System Frameworks #WWDC16

Apple Pay on the web

Session 703

Nick Shearer iOS Apps and Frameworks
Anders Carlsson WebKit

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Honest Bob's Internet Checkout

Name on Card:

Card Number: 4321 1234 4321 1234

Expiration Date: January 2016

CVV: 321

Billing Address: Your Address

Click to Buy

(Do not click the buy button more than once)

Honest Bob's Internet Checkout

Name on Card: Johnny Appleseed

Card Number: 4234 4321 1242 3214

Expiration Date: November 2019

CVV: 312

Billing Address: 800 Howard St, San Franci

Click to Buy

(Do not click the buy button more than once)

Sorry, card number must be a series of numbers

Honest Bob's Internet Checkout

Name on Card: Johnny Appleseed

Card Number: 4234432112423214

Expiration Date: Smarch 2019

CVV: 312

Billing Address: 800 Howard St, San Franci

Click to Buy

(Do not click the buy button more than once)

Smarch is not a valid month

Pay

Overview

Overview

Introduction

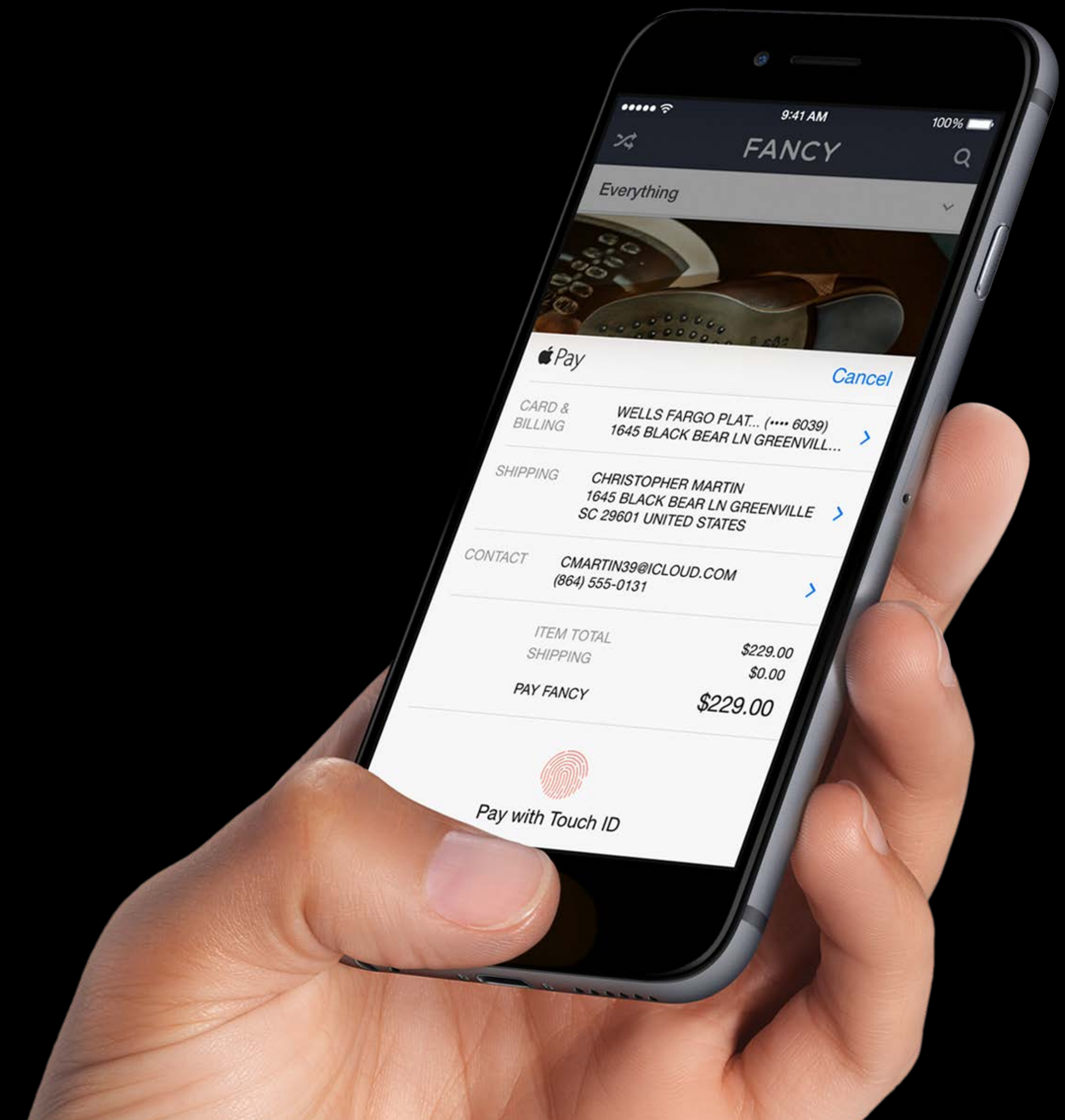
Apple Pay on the web

Payment Processing

Designing for Apple Pay

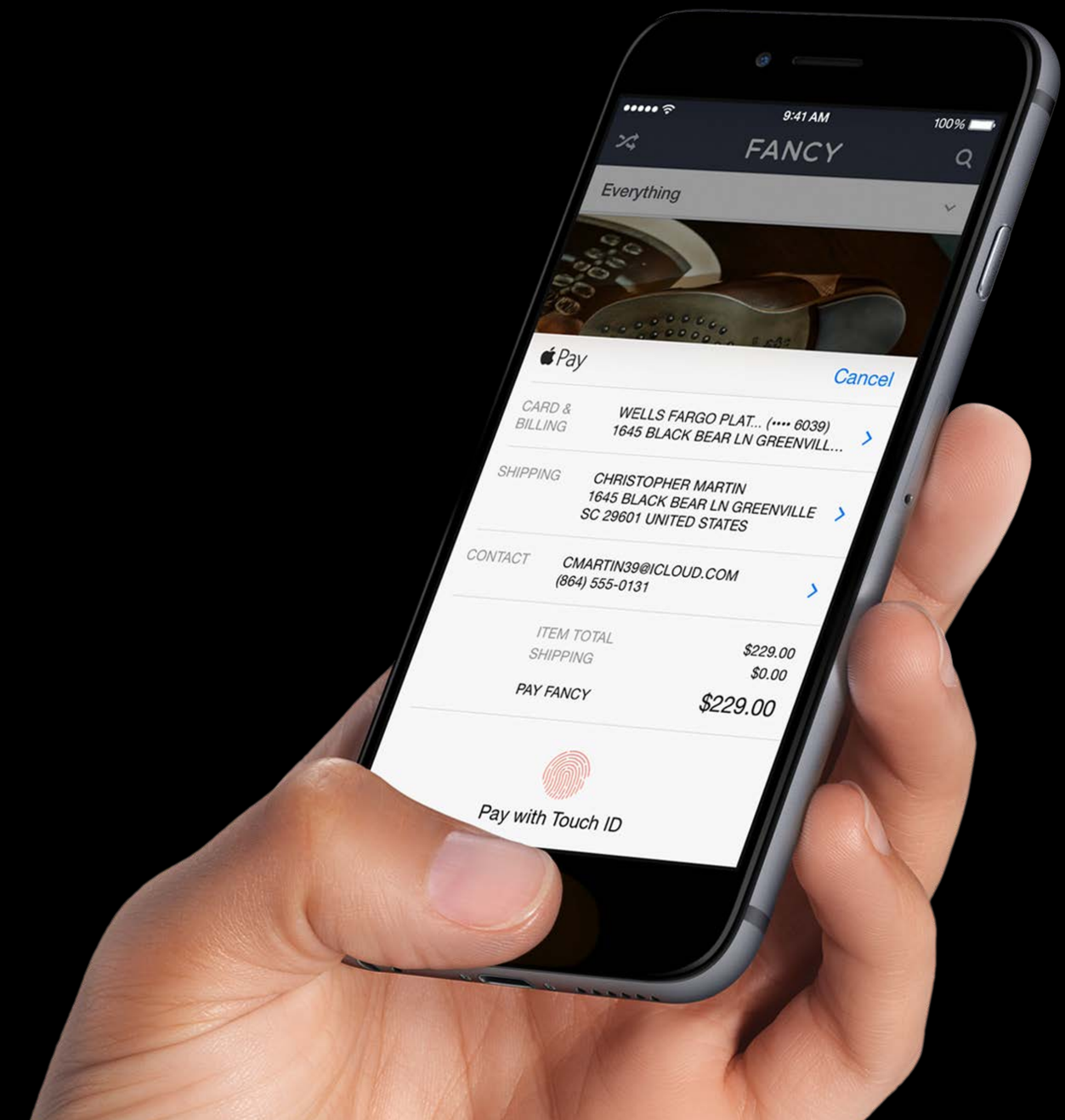
Introduction

Apple Pay


9:41 AM
100%
FANCY
Everything
Pay
Cancel
CARD & BILLING
WELLS FARGO PLAT... (•••• 6039)
1645 BLACK BEAR LN GREENVILL...
SHIPPING
CHRISTOPHER MARTIN
1645 BLACK BEAR LN GREENVILLE
SC 29601 UNITED STATES
CONTACT
CMARTIN39@ICLOUD.COM
(864) 555-0131
ITEM TOTAL
$229.00
SHIPPING
$0.00
PAY FANCY
$229.00
Pay with Touch ID

Apple Pay

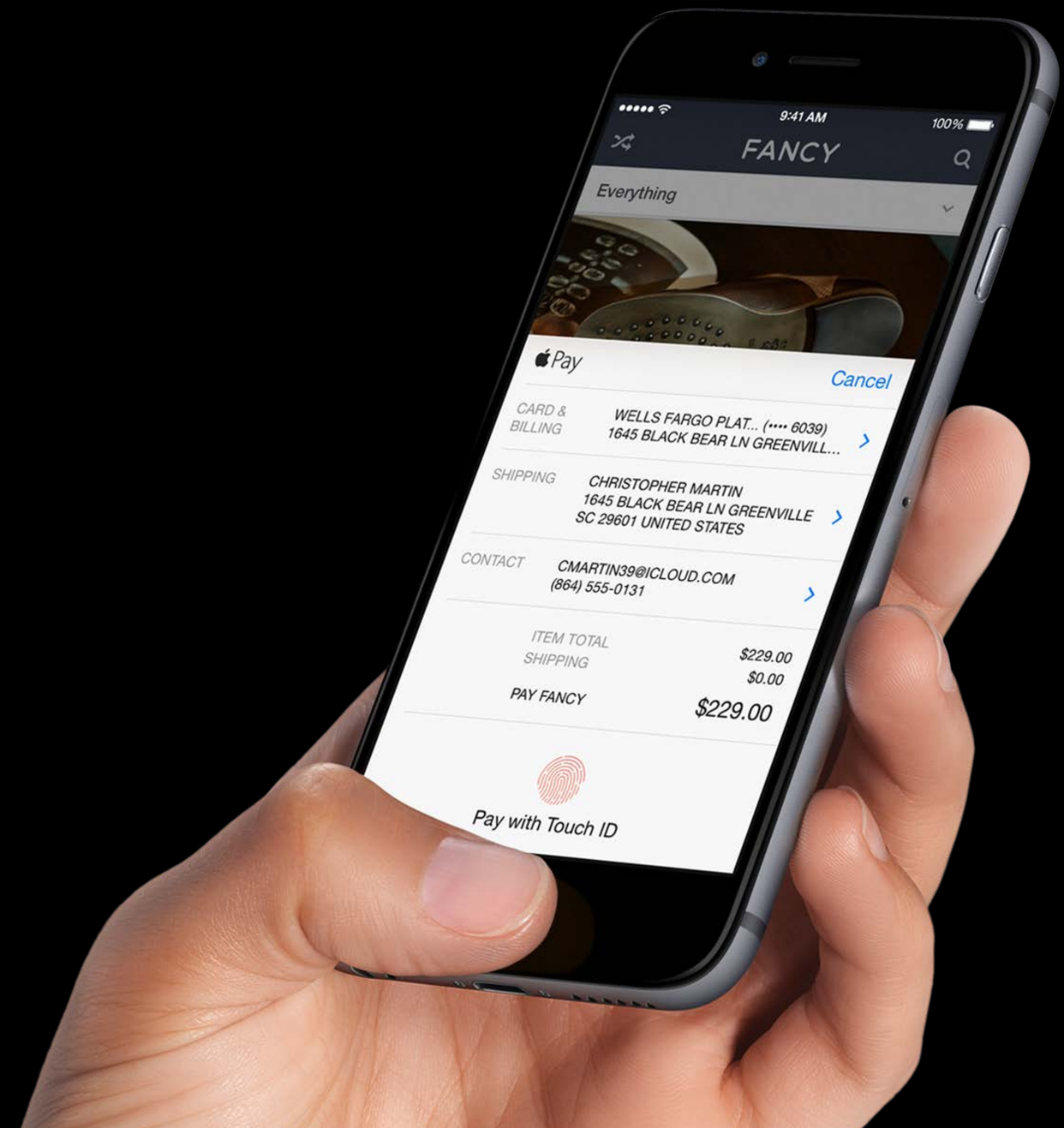
An easy, secure, and private way to pay



Apple Pay

An easy, secure, and private way to pay

Pay in-store and within iOS apps

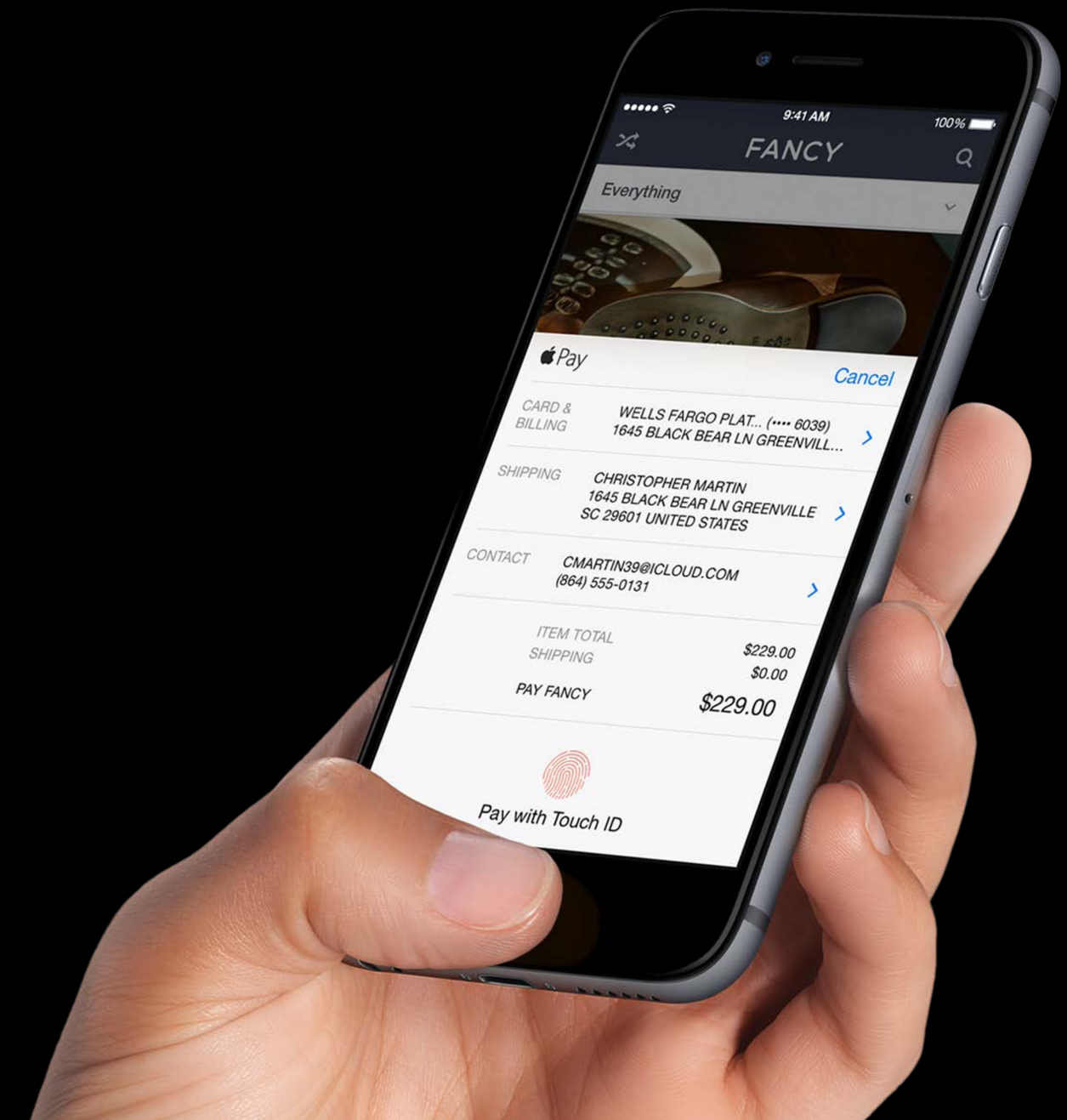


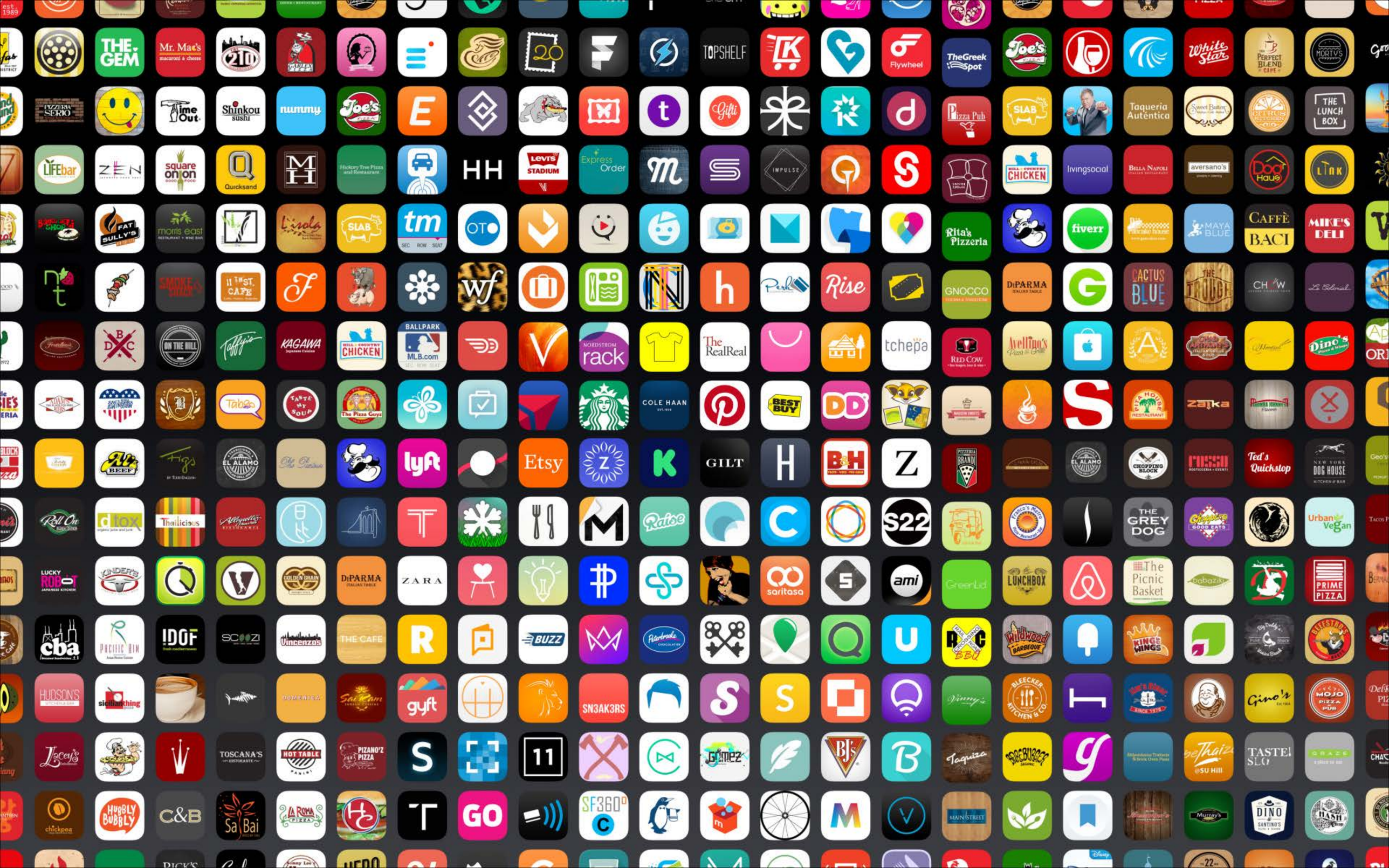
Apple Pay

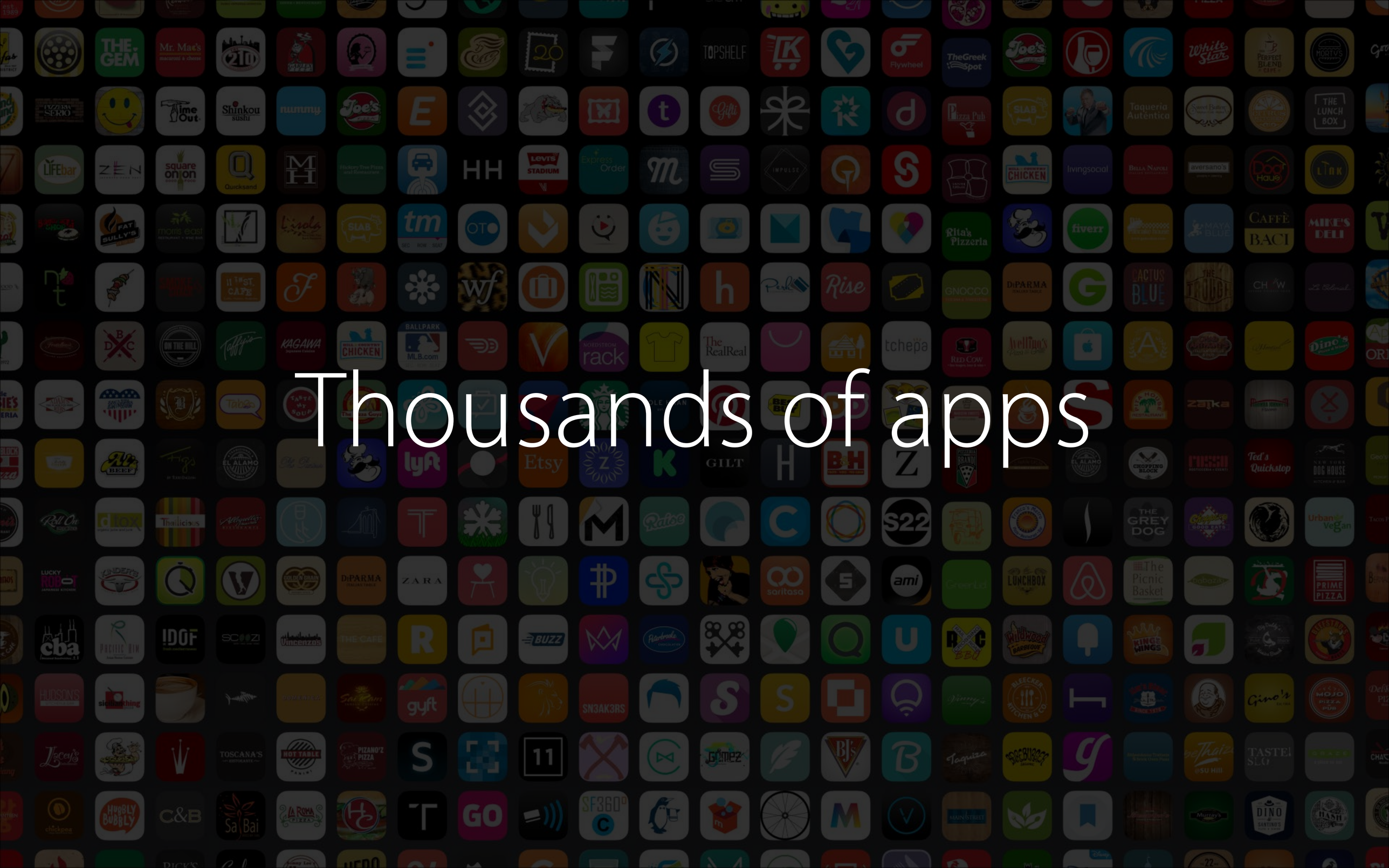
An easy, secure, and private way to pay

Pay in-store and within iOS apps

Enables best in class eCommerce




THE GEM
Mr. Mac's
macaroni & cheese
210
CARLA
TOPSHELF
Flywheel
TheGreek Spot
Joe's
White Star
PERFECT BLEND CAFE
MORTY'S
PIZZERIA SERIO
Time Out
Shinkou sushi
nummy
Joe's
Gifti
Pizza Pub
SLAB
Taqueria Auténtica
Sweet Butter
THE LUNCH BOX
LIFEbar
ZEN
square onion
Quicksand
HH
Levi's STADIUM
Express Order
IMPULSE
CHICKEN
livingsocial
BELLA NAPOLI
aversano's
Dog Haus
LINK
FAT SULLY'S
morris east
L'isola
SLAB
tm
OTO
Rita's Pizzeria
fiverr
MAYA BLUE
CAFFÈ BACI
MIKE'S DELI
SMOKE SHOP
11TH ST. CAFE
wf
Rise
GNOCCO
DiPARMA
CACTUS BLUE
THE TROUGH
CHOW
Le Colonial
ON THE HILL
Taffy's
KAGAWA
CHICKEN
BALLPARK
MLB.com
NORDSTROM rack
The RealReal
tchepa
RED COW
Avellino's
Dino's
The Pizza Guys
COLE HAAN
BEST BUY
DD
PITA HOUSE RESTAURANT
zatka
Figs
EL ALAMO
lyft
Etsy
GILT
B&H
Z
EL ALAMO
CHOPPING BLOCK
Ted's Quickstop
NEW YORK DOG HOUSE
Roll On
dtox
Thailicious
Raise
S22
THE GREY DOG
Urban Vegan
LUCKY ROBOT
KINDER'S
DiPARMA
ZARA
saritasa
ami
GreenLid
LUNCHBOX
The Picnic Basket
PRIME PIZZA
cba
PACIFIC RIM
IDOF
SCOZI
Vincenzo's
THE CAFE
BUZZ
Peterbrooke
Wildwood BARBEQUE
KING'S WINGS
HUDSON'S
sicilianthing
gyft
SN3AK3RS
Vinny's
BLEECKER KITCHEN & CO.
Gino's
MOJO PIZZA PUB
Lacey's
TOSCANA'S
HOT TABLE
PIZANO'Z PIZZA
11
GOMEZ
BJ's
Taquiza
BREBURGER
TASTE! SLO
GRAZE
chickpea
HUBBLY BUBBLY
C&B
Sa Bai
LA ROMA PIZZA
GO
SF360°
MAIN STREET
Murray's
DINO SANTINO'S
HASH



Thousands of apps

Apple Pay

Within apps

Apple Pay

Within apps

Higher conversion rates

Apple Pay

Within apps

Higher conversion rates

Increased engagement

Apple Pay

Within apps

Higher conversion rates

Increased engagement

Happier users

Apple Pay

Outside apps

Apple Pay

Outside apps

A large amount of eCommerce takes place outside of apps

Apple Pay

Outside apps

A large amount of eCommerce takes place outside of apps

Typically, payment outside of apps is slow, laborious, and unclear

Apple Pay

Outside apps

A large amount of eCommerce takes place outside of apps

Typically, payment outside of apps is slow, laborious, and unclear

We're bringing Apple Pay to more places and more people

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 on the web

Apple Pay on the web

eCommerce today

Apple Pay on the web

eCommerce today

Large amount of retail happens on the web

Apple Pay on the web

eCommerce today

Large amount of retail happens on the web

Checkouts are lengthy, complicated, and hard to use—especially on mobile

Apple Pay on the web

eCommerce today

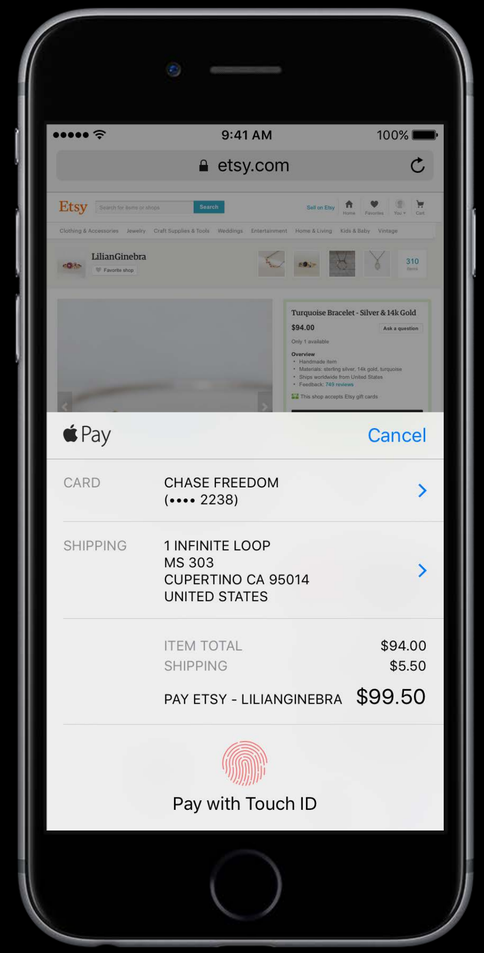
Large amount of retail happens on the web

Checkouts are lengthy, complicated, and hard to use—especially on mobile

Users want the same level of security and privacy they get from apps

Apple Pay

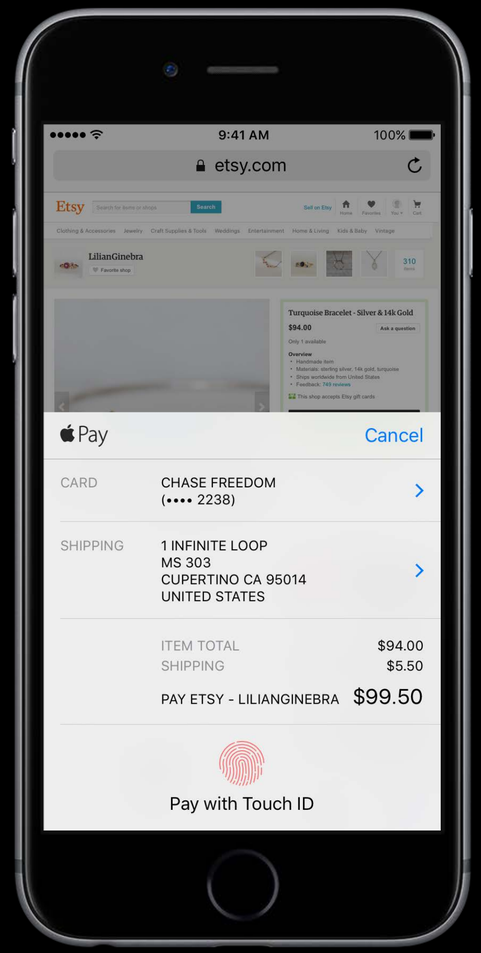
On the web



Apple Pay

On the web

Use Apple Pay from your websites
on iPhone and iPad

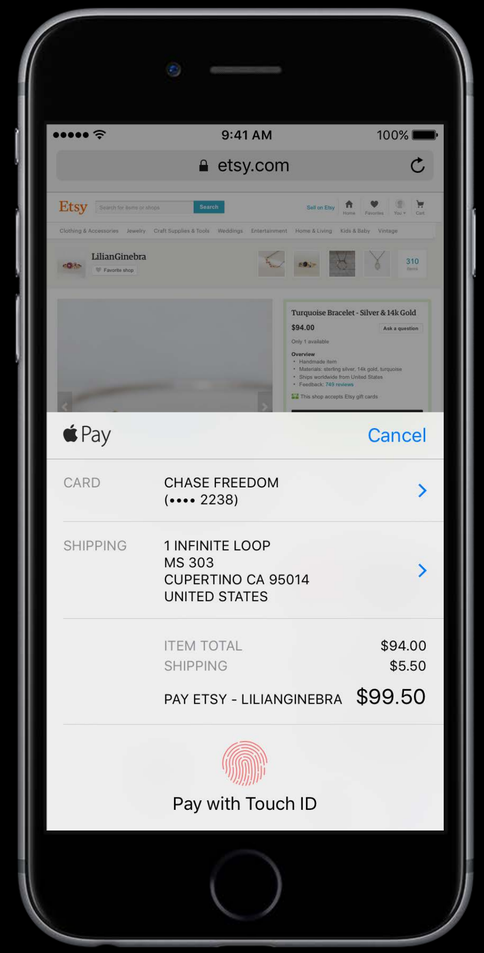


Apple Pay

On the web

Use Apple Pay from your websites
on iPhone and iPad

Available on Safari and
SFSafariViewController



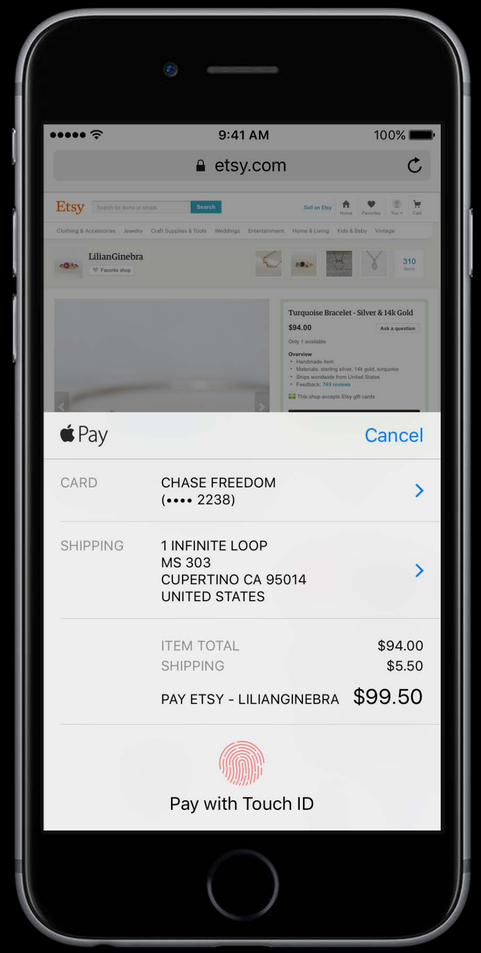
Apple Pay

On the web

Use Apple Pay from your websites on iPhone and iPad

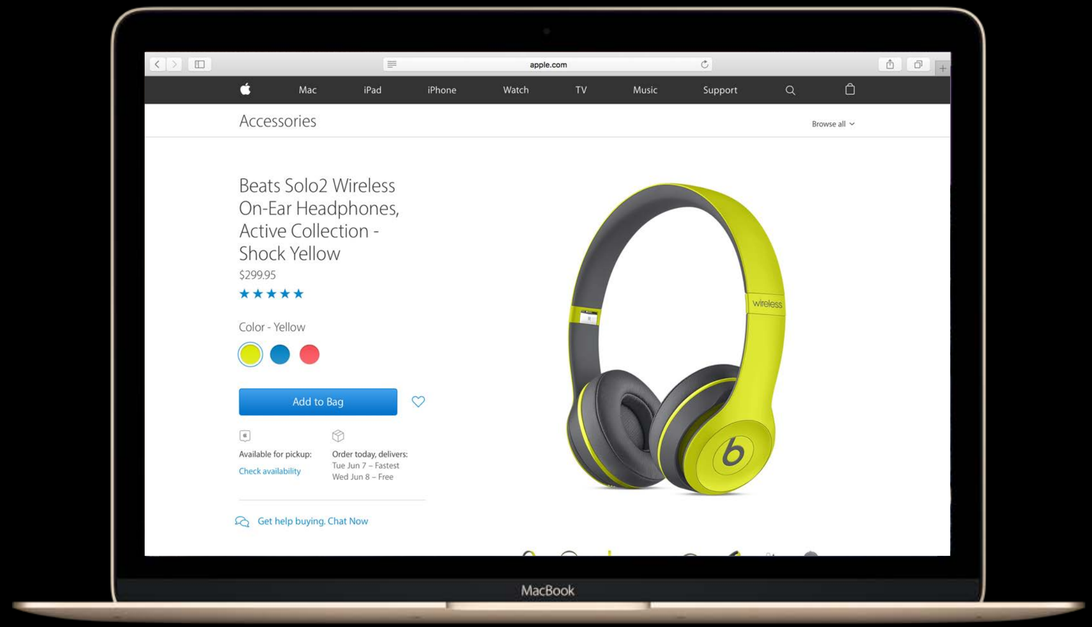
Available on Safari and SFSafariViewController

Same Apple Pay experience, but on the web



Apple Pay in 2016

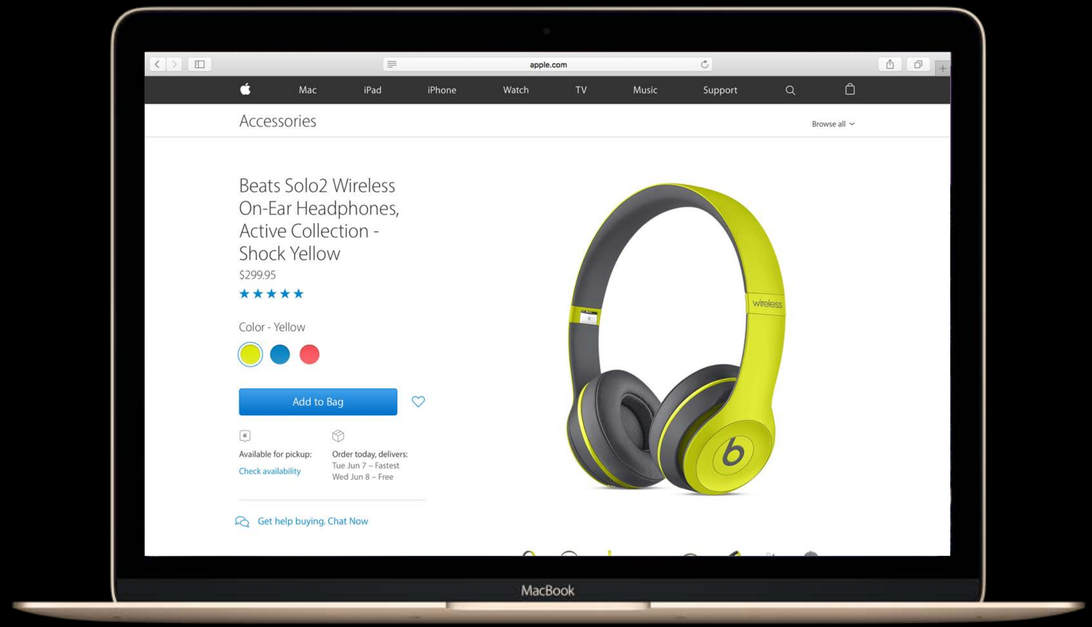
Desktop eCommerce



Apple Pay in 2016

Desktop eCommerce

Many transactions happen on the desktop

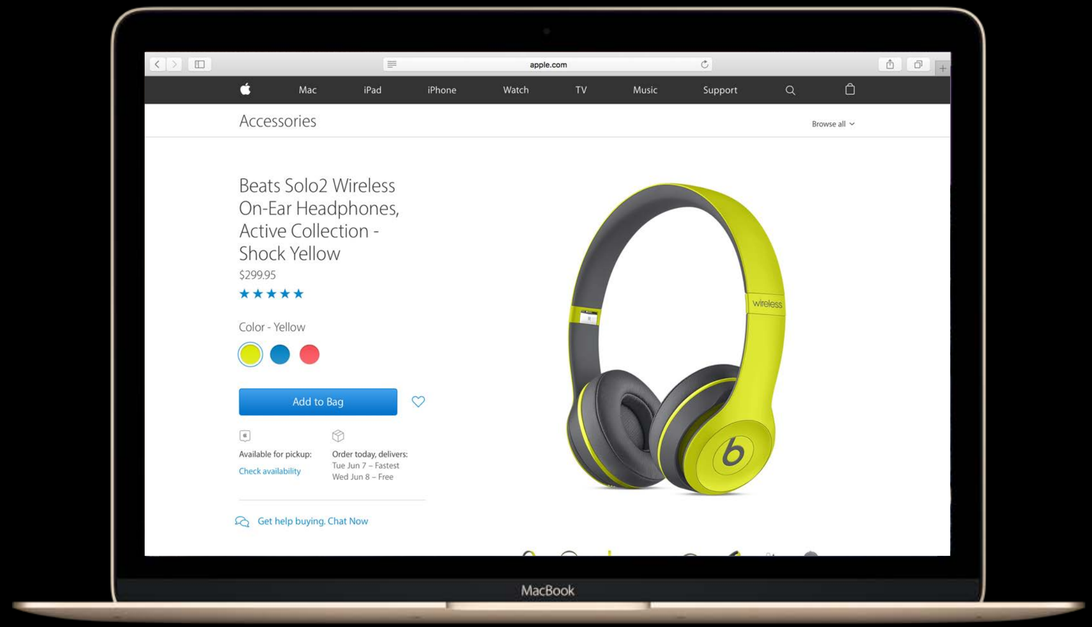


Apple Pay in 2016

Desktop eCommerce

Many transactions happen on the desktop

Apple Pay should be available wherever you pay



shop.lululemon.com

WOMEN MEN INSPIRATION

PROFILE MY BAG 0

Pay

Cancel

CARD CHASE FREEDOM

SHIPPING JOHN APPLESEED
1 INFINITE LOOP
MS:303-4MAC
CUPERTINO CA 95014

METHOD STANDARD (FEDEX USA)
2-7 BUSINESS DAYS

SUB TOTAL	$128.00
TAX	$11.20
SHIPPING	$0.00
PAY TOTAL	$139.20

Confirm on John's Apple Watch

NEW

Everything Bag

$128.00 USD SKU #

WHY WE MADE THIS

bag was designed to be your catch-all on jam-packed summer days.

CARE + FABRIC:

3 COLOURS

CTED COLOUR: soot light/seal grey

QTY

1

Pay

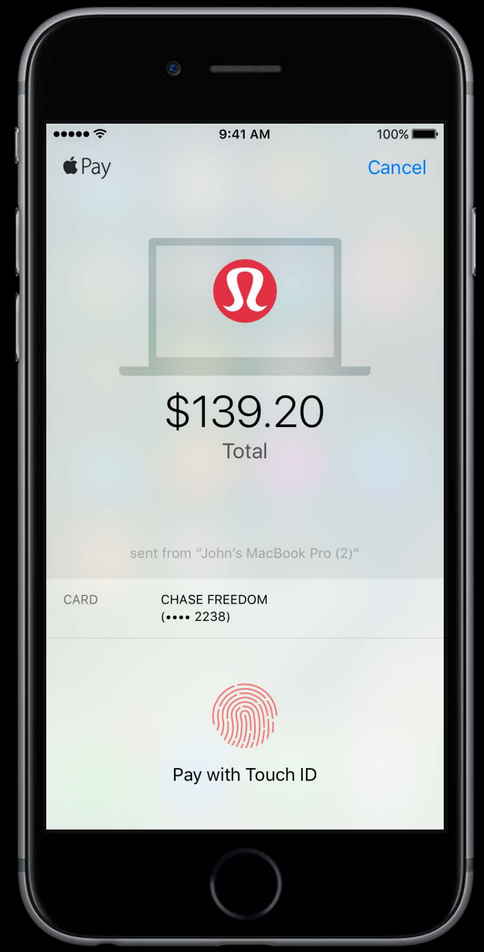
ADD TO BAG

WE OFFER FREE RETURNS

MacBook

Apple Pay

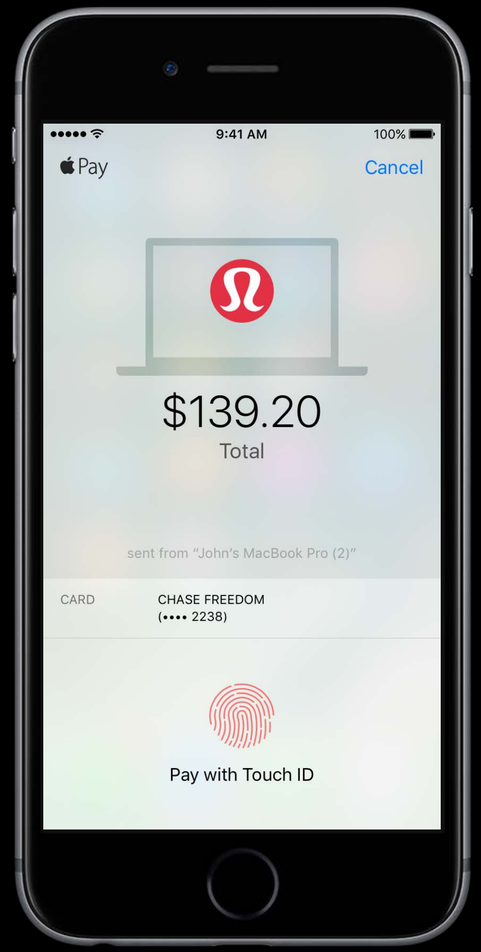
On macOS



Apple Pay

On macOS

Available on any handoff-enabled Mac

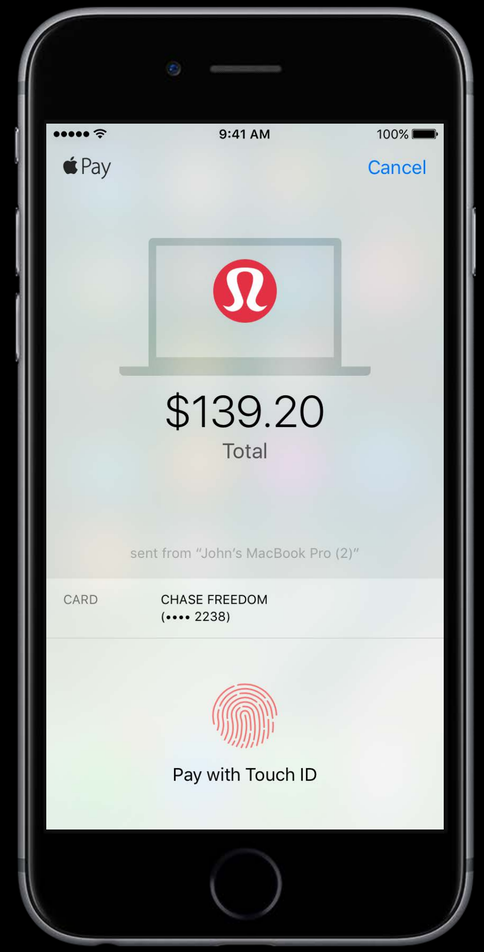


Apple Pay

On macOS

Available on any handoff-enabled Mac

Supported in Safari



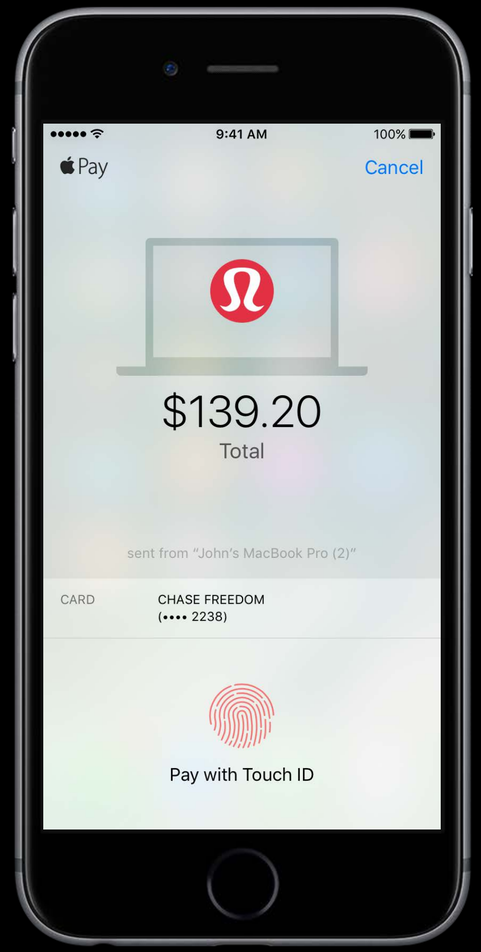
Apple Pay

On macOS

Available on any handoff-enabled Mac

Supported in Safari

Authorize payment on your iPhone
or Apple Watch



Demo

Apple Pay on the web

Apple Pay 101

The basics

Apple Pay 101

The basics

Apple Pay provides you with a unique payment token

Apple Pay 101

The basics

Apple Pay provides you with a unique payment token

You send this token to a payment processor

Apple Pay 101

The basics

Apple Pay provides you with a unique payment token

You send this token to a payment processor

This token is encrypted to your *merchant certificate* and *merchant identifier*

Apple Pay 101

Merchant identifier and certificate

Apple Pay 101

Merchant identifier and certificate

The merchant identifier uniquely identifies you as a merchant

```
merchant.com.example.merchant.identifier
```

Apple Pay 101

Merchant identifier and certificate

The merchant identifier uniquely identifies you as a merchant

The merchant certificate is used to encrypt your payment data

```
merchant.com.example.merchant.identifier
```

Apple Pay 101

Merchant identifier and certificate

The merchant identifier uniquely identifies you as a merchant

The merchant certificate is used to encrypt your payment data

This means only you can use your customer's Apple Pay tokens

```
merchant.com.example.merchant.identifier
```

Apple Pay within Apps

Merchant or
PSP Server

App

iOS

Apple Pay Server

Apple Pay within Apps

Merchant or
PSP Server

App

Buy with Pay

iOS

Apple Pay Server

Apple Pay within Apps

Merchant or
PSP Server

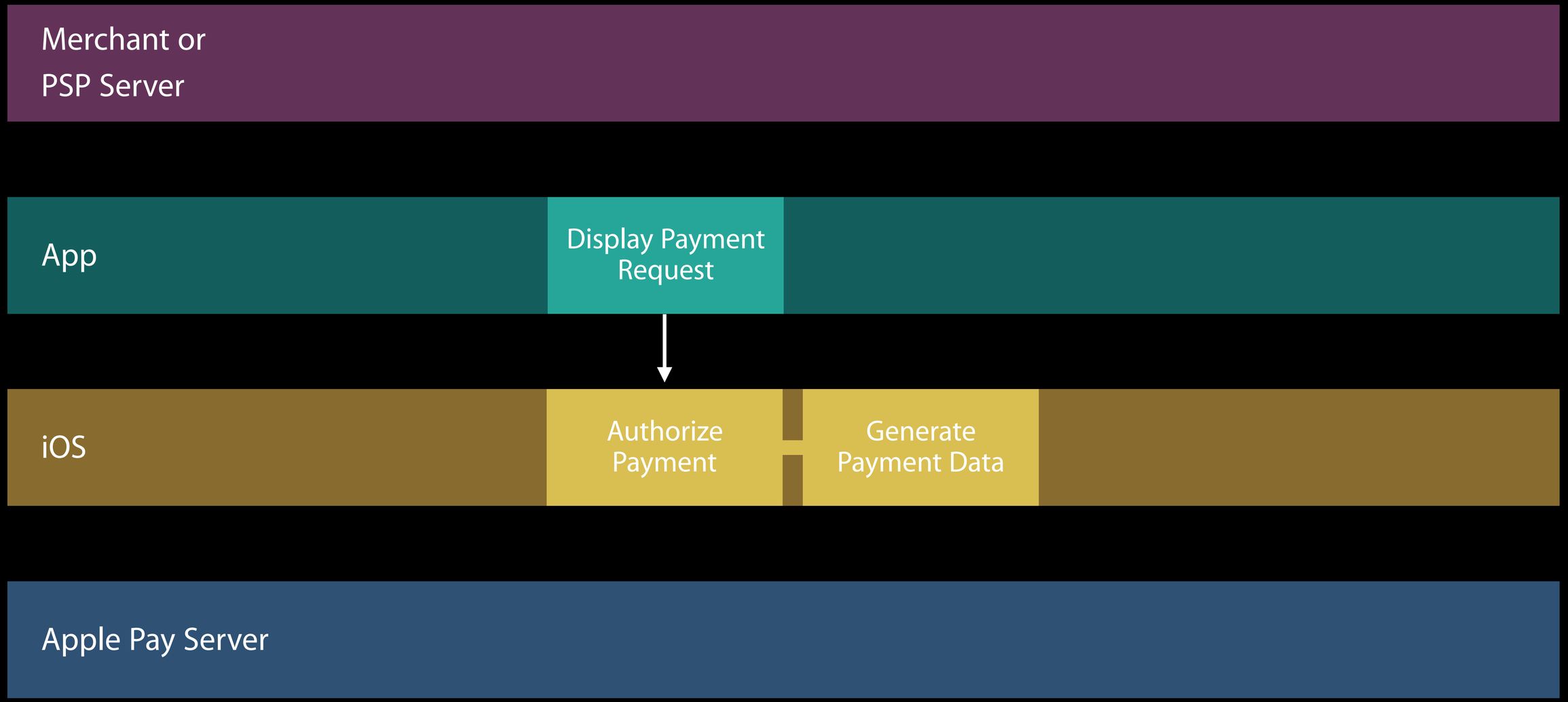
App

Display Payment Request

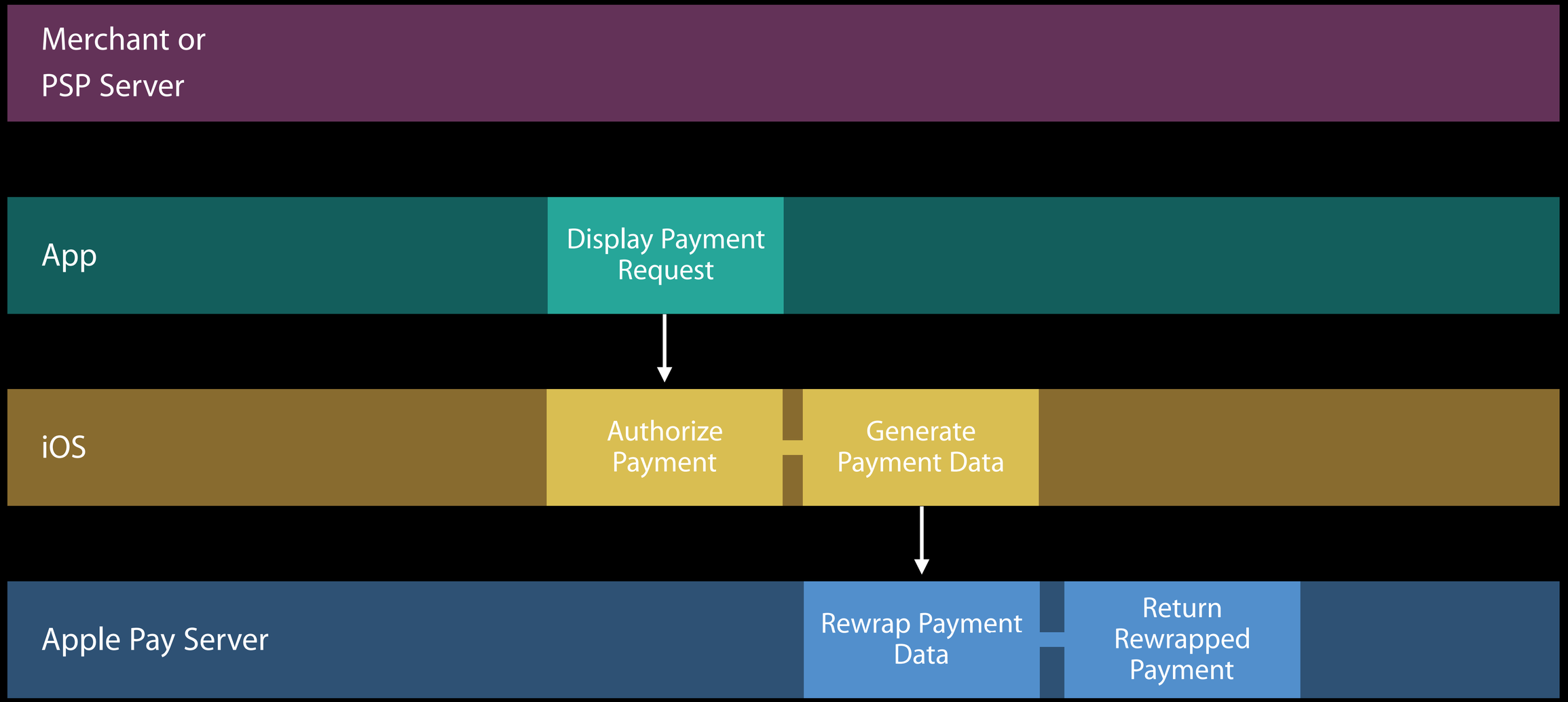
iOS

Apple Pay Server

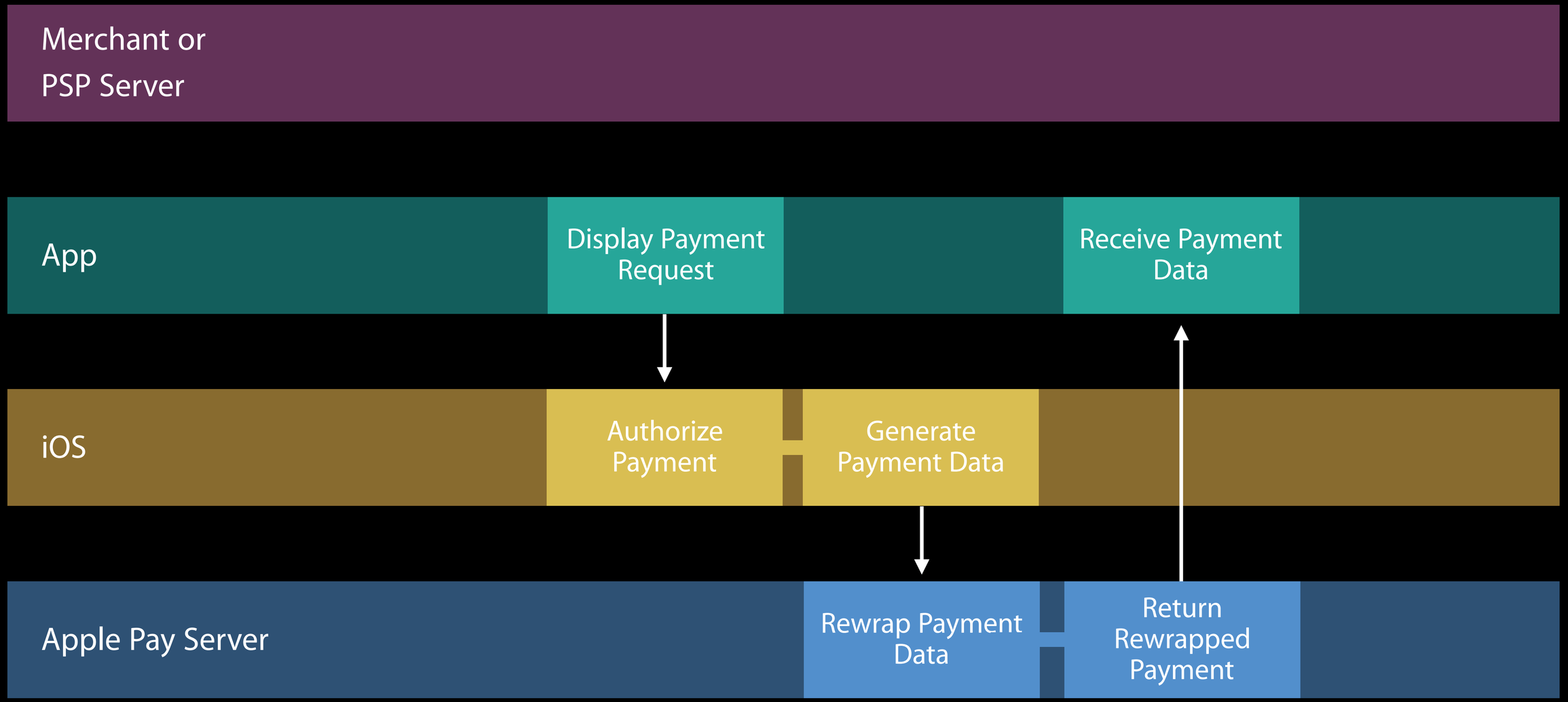
Apple Pay within Apps



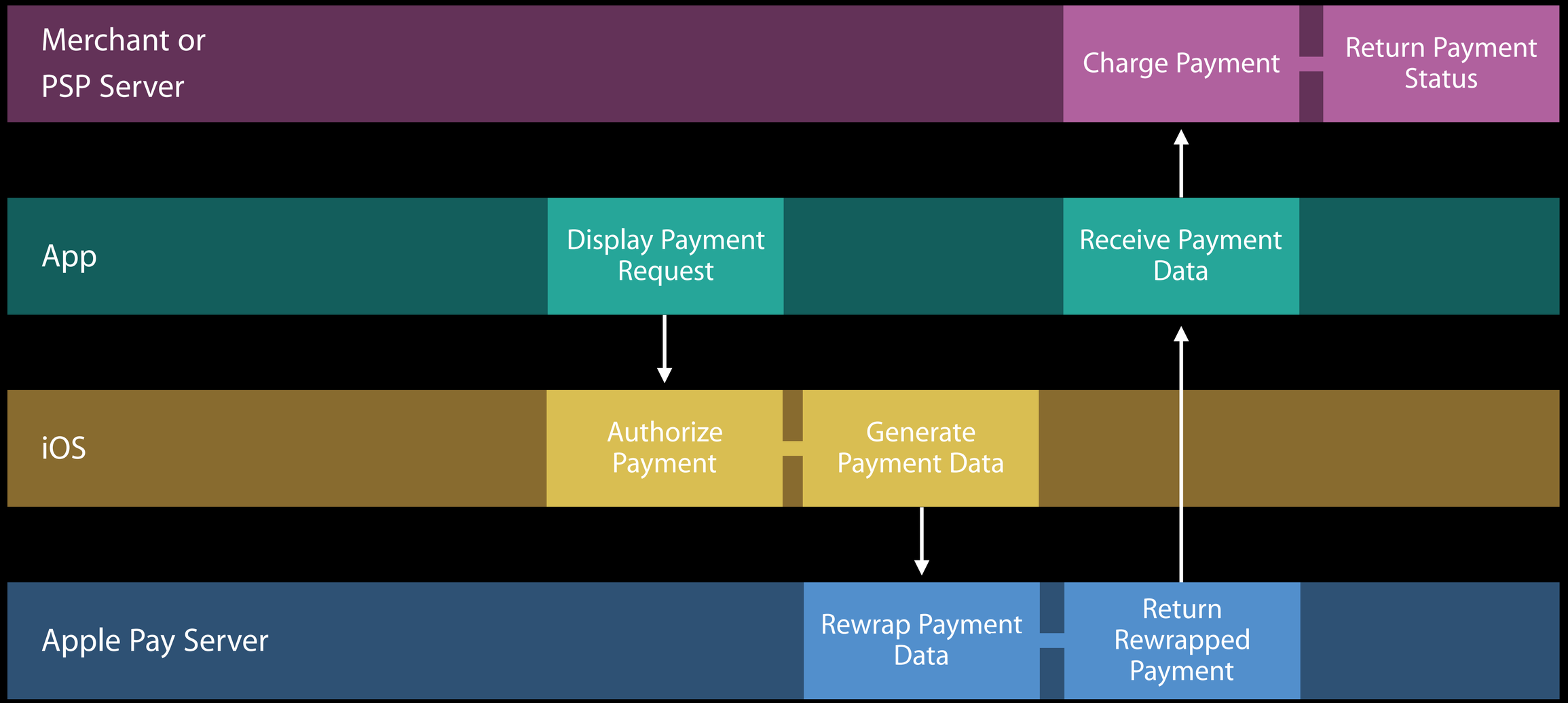
Apple Pay within Apps



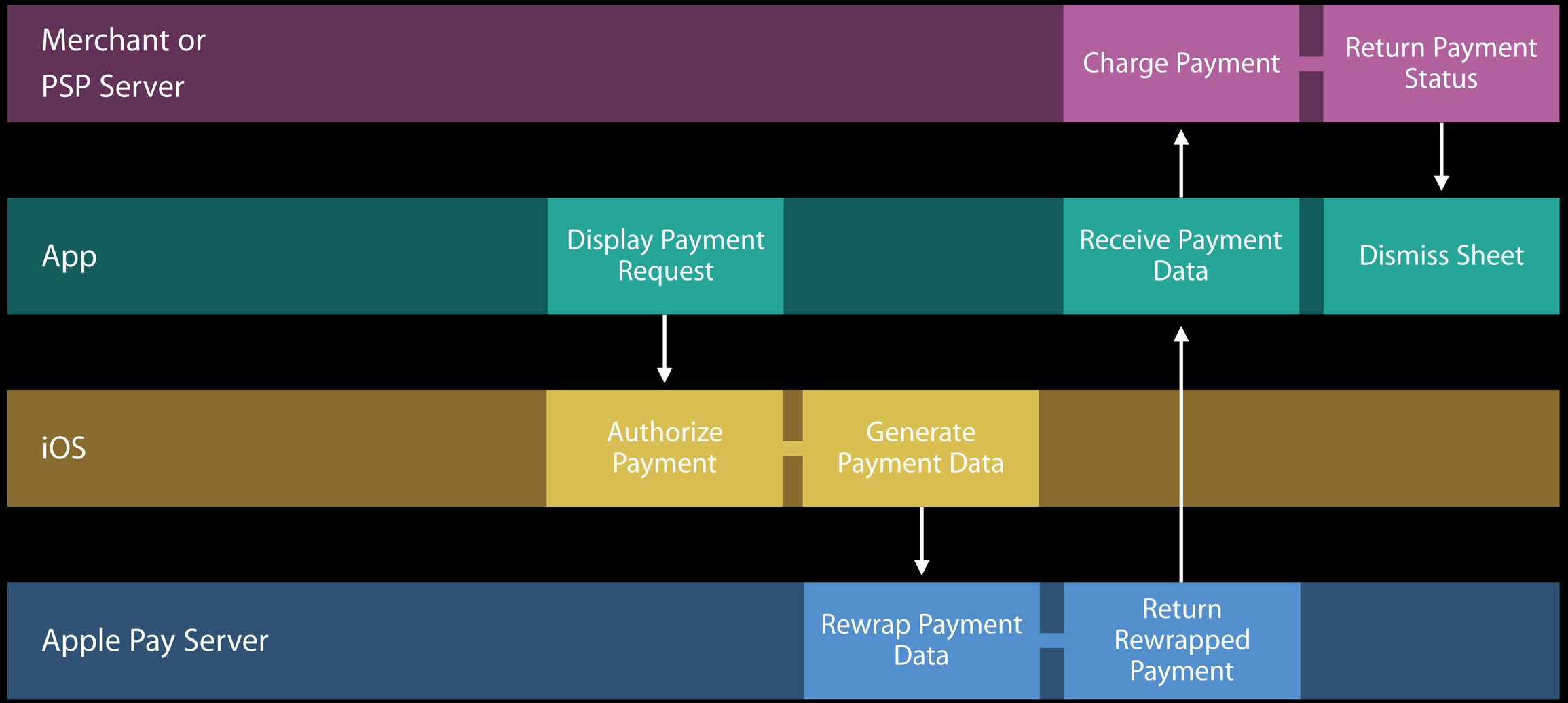
Apple Pay within Apps



Apple Pay within Apps



Apple Pay within Apps



On the web

Site requirements

On the web

Site requirements

You have an Apple Developer Account

On the web

Site requirements

You have an Apple Developer Account

Your site is served over HTTPS

On the web

Site requirements

You have an Apple Developer Account

Your site is served over HTTPS

Your site complies with the Apple Pay guidelines

On the web

Site requirements

You have an Apple Developer Account

Your site is served over HTTPS

Your site complies with the Apple Pay guidelines

Some eCommerce platforms will support Apple Pay on your behalf

On the web

Registering your site

On the web

Registering your site

Create a merchant identifier and certificate at the developer portal

On the web

Registering your site

Create a merchant identifier and certificate at the developer portal

Register your domain and link it to your identifier

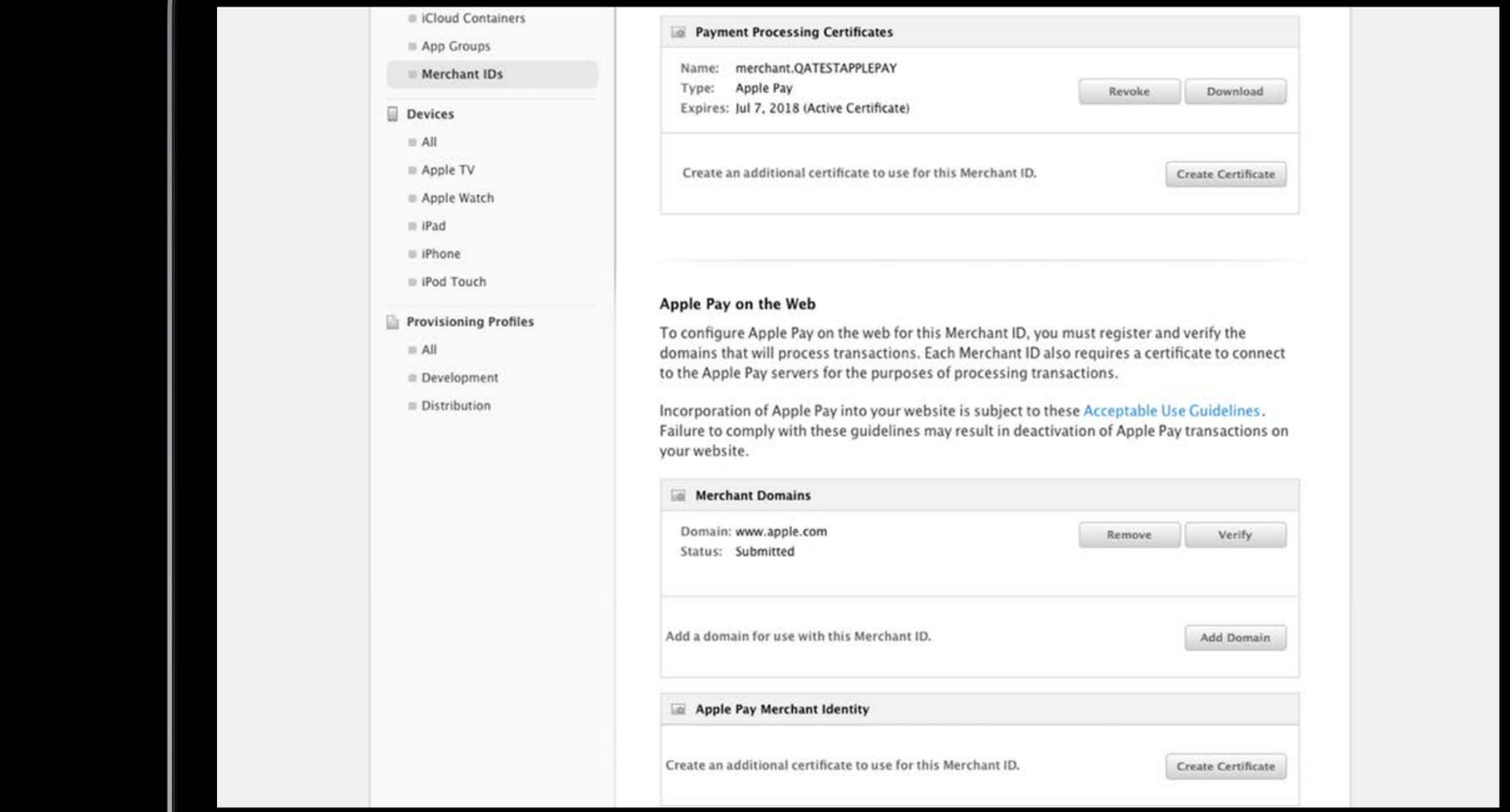
On the web

Registering your site

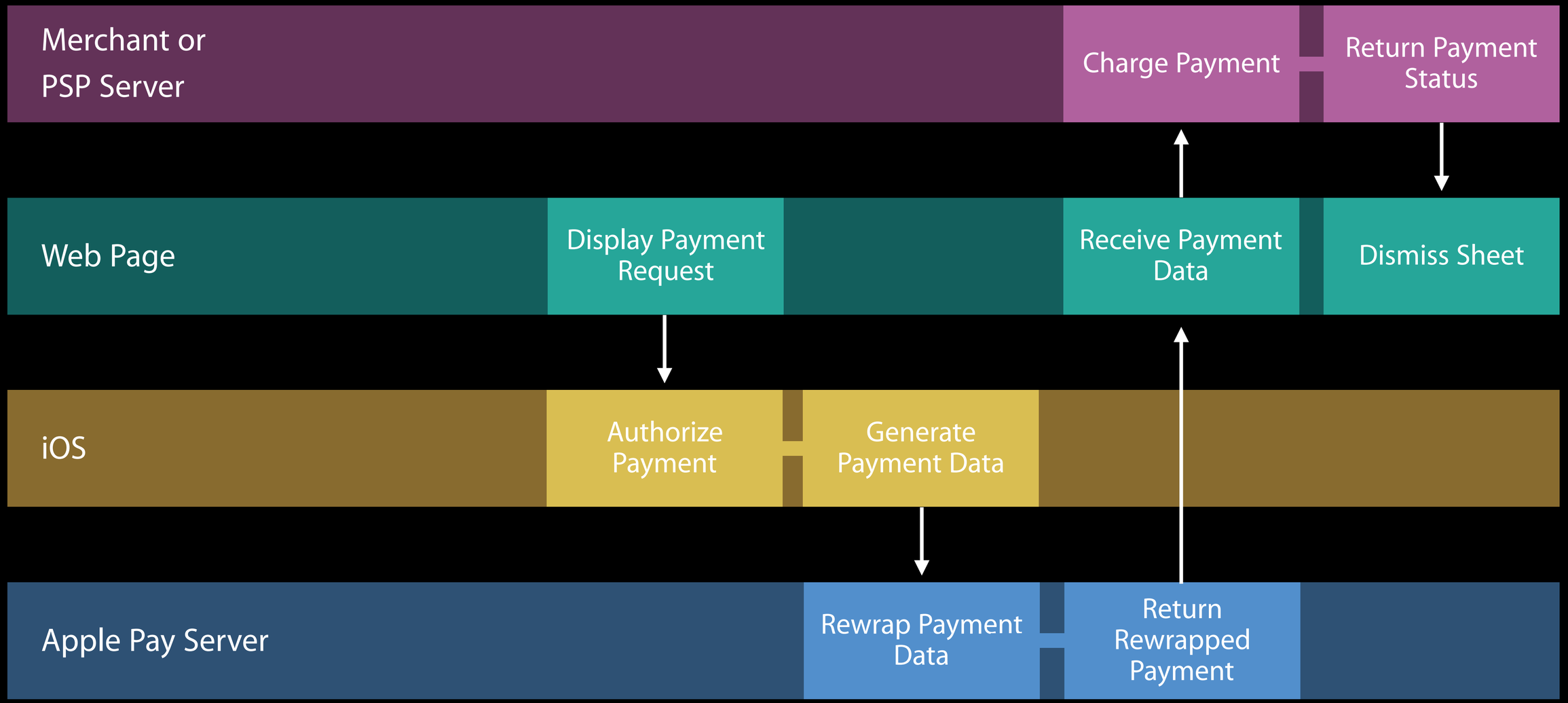
Create a merchant identifier and certificate at the developer portal

Register your domain and link it to your identifier

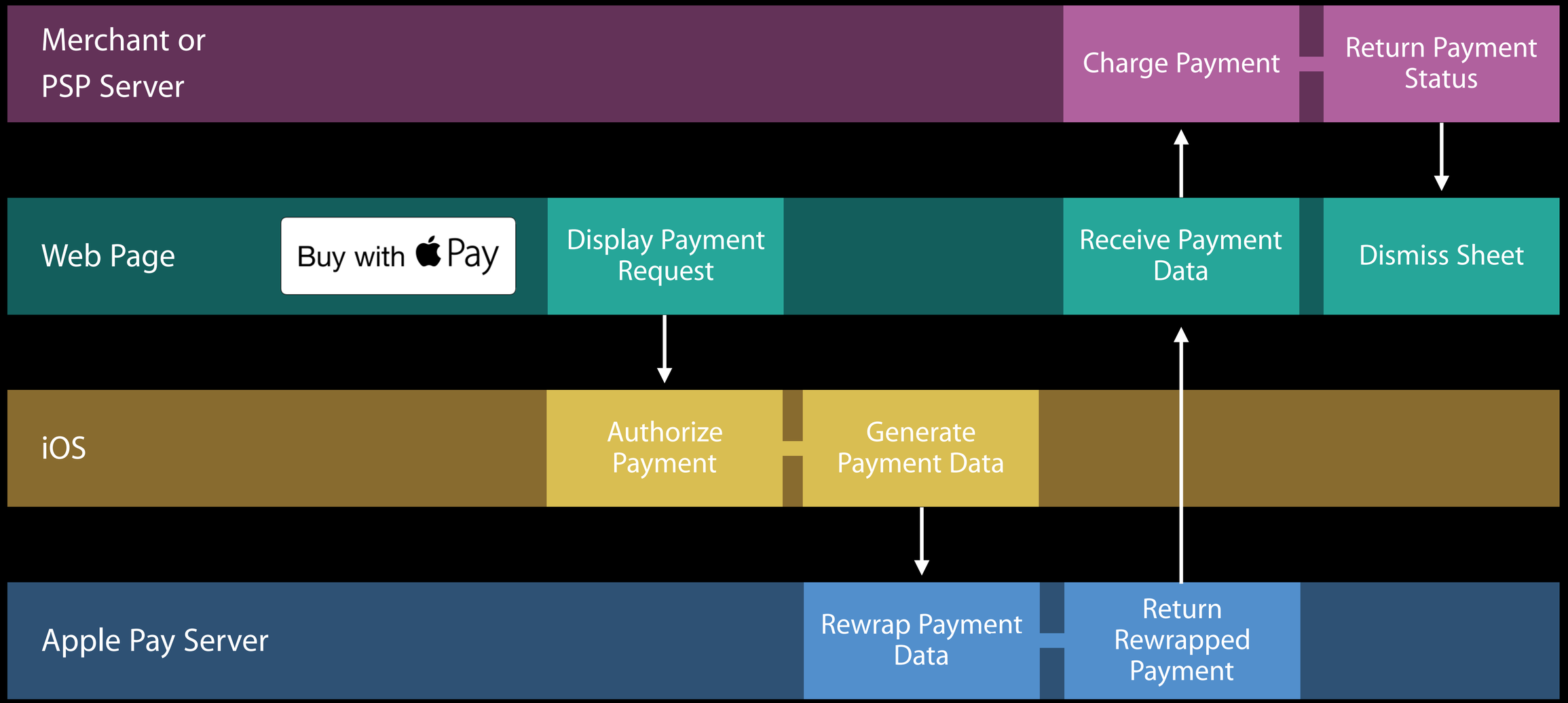
Obtain your domain's Apple Pay session certificate


iCloud Containers
App Groups
Merchant IDs
Devices
All
Apple TV
Apple Watch
iPad
iPhone
iPod Touch
Provisioning Profiles
All
Development
Distribution
Payment Processing Certificates
Name: merchant.QATESTAPPLEPAY
Type: Apple Pay
Expires: Jul 7, 2018 (Active Certificate)
Revoke
Download
Create an additional certificate to use for this Merchant ID.
Create Certificate
Apple Pay on the Web
To configure Apple Pay on the web for this Merchant ID, you must register and verify the domains that will process transactions. Each Merchant ID also requires a certificate to connect to the Apple Pay servers for the purposes of processing transactions.
Incorporation of Apple Pay into your website is subject to these Acceptable Use Guidelines. Failure to comply with these guidelines may result in deactivation of Apple Pay transactions on your website.
Merchant Domains
Domain: www.apple.com
Status: Submitted
Remove
Verify
Add a domain for use with this Merchant ID.
Add Domain
Apple Pay Merchant Identity
Create an additional certificate to use for this Merchant ID.
Create Certificate
MacBook

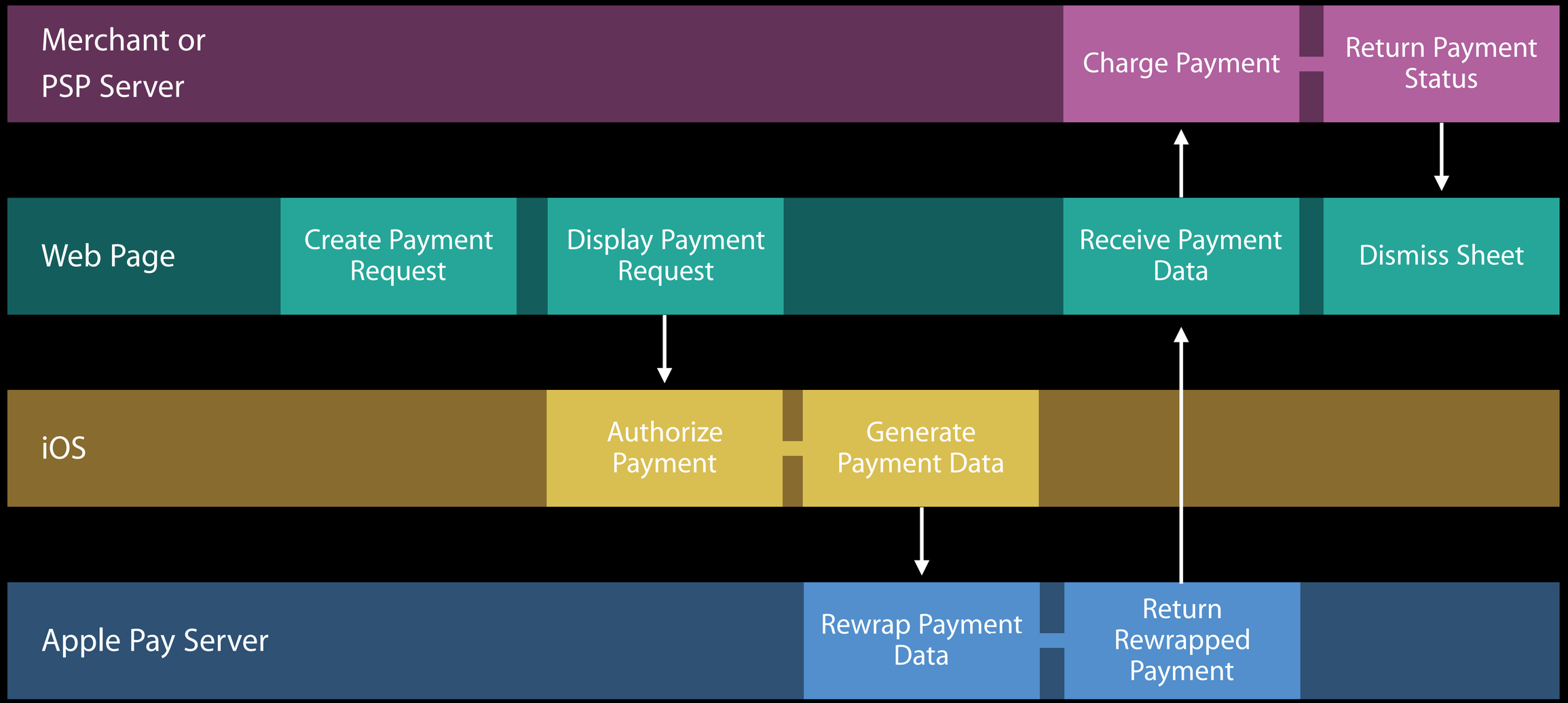
Apple Pay on the web



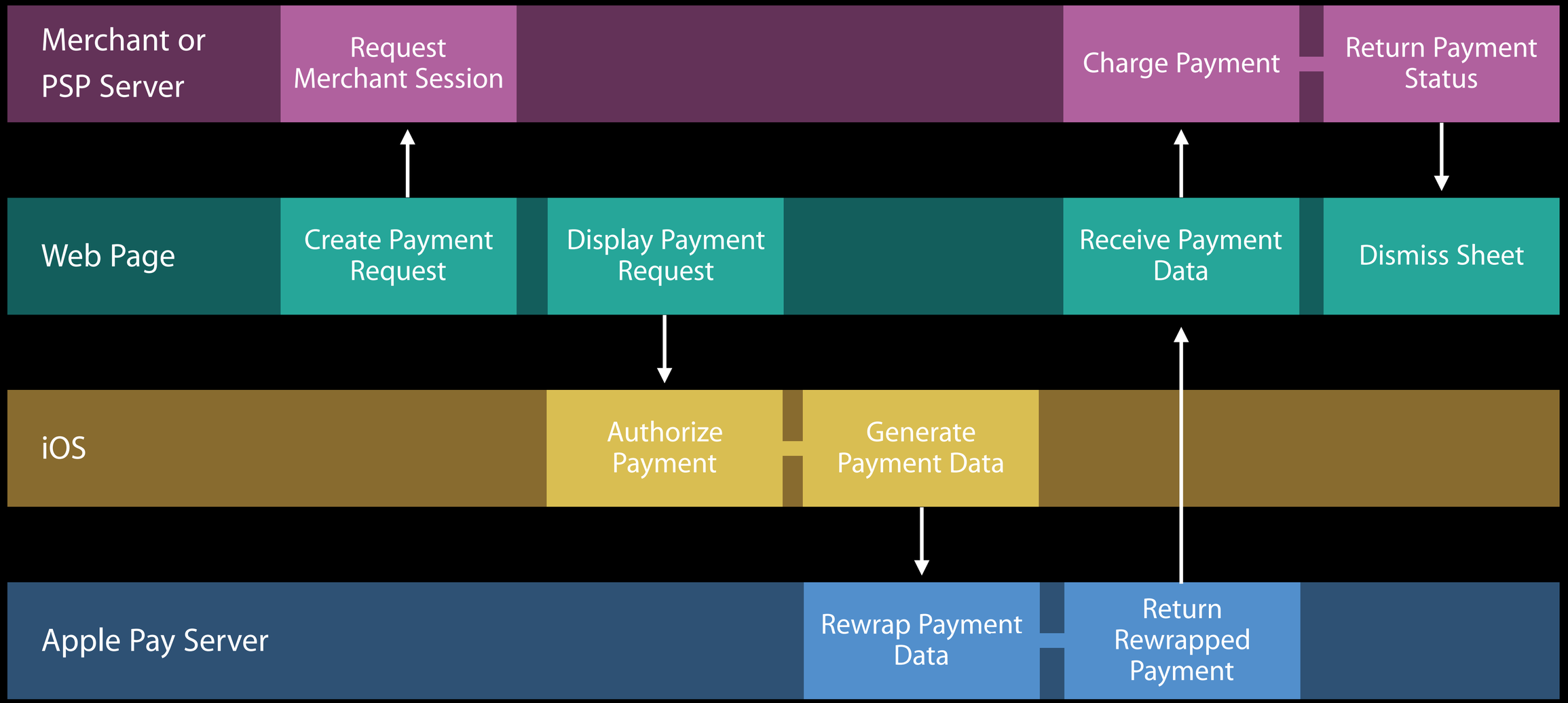
Apple Pay on the web



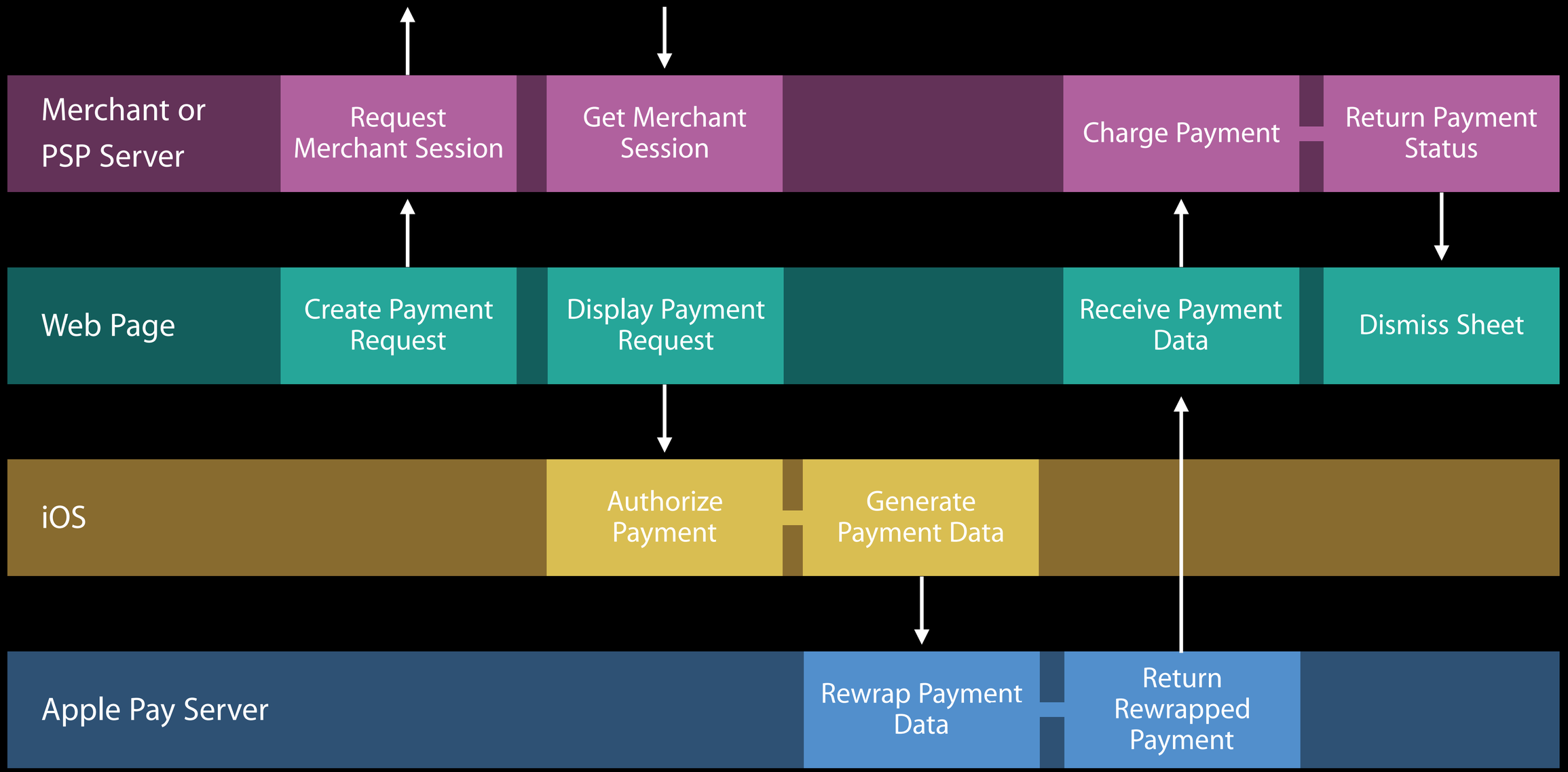
Apple Pay on the web



Apple Pay on the web



Apple Pay on the web



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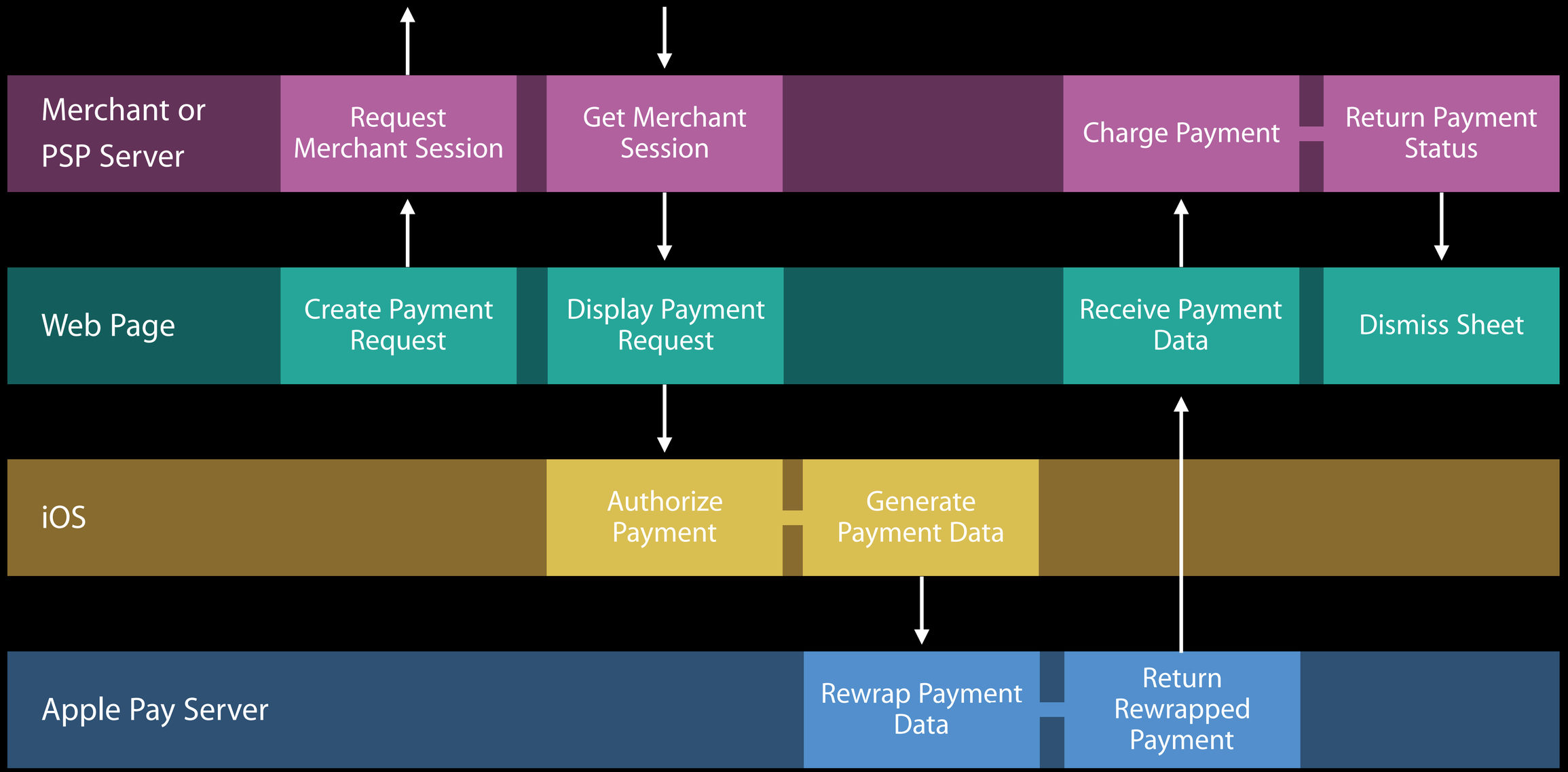
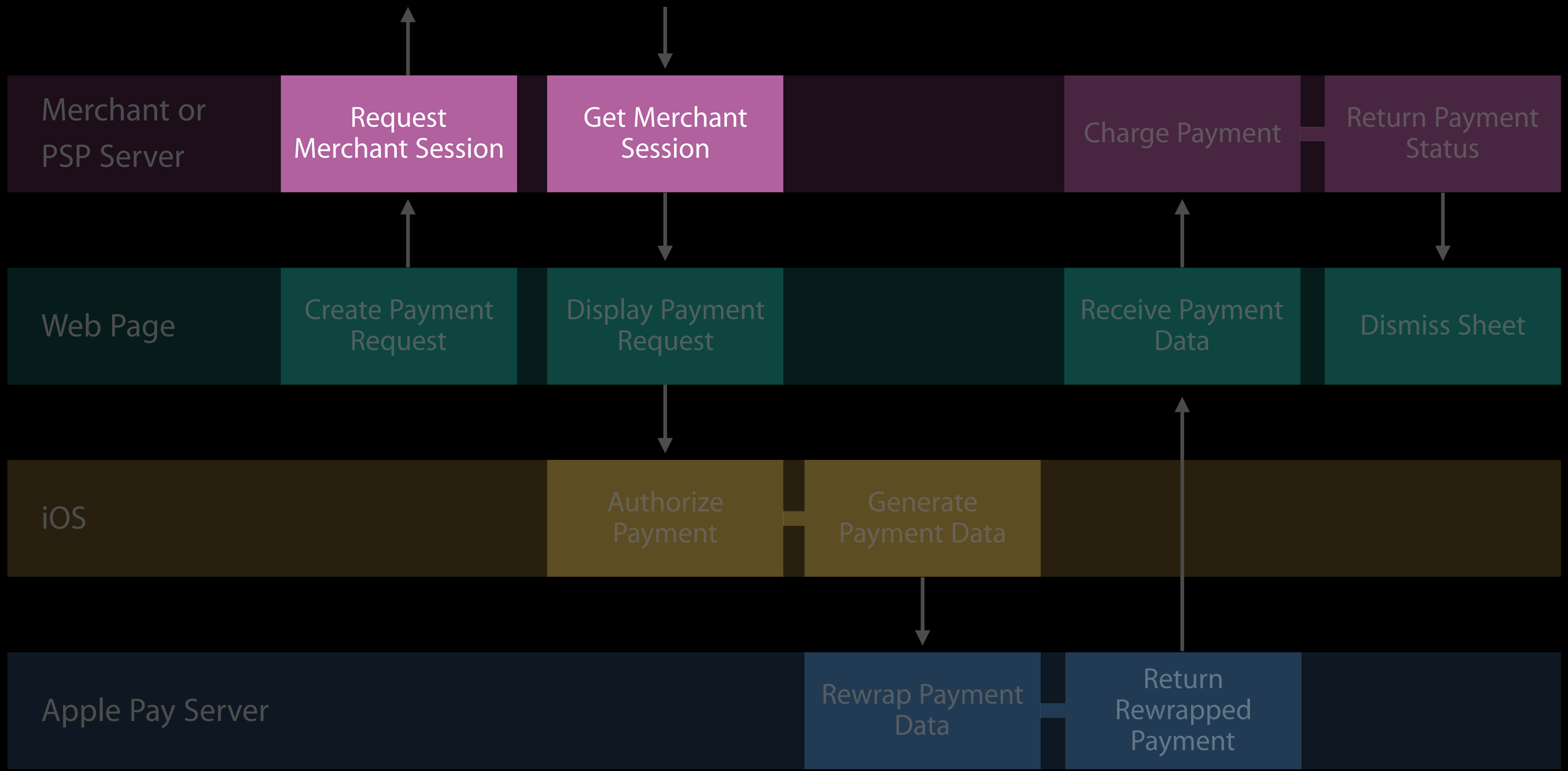
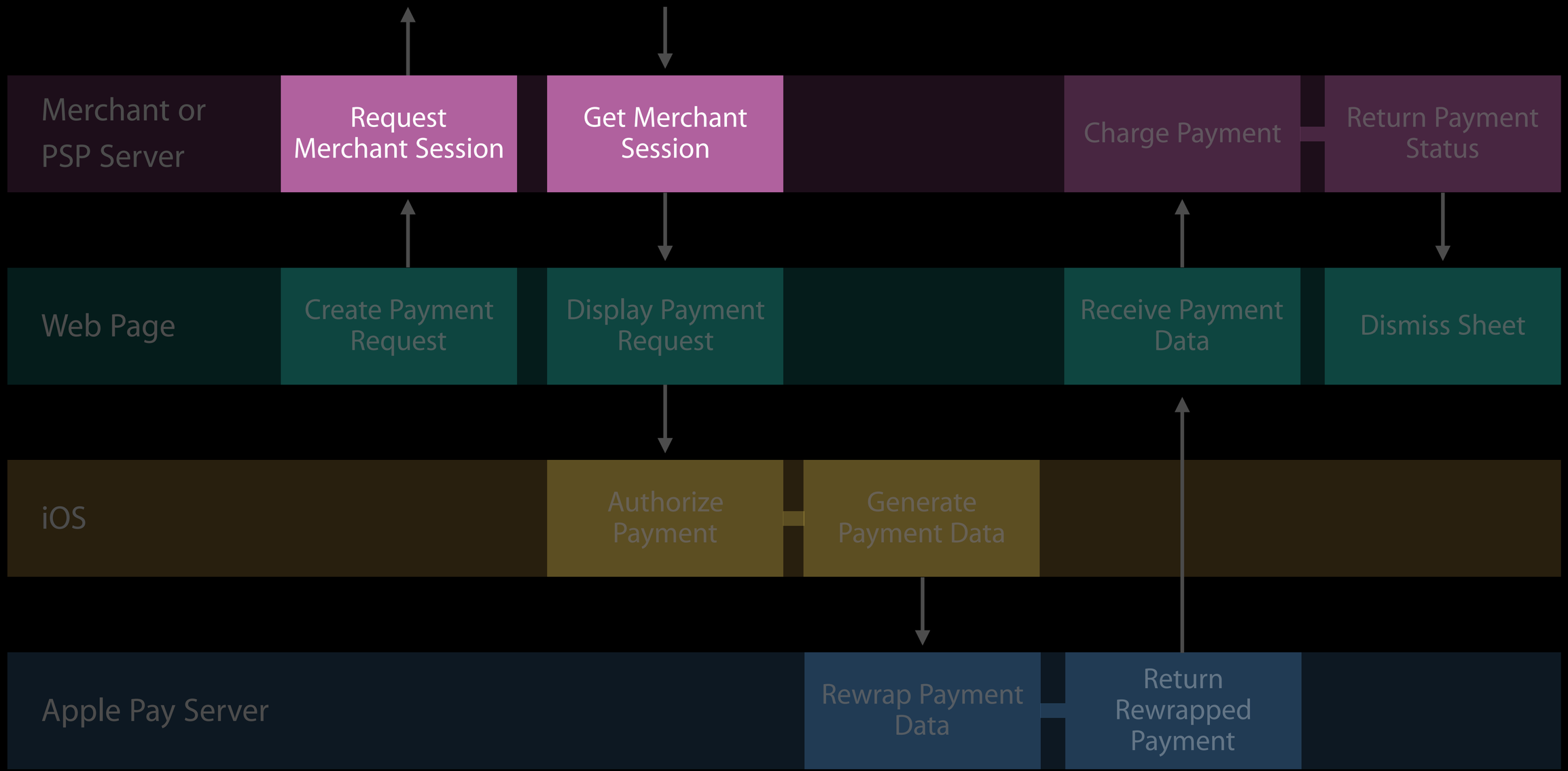


Apple Pay on the web



Apple Pay on the web



Merchant Validation

Why do we use it?

Merchant Validation

Why do we use it?

In an iOS app Apple Pay security is protected with signed entitlements

Merchant Validation

Why do we use it?

In an iOS app Apple Pay security is protected with signed entitlements

This protects both users and merchants

Merchant Validation

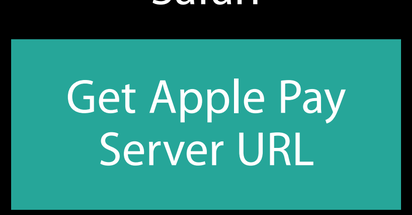
Why do we use it?

In an iOS app Apple Pay security is protected with signed entitlements

This protects both users and merchants

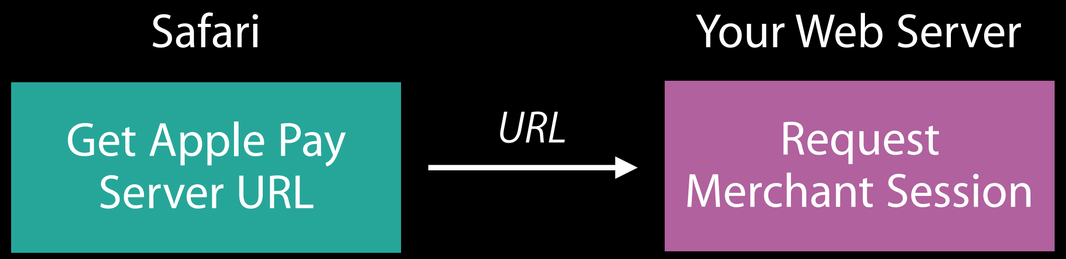
Merchant validation performs a similar function on the web

Performing Merchant Validation



Obtain the Apple Pay session generation URL from Safari

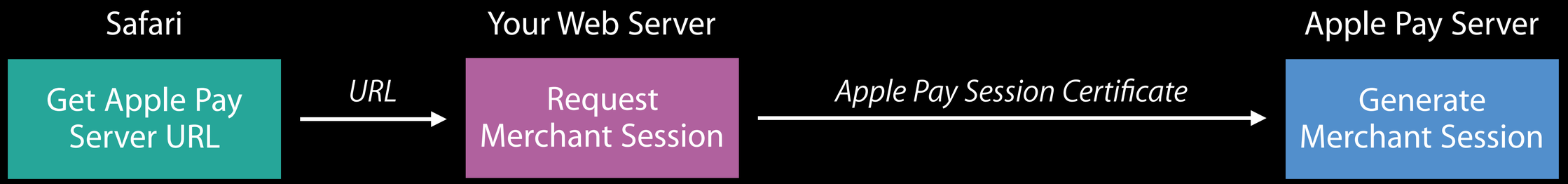
Performing Merchant Validation



Obtain the Apple Pay session generation URL from Safari

Send this URL to your web server to start merchant validation

Performing Merchant Validation



Obtain the Apple Pay session generation URL from Safari

Send this URL to your web server to start merchant validation

Once generated, return it back to the client to be consumed

Merchant Validation

The merchant session

Merchant Validation

The merchant session

A unique token that's linked with a single Apple Pay request from a site

Merchant Validation

The merchant session

A unique token that's linked with a single Apple Pay request from a site

Used to ensure your site is still secure and available for Apple Pay

Merchant Validation

The merchant session

A unique token that's linked with a single Apple Pay request from a site

Used to ensure your site is still secure and available for Apple Pay

Required for every Apple Pay on the web payment

Merchant Validation

The merchant session

A unique token that's linked with a single Apple Pay request from a site

Used to ensure your site is still secure and available for Apple Pay

Required for every Apple Pay on the web payment

Your server requests the session from Apple's servers

Merchant Validation

Tips

Merchant Validation

Tips

Always obtain the session request URL from the client, as it may vary

Merchant Validation

Tips

Always obtain the session request URL from the client, as it may vary

Only request a session when the user interacts with the Apple Pay button

Merchant Validation

Tips

Always obtain the session request URL from the client, as it may vary

Only request a session when the user interacts with the Apple Pay button

Do not generate a merchant session client-side!

Recap

Getting set up

Recap

Getting set up

Made sure our site complies with Apple's requirements

Recap

Getting set up

Made sure our site complies with Apple's requirements

Created our merchant identifier and merchant certificate used for payment encryption

Recap

Getting set up

Made sure our site complies with Apple's requirements

Created our merchant identifier and merchant certificate used for payment encryption

Created our Apple Pay session certificate linked to our domain name

Recap

Getting set up

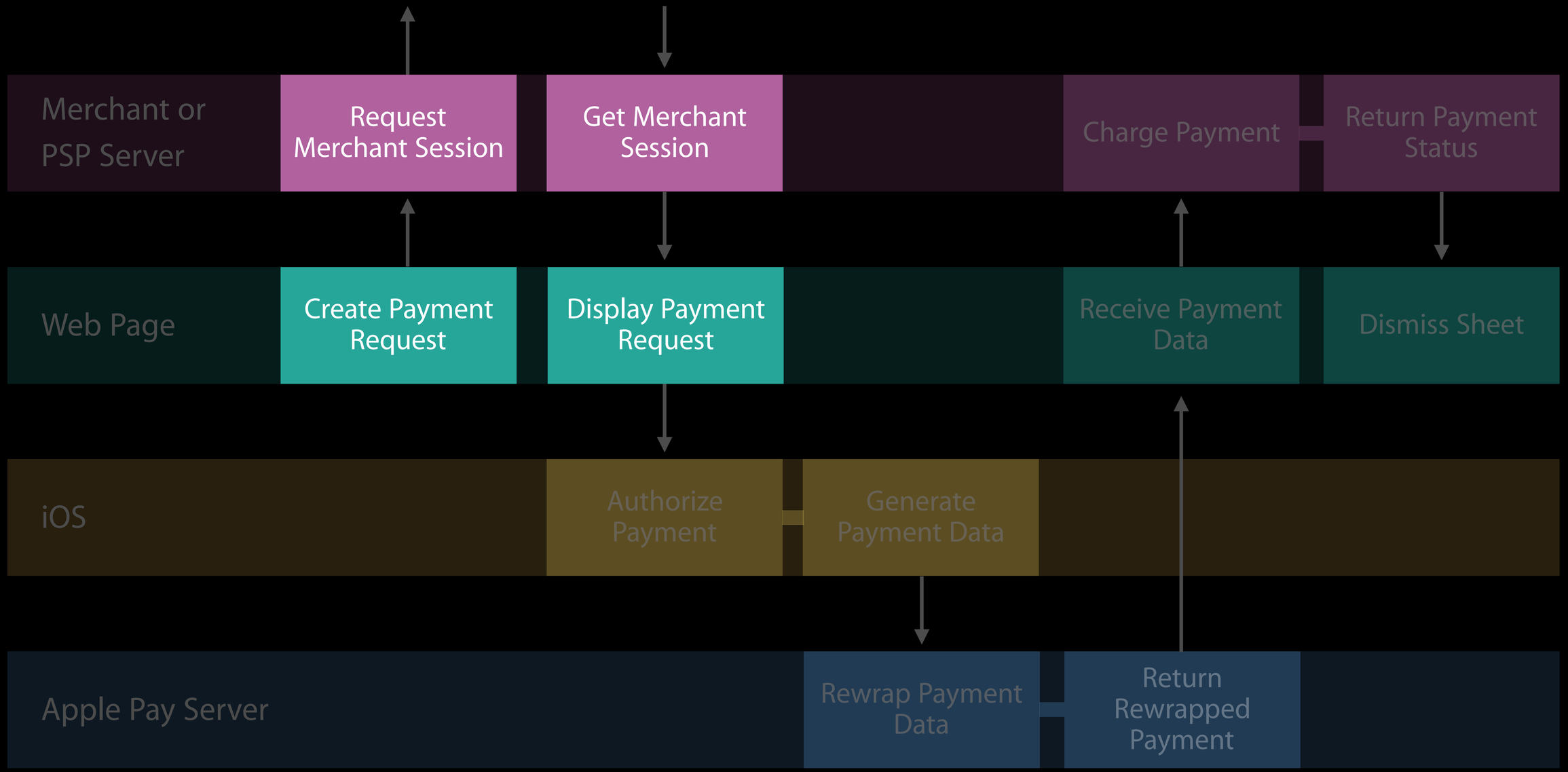
Made sure our site complies with Apple's requirements

Created our merchant identifier and merchant certificate used for payment encryption

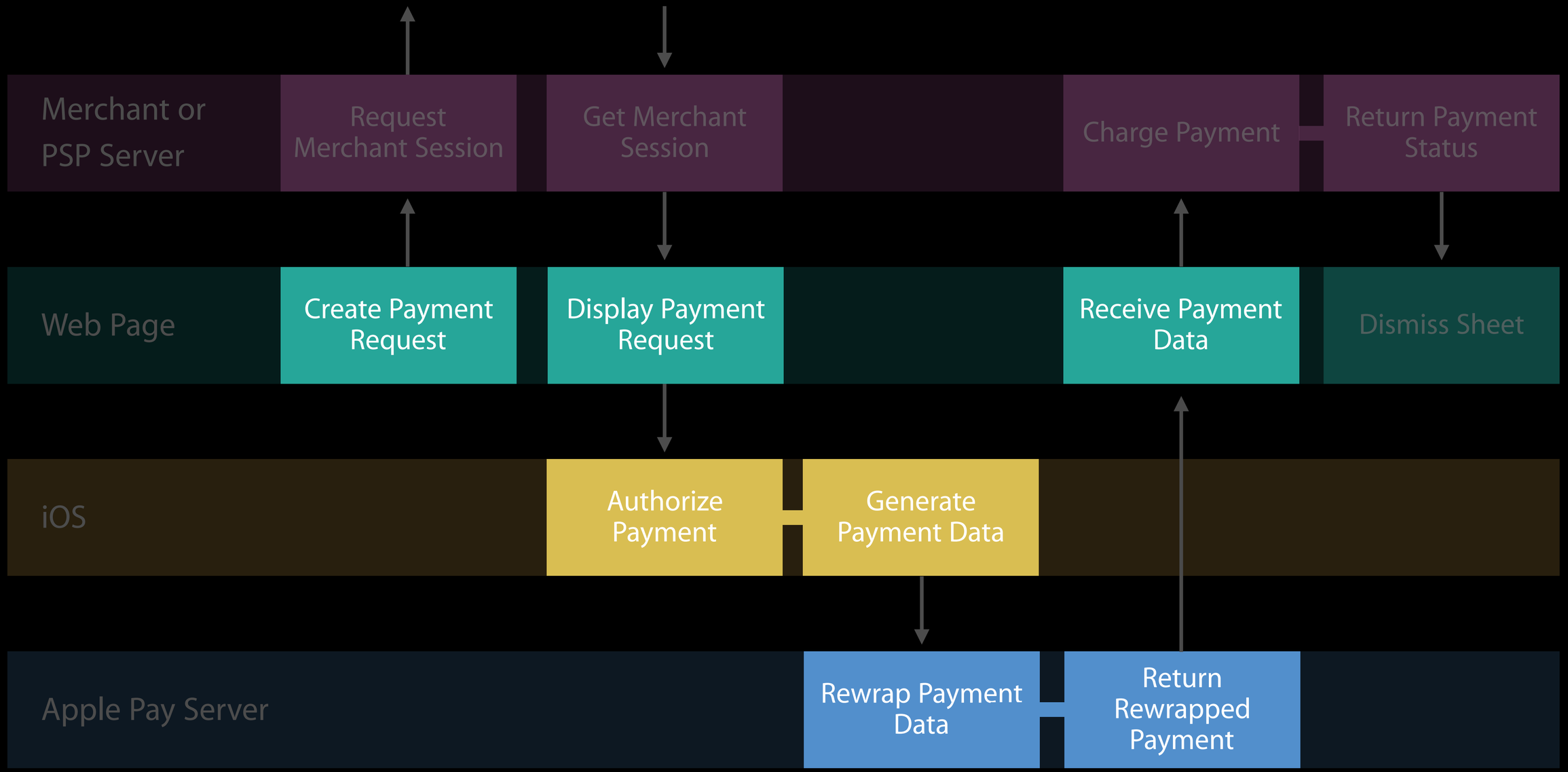
Created our Apple Pay session certificate linked to our domain name

Learned how to validate our site for every Apple Pay payment

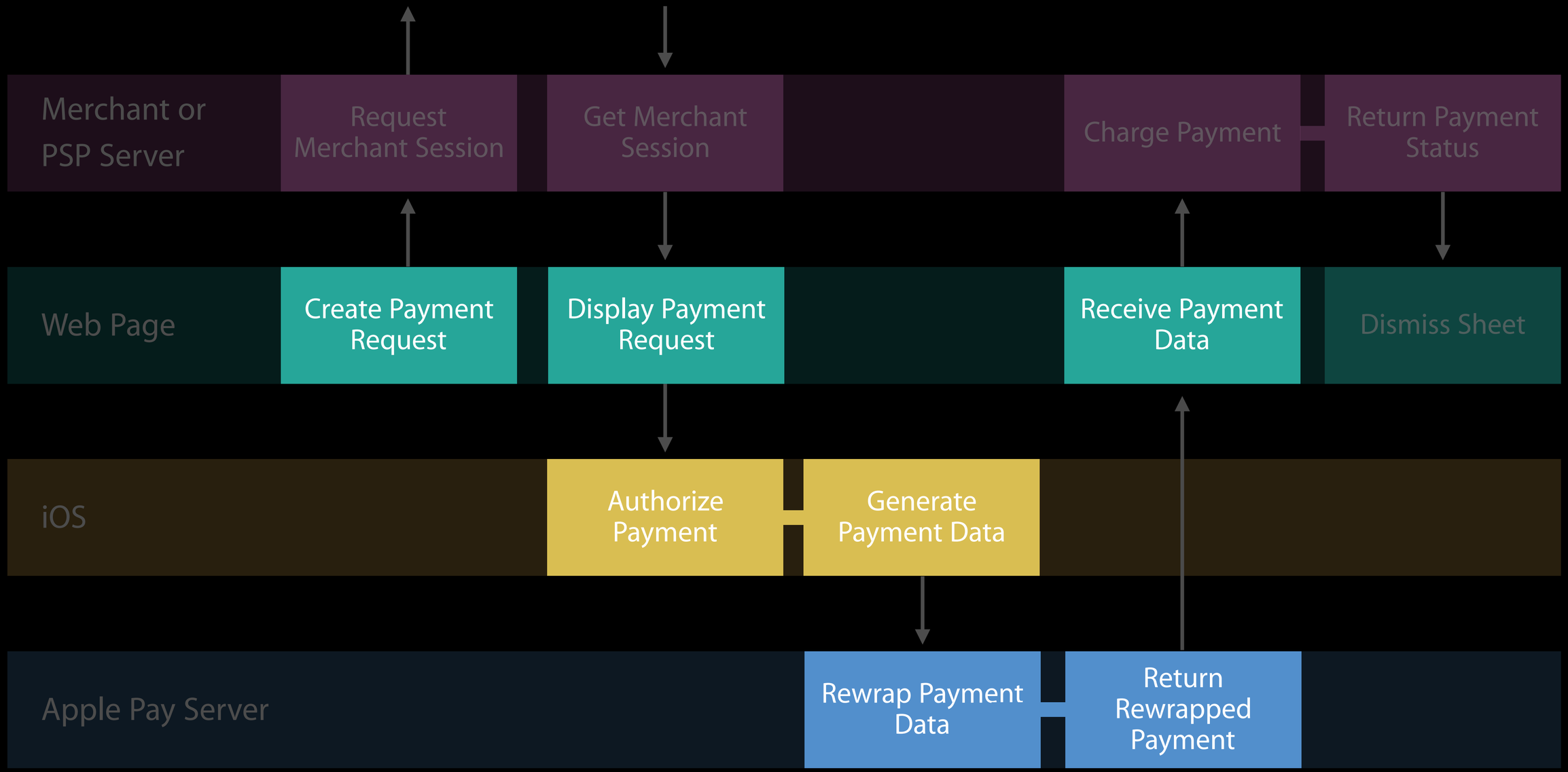
Apple Pay on the web



Apple Pay on the web



Apple Pay on the web



Apple Pay API

Apple Pay API

NEW

Available in Safari and SFSafariViewController on iOS

Available in Safari on macOS

Single API entry point, `ApplePaySession`

Influenced by PassKit API

canine-clothing.com

Purveyor of Fine Muttropolitan Fashion

Canine Clothing

Scarf it down!
$19.99

Add to Cart

Back to Puppy School
$49.99

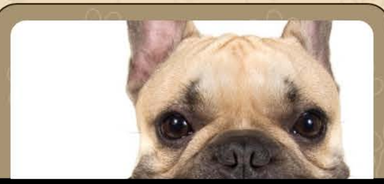
Add to Cart

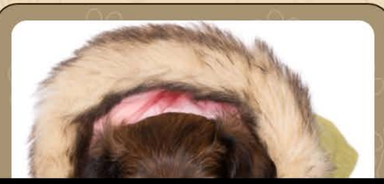
A Furmal Occasion
$69.99

Add to Cart

Puppy style
$39.99

Add to Cart





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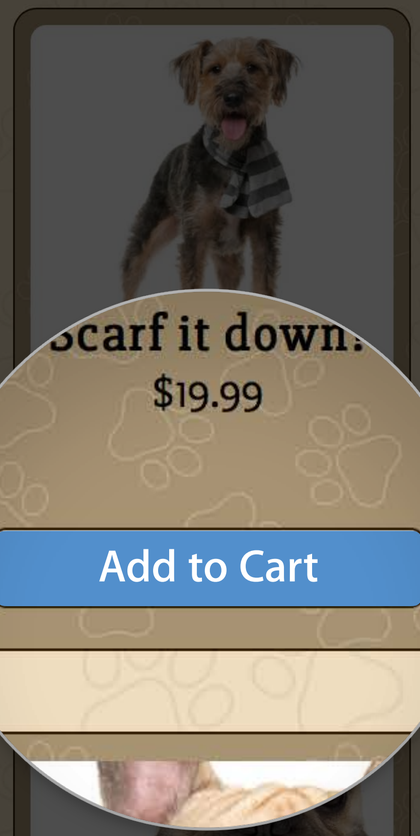
Canine Clothing



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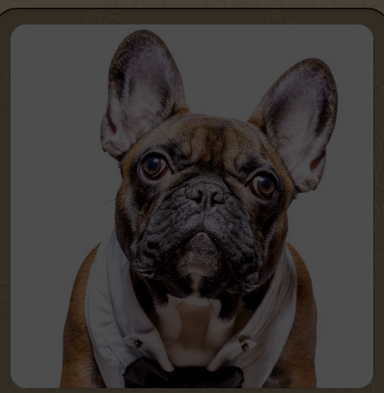
$49.99
Add to Cart



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Puppy style
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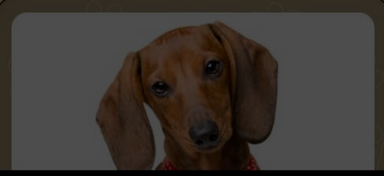
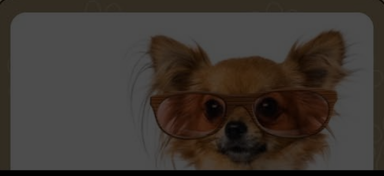
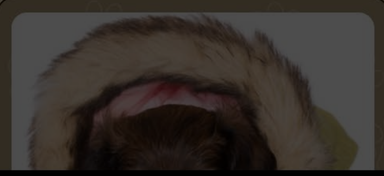
Add to Cart







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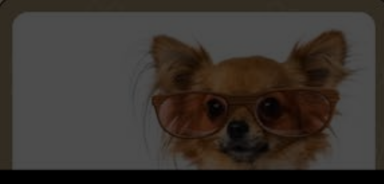

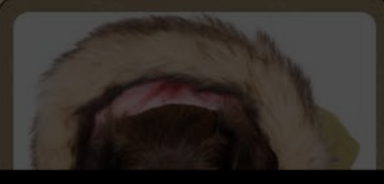

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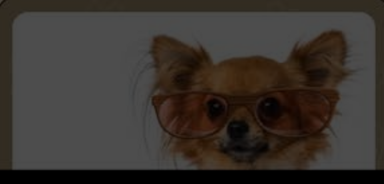
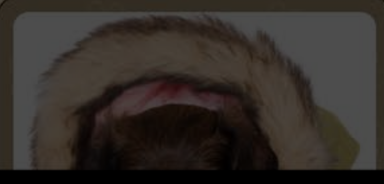
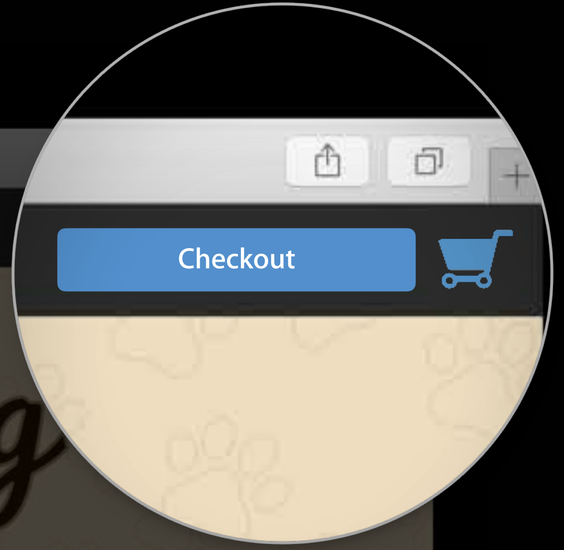






canine-clothing.com

Purveyor of Fine Muttropolitan Fashion

Checkout

Cart

	Scarf it down!	$19.99
	Total	$19.99

Shipping Address

Name

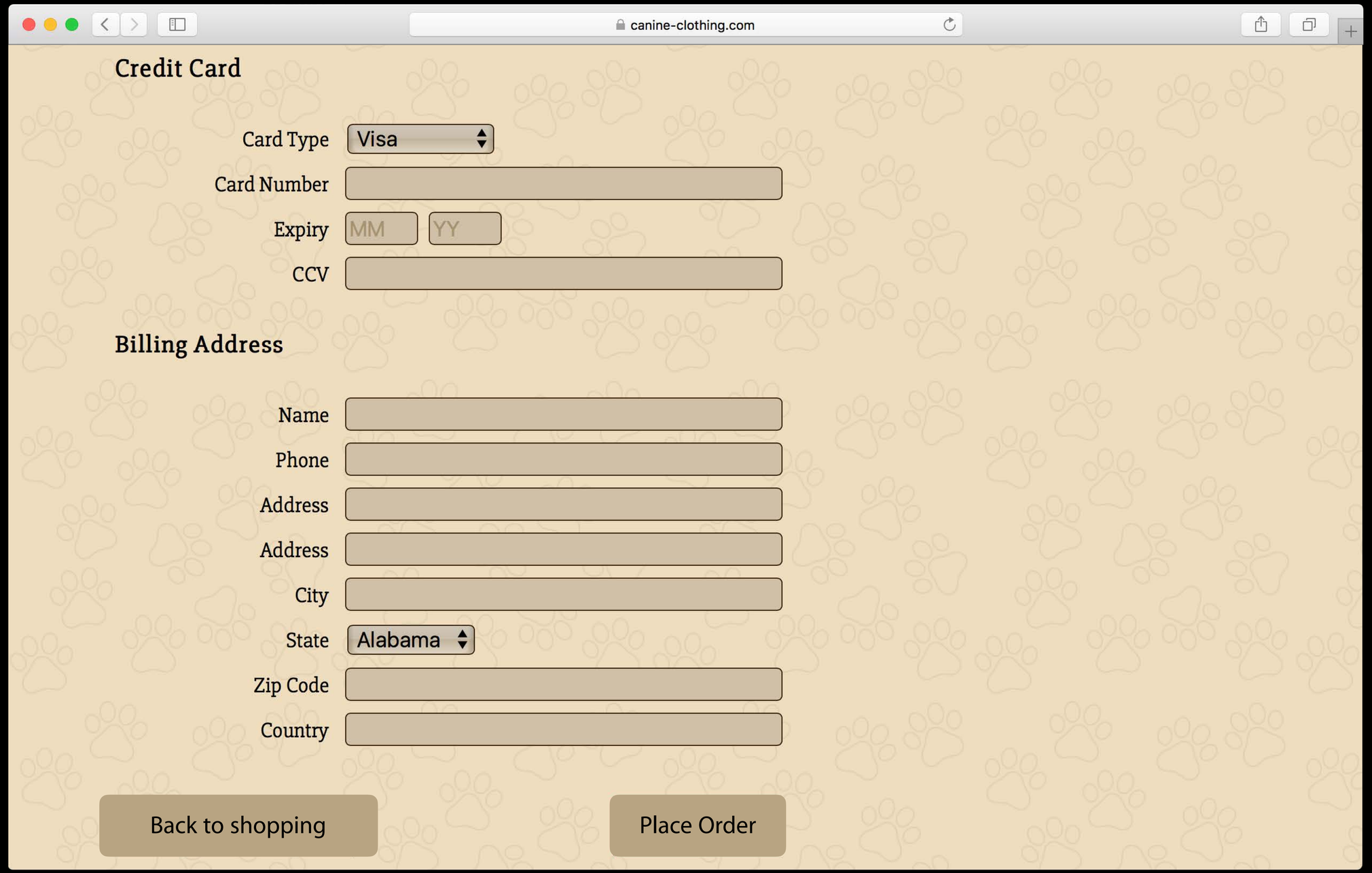
Phone

Address

Address

City

State Alabama


canine-clothing.com
Credit Card
Card Type
Visa
Card Number
Expiry
MM
YY
CCV
Billing Address
Name
Phone
Address
Address
City
State
Alabama
Zip Code
Country
Back to shopping
Place Order

canine-clothing.com

Credit Card

Card Type: Visa

Card Number

Expiry: MM YY

CCV

Billing Address

Name

Phone

Address

Address

City

State: Alabama

Zip Code

Country

Back to shopping

Place Order

canine-clothing.com

Purveyor of Fine Muttropolitan Fashion

Canine Clothing

Thank You!

Order Number: W34732832945

Anders, tell your lucky dog that their items are on the way.

Add To Cart

Pay

Add To Cart

Detecting Payment Availability

```
ApplePaySession.canMakePayments
```

Detecting Payment Availability

`ApplePaySession.canMakePayments`

```
if (window.ApplePaySession) {
    if (ApplePaySession.canMakePayments()) {
        showApplePayButtons();
    }
}
```

Detecting Payment Availability

`ApplePaySession.canMakePayments`

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if (window.ApplePaySession) {
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Detecting Payment Availability

`ApplePaySession.canMakePayments`

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if (window.ApplePaySession) {
    if (ApplePaySession.canMakePayments()) {
        showApplePayButtons();
    }
}
```

Detecting Payment Availability

`ApplePaySession.canMakePayments` only checks whether Apple Pay is supported

- iOS: Secure Element
- Mac: iPhone or Apple Watch

Detecting Payment Availability

```
ApplePaySession.canMakePaymentsWithActiveCard
```

Takes a merchant identifier

Asynchronous

Detecting Payment Availability

Allowed uses

Defaulting to Apple Pay during checkout

Adding Apple Pay button to product page

```
// Detecting Payment Availability

if (window.ApplePaySession) {
   var merchantIdentifier = 'merchant.com.canine-clothing';
   var promise = ApplePaySession.canMakePaymentsWithActiveCard(merchantIdentifier);
   promise.then(function (canMakePayments) {
      if (canMakePayments)
         showApplePayButtons();
   });
}
```

```
// Detecting Payment Availability

if (window.ApplePaySession) {
    var merchantIdentifier = 'merchant.com.canine-clothing';
    var promise = ApplePaySession.canMakePaymentsWithActiveCard(merchantIdentifier);
    promise.then(function (canMakePayments) {
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   promise.then(function (canMakePayments) {
      if (canMakePayments)
         showApplePayButtons();
   });
}
```

canine-clothing.com

Purveyor of Fine Muttropolitan Fashion

Canine Clothing

Scarf it down!
$19.99
Pay
Add to Cart

Back to Puppy School
$49.99
Pay
Add to Cart

A Furmal Occasion
$69.99
Pay
Add to Cart

Puppy style
$39.99
Pay
Add to Cart

Presenting the Payment Sheet

Create a new `ApplePaySession` JavaScript object

Pass in an API version number

Pass in a payment request

Call begin()

```
// Presenting the payment sheet

var paymentRequest = {
   currencyCode: 'USD',
   countryCode: 'US',
   total: {
      label: ‘Canine Clothing',
      amount: '19.99'
   },
   supportedNetworks: ['amex', 'discover', 'masterCard', 'visa' ],
   merchantCapabilities: [ 'supports3DS' ],
   requiredShippingAddressFields: [ 'postalAddress' ]
};

var session = new ApplePaySession(1, paymentRequest);
session.begin();
```

```
// Presenting the payment sheet

var paymentRequest = {
    currencyCode: 'USD',
    countryCode: 'US',
    total: {
        label: ‘Canine Clothing',
        amount: '19.99'
    },
    supportedNetworks: ['amex', 'discover', 'masterCard', 'visa' ],
    merchantCapabilities: [ 'supports3DS' ],
    requiredShippingAddressFields: [ 'postalAddress' ]
};

var session = new ApplePaySession(1, paymentRequest);
session.begin();
```

```
// Presenting the payment sheet

var paymentRequest = {
   currencyCode: 'USD',
   countryCode: 'US',
   total: {
      label: ‘Canine Clothing',
      amount: '19.99'
   },
   supportedNetworks: ['amex', 'discover', 'masterCard', 'visa' ],
   merchantCapabilities: [ 'supports3DS' ],
   requiredShippingAddressFields: [ 'postalAddress' ]
};

var session = new ApplePaySession(1, paymentRequest);
session.begin();
```

```
// Presenting the payment sheet

var paymentRequest = {
   currencyCode: 'USD',
   countryCode: 'US',
   total: {
      label: ‘Canine Clothing',
      amount: '19.99'
   },
   supportedNetworks: ['amex', 'discover', 'masterCard', 'visa' ],
   merchantCapabilities: [ 'supports3DS' ],
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var session = new ApplePaySession(1, paymentRequest);
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```

```
// Presenting the payment sheet

var paymentRequest = {
   currencyCode: 'USD',
   countryCode: 'US',
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      label: ‘Canine Clothing',
      amount: '19.99'
   },
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   merchantCapabilities: [ 'supports3DS' ],
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session.begin();
```

```
// Presenting the payment sheet

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   countryCode: 'US',
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      label: ‘Canine Clothing',
      amount: '19.99'
   },
   supportedNetworks: ['amex', 'discover', 'masterCard', 'visa' ],
   merchantCapabilities: [ 'supports3DS' ],
   requiredShippingAddressFields: [ 'postalAddress' ]
};

var session = new ApplePaySession(1, paymentRequest);
session.begin();
```

Presenting the Payment Sheet

Creating an ApplePaySession can throw an exception

Called from an insecure page

Called with an invalid payment request

- Missing properties
- Invalid properties
- Unknown properties

Presenting the Payment Sheet

Calling begin() can throw an exception

If not called in response to a user action

If there is already an active sheet

Web Inspector — canine-clothing.com

19 1 0

Search

Console

Filter Console Log

All Errors Warnings Logs

Total amount must be greater than zero. applePayButtonClicked — site.js:19

applePayButtonClicked — site.js:19

applePayButtonClicked — site.js:19

Pay

Cancel

CARD	BLUE CASH EVERYDAY(SM)
SHIPPING	ANDERS CARLSSON 1 INFINITE LOOP CUPERTINO CA 95014 UNITED STATES
PAY CANINE CLOTHING	$19.99

Processing

Merchant Validation

A `validatemerchant` DOM event is dispatched to the session

Event has a `validationURL` property

Perform validation

Call `completeMerchantValidation`

```
// Merchant Validation

session.onvalidatemerchant = function (event) {
   var promise = performValidation(event.validationURL);

   promise.then(function (merchantSession) {
      session.completeMerchantValidation(merchantSession);
   });
}
```

```
// Merchant Validation

session.onvalidatemerchant = function (event) {
   var promise = performValidation(event.validationURL);

   promise.then(function (merchantSession) {
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Pay

Cancel

CARD	BLUE CASH EVERYDAY(SM)
SHIPPING	ANDERS CARLSSON 1 INFINITE LOOP CUPERTINO CA 95014 UNITED STATES
PAY CANINE CLOTHING	$19.99

Confirm on iPhone

Payment Authorization

A `paymentauthorized` DOM event is dispatched to the session

Event has a `payment` property

- Shipping information
- Payment method
- Payment token

Call `completePayment`

```
// Payment Authorization

session.onpaymentauthorized = function (event) {
   var promise = sendPaymentToken(event.payment.token);

   promise.then(function (success) {
      var status;
      if (success)
         status = ApplePaySession.STATUS_SUCCESS;
      else
         status = ApplePaySession.STATUS_FAILURE;

      session.completePayment(status);
      showConfirmation();
   });
}
```

```
// Payment Authorization

session.onpaymentauthorized = function (event) {
   var promise = sendPaymentToken(event.payment.token);

   promise.then(function (success) {
      var status;
      if (success)
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      session.completePayment(status);
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```

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   });
}
```

Pay

Cancel

CARD	BLUE CASH EVERYDAY(SM)
SHIPPING	ANDERS CARLSSON 1 INFINITE LOOP CUPERTINO CA 95014 UNITED STATES

PAY CANINE CLOTHING	$19.99

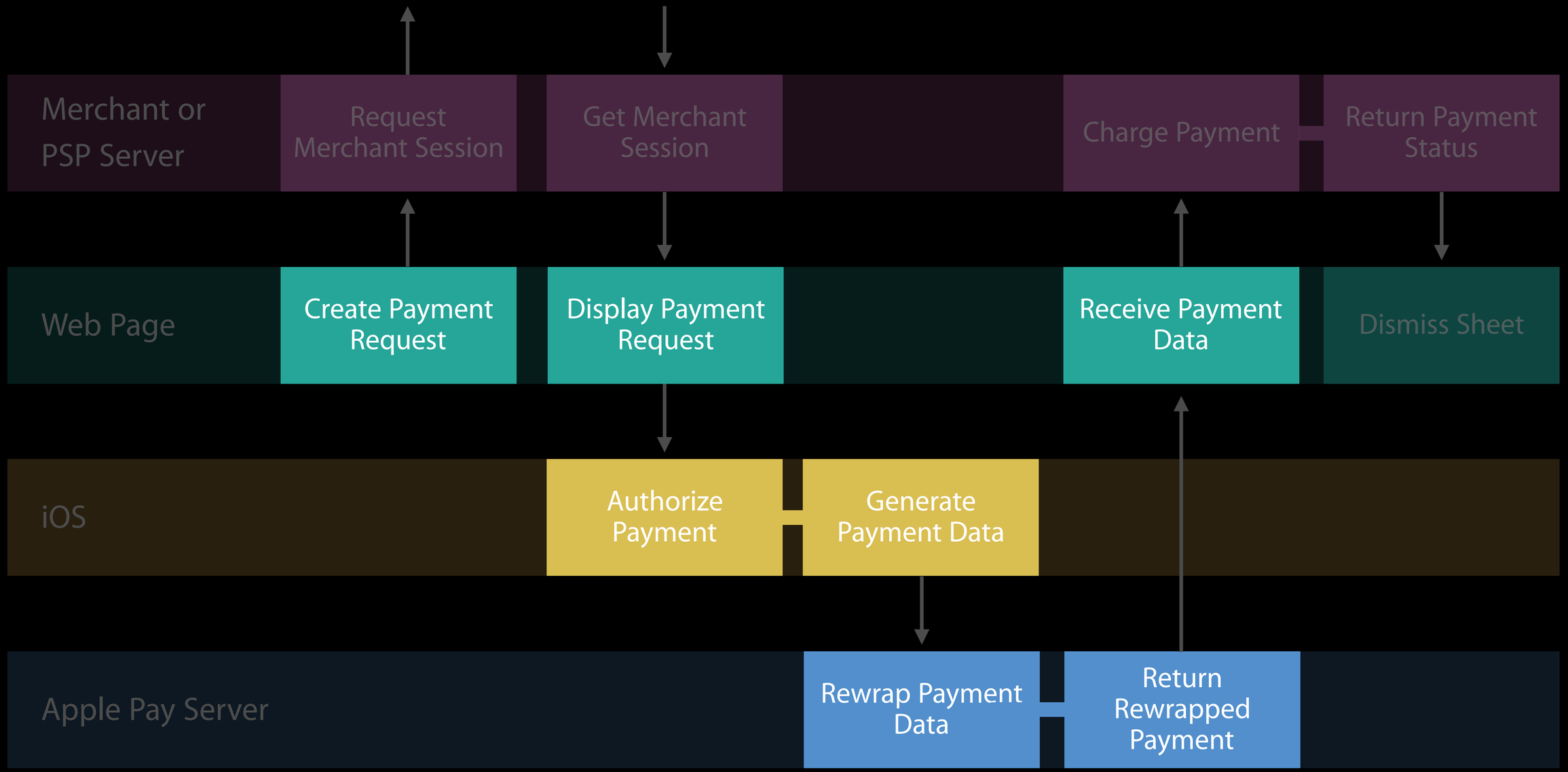
Done

Demo

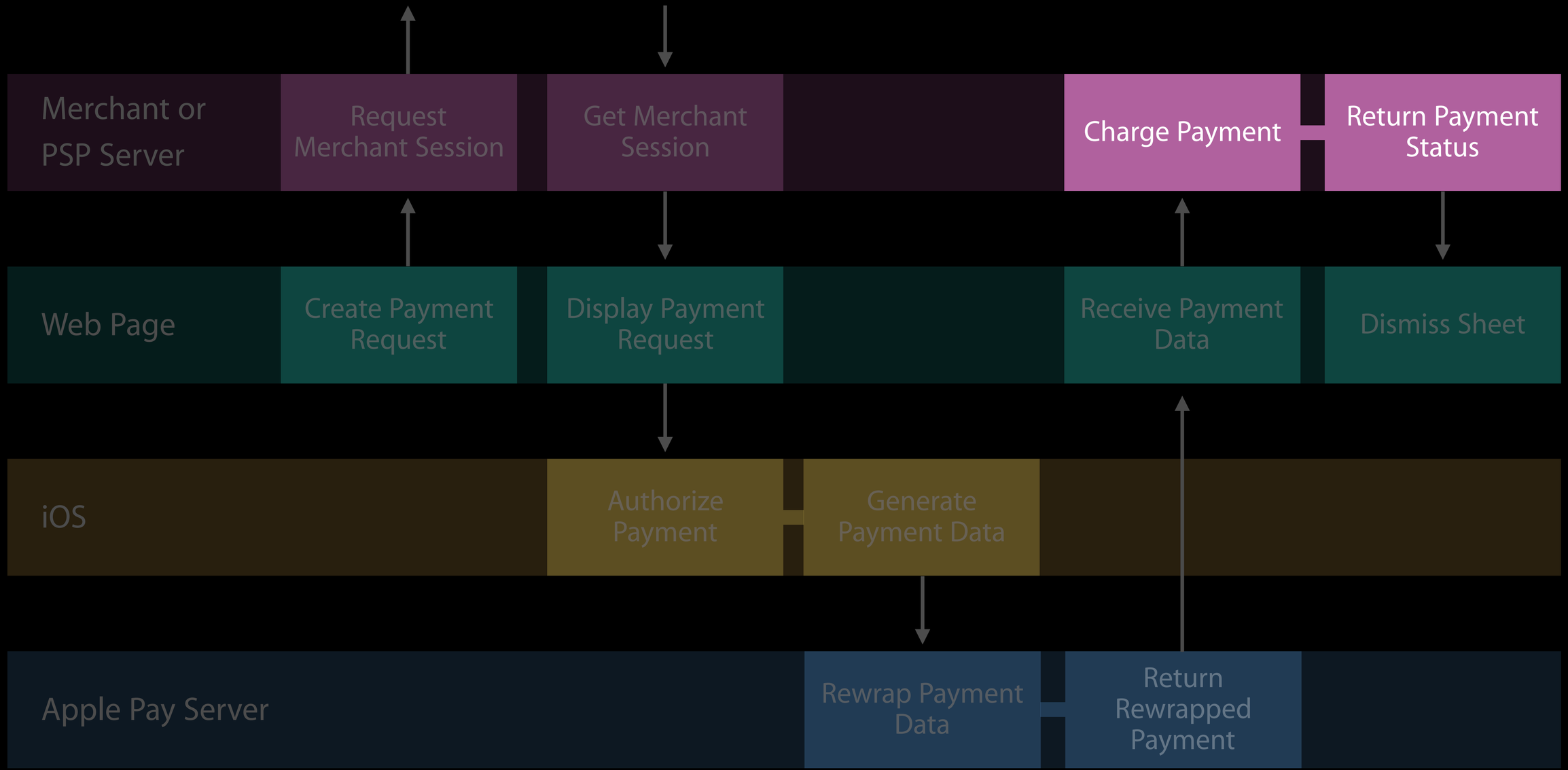
Payment Processing

Handling your payments

Apple Pay on the web



Apple Pay on the web



The Payment Token

The Payment Token

Decrypt the payment token yourself

Pass the raw data to your payment provider

Pass the encrypted payment token to your payment provider

They decrypt on your behalf and charge

Payment Processors

US and Europe

Payment Processors

US and Europe

Over forty payment processors support Apple Pay today

Payment Processors

US and Europe

Over forty payment processors support Apple Pay today

Many providers offer SDKs for in-app payments

Payment Processors

US and Europe

Over forty payment processors support Apple Pay today

Many providers offer SDKs for in-app payments

For a full list, see developer.apple.com/apple-pay

Payment Processors

Asia Pacific

银联商务 ChinaUMS

连连支付 www.lianlianpay.com

首信易支付 PayEase

易宝支付 YEEPAY.COM

eCommerce Platforms

eCommerce Platforms

Partnering with major eCommerce platforms

eCommerce Platforms

Partnering with major eCommerce platforms

demandware®

IBM®

shopify

eCommerce Platforms

Partnering with major eCommerce platforms

Deeply integrated Apple Pay support

demandware®

IBM®

shopify

eCommerce Platforms

Partnering with major eCommerce platforms

Deeply integrated Apple Pay support

No developer account required

demandware®

IBM®

shopify

Testing Your Sites

The Apple Pay Sandbox

A new testing environment for Apple Pay

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM

Testing Your Sites

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM

Testing Your Sites

Apple Pay on the web is available in the Apple Pay Sandbox for testing

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM

Testing Your Sites

Apple Pay on the web is available in the Apple Pay Sandbox for testing

Will be rolled out to production closer to GM

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM

Testing Your Sites

Apple Pay on the web is available in the Apple Pay Sandbox for testing

Will be rolled out to production closer to GM

File bugs and send us feedback!

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM

Designing for Apple Pay

Building a compelling experience

Easy. Secure. Private.

The Three Phases of Apple Pay

The Three Phases of Apple Pay

Pre-payment

The Three Phases of Apple Pay

Pre-payment

Payment

The Three Phases of Apple Pay

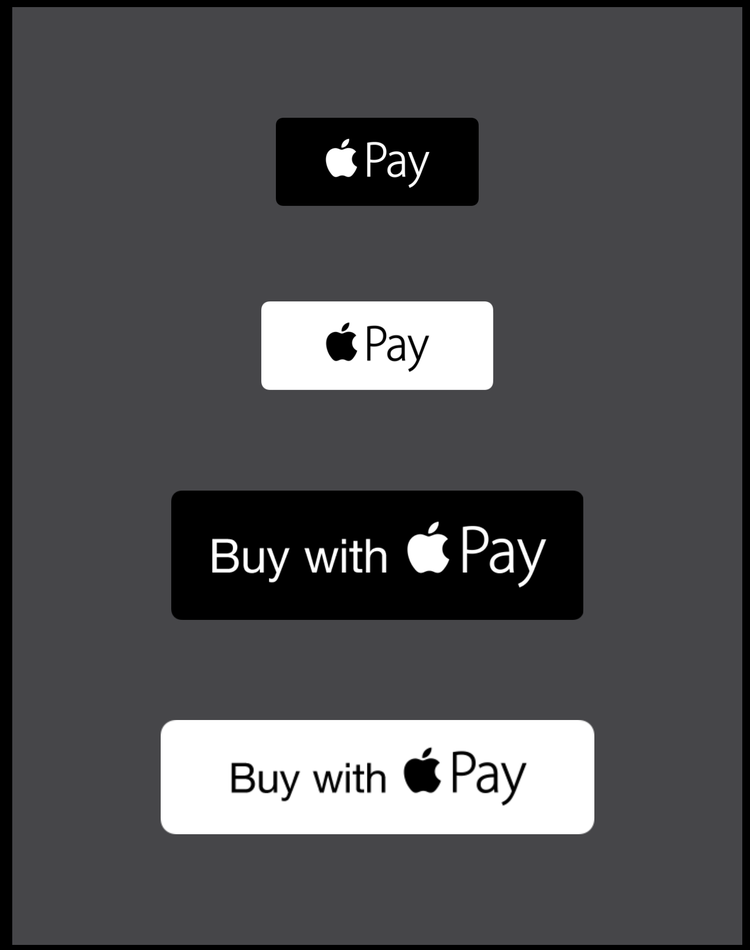
Pre-payment

Payment

Post-payment

Pre-Payment

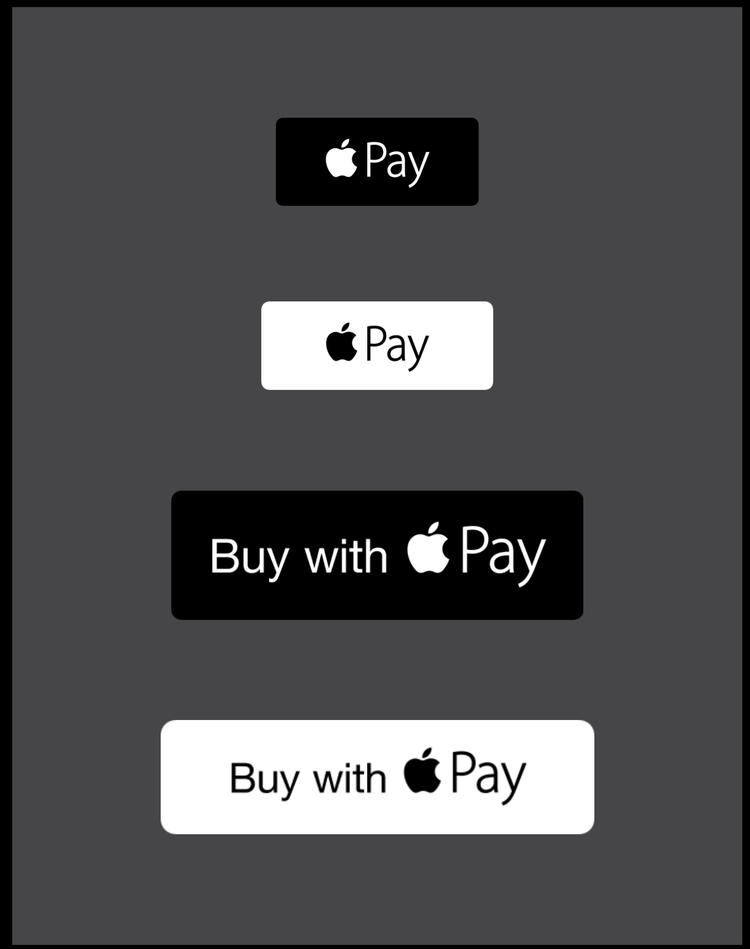
The Apple Pay button



Pre-Payment

The Apple Pay button

Available in Cocoa Touch and WebKit

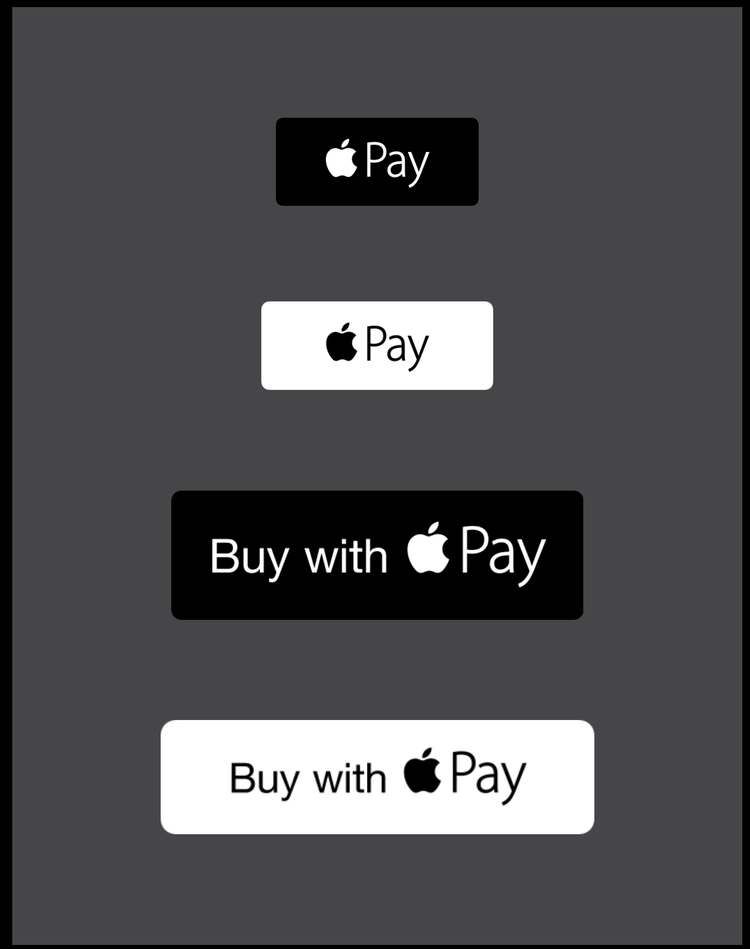


Pre-Payment

The Apple Pay button

Available in Cocoa Touch and WebKit

A variety of styles to suit your needs



```
div {
 width: 150px;
 height: 50px;
 display: inline-block;
 border: 1px solid black;
 box-sizing: border-box;
}

.normal {
 background-image: -webkit-named-image(apple-pay-logo-black);
 background-size: 100% 100%;
 background-repeat: no-repeat;
}
```

```
div {
 width: 150px;
 height: 50px;
 display: inline-block;
 border: 1px solid black;
 box-sizing: border-box;
}

.normal {
 background-image: -webkit-named-image(apple-pay-logo-black);
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 background-repeat: no-repeat;
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Apple Pay Button

Apple Pay Button

Do's

- Use the built-in assets
- Place wherever a user might want to purchase

Apple Pay Button

Do's

- Use the built-in assets
- Place wherever a user might want to purchase

Don'ts

- Modify the button or change its behavior
- Suppress the button

Pre-Payment

Placement

Pre-Payment

Placement

Offer Apple Pay early in your purchase flow

Pre-Payment

Placement

Offer Apple Pay early in your purchase flow

Placement on product pages can increase user engagement

Pre-Payment

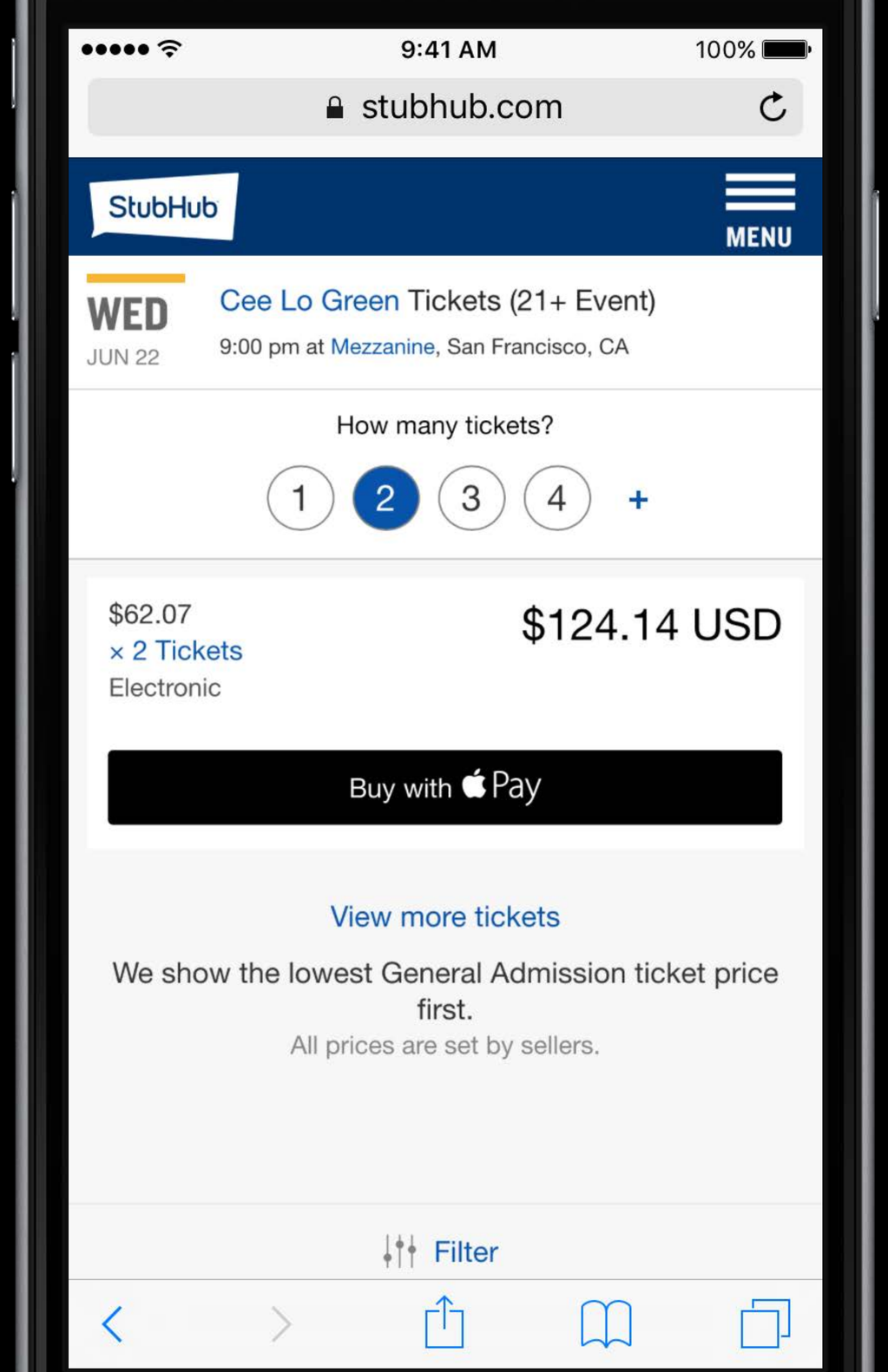
Placement

Offer Apple Pay early in your purchase flow

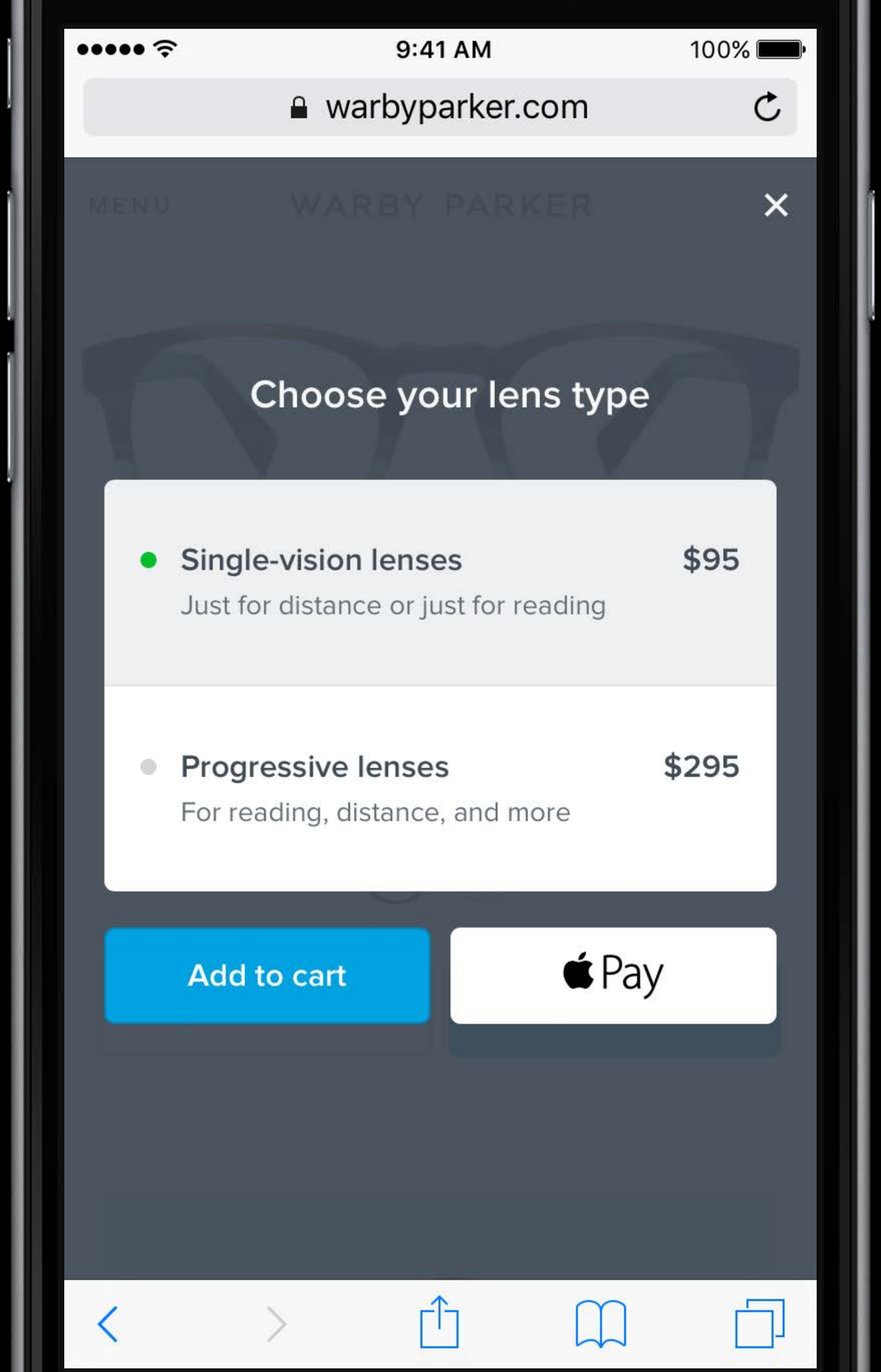
Placement on product pages can increase user engagement

Also place in regular checkout flows and in carts

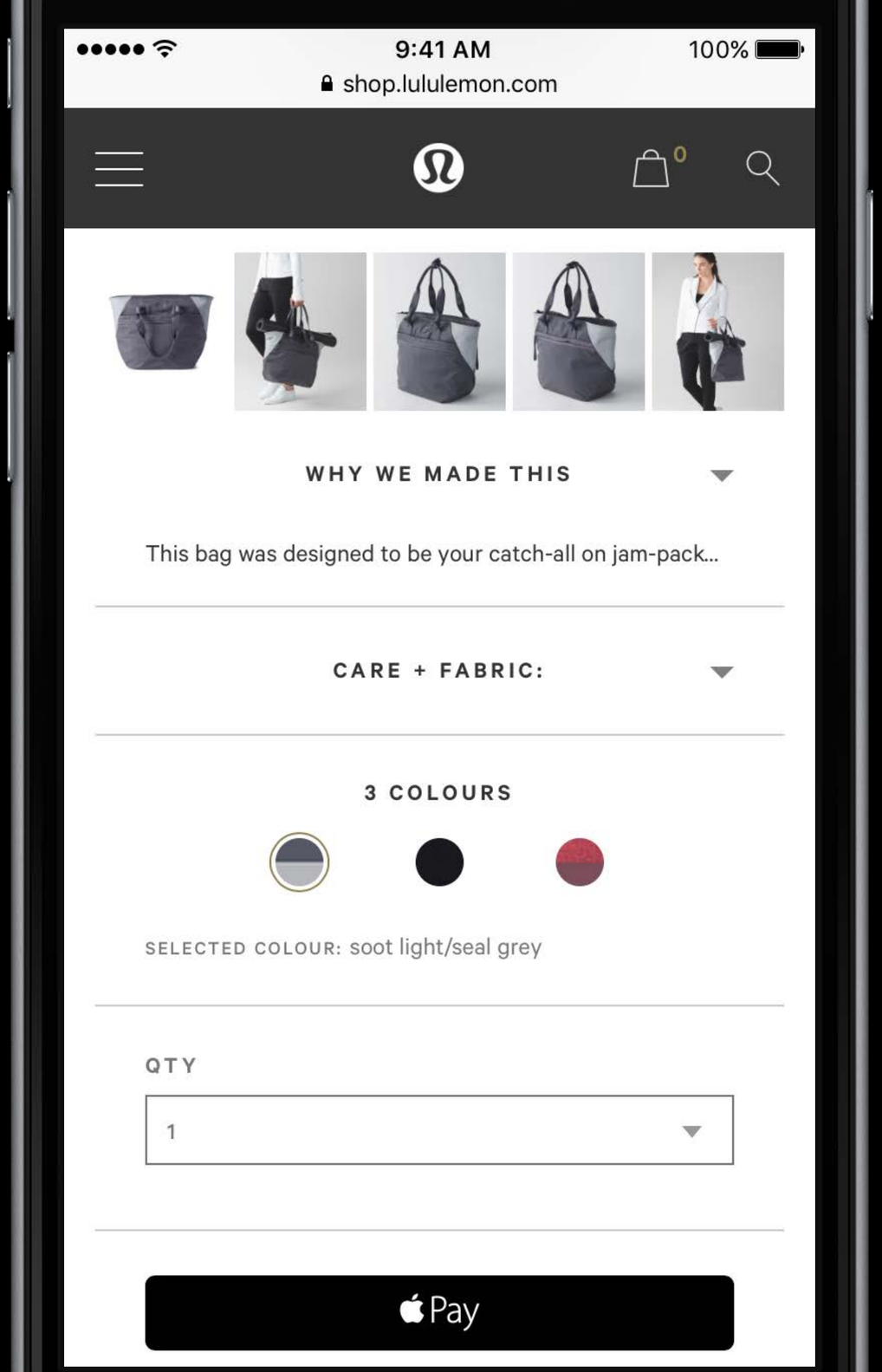
Carts


9:41 AM
100%
stubhub.com
StubHub
MENU
WED
JUN 22
Cee Lo Green Tickets (21+ Event)
9:00 pm at Mezzanine, San Francisco, CA
How many tickets?
1
2
3
4
+
$62.07
× 2 Tickets
Electronic
$124.14 USD
Buy with Pay
View more tickets
We show the lowest General Admission ticket price first.
All prices are set by sellers.
Filter

Express Checkout



Product Pages



iPad 9:41 AM 100%

shop.lululemon.com

WOMEN MEN INSPIRATION PROFILE MY BAG 0

NEW

Everything Bag

$128.00 USD SKU #

WHY WE MADE THIS

This bag was designed to be your catch-all on jam-packe...

CARE + FABRIC:

3 COLOURS

SELECTED COLOUR: soot light/seal grey

QTY

1

Pay

ADD TO BAG

Pre-Payment

Account creation

Pre-Payment

Account creation

Required registration is a major source of user friction

Pre-Payment

Account creation

Required registration is a major source of user friction

Apple Pay can help reduce abandoned purchases with guest checkout

Pre-Payment

Account creation

Required registration is a major source of user friction

Apple Pay can help reduce abandoned purchases with guest checkout

Leverage information collected in the Apple Pay sheet to create accounts post purchase

Payment

The Apple Pay Sheet

Payment

The Apple Pay Sheet

The Apple Pay sheet offers a flexible payment flow for merchants

Payment

The Apple Pay Sheet

The Apple Pay sheet offers a flexible payment flow for merchants

But a consistent experience for users

Pay

Cancel

CARD CAPITAL ONE BANK DEBIT (•••• 3824)

SHIPPING JOHN APPLESEED
1035 STEVENS CREEK BOULEVARD
CUPERTINO, CA 95104

METHOD FREE 5 DAY DELIVERY - $0.00
ARRIVES MARCH 25

CONTACT J.APPLESEED@ICLOUD.COM

SUBTOTAL	$32.00
SHIPPING	$0.00
PAY LULULEMON	$32.00

Confirm on iPhone

Pay

Cancel

CARD CAPITAL ONE BANK DEBIT (•••• 3824)

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1035 STEVENS CREEK BOULEVARD
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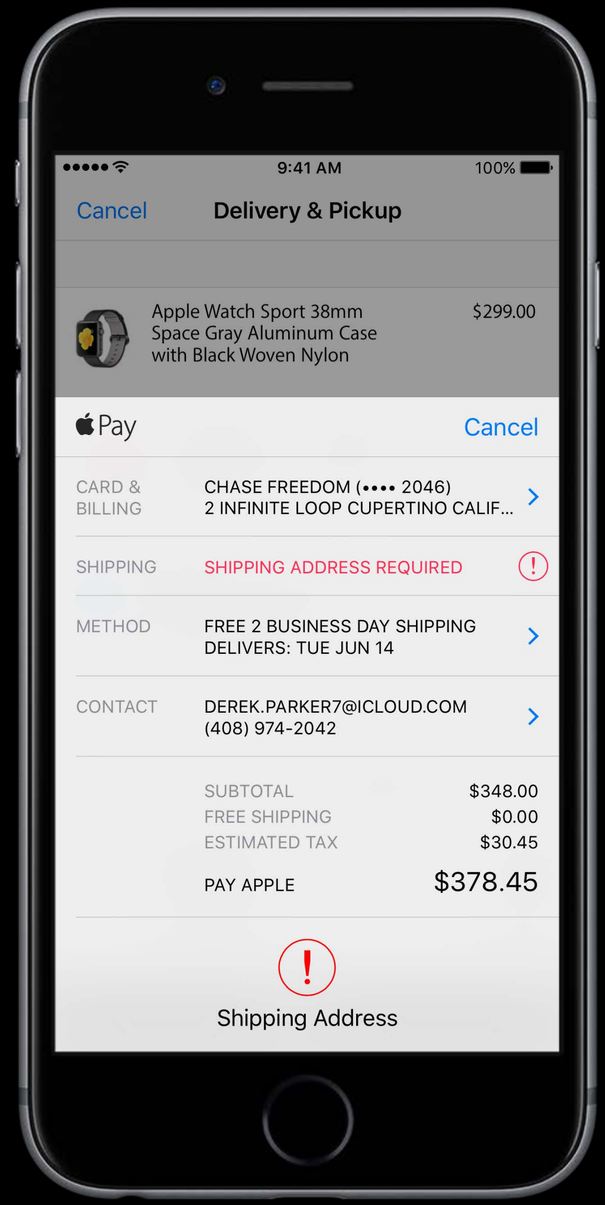
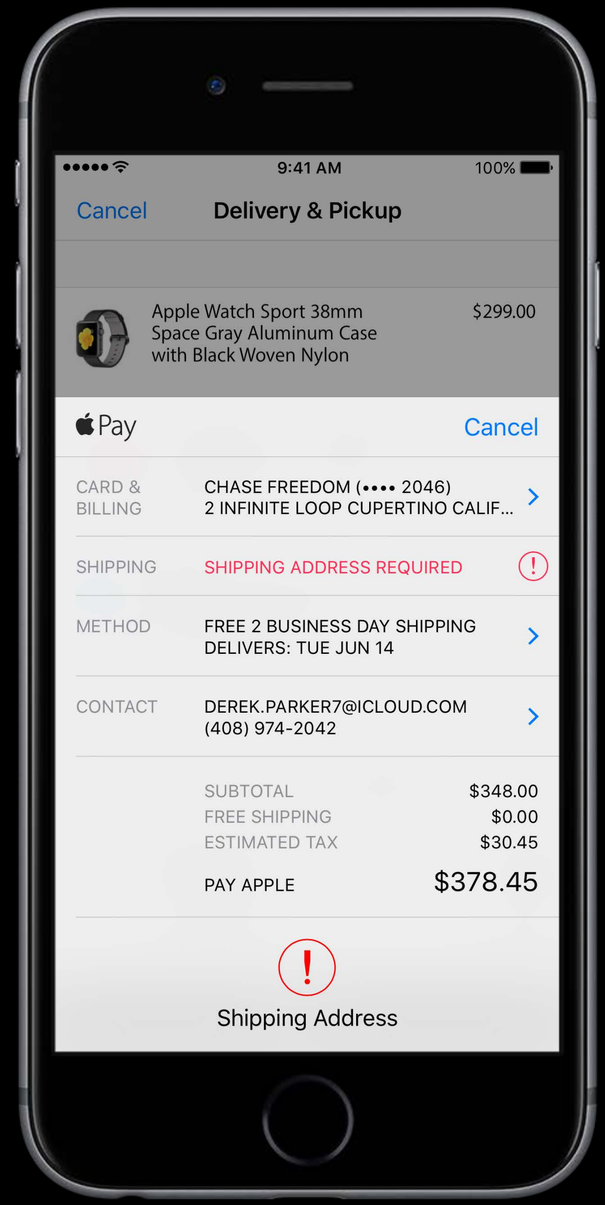
Confirm on iPhone

Requesting Information



Requesting Information

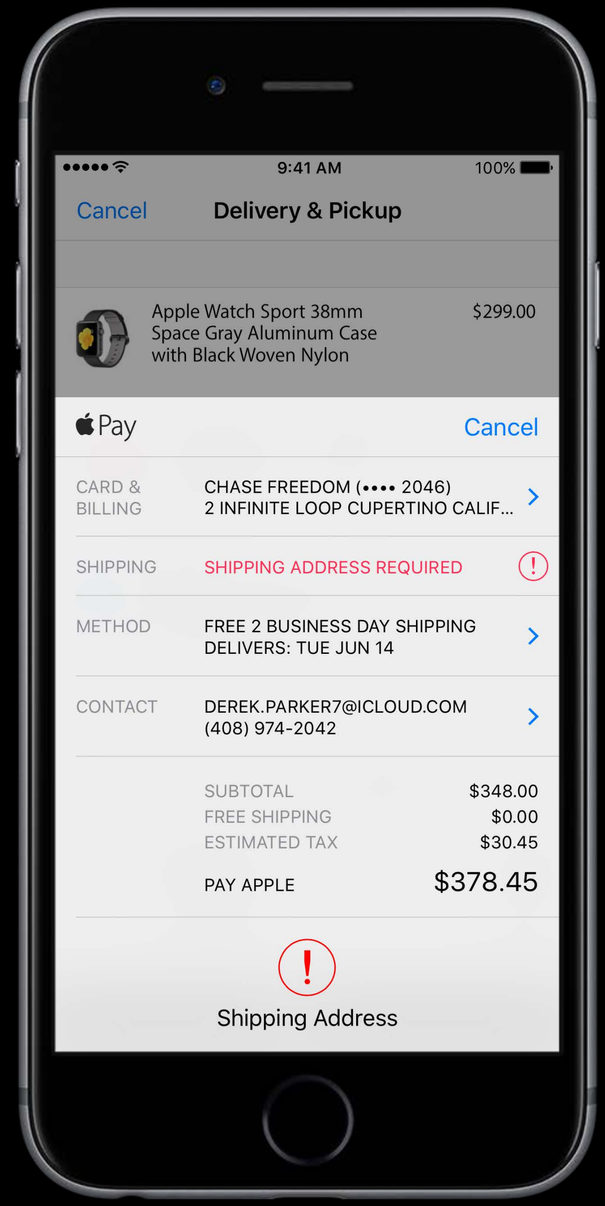
Request billing, shipping, and contact info if needed



Requesting Information

Request billing, shipping, and contact info if needed

Specify shipping method or pickup

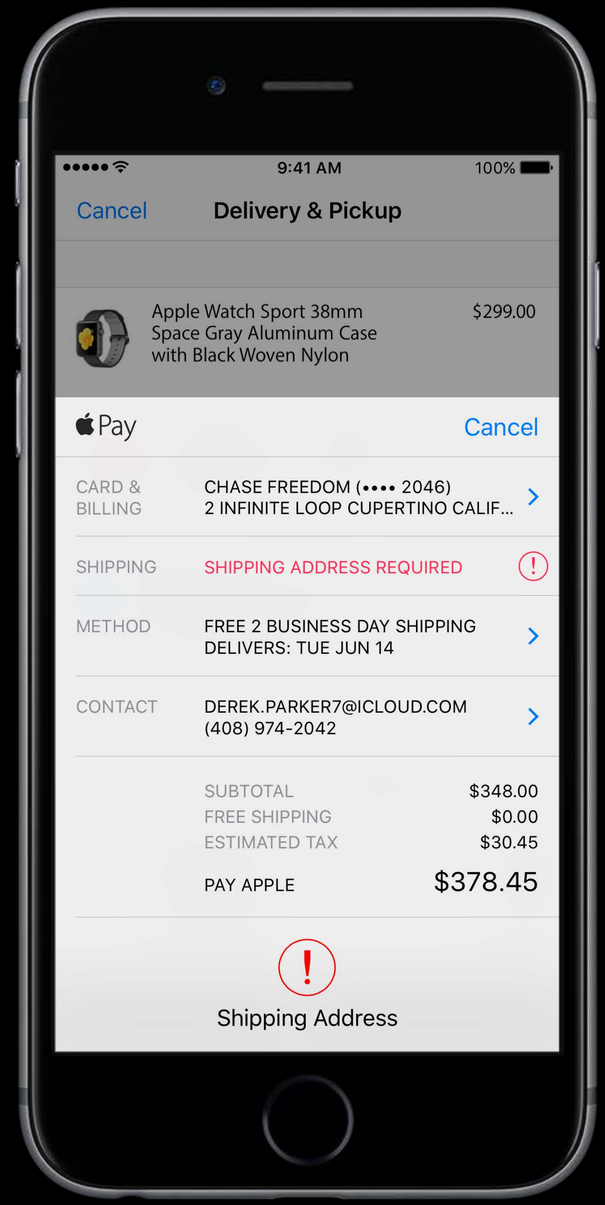


Requesting Information

Request billing, shipping, and contact info if needed

Specify shipping method or pickup

List shipping cost, tax, or discounts after the subtotal



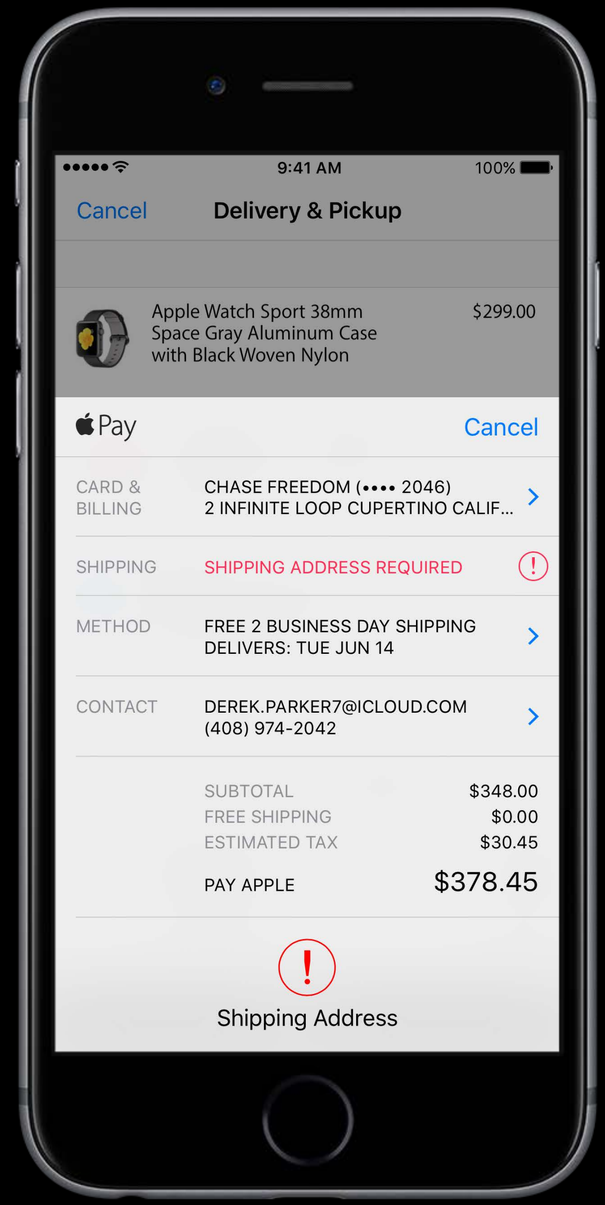
Requesting Information

Request billing, shipping, and contact info if needed

Specify shipping method or pickup

List shipping cost, tax, or discounts after the subtotal

Make sure you have a clear privacy policy



Pay

Cancel

CARD CAPITAL ONE BANK DEBIT (•••• 3824)

SHIPPING JOHN APPLESEED
1035 STEVENS CREEK BOULEVARD
CUPERTINO, CA 95104

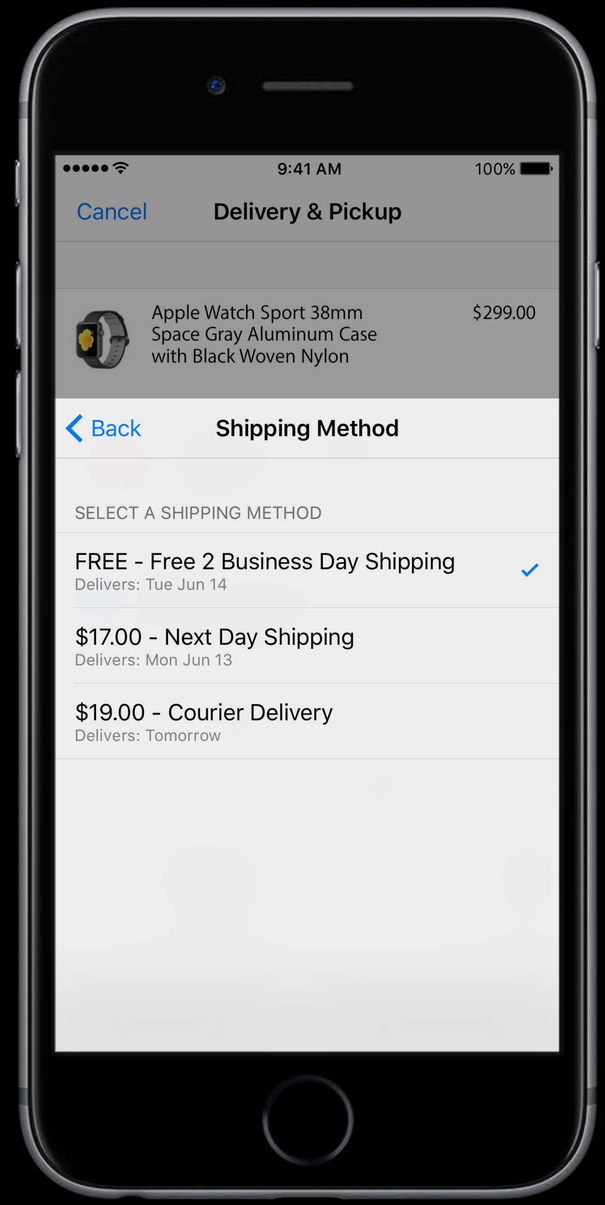
METHOD FREE 5 DAY DELIVERY - $0.00
ARRIVES MARCH 25

CONTACT J.APPLESEED@ICLOUD.COM

SUBTOTAL	$32.00
SHIPPING	$0.00
PAY LULULEMON	$32.00

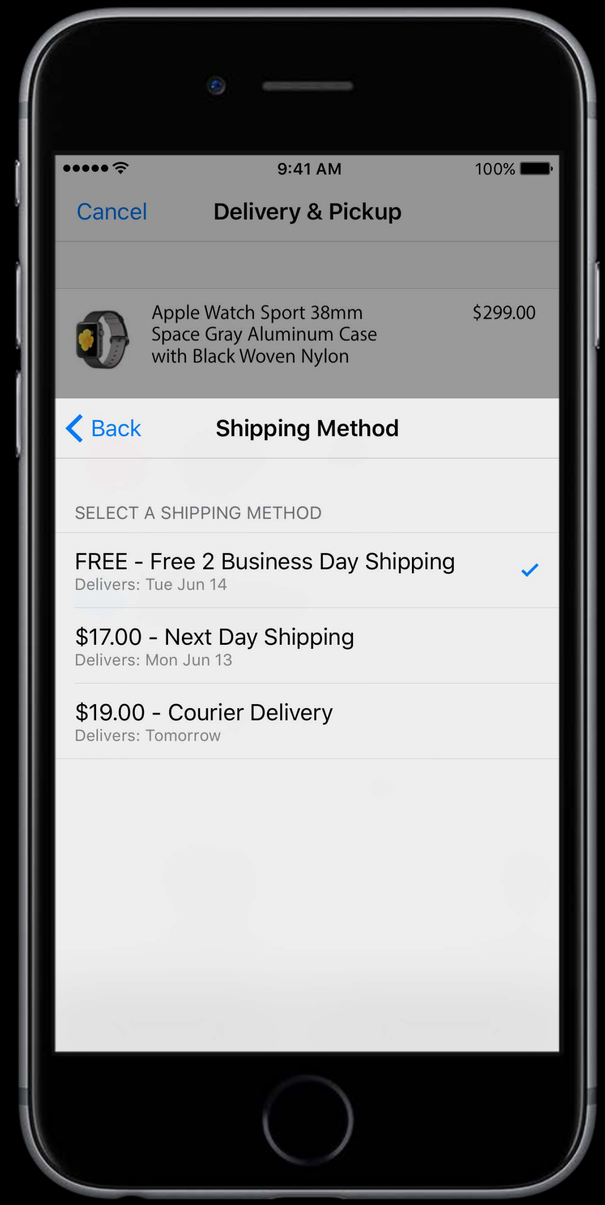
Confirm on iPhone

Shipping Method



Shipping Method

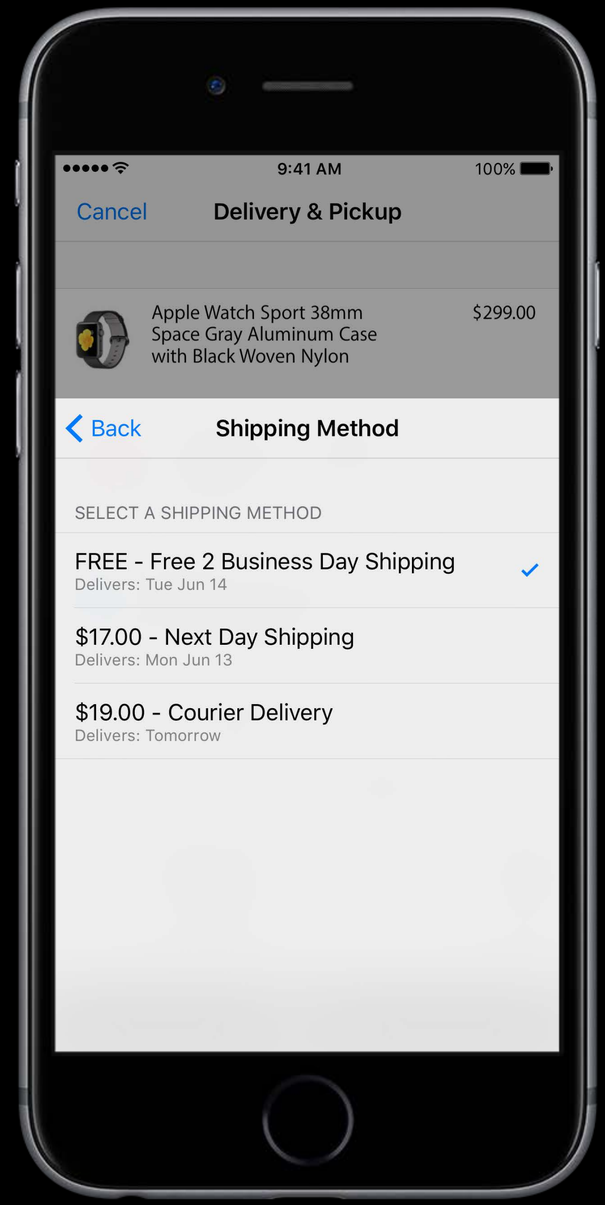
Users can pick from a provided list of methods



Shipping Method

Users can pick from a provided list of methods

Methods can be updated in response to address changes

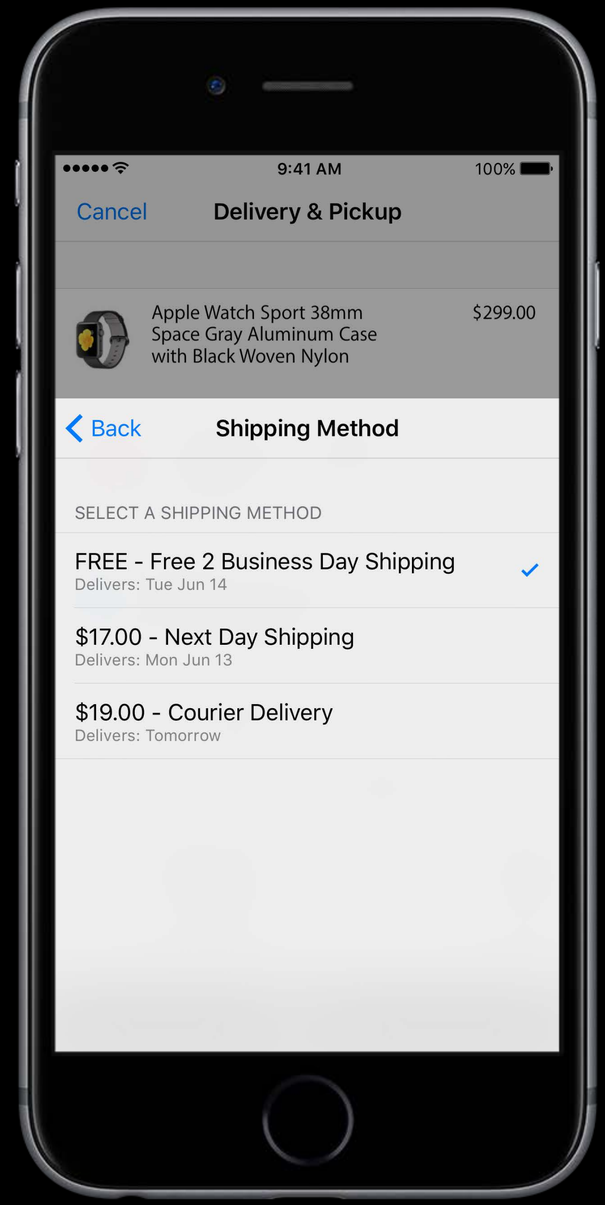


Shipping Method

Users can pick from a provided list of methods

Methods can be updated in response to address changes

Methods can be free



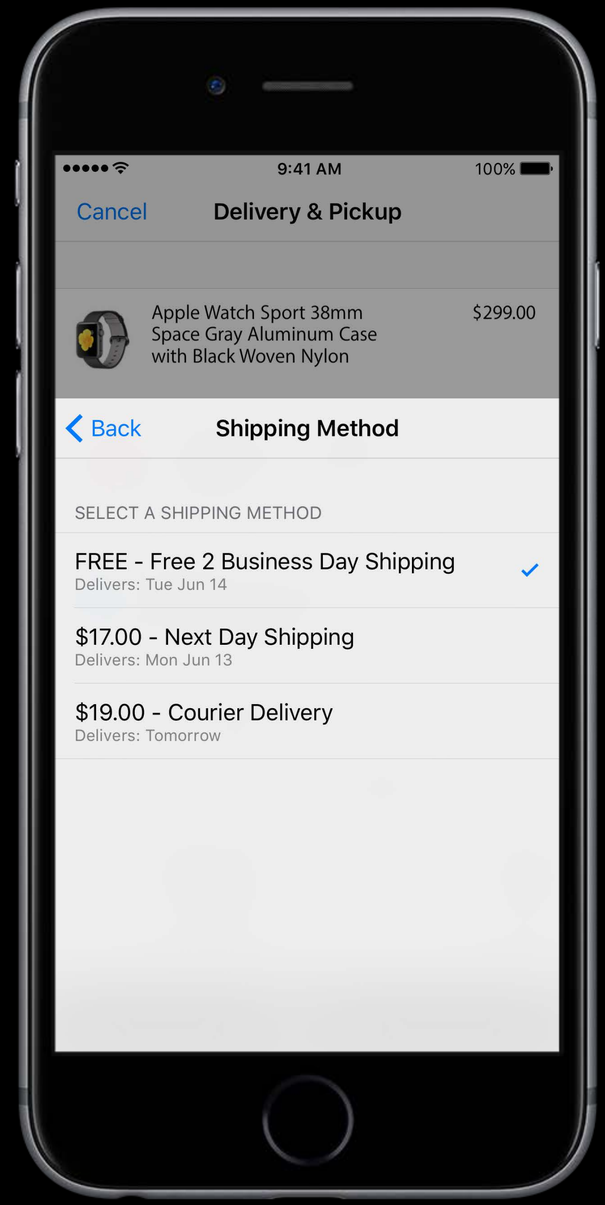
Shipping Method

Users can pick from a provided list of methods

Methods can be updated in response to address changes

Methods can be free

Naming can be customized: shipping, pickup, and delivery



Pay

Cancel

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1035 STEVENS CREEK BOULEVARD
CUPERTINO, CA 95104

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ARRIVES MARCH 25

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SUBTOTAL $32.00
SHIPPING $0.00

PAY LULULEMON $32.00

Confirm on iPhone

Pay

Cancel

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Confirm on iPhone

Summary Items

What to display

Summary Items

What to display

Use the summary items as a concise indication of what's to be charged

Summary Items

What to display

Use the summary items as a concise indication of what's to be charged

Sub-totals, taxes, shipping, discounts

Summary Items

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Use the summary items as a concise indication of what's to be charged

Sub-totals, taxes, shipping, discounts

Not a line by line itemized list

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Not a line by line itemized list

Keep it concise

Summary Items

What to display

Use the summary items as a concise indication of what's to be charged

Sub-totals, taxes, shipping, discounts

Not a line by line itemized list

Keep it concise

Be up-front and clear about charges

Summary Items

Unknown amounts

Summary Items

Unknown amounts

Sometimes you don't know the final cost

Summary Items

Unknown amounts

Sometimes you don't know the final cost

Use the pending item type to indicate this

Summary Items

Unknown amounts

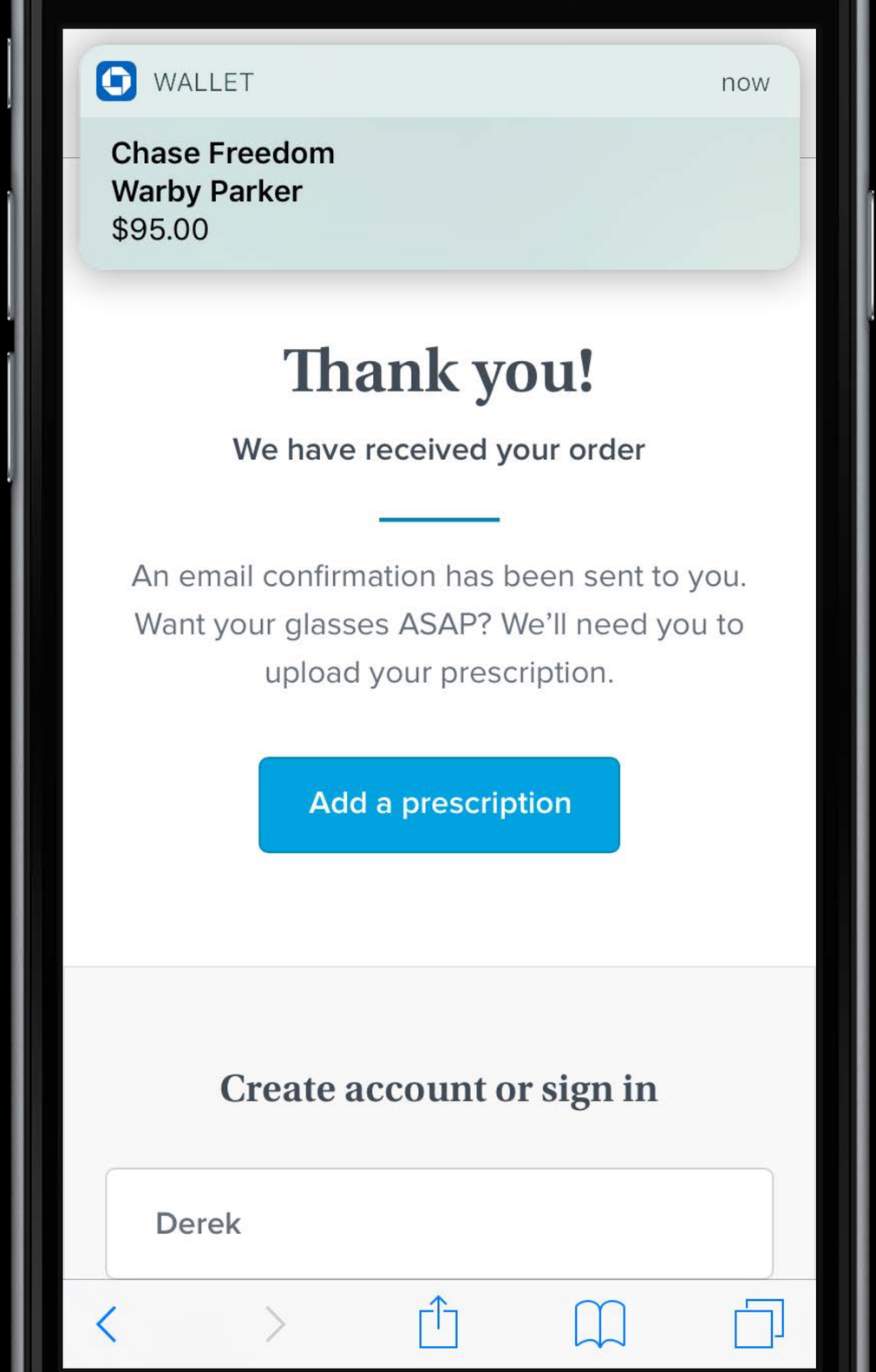
Sometimes you don't know the final cost

Use the pending item type to indicate this

Make estimates clear

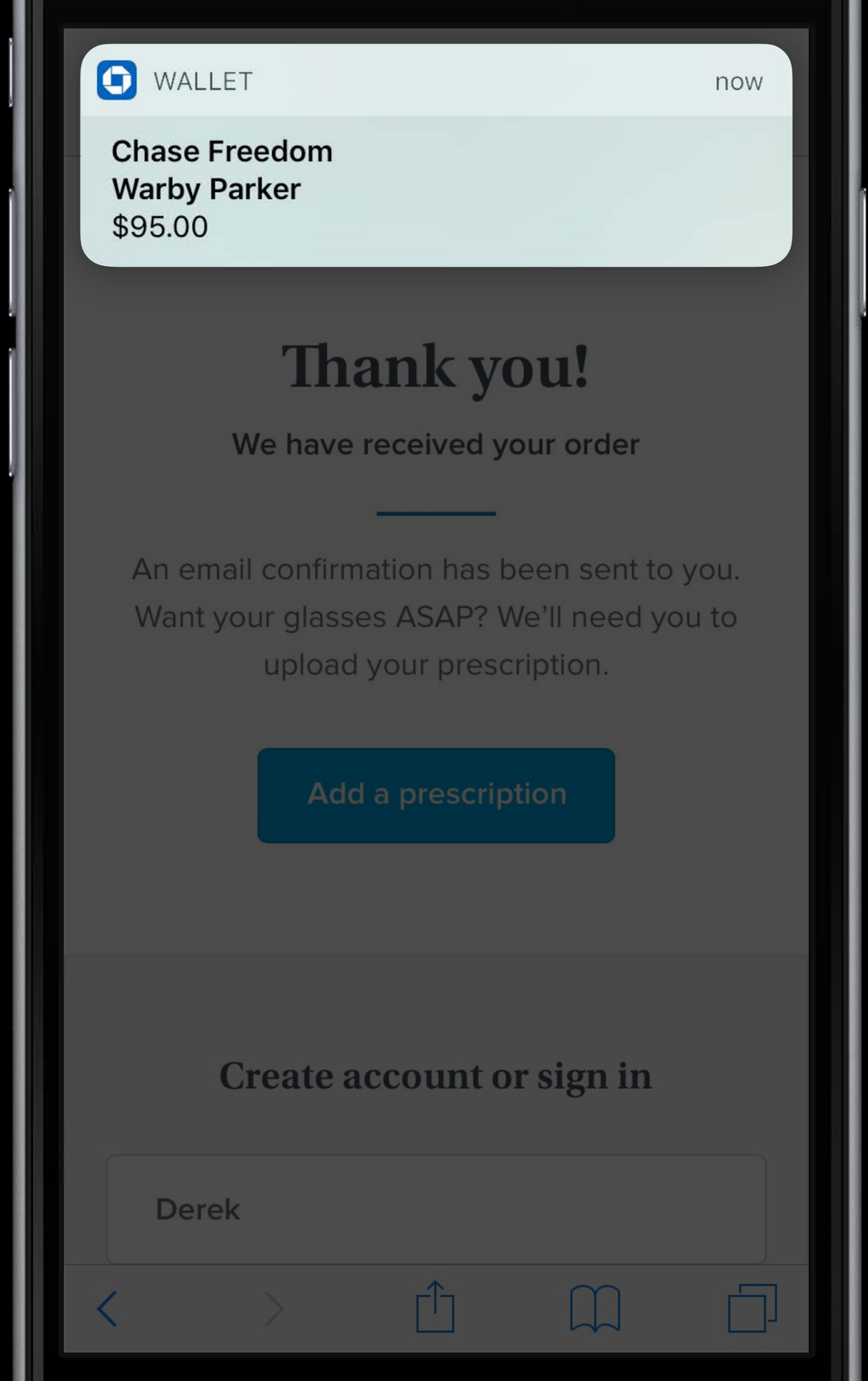
Summary Items

Clear estimates



Summary Items

Clear estimates



Summary Items

Free and discounted items

Summary Items

Free and discounted items

Items can be marked as free

Summary Items

Free and discounted items

Items can be marked as free

Items may also be negative, except for the total

Pay

Cancel

CARD CAPITAL ONE BANK DEBIT (•••• 3824)

SHIPPING JOHN APPLESEED
1035 STEVENS CREEK BOULEVARD
CUPERTINO, CA 95104

METHOD FREE 5 DAY DELIVERY - $0.00
ARRIVES MARCH 25

CONTACT J.APPLESEED@ICLOUD.COM

SUBTOTAL $32.00
SHIPPING $0.00

PAY LULULEMON $32.00

Confirm on iPhone

9:41 AM 100%

Pay Cancel

WP

$95.00

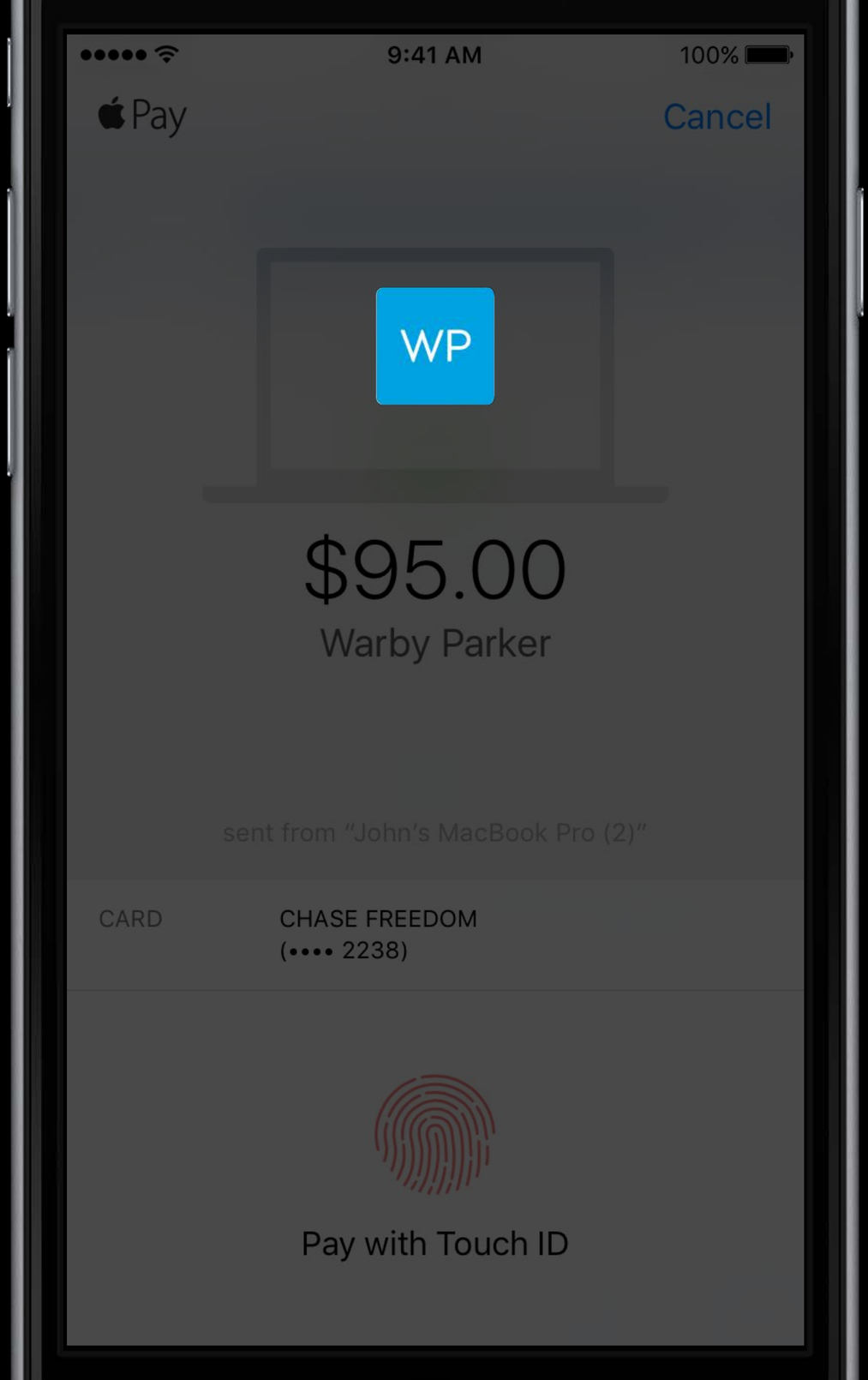
Warby Parker

sent from “John’s MacBook Pro (2)”

CARD CHASE FREEDOM
(•••• 2238)

Pay with Touch ID

Site Icon


9:41 AM
100%
Pay
Cancel
WP
$95.00
Warby Parker
sent from “John’s MacBook Pro (2)”
CARD
CHASE FREEDOM
(•••• 2238)
Pay with Touch ID

Site Icon

Site Icon

Uses the existing Apple Touch icon

Site Icon

Uses the existing Apple Touch icon

Provide in 180x180 and 120x120 sizes

Site Icon

Uses the existing Apple Touch icon

Provide in 180x180 and 120x120 sizes

```
<link rel="apple-touch-icon" sizes="120x120" href="touch-icon@2x.png">
```

Site Icon

Uses the existing Apple Touch icon

Provide in 180x180 and 120x120 sizes

```
<link rel="apple-touch-icon" sizes="120x120" href="touch-icon@2x.png">
<link rel="apple-touch-icon" sizes="180x180" href="touch-icon@3x.png">
```

Apple Pay Tips

Semantic markup

Indicate your site takes Apple Pay with appropriate semantic markup

```
<!-- Open Graph -->
<meta property="og:type"  content="og:product />
<meta property="og:title" content="Apple Watch" />
<meta property="product:price:amount"  content="249.99" />
<meta property="product:price:currency" content="USD" />
<meta property="product:payment_method" content="ApplePay" />
```

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<meta property="og:title" content="Apple Watch" />
<meta property="product:price:amount"  content="249.99" />
<meta property="product:price:currency" content="USD" />
<meta property="product:payment_method" content="ApplePay" />
```

Post Payment

Confirmation

Post Payment

Confirmation

Reflect the appropriate status in the Apple Pay sheet

Post Payment

Confirmation

Reflect the appropriate status in the Apple Pay sheet

Leverage information collected via Apple Pay sheet to offer account creation

iPad 9:41 AM 100%
shop.lululemon.com

Thank You Derek

Your order is complete. We'll send you an email confirmation shortly.

Order Confirmation Number:

45725994

What's Next?

WANT TO MAKE CHANGES?

You can cancel your order within one hour of placing it. Get in touch with us and we'll take care of everything.

CALL US
1.877.263.9300

CHAT NOW

ORDER ID
45725994

CREATE AN ACCOUNT

* Email Address

derek.parker7@icloud.com

* Password

8 characters 1 lowercase
1 uppercase 1 digit

Sign me up for lululemon emails (you can unsubscribe at any time). See our terms and conditions for details.

CREATE ACCOUNT

We are processing these items:

iPad 9:41 AM 100%

shop.lululemon.com

Thank You Derek

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45725994

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derek.parker7@icloud.com

* Password

8 characters 1 lowercase
1 uppercase 1 digit

Sign me up for lululemon emails (you can unsubscribe at any time). See our terms and conditions for details.

CREATE ACCOUNT

We are processing these items:

Pay

Summary

Summary

Apple Pay Merchant Validation on the web

Summary

Apple Pay Merchant Validation on the web

ApplePaySession JavaScript API

Summary

Apple Pay Merchant Validation on the web

ApplePaySession JavaScript API

Taking advantage of Apple Pay in your designs

More Information

https://developer.apple.com/wwdc16/703

Related Sessions

What's New with Wallet & Apple Pay	Mission	Tuesday 3:00PM
Optimizing Web Content in Your App	Mission	Friday 4:00PM

Labs

Apple Pay Lab 1	Frameworks Lab B	Tuesday 4:00PM
Apple Pay Lab 2	Frameworks Lab D	Wednesday 9:00AM
Safari & WebKit Lab	Fort Mason	Wednesday 4:30PM
Safari & WebKit Lab	Frameworks Lab C	Friday 4:30PM

WWDC16