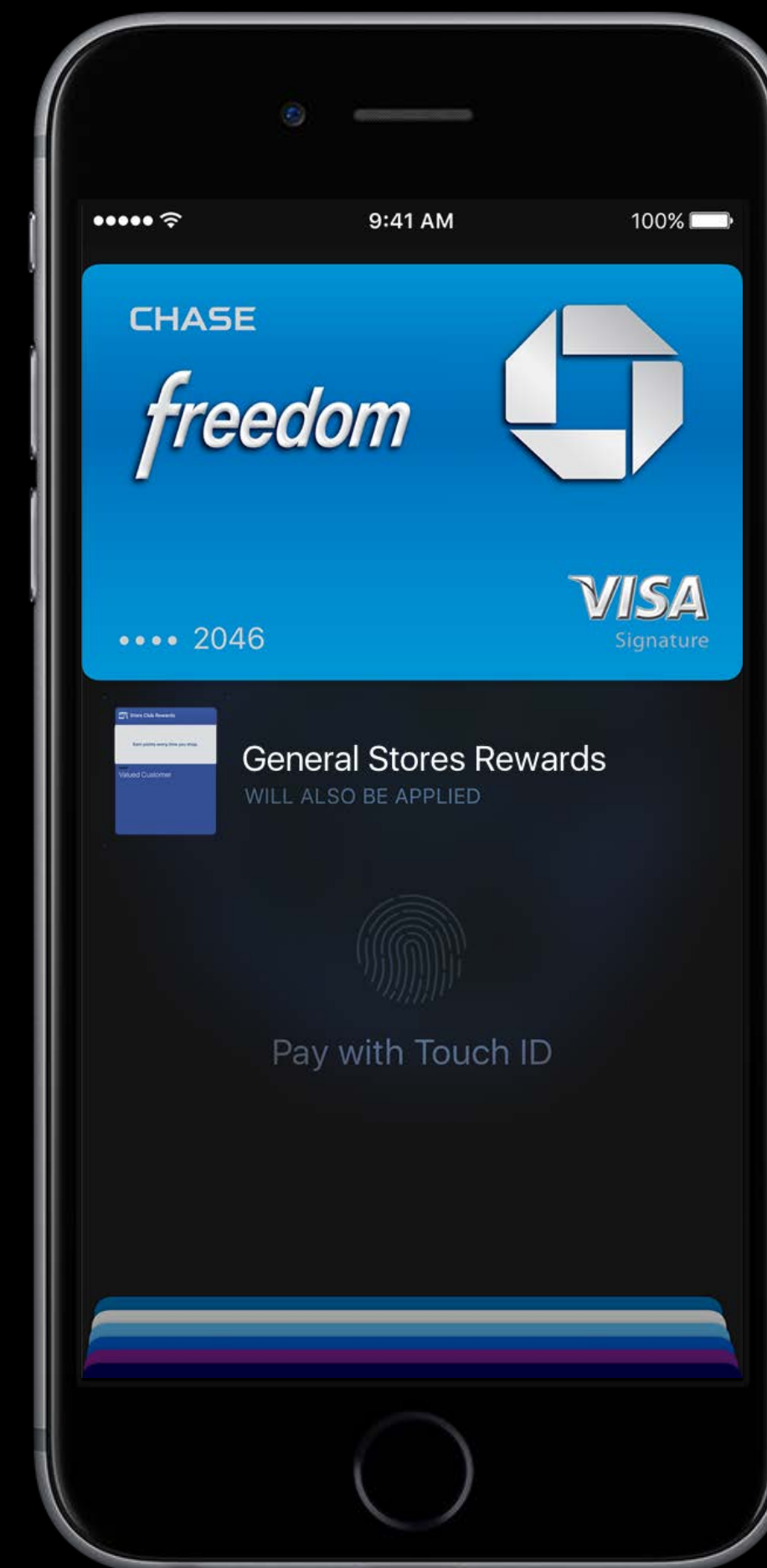
# Passes

Value-added services

"One Tap" experience

Deeply integrated into the purchase process

Available on iPhone and Apple Watch



# Passes

Value-added services

# Passes

Value-added services

Distribute passes over NFC



# Passes

Value-added services

Distribute passes over NFC

Sign up for loyalty programs directly from Wallet

# Passes

Value-added services

Distribute passes over NFC

Sign up for loyalty programs directly from Wallet

Share and personalize passes quickly and easily

# Passes

VAS and personalization

# Passes

VAS and personalization

Passes must be signed using a NFC signing certificate

# Passes

## VAS and personalization

Passes must be signed using a NFC signing certificate

Contact us to find out more about using VAS services

# Passes

## VAS and personalization

Passes must be signed using a NFC signing certificate

Contact us to find out more about using VAS services

VAS engineers available in the labs

# Card Issuers



# Card Issuers

Wallet offers unique features for card issuers





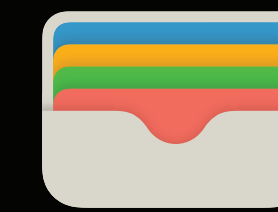
# Card Issuers

Wallet offers unique features for card issuers  
Store credit and debit cards also supported

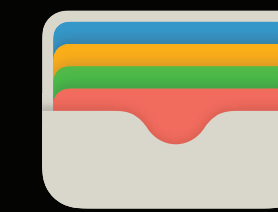


# Card Issuers

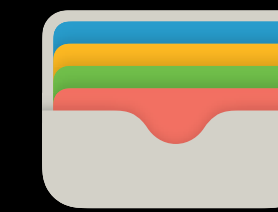
## App provisioning



Add to  
Apple Wallet



添加到  
Apple Wallet

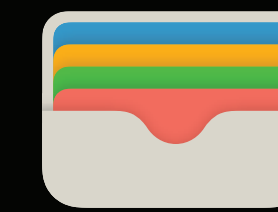


Ajouter à  
Apple Wallet

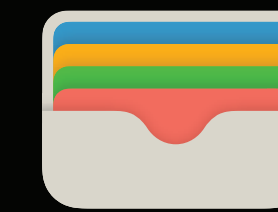
# Card Issuers

## App provisioning

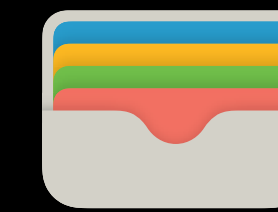
Set up cards in Apple Pay directly from your app



Add to  
Apple Wallet



添加到  
Apple Wallet



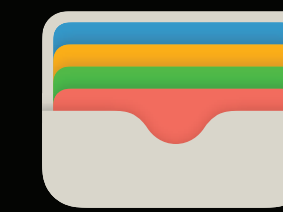
Ajouter à  
Apple Wallet

# Card Issuers

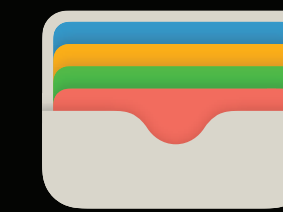
## App provisioning

Set up cards in Apple Pay directly from your app

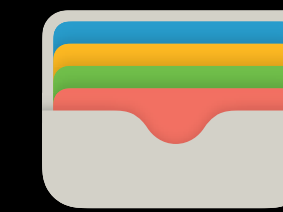
Available to any existing Apple Pay issuer



Add to  
**Apple Wallet**



添加到  
**Apple Wallet**



Ajouter à  
**Apple Wallet**

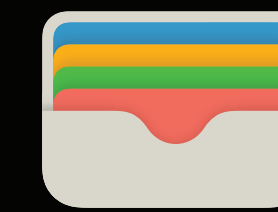
# Card Issuers

## App provisioning

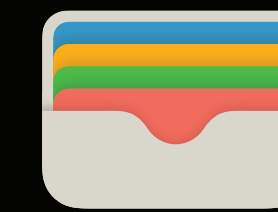
Set up cards in Apple Pay directly from your app

Available to any existing Apple Pay issuer

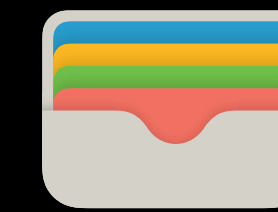
Visit the labs or contact us for more information



Add to  
**Apple Wallet**



添加到  
**Apple Wallet**



Ajouter à  
**Apple Wallet**

# Card Issuers

In-store experience

NEW

# Card Issuers

In-store experience

Present your cards directly from your apps

NEW

# Card Issuers

## In-store experience

NEW

Present your cards directly from your apps

Redeem a coupon in your app, and immediately present a payment method



# Card Issuers

NEW

## In-store experience

Present your cards directly from your apps

Redeem a coupon in your app, and immediately present a payment method

```
let passLibrary = PKPassLibrary.init()
passLibrary.present(pass: myPaymentPass)
```

# Card Issuers

In-store experience

NEW

# Card Issuers

In-store experience

Use the new PKPaymentButton style for consistent branding

NEW

# Card Issuers

In-store experience

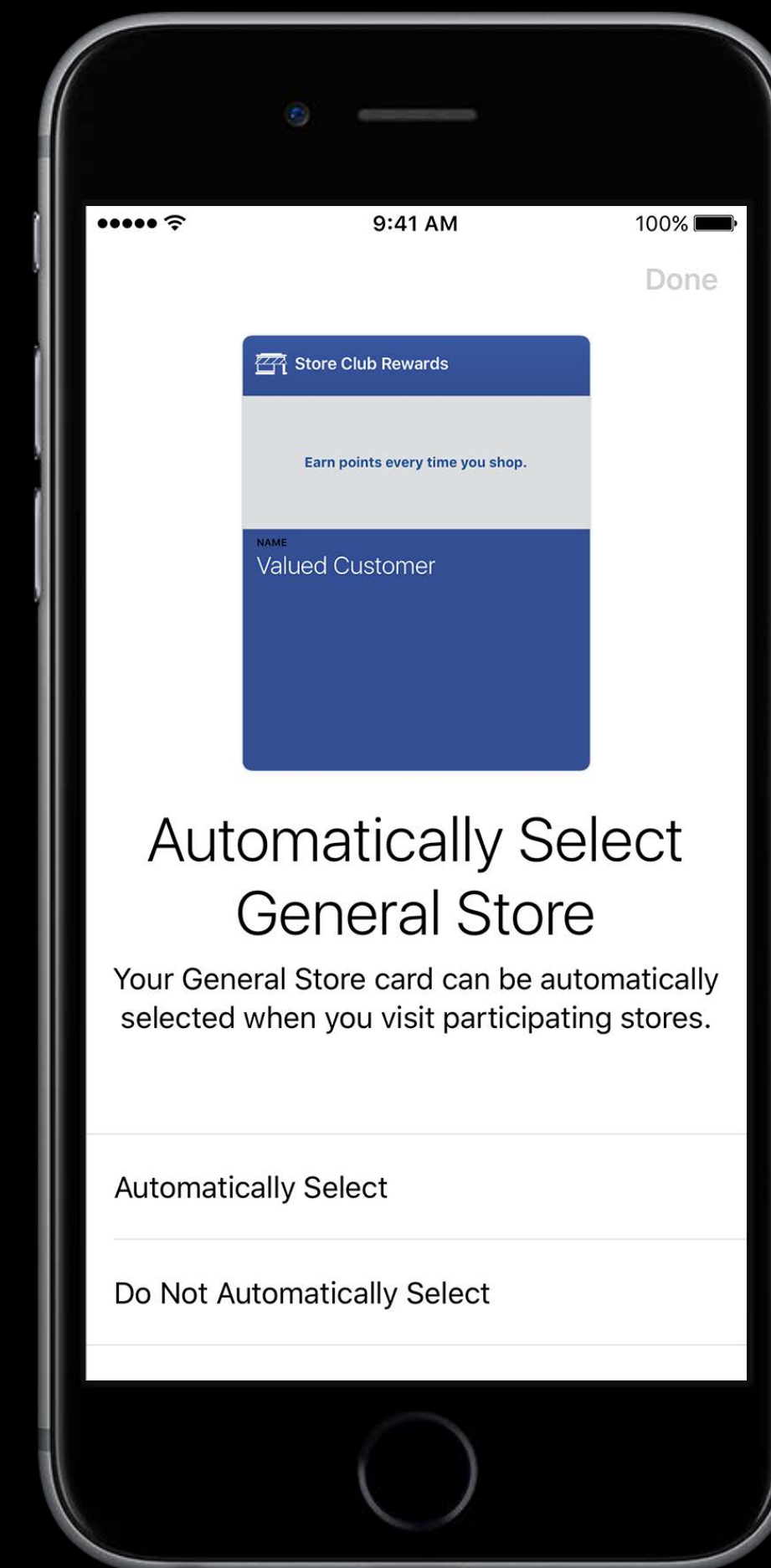
NEW

Use the new PKPaymentButton style for consistent branding

```
let presentButton = PKPaymentButton(type: .inStore, style: .black)
```

# Wallet

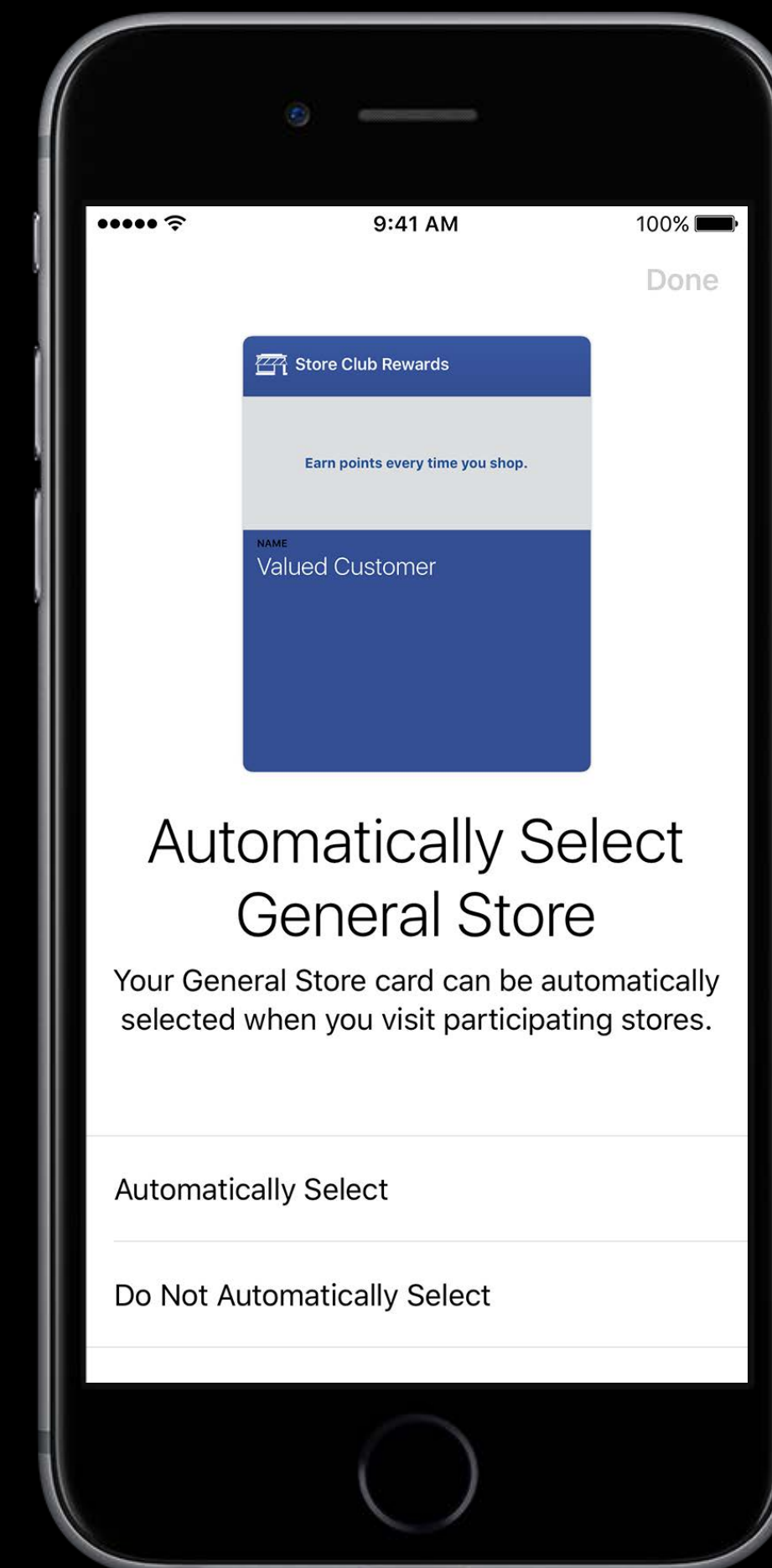
## Store Credit and Debit



# Wallet

## Store Credit and Debit

Associate your app with your store or co-brand card

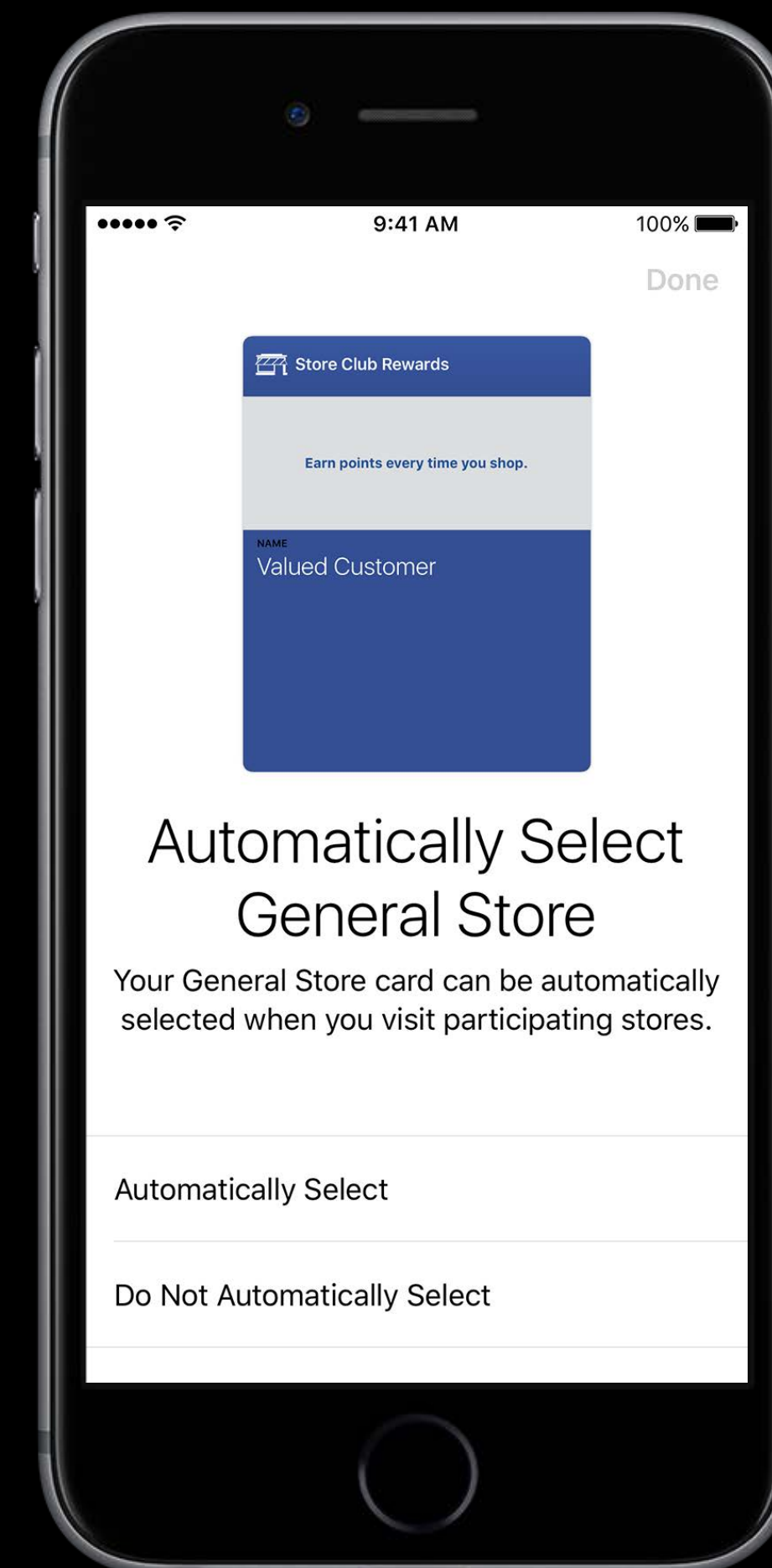


# Wallet

## Store Credit and Debit

Associate your app with your store or co-brand card

Default to your card when paying over NFC or within app



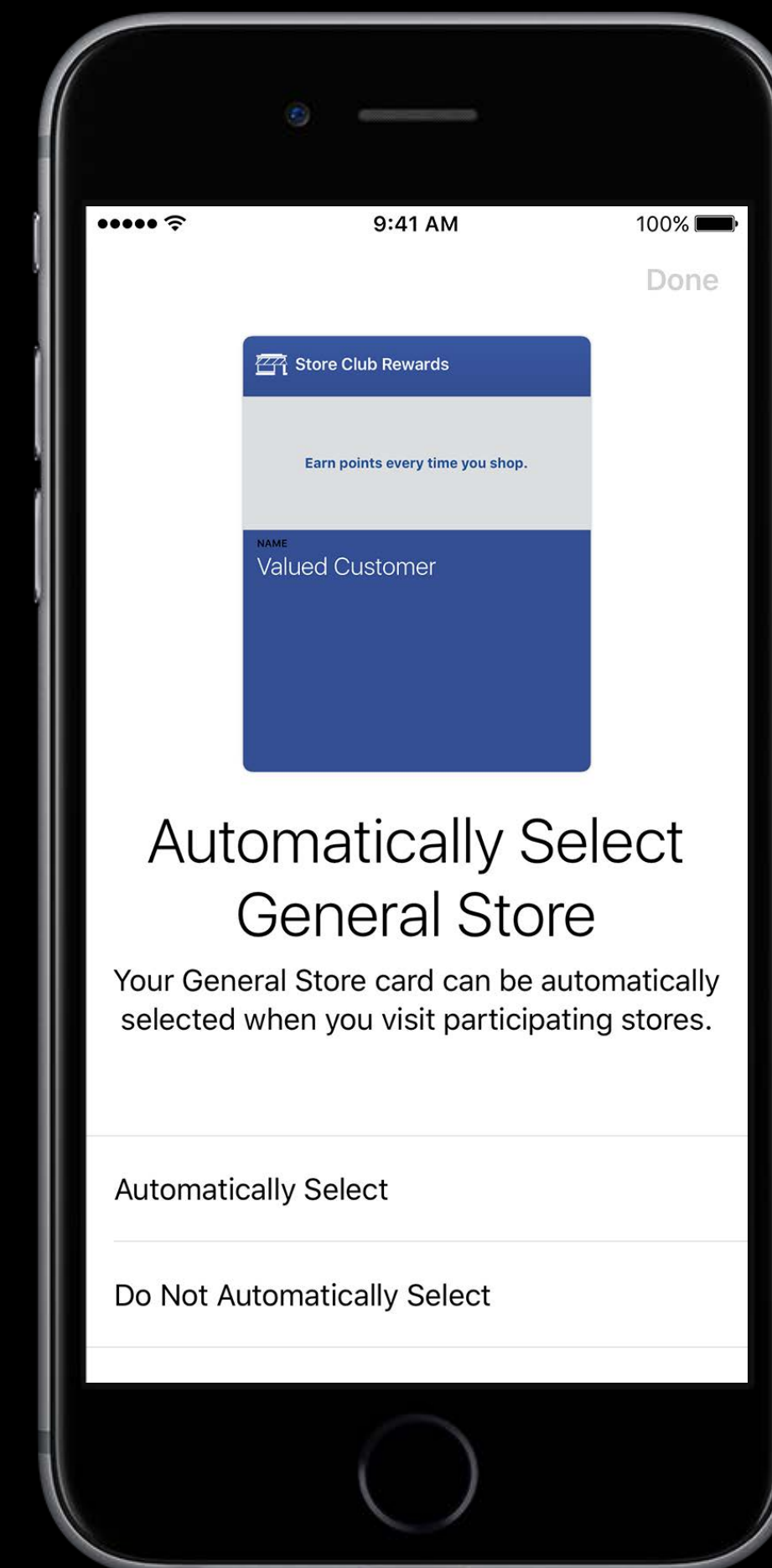
# Wallet

## Store Credit and Debit

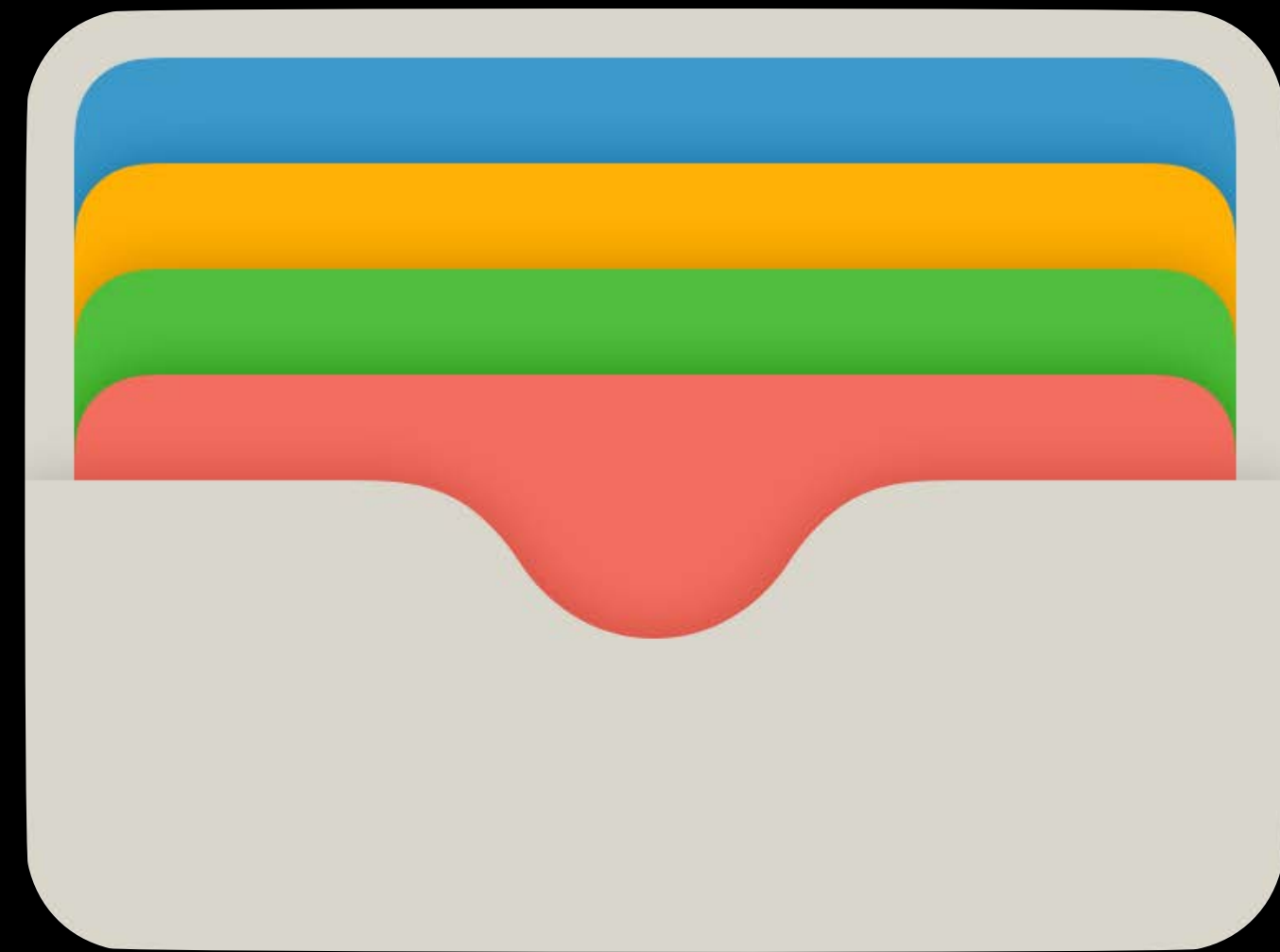
Associate your app with your store or co-brand card

Default to your card when paying over NFC or within app

No API required—built into the card itself









# Apple Pay





# Apple Pay

An easy, secure, and private way to pay



# Apple Pay

An easy, secure, and private way to pay  
Pay in-store and within apps



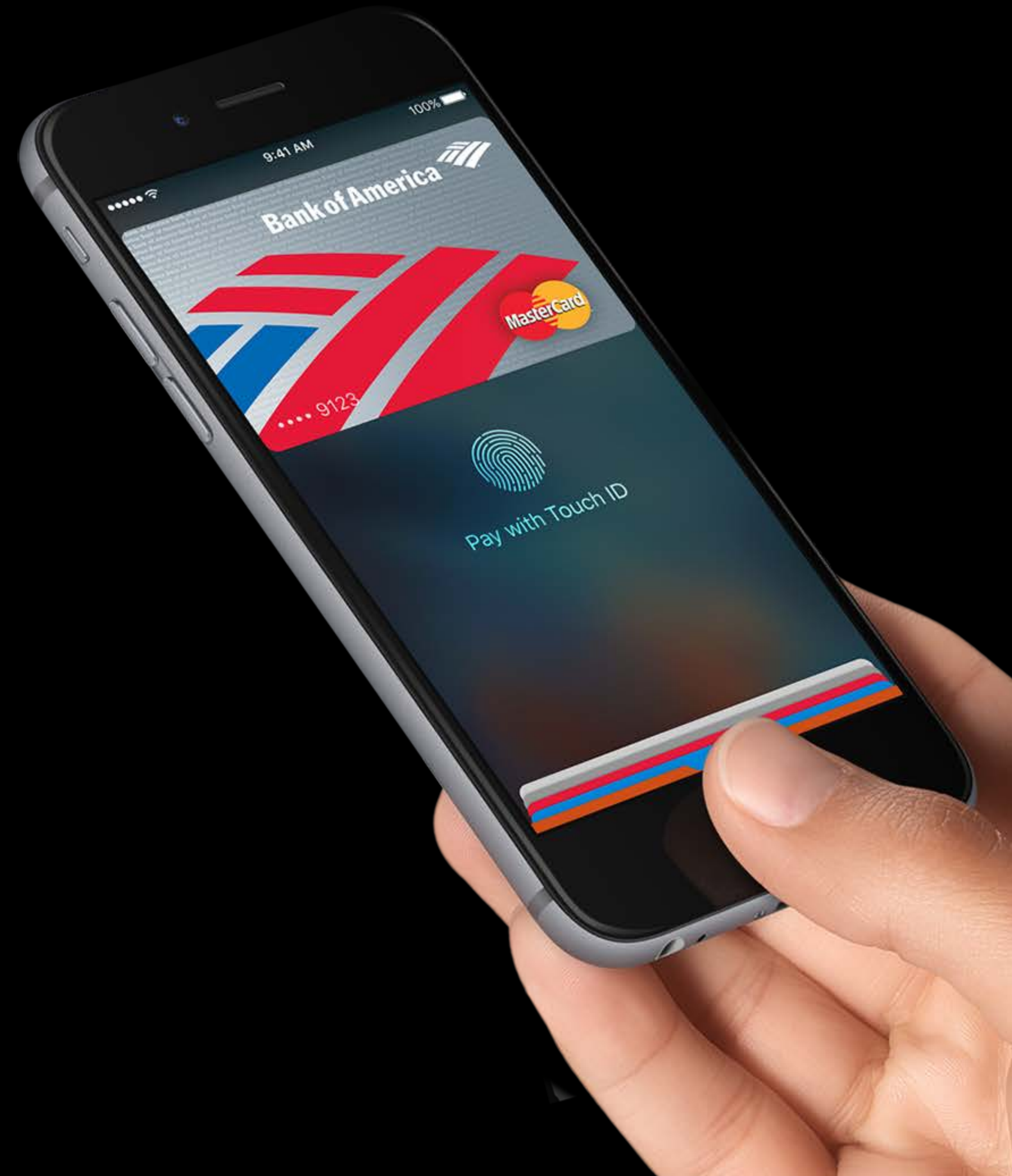


# Apple Pay

An easy, secure, and private way to pay

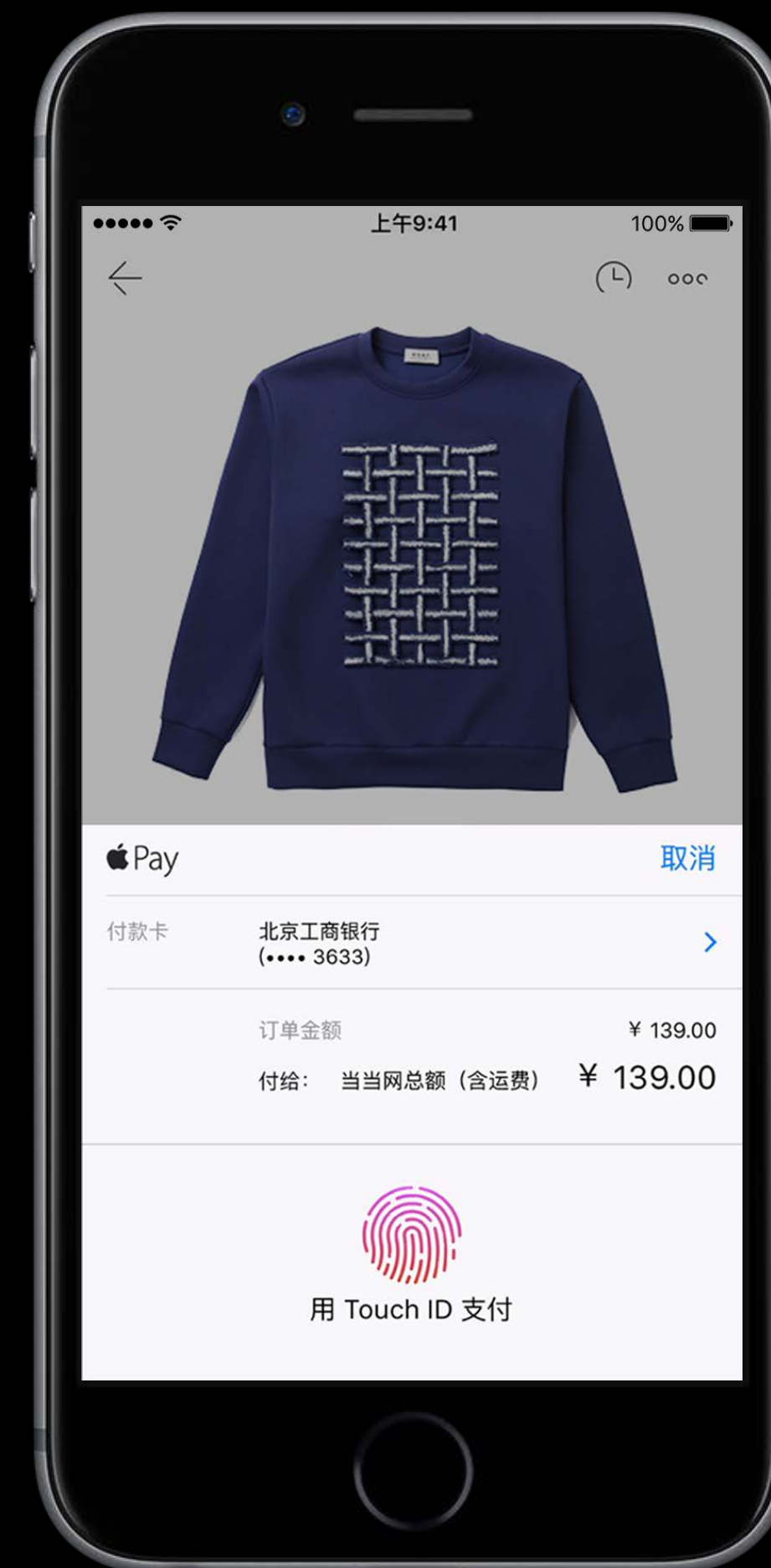
Pay in-store and within apps

Amazing customer satisfaction



# Apple Pay

Within apps



# Apple Pay

Within apps

Pay using Apple Pay directly from apps





# Apple Pay

Within apps

Pay using Apple Pay directly from apps

Thousands of apps have already adopted



# Apple Pay

Within apps

Pay using Apple Pay directly from apps

Thousands of apps have already adopted

Millions of users using Apple Pay



# Apple Pay

Within apps

Pay using Apple Pay directly from apps

Thousands of apps have already adopted

Millions of users using Apple Pay

Incredible growth



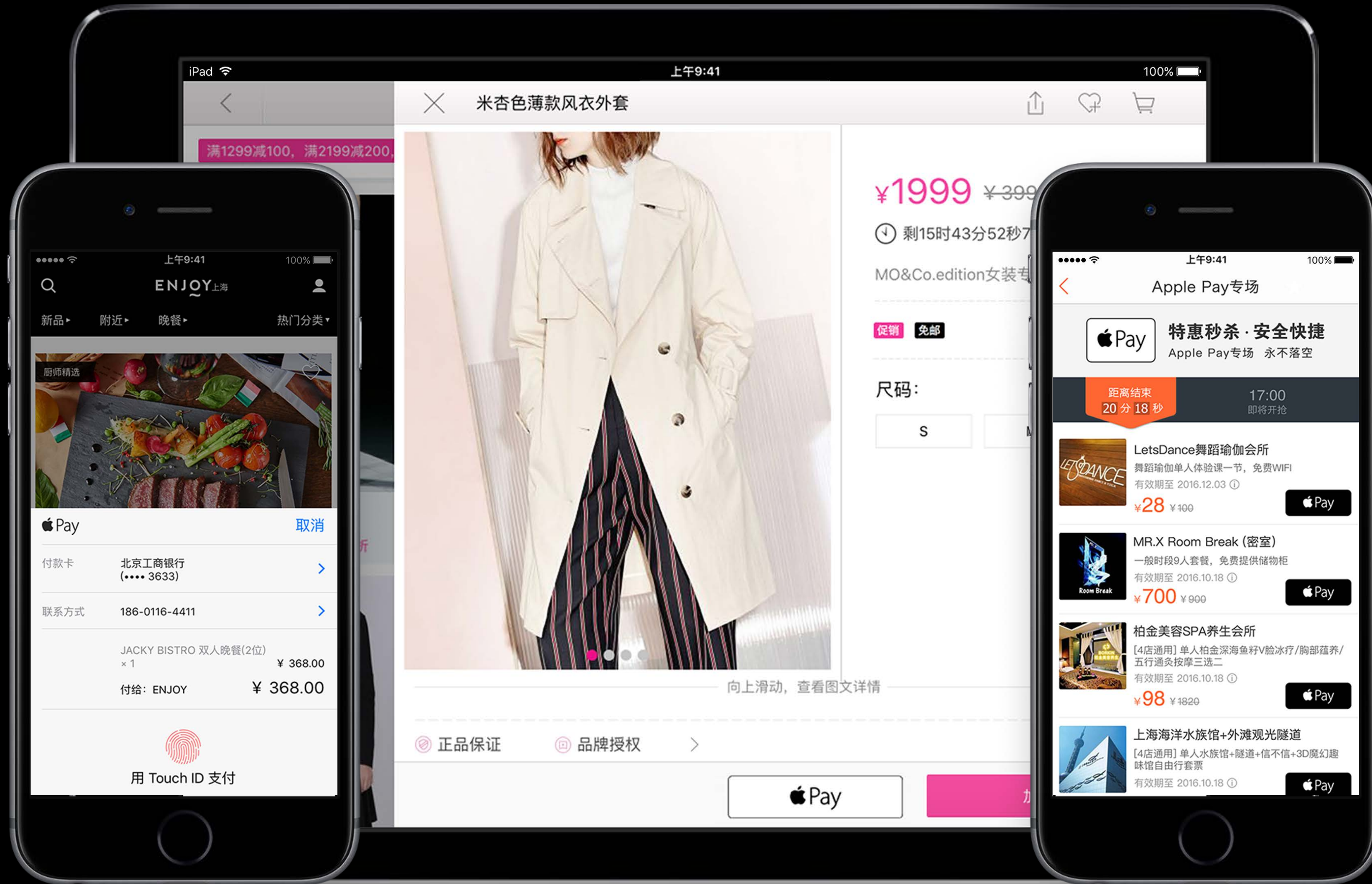
“With Apple Pay, our  
conversion rate has tripled.”

Chairish

“Apple Pay drives twice as many new users to StubHub as any other payment method.”

StubHub





满1299减100, 满2199减200



¥1999 ¥3999

剩15时43分52秒

MO&Co.edition女装专

促销 免邮

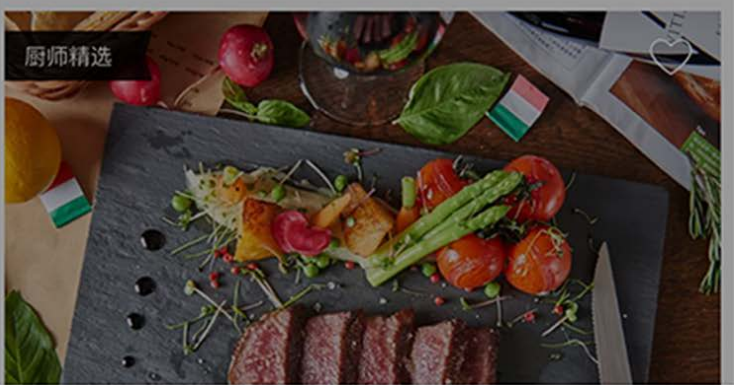
尺码:

S

向上滑动, 查看图文详情

正品保证 品牌授权

Apple Pay



Apple Pay 取消

付款卡 北京工商银行 (\*\*\*\* 3633)

联系方式 186-0116-4411

JACKY BISTRO 双人晚餐(2位) x 1 ¥ 368.00

付给: ENJOY ¥ 368.00

用 Touch ID 支付

特惠秒杀·安全快捷 Apple Pay专场 永不落空

距离结束 20分18秒 17:00 即将开抢

LetsDance舞蹈瑜伽会所 舞蹈瑜伽单人体验课一节, 免费WIFI 有效期至 2016.12.03 ¥28 ¥100

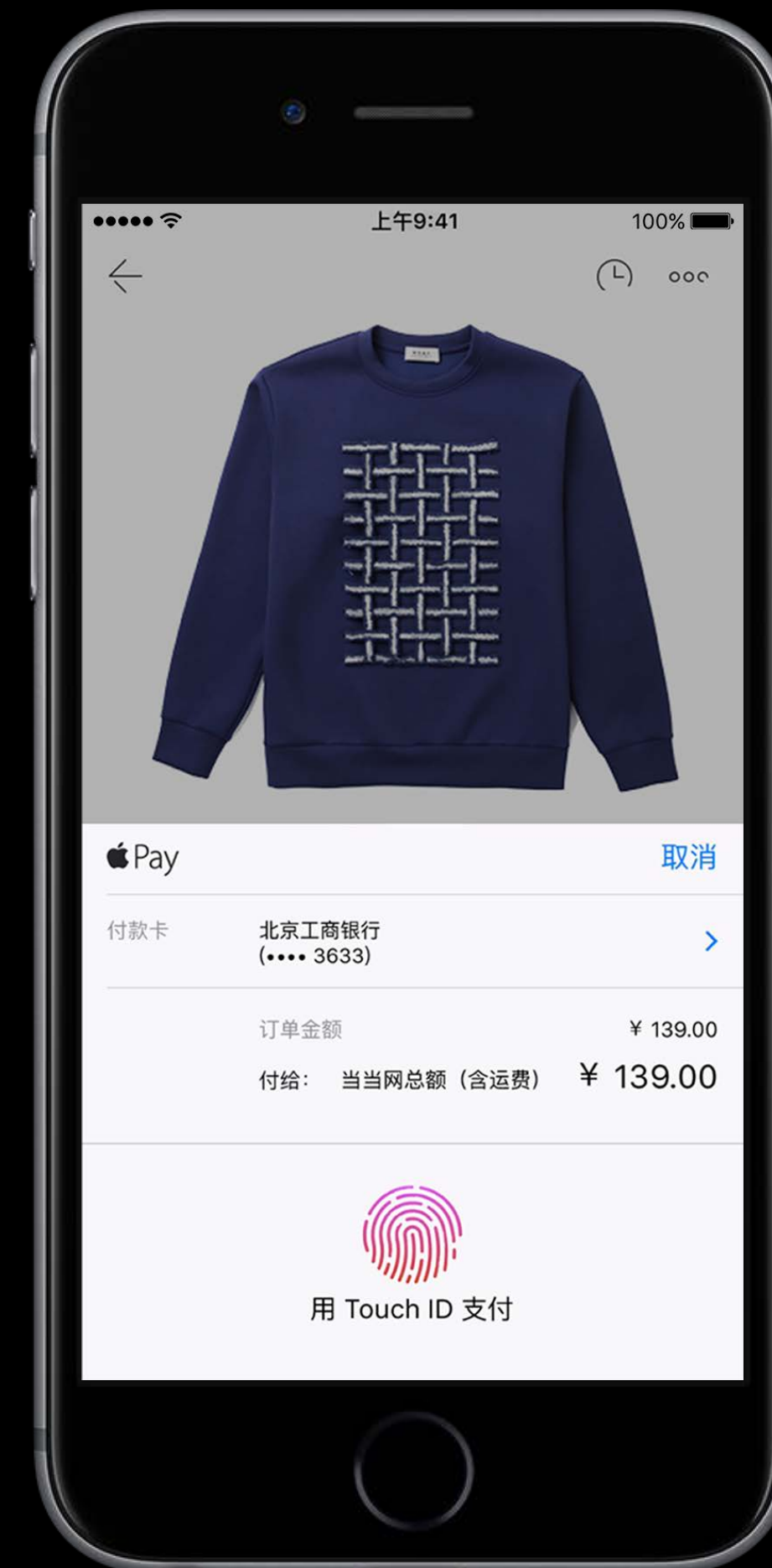
MR.X Room Break (密室) 一般时段9人套餐, 免费提供储物柜 有效期至 2016.10.18 ¥700 ¥900

柏金美容SPA养生会所 [4店通用] 单人柏金深海鱼籽V脸冰疗/胸部滋养/五行通灸按摩三选二 有效期至 2016.10.18 ¥98 ¥1820

上海海洋水族馆+外滩观光隧道 [4店通用] 单人水族馆+隧道+信不信+3D魔幻趣味馆自由套票 有效期至 2016.10.18

# China

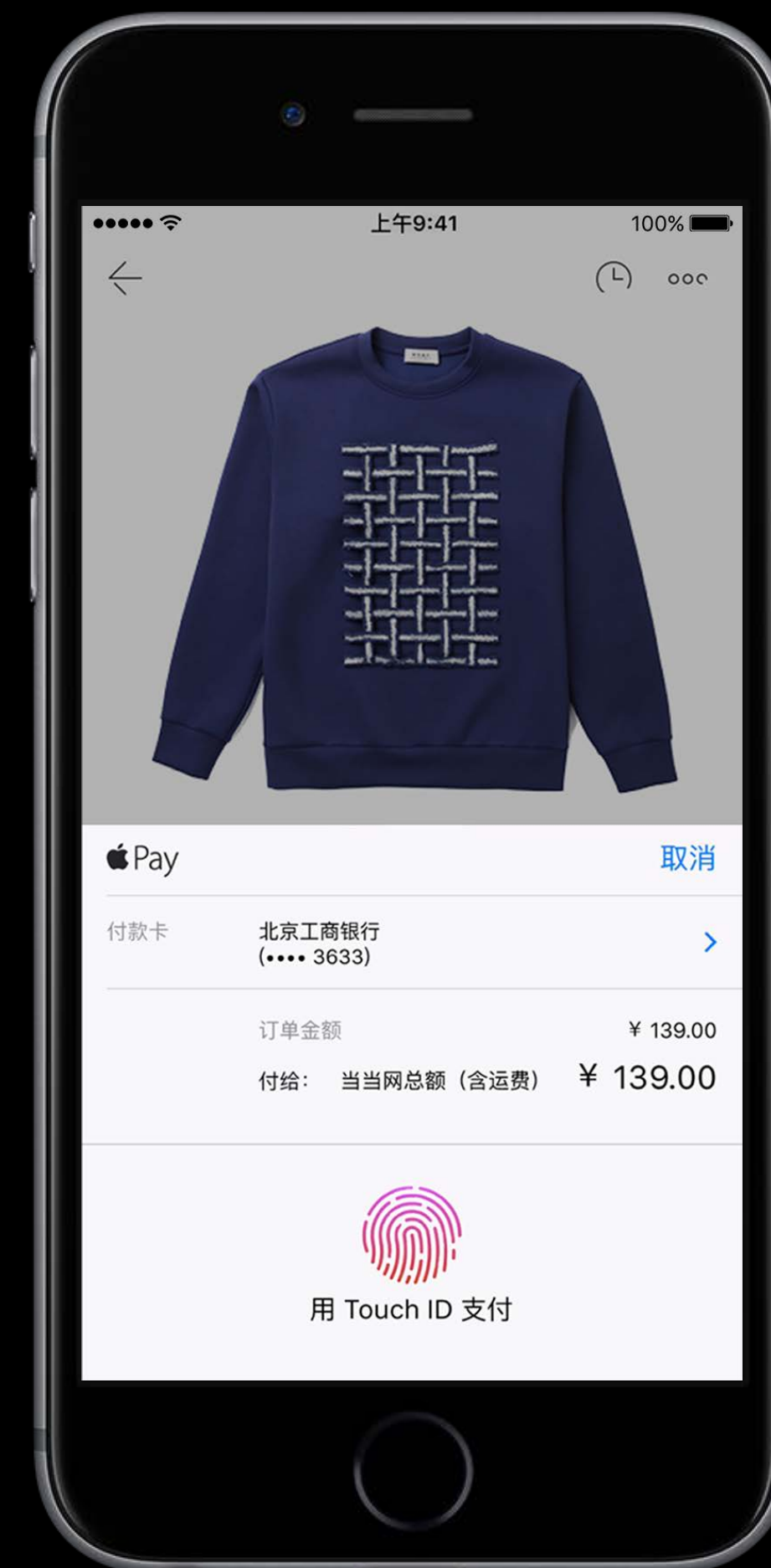
## Apple Pay 入门



# China

## Apple Pay 入门

Full support for China UnionPay credit and debit cards





# China

## Apple Pay 入门

Full support for China UnionPay credit and debit cards

Accepted by CUP, PayEase, LianlianPay, YeePay, and UMS



# China

## Apple Pay 入门

Full support for China UnionPay credit and debit cards

Accepted by CUP, PayEase, LianlianPay, YeePay, and UMS

<https://developer.apple.com/apple-pay/get-started/cn/>



# What's New

Dynamic networks and proxies

NEW

# What's New

NEW

Dynamic networks and proxies

```
request.supportedNetworks = ["Visa", "Mastercard", "AmEx", "Discover"]
```

# What's New

NEW

## Dynamic networks and proxies

```
request.supportedNetworks = ["Visa", "Mastercard", "AmEx", "Discover"]
```

Today, supported payment networks are hard-coded into your app

# What's New

NEW

## Dynamic networks and proxies

```
request.supportedNetworks = ["Visa", "Mastercard", "AmEx", "Discover"]
```

Today, supported payment networks are hard-coded into your app

Adding new networks requires you to perform SDK availability checks

# What's New

NEW

## Dynamic networks and proxies

```
request.supportedNetworks = ["Visa", "Mastercard", "AmEx", "Discover"]
```

Today, supported payment networks are hard-coded into your app

Adding new networks requires you to perform SDK availability checks

Updating networks often means updating your app

# What's New

Dynamic networks and proxies

NEW



# What's New

NEW

## Dynamic networks and proxies

```
// Discover all supported networks available on this device
PKPaymentRequest.availableNetworks

// Set a payment processor as a supported network
// This maps to a subset of available networks and is dynamically updated
request.supportedNetworks = ["My Payment Processor"]
```

# What's New

NEW

## Dynamic networks and proxies

```
// Discover all supported networks available on this device
PKPaymentRequest.availableNetworks

// Set a payment processor as a supported network
// This maps to a subset of available networks and is dynamically updated
request.supportedNetworks = ["My Payment Processor"]
```

Enable new networks as they're added

# What's New

NEW

## Dynamic networks and proxies

```
// Discover all supported networks available on this device
PKPaymentRequest.availableNetworks

// Set a payment processor as a supported network
// This maps to a subset of available networks and is dynamically updated
request.supportedNetworks = ["My Payment Processor"]
```

Enable new networks as they're added

Use a payment processor as a supported network

# What's New

NEW

## Dynamic networks and proxies

```
// Discover all supported networks available on this device
PKPaymentRequest.availableNetworks

// Set a payment processor as a supported network
// This maps to a subset of available networks and is dynamically updated
request.supportedNetworks = ["My Payment Processor"]
```

Enable new networks as they're added

Use a payment processor as a supported network

Gain support for new networks as they're added, without needing to change your code

# What's New

Swift 3 API

NEW

# What's New

## Swift 3 API

Improved API for Swift users

NEW

# What's New

## Swift 3 API

NEW

Improved API for Swift users

PassKit now uses stringly typed enumerations

Apple Pay

Everywhere



# Apple Pay

Everywhere



WatchKit

# Apple Pay

Everywhere



WatchKit



Extensions

# Apple Pay

Everywhere



WatchKit



Extensions



Safari



# Apple Pay

Everywhere



WatchKit



Extensions



Safari

# Apple Pay

Everywhere



WatchKit



Extensions



Safari

# Apple Pay in WatchKit

Leo Cantelmo Watch SW Engineer

Apple Pay

+



# Apple Pay—WatchKit

## Overview



# Apple Pay—WatchKit

Overview

Quick recap

# Apple Pay—WatchKit

Overview

Quick recap

Creating a payment request

# Apple Pay—WatchKit

## Overview

Quick recap

Creating a payment request

Presenting the payment sheet

# Apple Pay—WatchKit

Overview

Quick recap

Creating a payment request

Presenting the payment sheet

Demo

# Apple Pay—WatchKit

## Overview

Quick recap

Creating a payment request

Presenting the payment sheet

Demo

Design considerations



9:41 AM

100%

# Emporium



Cancel

CARD CHASE FREEDOM  
(•••• 5555) >

SHIPPING JOHN APPLESEED  
1035 STEVENS CREEK BLVD  
CUPERTINO CA 95104  
UNITED STATES >

METHOD FREE SHIPPING  
DELIVERS: JUNE 15 >

CONTACT J.APPLESEED@ICLOUD.COM >

SUBTOTAL \$20.00

FREE SHIPPING \$0.00

ESTIMATED TAX \$1.75

**PAY EMPORIUM \$21.75**



Pay with Touch ID



9:41 AM

100%

# Emporium



Cancel

CARD CHASE FREEDOM  
(•••• 5555) >

SHIPPING JOHN APPLESEED  
1035 STEVENS CREEK BLVD  
CUPERTINO CA 95104  
UNITED STATES >

METHOD FREE SHIPPING  
DELIVERS: JUNE 15 >

CONTACT J.APPLESEED@ICLOUD.COM >

SUBTOTAL \$20.00

FREE SHIPPING \$0.00

ESTIMATED TAX \$1.75

PAY EMPORIUM **\$21.75**



Pay with Touch ID



Cancel



**\$21.75**  
to Emporium

Double Click  
to Pay

CHASE





9:41 AM

100%

# Emporium



Cancel

CARD CHASE FREEDOM  
(•••• 5555) >

SHIPPING JOHN APPLESEED  
1035 STEVENS CREEK BLVD  
CUPERTINO CA 95104  
UNITED STATES >

METHOD FREE SHIPPING  
DELIVERS: JUNE 15 >

CONTACT J.APPLESEED@ICLOUD.COM >

SUBTOTAL	\$20.00
FREE SHIPPING	\$0.00
ESTIMATED TAX	\$1.75
<b>PAY EMPORIUM</b>	<b>\$21.75</b>



Pay with Touch ID



Cancel



•••• 5555

VISA  
Signature

Shipping

1035 Stevens Creek...

Method





9:41 AM

100%

# Emporium



Cancel

CARD CHASE FREEDOM  
(•••• 5555) >

SHIPPING JOHN APPLESEED  
1035 STEVENS CREEK BLVD  
CUPERTINO CA 95104  
UNITED STATES >

METHOD FREE SHIPPING  
DELIVERS: JUNE 15 >

CONTACT J.APPLESEED@ICLOUD.COM >

SUBTOTAL	\$20.00
FREE SHIPPING	\$0.00
ESTIMATED TAX	\$1.75
<b>PAY EMPORIUM</b>	<b>\$21.75</b>



Pay with Touch ID



Cancel

1035 STEVENS CREEK...

Method  
Free Shipping

Contact  
j.appleseed@icloud....

Subtotal	\$20.00
Free Shipping	\$0.00
Estimated Tax	\$1.75
<b>Total</b>	<b>\$21.75</b>



Cancel

Apple Pay

\$21.75

to Emporium

Double Click  
to Pay

CHASE



Cancel

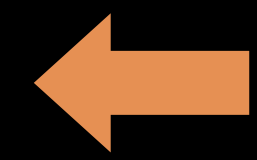
Apple Pay

\$21.75

to Emporium

Double Click  
to Pay

CHASE





Done

CHASE

*freedom*



.... 5555

VISA  
Signature



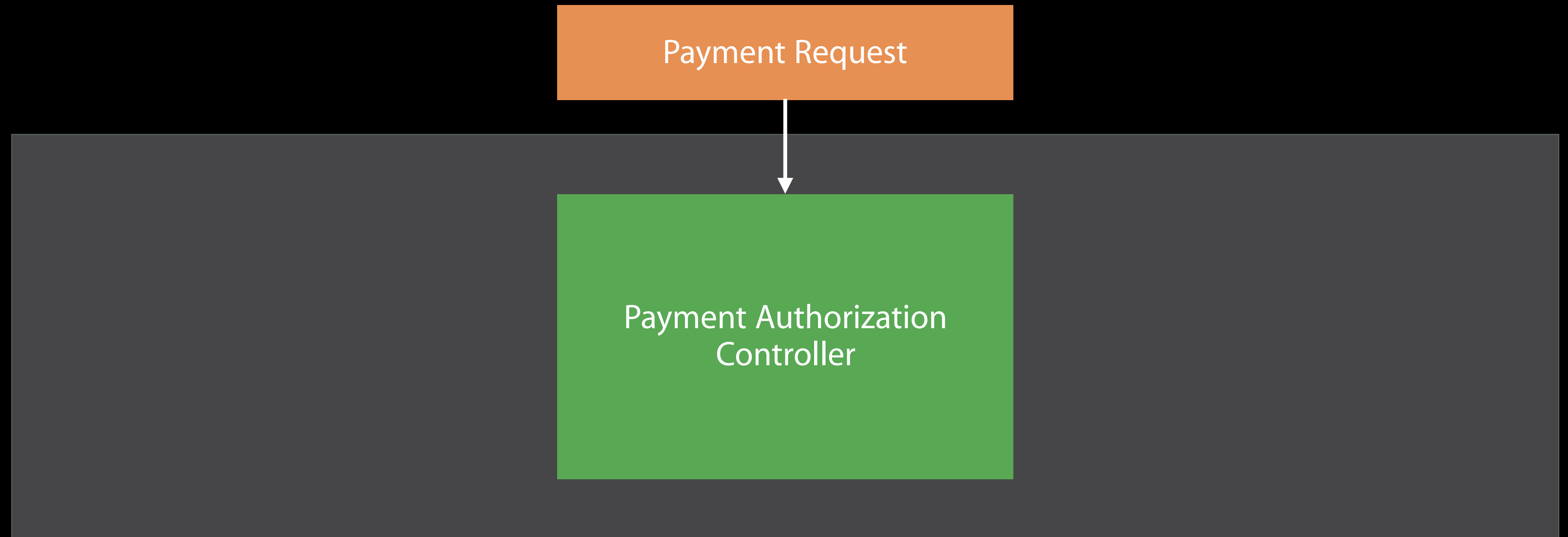
# Quick Recap

How payments work



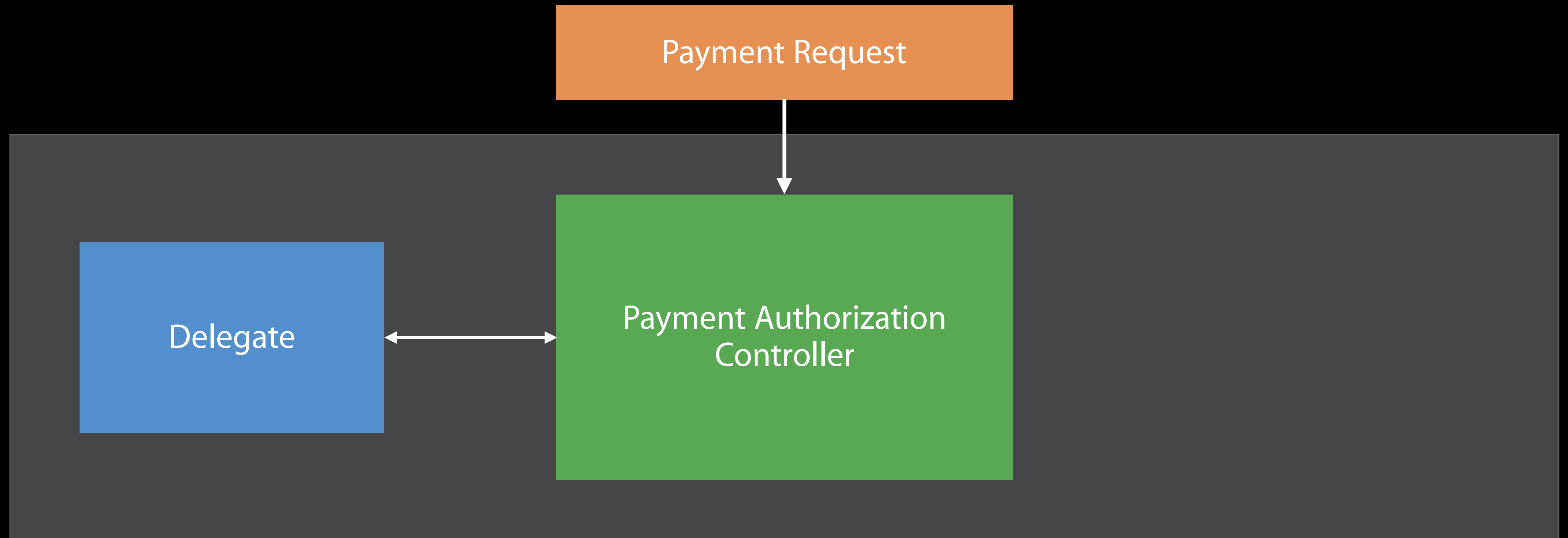
# Quick Recap

How payments work



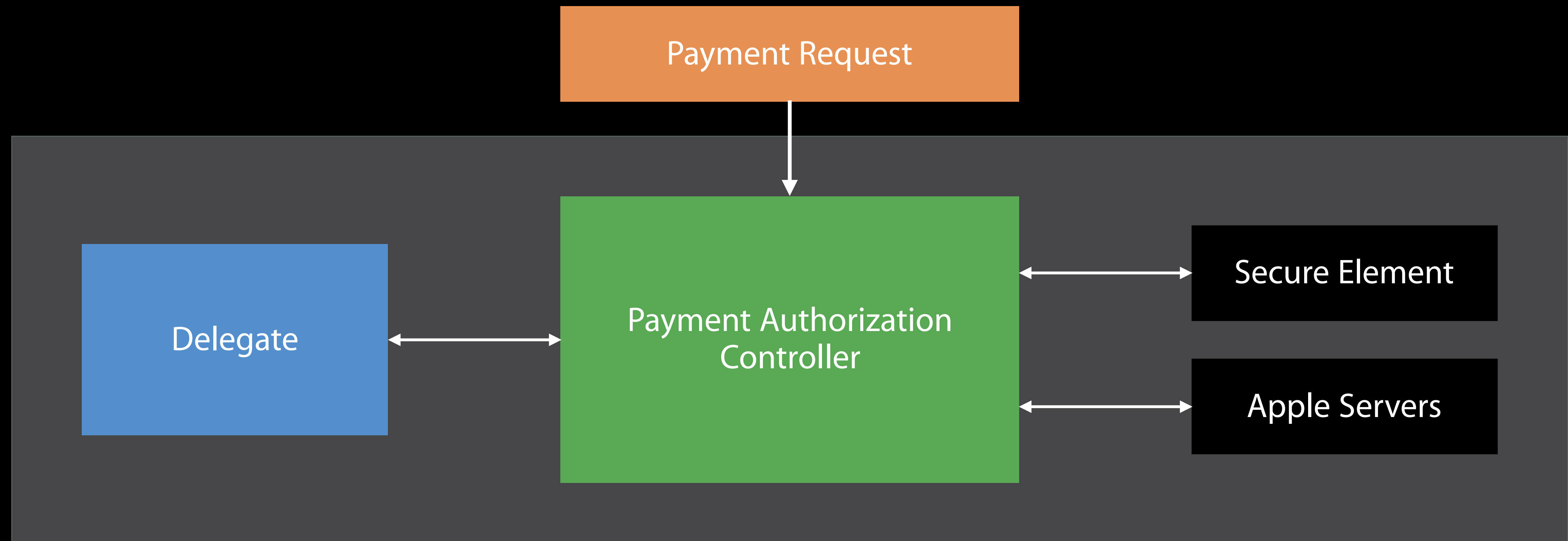
# Quick Recap

How payments work



# Quick Recap

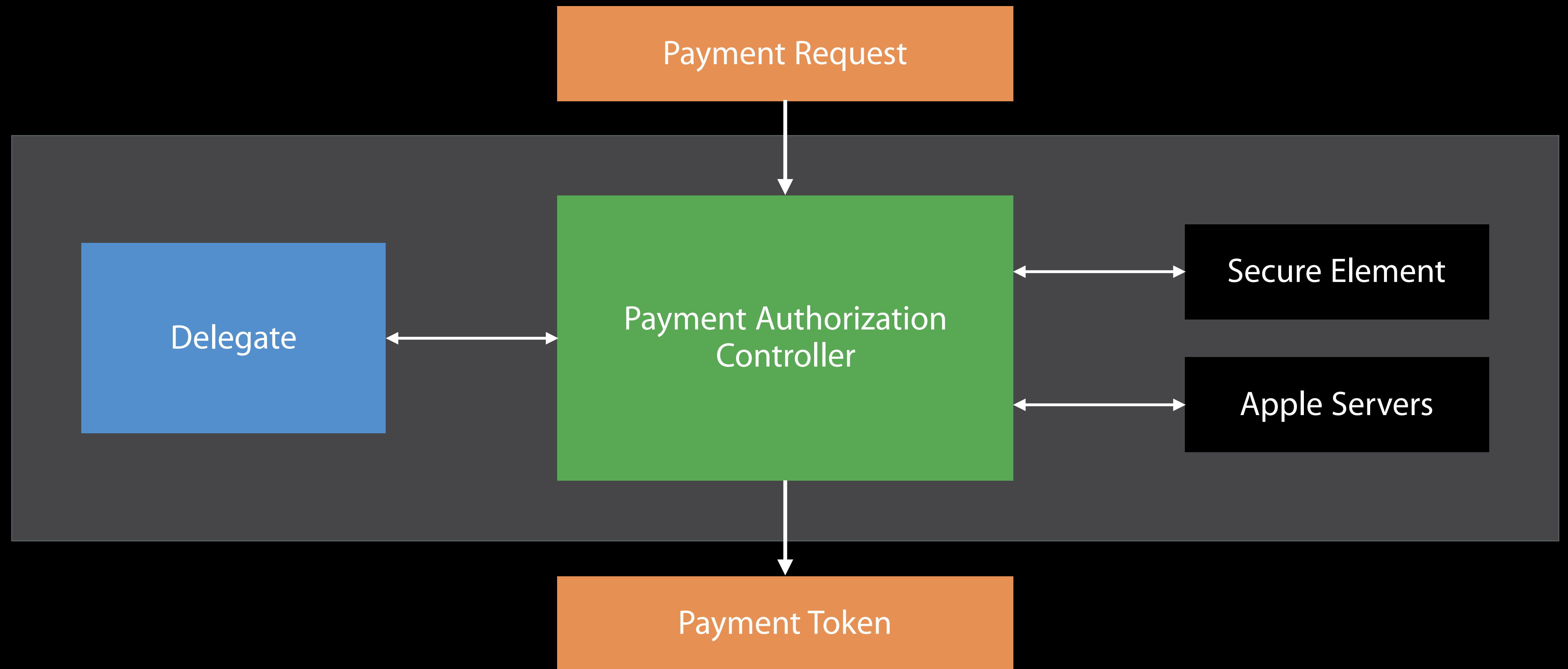
How payments work





# Quick Recap

How payments work



# Before You Start

Configuring your environment

# Before You Start

Configuring your environment

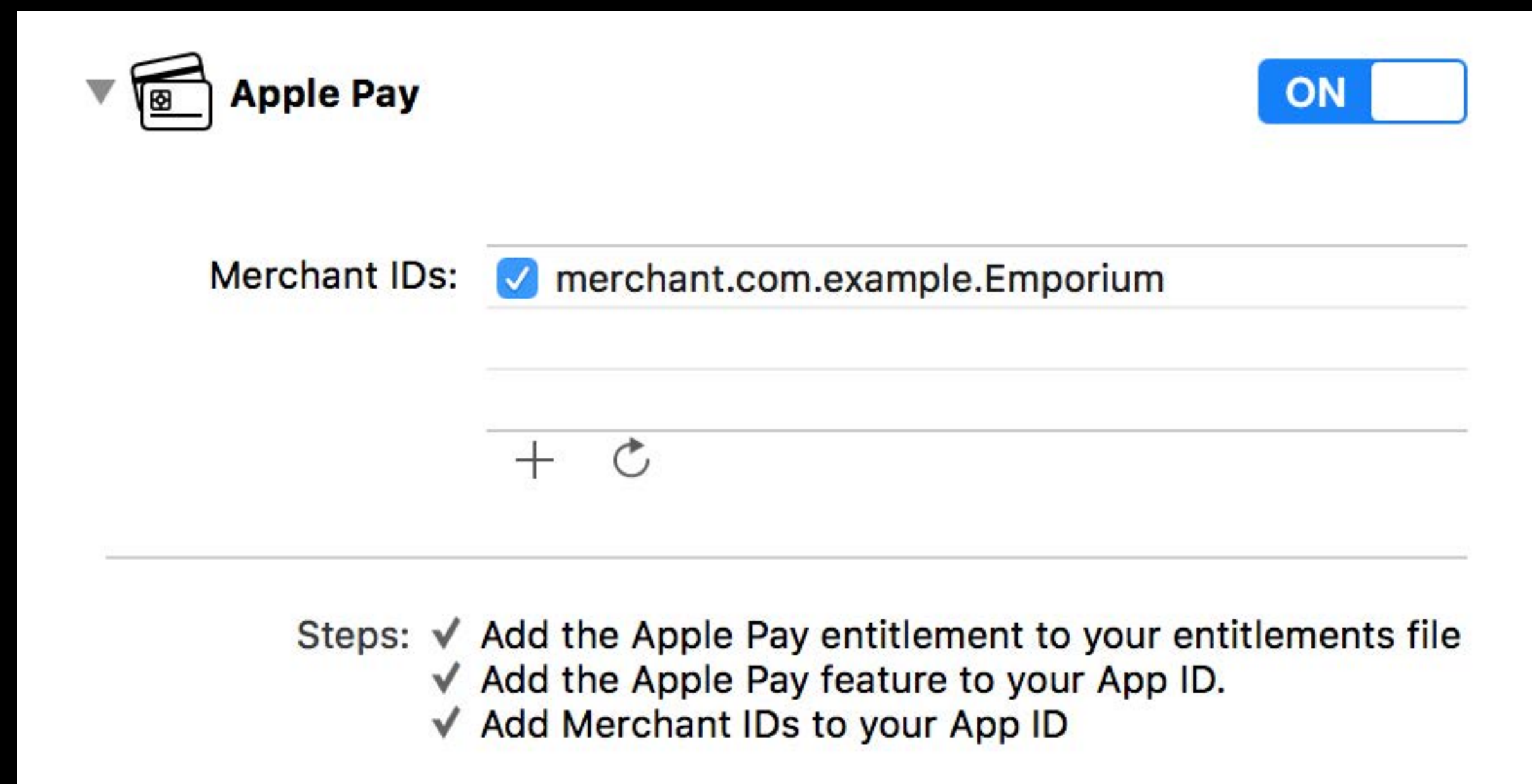
Register a merchant identifier and set up cryptographic keys in the Developer Portal

# Before You Start

## Configuring your environment

Register a merchant identifier and set up cryptographic keys in the Developer Portal

Enable Apple Pay in the Capabilities pane inside Xcode



```
// Creating a Payment Request
```

```
import PassKit
```

```
let paymentRequest = PKPaymentRequest()
```

```
paymentRequest.countryCode = "US"
```

```
paymentRequest.currencyCode = "USD"
```

```
paymentRequest.merchantIdentifier = "merchant.com.example.emporium"
```

```
paymentRequest.merchantCapabilities = .capability3DS
```

```
paymentRequest.supportedNetworks = PKPaymentRequest.availableNetworks()
```

```
paymentRequest.paymentSummaryItems = [
```

```
    PKPaymentSummaryItem(label:"Emporium", amount:NSDecimalNumber(string:"10.99"))
```

```
]
```

```
// Creating a Payment Request
```

```
import PassKit
```

```
let paymentRequest = PKPaymentRequest()
```

```
paymentRequest.countryCode = "US"
```

```
paymentRequest.currencyCode = "USD"
```

```
paymentRequest.merchantIdentifier = "merchant.com.example.emporium"
```

```
paymentRequest.merchantCapabilities = .capability3DS
```

```
paymentRequest.supportedNetworks = PKPaymentRequest.availableNetworks()
```

```
paymentRequest.paymentSummaryItems = [
```

```
    PKPaymentSummaryItem(label:"Emporium", amount:NSDecimalNumber(string:"10.99"))
```

```
]
```

```
// Creating a Payment Request
```

```
import PassKit
```

```
let paymentRequest = PKPaymentRequest()
```

```
paymentRequest.countryCode = "US"
```

```
paymentRequest.currencyCode = "USD"
```

```
paymentRequest.merchantIdentifier = "merchant.com.example.emporium"
```

```
paymentRequest.merchantCapabilities = .capability3DS
```

```
paymentRequest.supportedNetworks = PKPaymentRequest.availableNetworks()
```

```
paymentRequest.paymentSummaryItems = [
```

```
    PKPaymentSummaryItem(label:"Emporium", amount:NSDecimalNumber(string:"10.99"))
```

```
]
```

```
// Creating a Payment Request
```

```
import PassKit
```

```
let paymentRequest = PKPaymentRequest()
```

```
paymentRequest.countryCode = "US"
```

```
paymentRequest.currencyCode = "USD"
```

```
paymentRequest.merchantIdentifier = "merchant.com.example.emporium"
```

```
paymentRequest.merchantCapabilities = .capability3DS
```

```
paymentRequest.supportedNetworks = PKPaymentRequest.availableNetworks()
```

```
paymentRequest.paymentSummaryItems = [
```

```
    PKPaymentSummaryItem(label:"Emporium", amount:NSDecimalNumber(string:"10.99"))
```

```
]
```



```
// Presenting the Payment Sheet
```

```
import PassKit
```

```
let paymentController = PKPaymentAuthorizationController(paymentRequest: paymentRequest)
```

```
paymentController.delegate = self
```

```
paymentController.present { (success) in
```

```
    // ...
```

```
}
```

```
// MARK: - PKPaymentAuthorizationControllerDelegate
```

```
func paymentAuthorizationControllerDidFinish(controller: PKPaymentAuthorizationController) {
```

```
    controller.dismiss {
```

```
        // ...
```

```
    }
```

```
}
```

```
// Presenting the Payment Sheet
```

```
import PassKit
```

```
let paymentController = PKPaymentAuthorizationController(paymentRequest: paymentRequest)
```

```
paymentController.delegate = self
```

```
paymentController.present { (success) in
```

```
    // ...
```

```
}
```

```
// MARK: - PKPaymentAuthorizationControllerDelegate
```

```
func paymentAuthorizationControllerDidFinish(controller: PKPaymentAuthorizationController) {
```

```
    controller.dismiss {
```

```
        // ...
```

```
    }
```

```
}
```

```
// Presenting the Payment Sheet
```

```
import PassKit
```

```
let paymentController = PKPaymentAuthorizationController(paymentRequest: paymentRequest)
```

```
paymentController.delegate = self
```

```
paymentController.present { (success) in
```

```
    // ...
```

```
}
```

```
// MARK: - PKPaymentAuthorizationControllerDelegate
```

```
func paymentAuthorizationControllerDidFinish(controller: PKPaymentAuthorizationController) {
```

```
    controller.dismiss {
```

```
        // ...
```

```
    }
```

```
}
```

```
// Presenting the Payment Sheet
```

```
import PassKit
```

```
let paymentController = PKPaymentAuthorizationController(paymentRequest: paymentRequest)
```

```
paymentController.delegate = self
```

```
paymentController.present { (success) in
```

```
    // ...
```

```
}
```

```
// MARK: - PKPaymentAuthorizationControllerDelegate
```

```
func paymentAuthorizationControllerDidFinish(controller: PKPaymentAuthorizationController) {
```

```
    controller.dismiss {
```

```
        // ...
```

```
    }
```

```
}
```

```
// Presenting the Payment Sheet
```

```
import PassKit
```

```
let paymentController = PKPaymentAuthorizationController(paymentRequest: paymentRequest)
```

```
paymentController.delegate = self
```

```
paymentController.present { (success) in
```

```
    // ...
```

```
}
```

```
// MARK: - PKPaymentAuthorizationControllerDelegate
```

```
func paymentAuthorizationControllerDidFinish(controller: PKPaymentAuthorizationController) {
```

```
    controller.dismiss {
```

```
        // ...
```

```
    }
```

```
}
```

# Presenting the Payment Sheet

PKPaymentAuthorizationController

NEW

# Presenting the Payment Sheet

PKPaymentAuthorizationController

New controller class available in PassKit.framework



NEW

# Presenting the Payment Sheet

PKPaymentAuthorizationController

NEW

New controller class available in PassKit.framework

Responsible for controlling the payment authorization flow



# Presenting the Payment Sheet

## PKPaymentAuthorizationController

NEW

New controller class available in PassKit.framework

Responsible for controlling the payment authorization flow

Same API semantics of PKPaymentAuthorizationViewController

# Presenting the Payment Sheet

NEW

## PKPaymentAuthorizationController

New controller class available in PassKit.framework

Responsible for controlling the payment authorization flow

Same API semantics of PKPaymentAuthorizationViewController

Allows for presentation of the payment sheet from WatchKit extensions

# Presenting the Payment Sheet

## PKPaymentAuthorizationController

NEW

New controller class available in PassKit.framework

Responsible for controlling the payment authorization flow

Same API semantics of PKPaymentAuthorizationViewController

Allows for presentation of the payment sheet from WatchKit extensions

Supported across watchOS and iOS allowing for code reuse

*Demo*

Making payments on watchOS

# Design considerations

Make shopping easy



# Design considerations

Make shopping easy

Design short interactions for small screens





# Design considerations

Make shopping easy

Design short interactions for small screens

Don't require unnecessary information



# Design considerations

Make shopping easy

Design short interactions for small screens

Don't require unnecessary information

Billing and shipping options from iPhone





# Design considerations

Make shopping easy

Design short interactions for small screens

Don't require unnecessary information

Billing and shipping options from iPhone

Use provided `WKInterfacePaymentButton`



# Design considerations

Make shopping easy

Design short interactions for small screens

Don't require unnecessary information

Billing and shipping options from iPhone

Use provided `WKInterfacePaymentButton`

Storyboard support in Interface Builder



# Design considerations

Make shopping easy

Design short interactions for small screens

Don't require unnecessary information

Billing and shipping options from iPhone

Use provided `WKInterfacePaymentButton`

Storyboard support in Interface Builder

Follow our Apple Pay Identity Guidelines



# Apple Pay—WatchKit

## Summary

# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes



# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension

# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension
- Use provided methods to present and dismiss the payment sheet

# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension
- Use provided methods to present and dismiss the payment sheet

Create a great Apple Watch experience for your users



# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension
- Use provided methods to present and dismiss the payment sheet

Create a great Apple Watch experience for your users

- Interactions are short and screens small

# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension
- Use provided methods to present and dismiss the payment sheet

Create a great Apple Watch experience for your users

- Interactions are short and screens small
- Use `WKInterfacePaymentButton` following our guidelines

# Apple Pay—WatchKit

## Summary

Same code from iOS will work with minimal changes

- Use `PKPaymentAuthorizationController` in your WatchKit extension
- Use provided methods to present and dismiss the payment sheet

Create a great Apple Watch experience for your users

- Interactions are short and screens small
- Use `WKInterfacePaymentButton` following our guidelines

# Extensions

Messages, Siri, Maps, and more...

# Extension Support

Previous releases

# Extension Support

Previous releases

Apple Pay has been difficult to support in extensions

# Extension Support

Previous releases

Apple Pay has been difficult to support in extensions

Not many interesting places to use it

# Extension Support

New opportunities



# Extension Support

New opportunities

New extensions in iOS 10 offer many new Apple Pay opportunities

# Extension Support

## New opportunities

New extensions in iOS 10 offer many new Apple Pay opportunities

New `PKPaymentAuthorizationController` API allows presentment in non-UI contexts

# Extension Support

## Messages

NEW

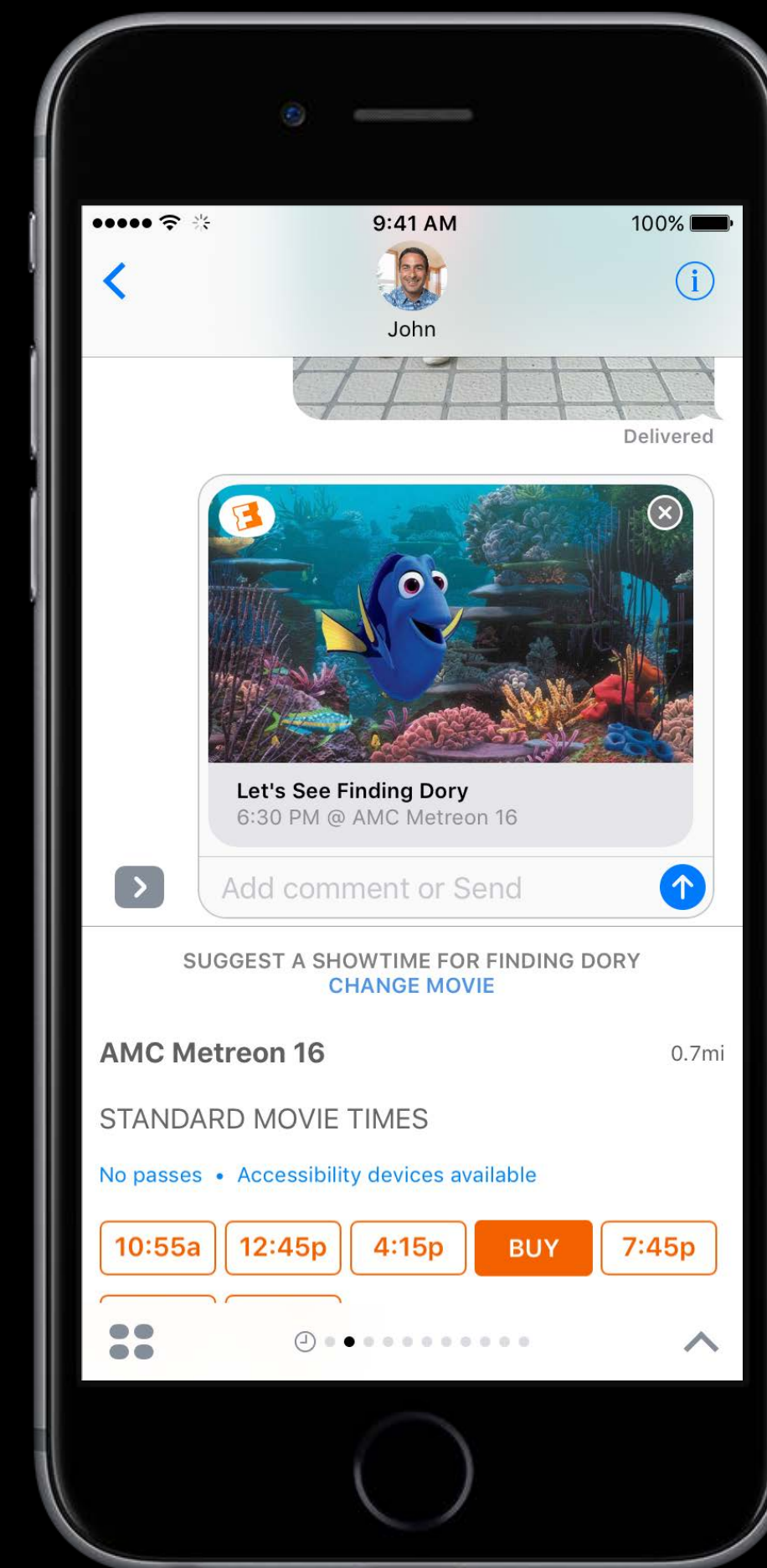


# Extension Support

## Messages

NEW

Split items and purchases



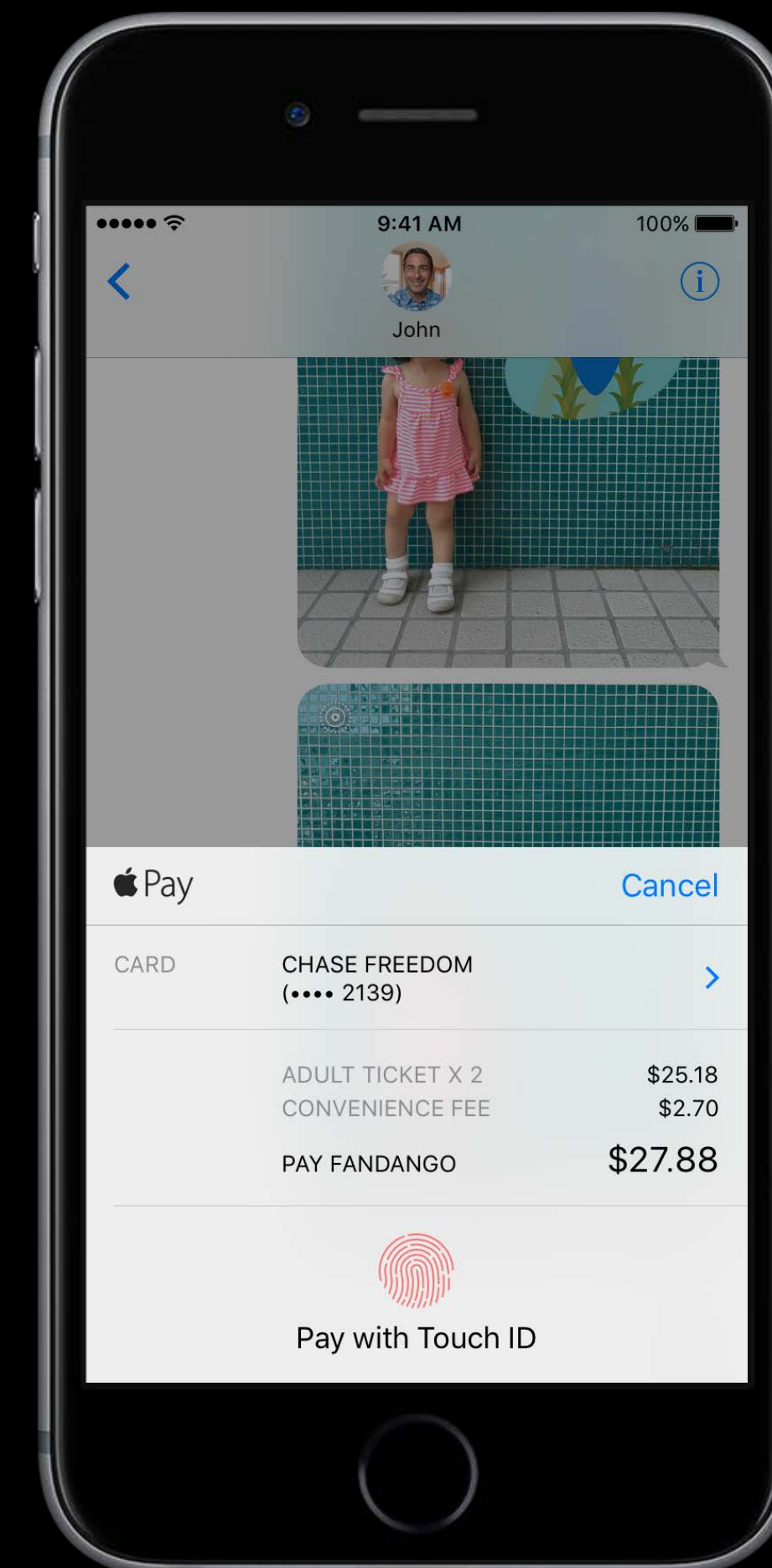
# Extension Support

## Messages

Split items and purchases

Send a gift to a friend

NEW





# Extension Support

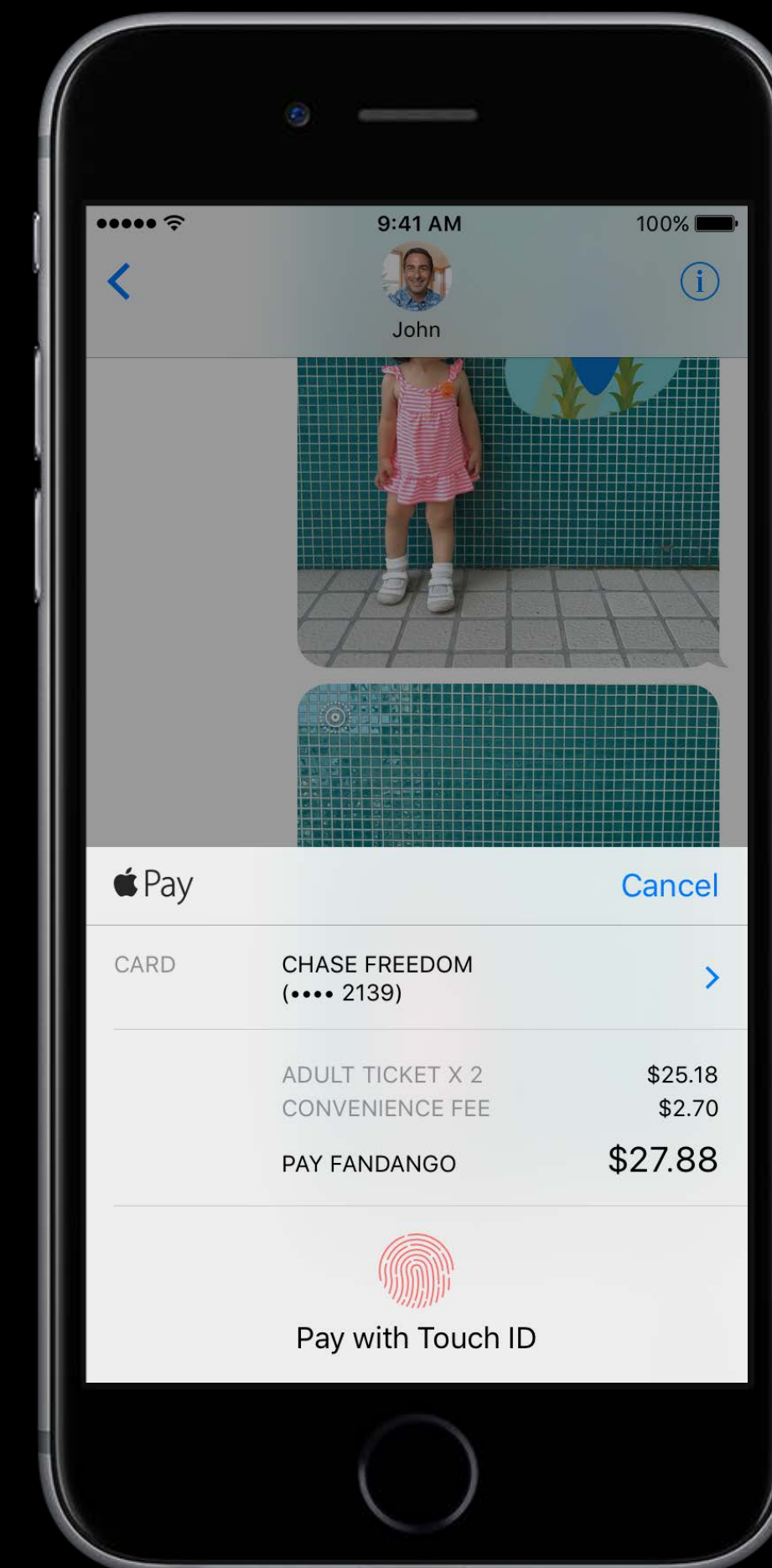
## Messages

Split items and purchases

Send a gift to a friend

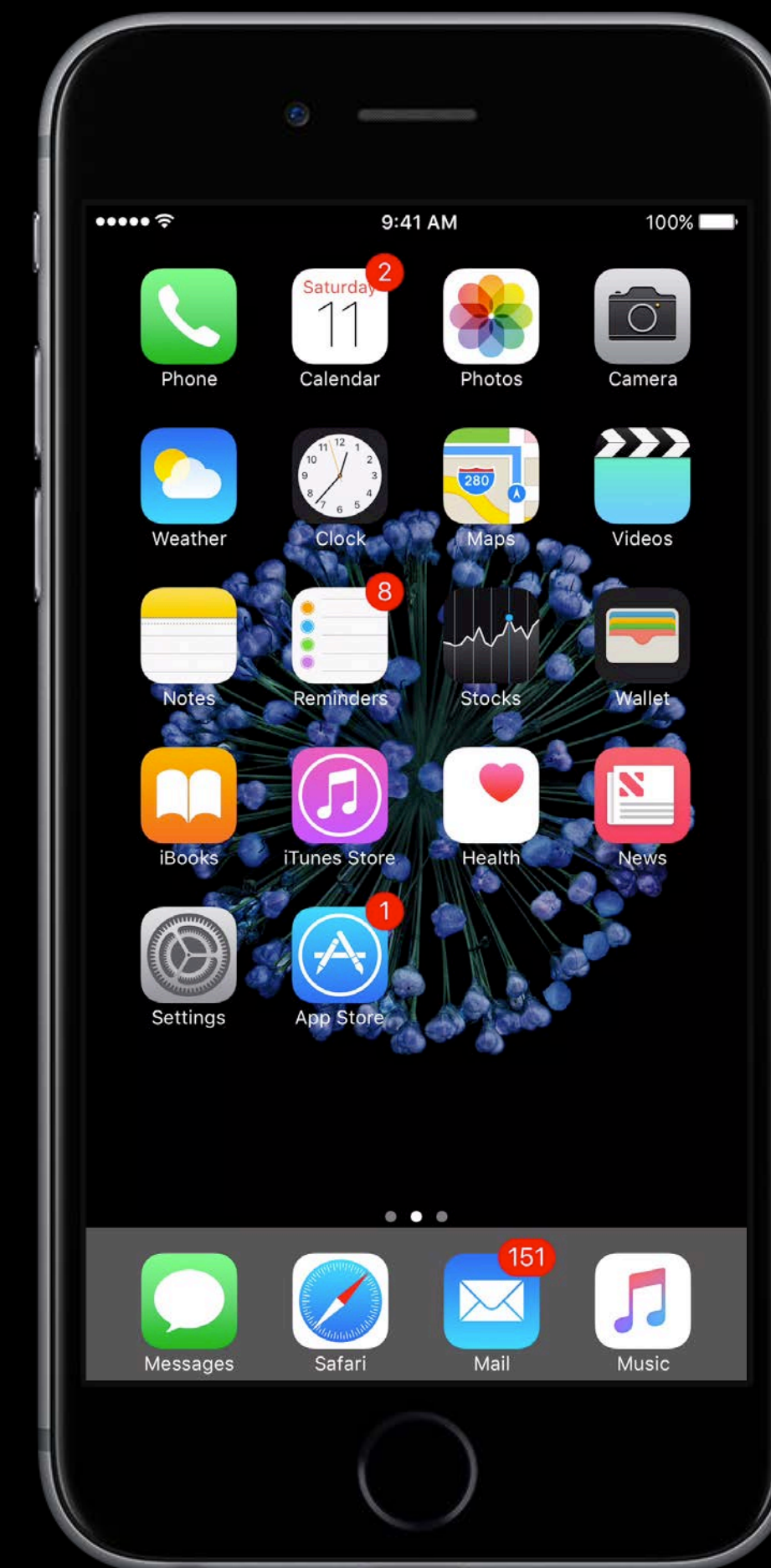
Organize outings

NEW



# Extension Support Intents—Siri and Maps

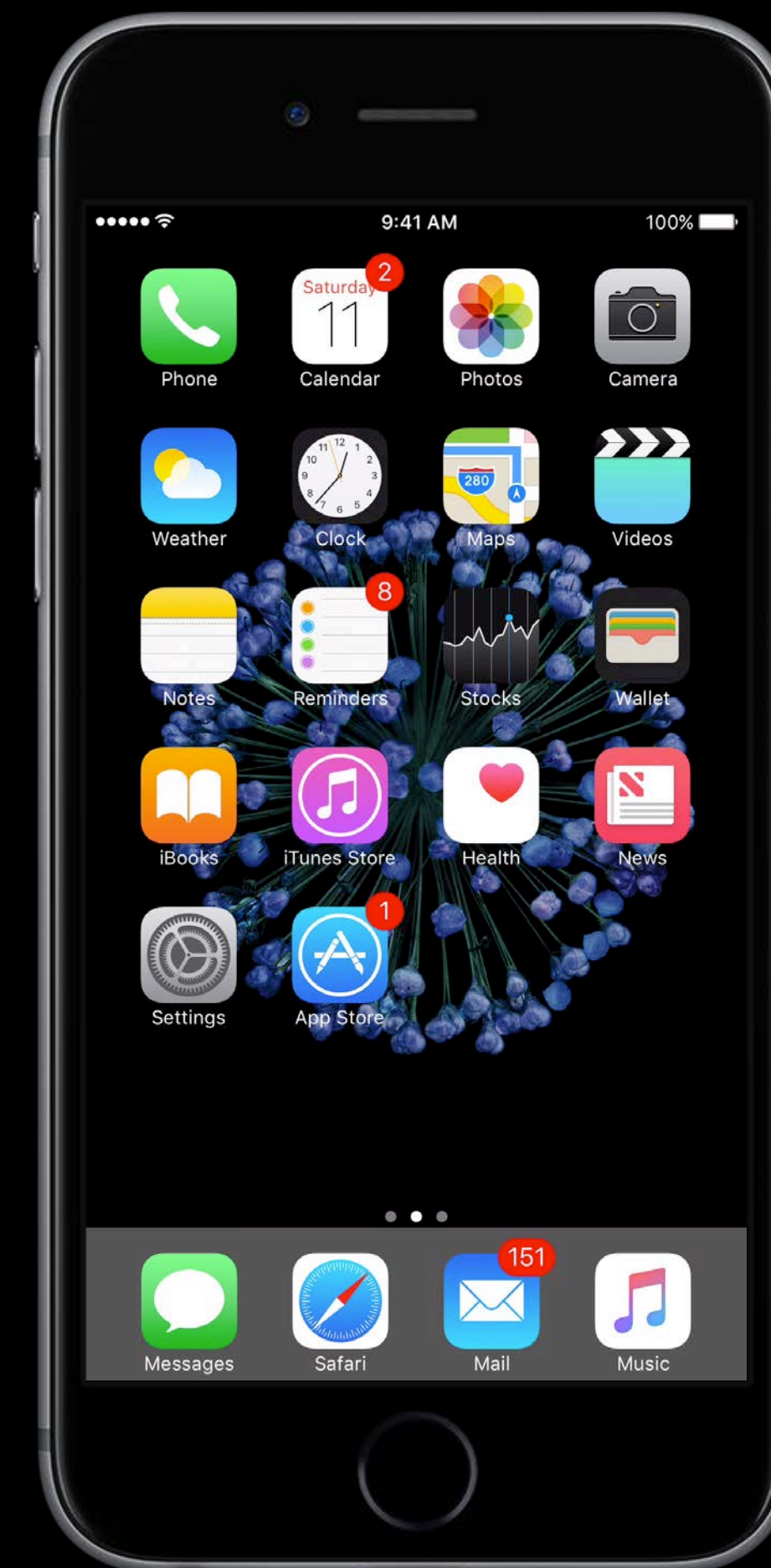
NEW



# Extension Support Intents—Siri and Maps

NEW

Get a ride or cab from Maps and Siri





# Extension Support Intents—Siri and Maps

NEW

Get a ride or cab from Maps and Siri  
Pay directly from the extension



# Extension Support Intents—Siri and Maps

NEW

Get a ride or cab from Maps and Siri  
Pay directly from the extension



# Extension Support

Using Apple Pay

NEW

# Extension Support

## Using Apple Pay

NEW

Requesting and presenting payment is identical to WatchKit

# Extension Support

## Using Apple Pay

NEW

Requesting and presenting payment is identical to WatchKit

Use the new `PKPaymentAuthorizationController` in both UI and non-UI extensions

# Extension Support

## Using Apple Pay

NEW

Requesting and presenting payment is identical to WatchKit

Use the new `PKPaymentAuthorizationController` in both UI and non-UI extensions

Share your payment code between app and extension

# Apple Pay

Sample code

NEW

# Apple Pay

## Sample code

NEW

New sample code with WatchKit and Intents samples available



# Apple Pay

## Sample code

NEW

New sample code with WatchKit and Intents samples available

Simplified to show a shared Apple Pay model

Testing Apple Pay

# Testing Apple Pay

The simulator

# Testing Apple Pay

The simulator

Test your iOS, WatchKit, Web, and Intents in the Simulator

# Testing Apple Pay

The simulator

Test your iOS, WatchKit, Web, and Intents in the Simulator

Returns dummy payment data

# Testing Apple Pay

## The simulator

Test your iOS, WatchKit, Web, and Intents in the Simulator

Returns dummy payment data

Useful for UI development and testing

# Testing Apple Pay

The simulator

# Testing Apple Pay

The simulator

Not real card data



# Testing Apple Pay

The simulator

Not real card data

Not representative of real device behavior

# Testing Apple Pay

## The simulator

Not real card data

Not representative of real device behavior

Testing with real devices and cards not always feasible

# The Apple Pay Sandbox

NEW

# The Apple Pay Sandbox

NEW

A brand new testing environment for Apple Pay

# The Apple Pay Sandbox

NEW

A brand new testing environment for Apple Pay

Provision test cards directly onto devices

# The Apple Pay Sandbox

NEW

A brand new testing environment for Apple Pay

Provision test cards directly onto devices

Returns test encrypted payment data

# The Apple Pay Sandbox

Getting set up

NEW

# The Apple Pay Sandbox

Getting set up

Create a testing iCloud Account at iTunes Connect

NEW



# The Apple Pay Sandbox

Getting set up

NEW

Create a testing iCloud Account at iTunes Connect

Log in to that account on your device

# The Apple Pay Sandbox

## Getting set up

NEW

Create a testing iCloud Account at iTunes Connect

Log in to that account on your device

Set your region

# The Apple Pay Sandbox

## Getting set up

NEW

Create a testing iCloud Account at iTunes Connect

Log in to that account on your device

Set your region

Use test cards at [developer.apple.com](https://developer.apple.com)

# The Apple Pay Sandbox

Tips

NEW

# The Apple Pay Sandbox

Tips

NEW

Environments are switched automatically when you sign in/out of iCloud

# The Apple Pay Sandbox

NEW

## Tips

Environments are switched automatically when you sign in/out of iCloud

Validate your apps and sites with production cards before launching

# The Apple Pay Sandbox

Support

NEW

# The Apple Pay Sandbox

Support

NEW

Supports American Express, MasterCard, and Visa in Seed 1



# The Apple Pay Sandbox

Support

NEW

Supports American Express, MasterCard, and Visa in Seed 1

Additional networks coming soon

# Summary

# Summary

New Wallet and Apple Pay API and features

# Summary

New Wallet and Apple Pay API and features

Apple Pay in WatchKit

# Summary

New Wallet and Apple Pay API and features

Apple Pay in WatchKit

Apple Pay in Extensions

# Summary

New Wallet and Apple Pay API and features

Apple Pay in WatchKit

Apple Pay in Extensions

Testing in the Sandbox and Simulator

# Apple Pay

On the web



# Apple Pay

On the web

Use Apple Pay on mobile websites





# Apple Pay

On the web

Use Apple Pay on mobile websites

Authorize payment on using your

Apple Pay device



# Apple Pay

On the web

Use Apple Pay on mobile websites

Authorize payment on using your

Apple Pay device



# Apple Pay

On the web

Use Apple Pay on mobile websites

Authorize payment on using your

Apple Pay device



More Information

<https://developer.apple.com/wwdc16/704>

# Apple Pay Partners

## Bank and private label inquiries

- In-app provisioning and co-brand/private label features
  - [apple-pay-provisioning@apple.com](mailto:apple-pay-provisioning@apple.com)

## Value-added service inquiries

- NFC passes and loyalty
  - <https://developer.apple.com/contact/passkit/>

# Related Sessions

---

Apple Pay on the web

Mission

Tuesday 1:40PM

---

Designing Great Apple Watch Experiences

Presidio

Wednesday 1:40PM

---

# Labs

---

Apple Pay Lab 1

Frameworks Lab B

Tuesday 4:00PM

---

Apple Pay Lab 2

Frameworks Lab D

Wednesday 9:00AM

---



W

W

D

C

1

6