#WWDC18

Siri Shortcuts on the Siri Watch Face

Session 217

Paul Salzman, watchOS Engineer
Josh Ford, watchOS Engineer


WED 6
10:09
Lafayette
11AM
11:30AM
Meet with Ryan
Philz Coffee


WED 6
10:09
Lafayette
11AM
11:30AM
Meet with Ryan
Philz Coffee


WED 6
10:09
10% Happier
Your daily dose is here
Lose It!
Log carrots and hummus


WED 6
10:09
10% Happier
Your daily dose is here
Lose It!
Log carrots and hummus


Daily 10%
10:09
Today's Meditation
JUNE 6
Lucy will help you ease into the week by


WED 6
10:09
10% Happier
Your daily dose is here
Lose It!
Log carrots and hummus


Done

Appearing on the Siri watch face

Appearing on the Siri watch face

Relevant Shortcuts

Appearing on the Siri watch face

Relevant Shortcuts

Relevant Shortcuts from iOS

Appearing on the Siri watch face

Relevant Shortcuts

Relevant Shortcuts from iOS

Predicting Shortcuts on watchOS

Appearing on the Siri watch face

Relevant Shortcuts

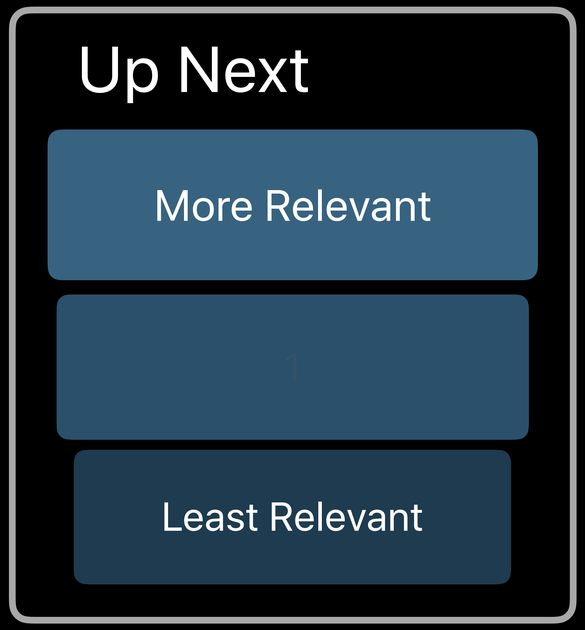
Relevant Shortcuts from iOS

Predicting Shortcuts on watchOS

Making a great experience

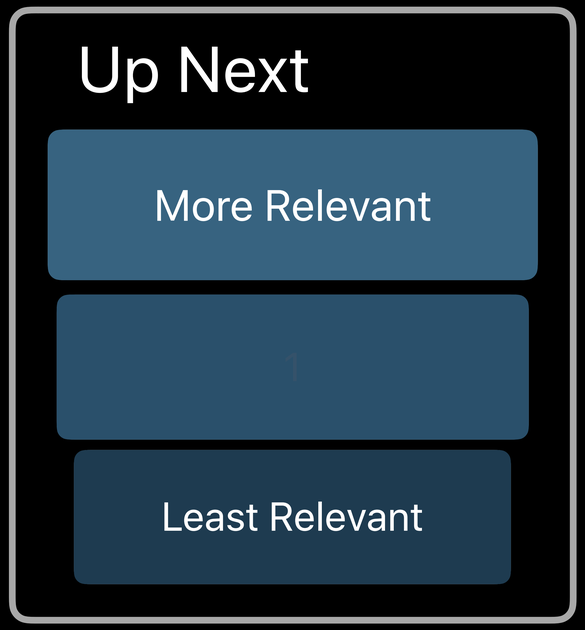
Appearing on the Siri Watch Face

Your Shortcuts on Siri Watch Face



Your Shortcuts on Siri Watch Face

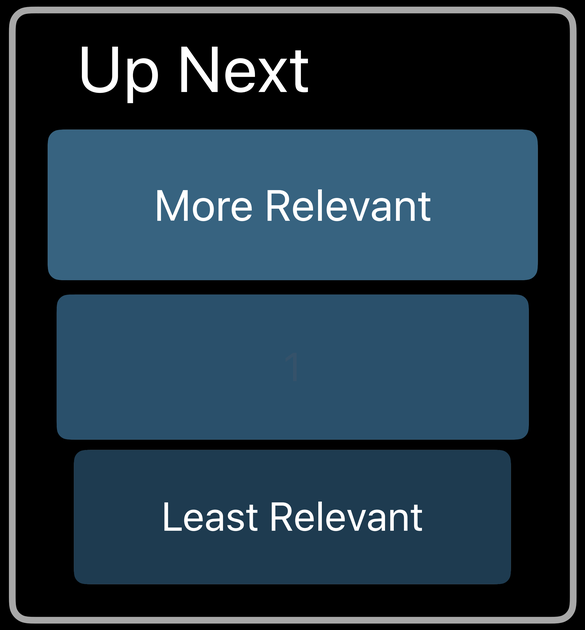
Sorted by relevance



Your Shortcuts on Siri Watch Face

Sorted by relevance

Provide `INRelevantShortcut`

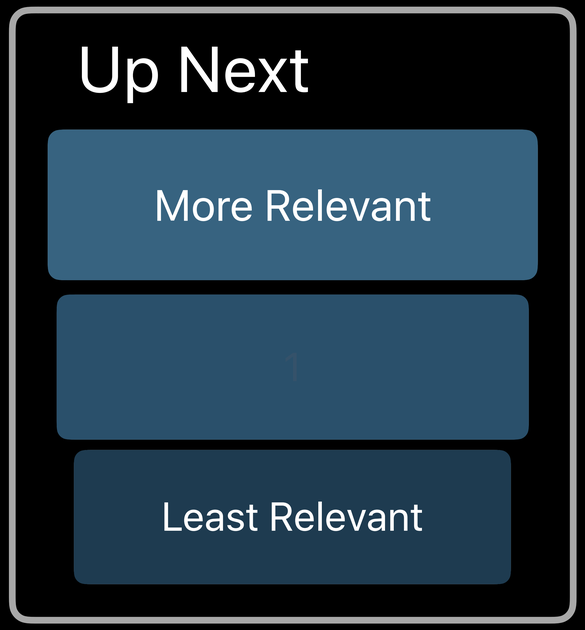


Your Shortcuts on Siri Watch Face

Sorted by relevance

Provide `INRelevantShortcut`

Optional relevance suggestions



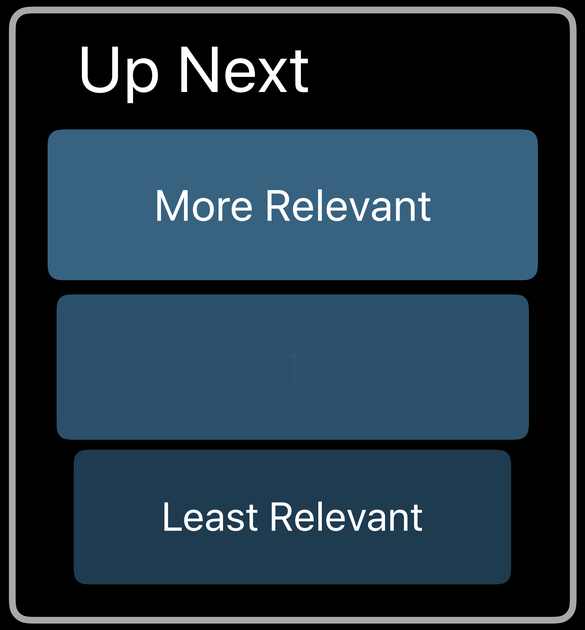
Your Shortcuts on Siri Watch Face

Sorted by relevance

Provide `INRelevantShortcut`

Optional relevance suggestions

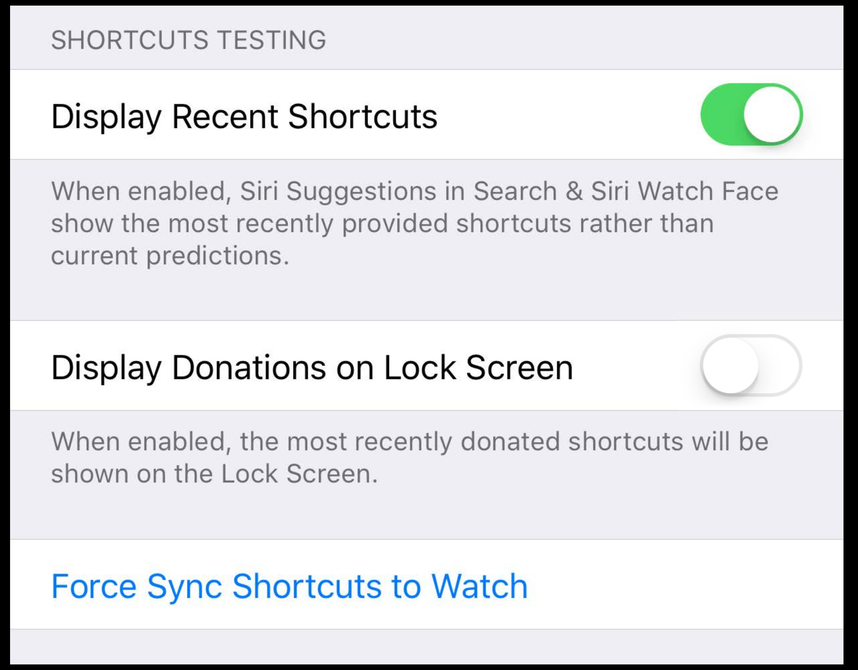
Disable/enable source in iOS face customization



Development Configuration

Development Configuration

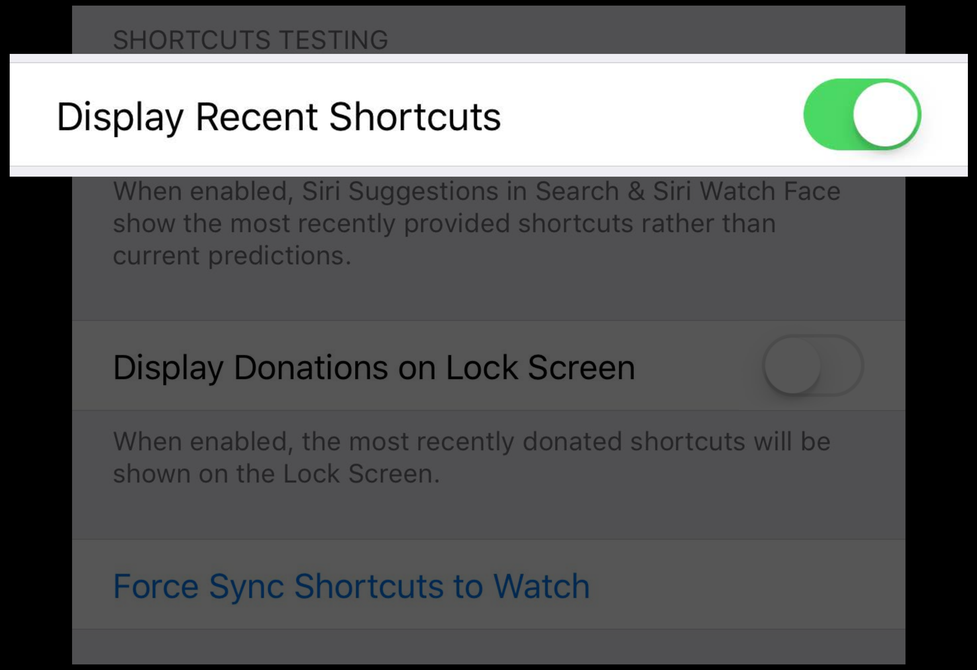
Settings > Developer



Development Configuration

Settings > Developer

Skip relevance calculations

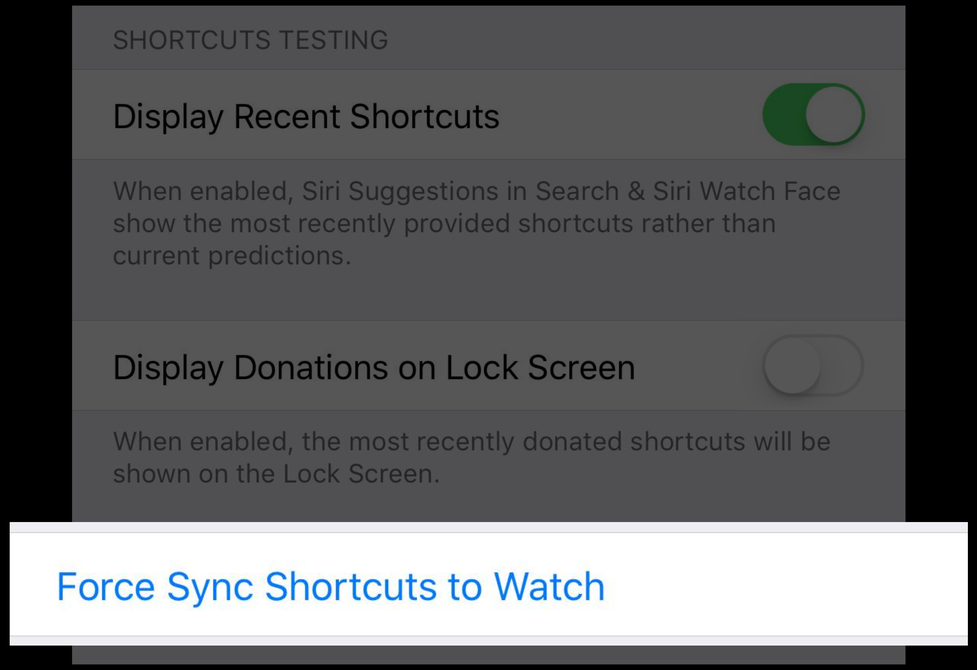


Development Configuration

Settings > Developer

Skip relevance calculations

Bringing iOS shortcuts to watchOS now



Relevant Shortcuts

Shortcuts

Shortcuts

Quick access to key functionality

Shortcuts

Quick access to key functionality

Accessible via voice and UI

Shortcuts

Quick access to key functionality

Accessible via voice and UI

Introduction to Siri Shortcuts	WWDC 2018
Building for Voice with Siri Shortcuts	WWDC 2018

Shortcuts

Shortcuts

User activities

Shortcuts

User activities

Intents

Shortcuts

User activities

Intents

- Built-in

Shortcuts

User activities

Intents

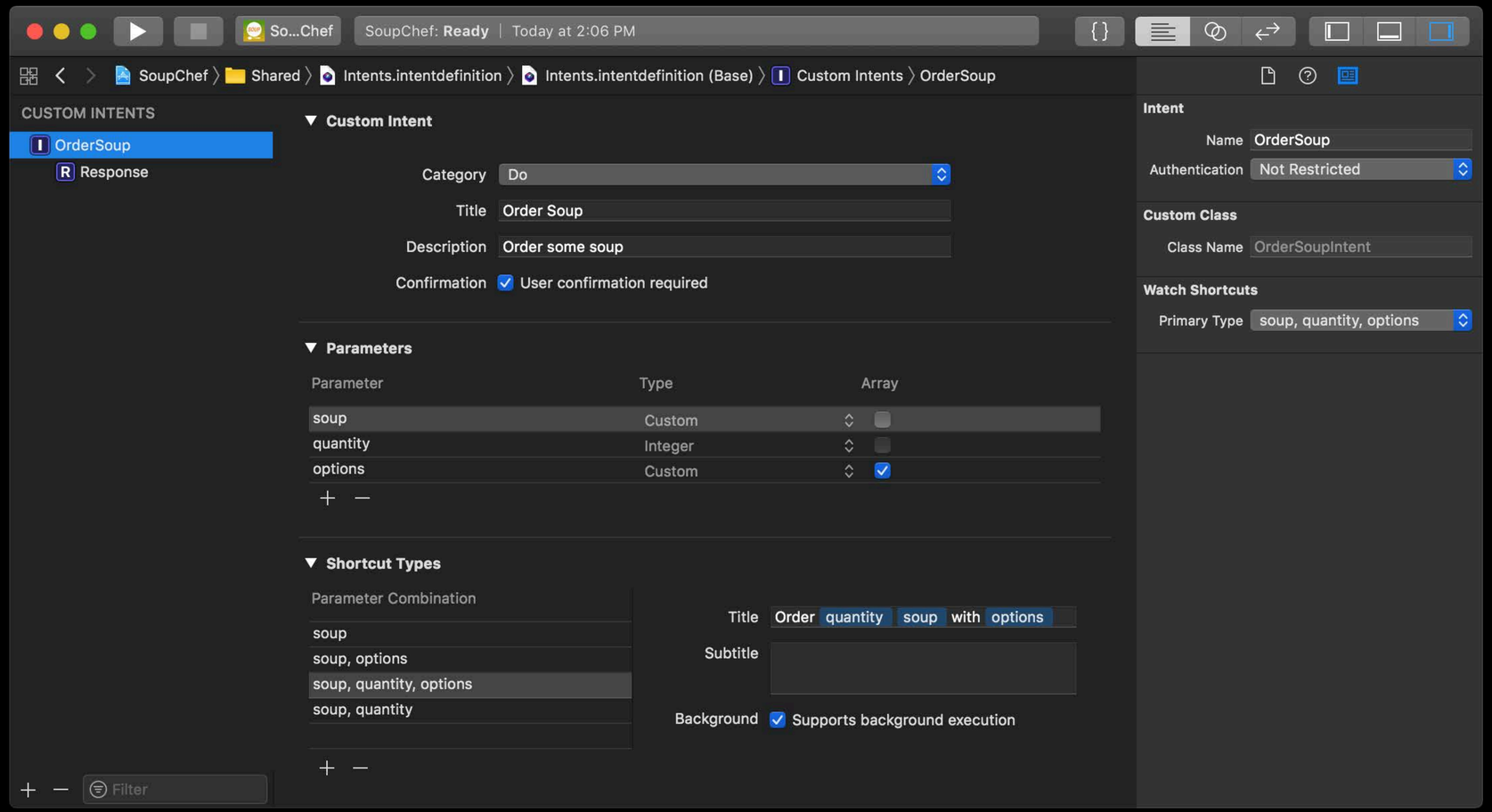
- Built-in
- Custom

Shortcuts

User activities

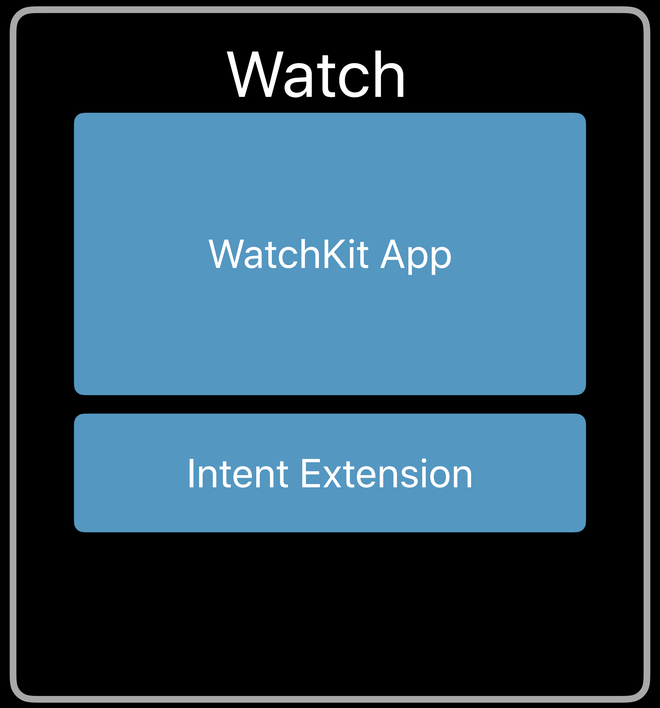
Intents

- Built-in
- Custom



Running Shortcuts on Watch

Supported by watch app



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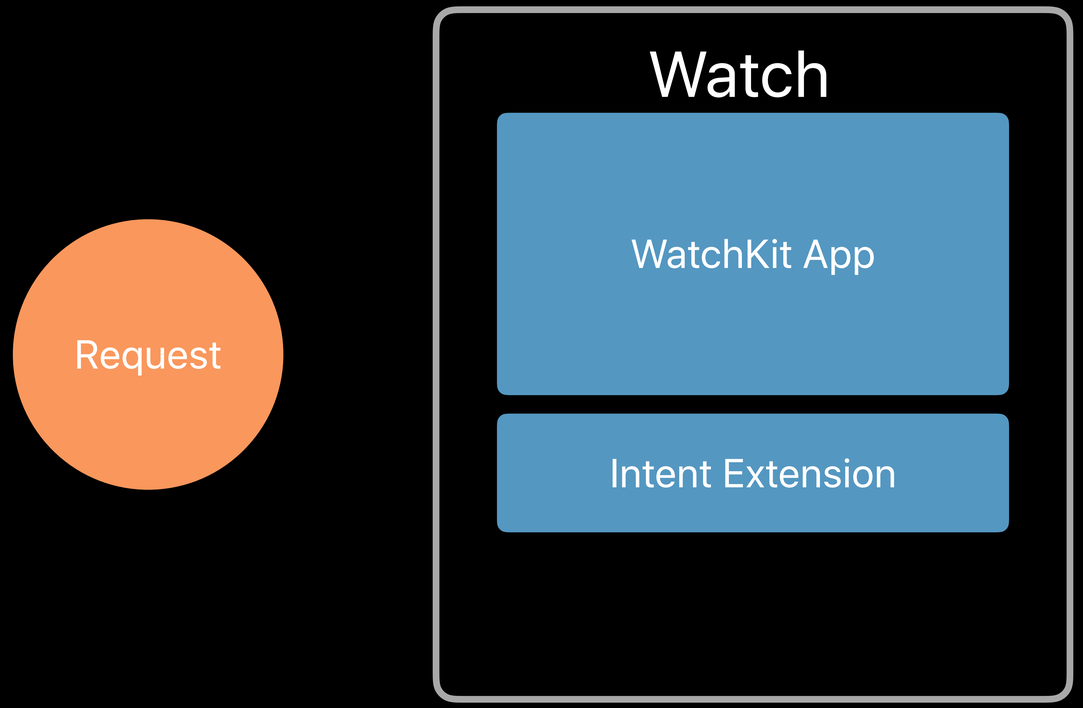

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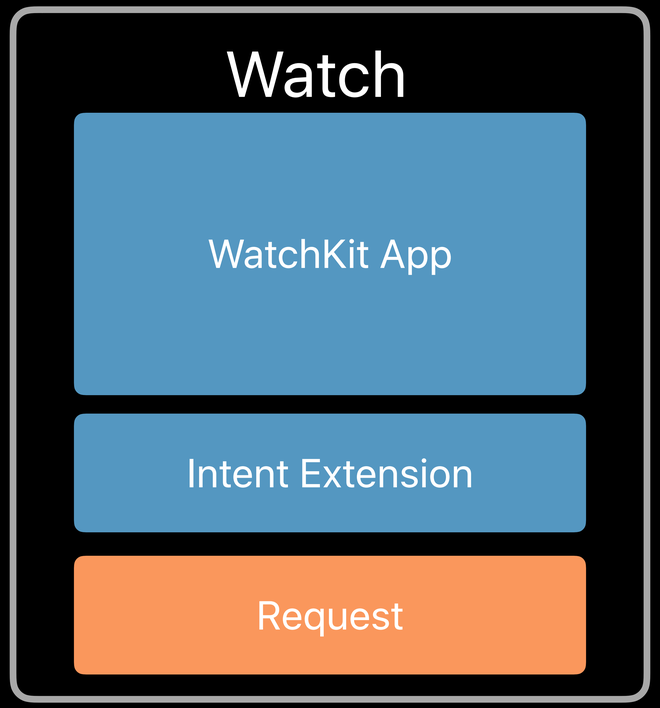

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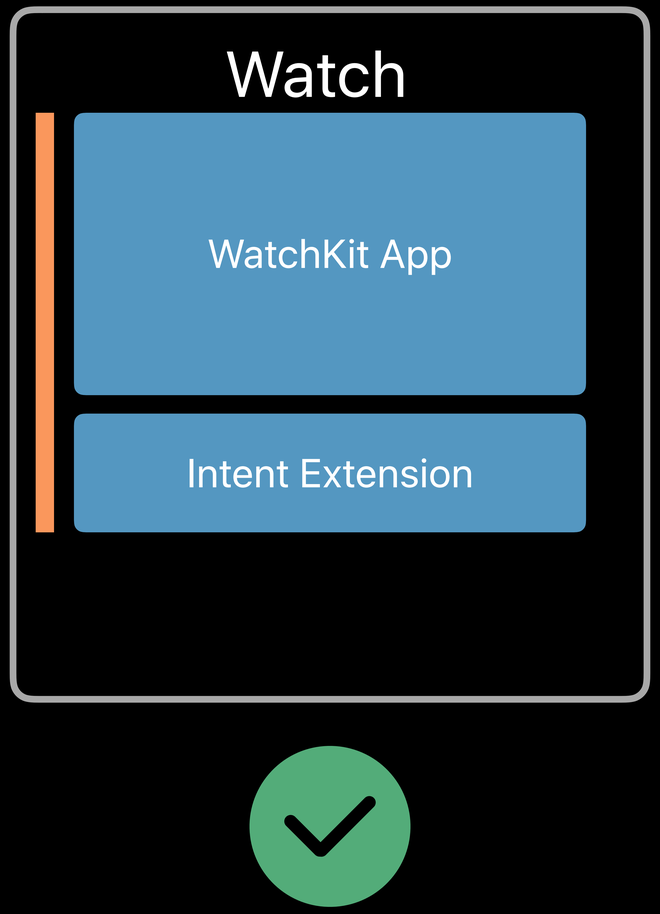

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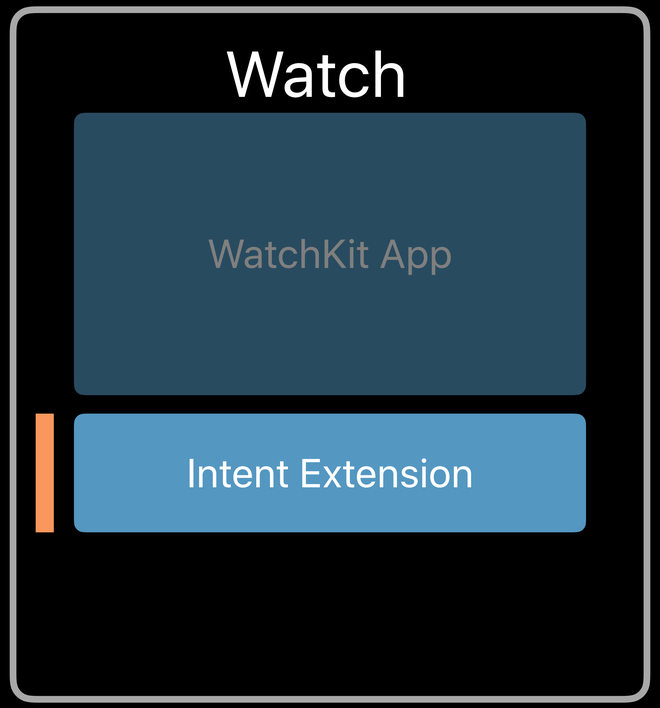

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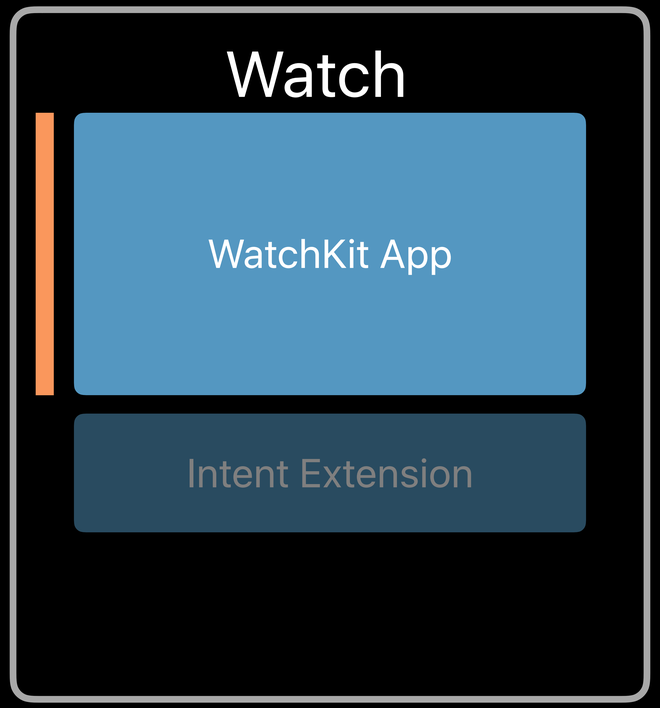

Running Shortcuts on Watch

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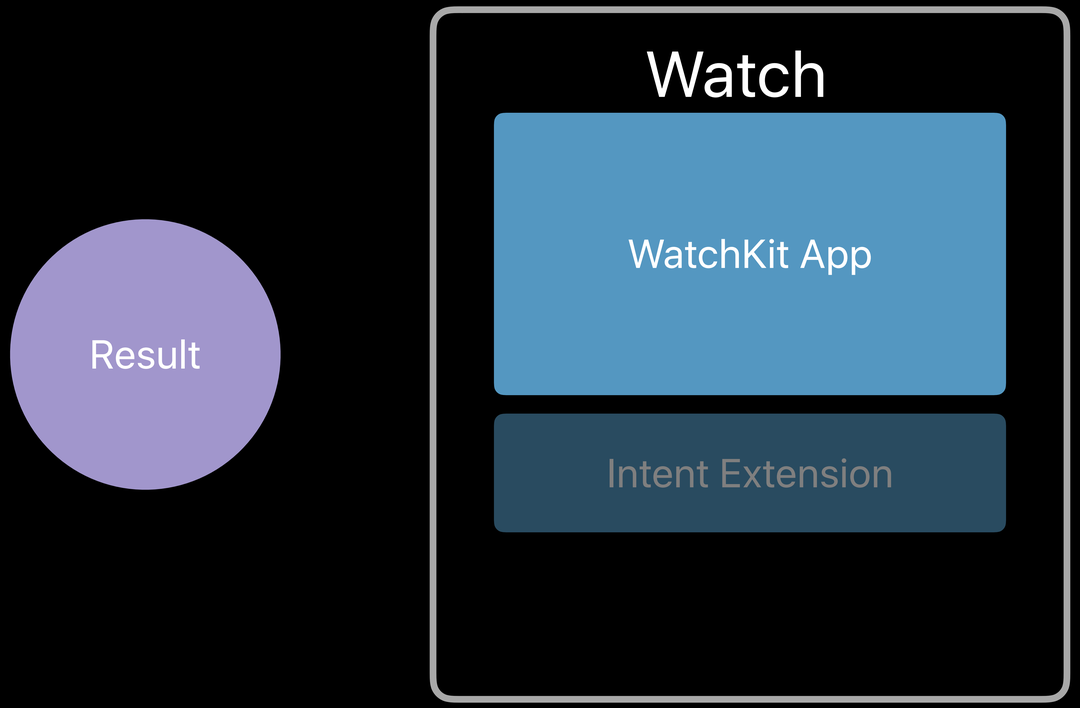
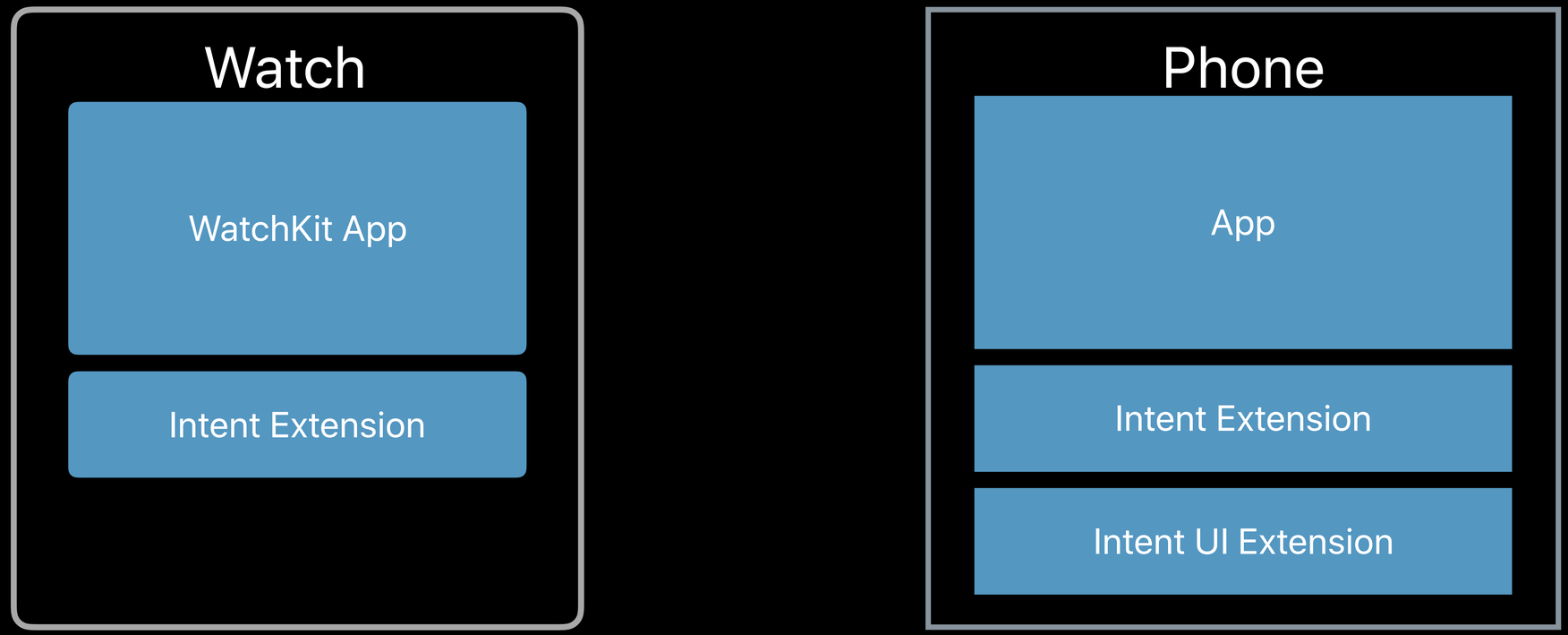


Running Shortcuts on Watch

Not supported by watch app



Running Shortcuts on Watch

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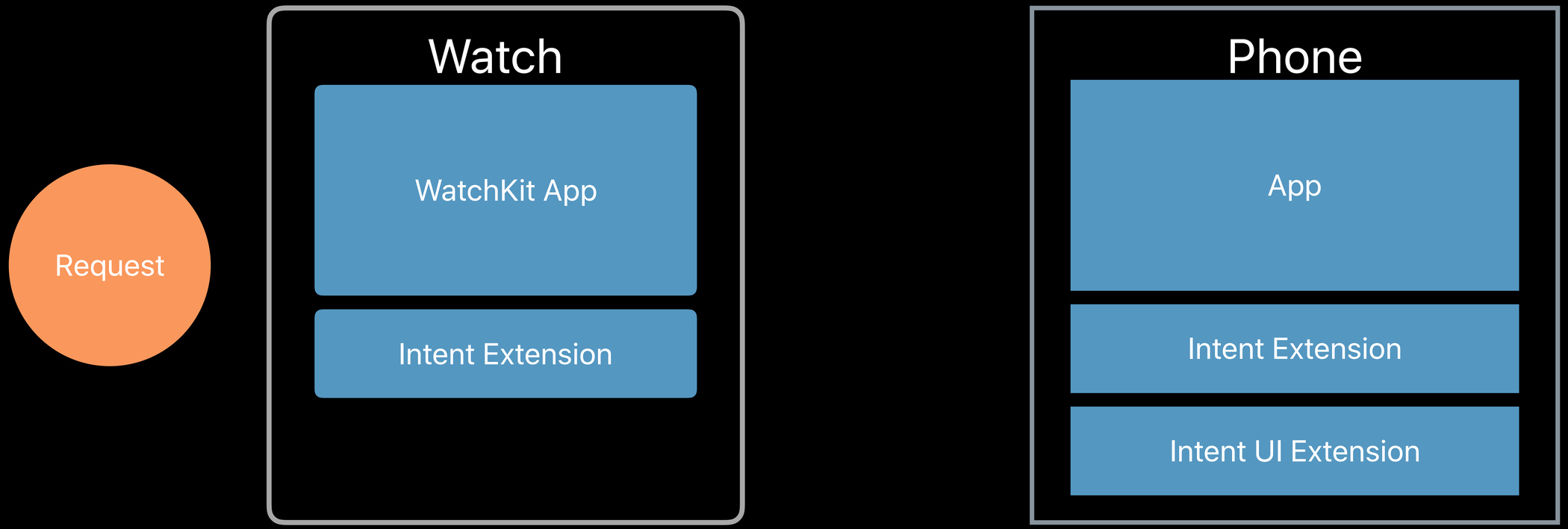

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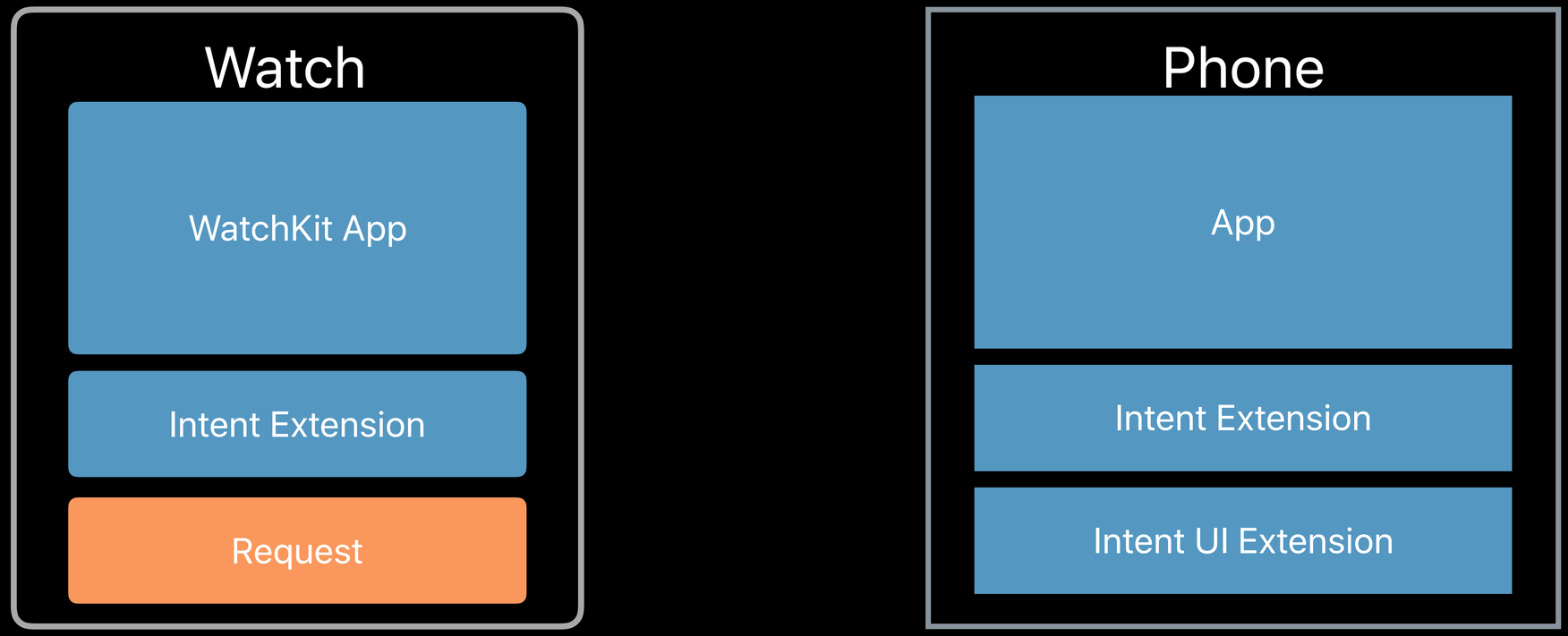

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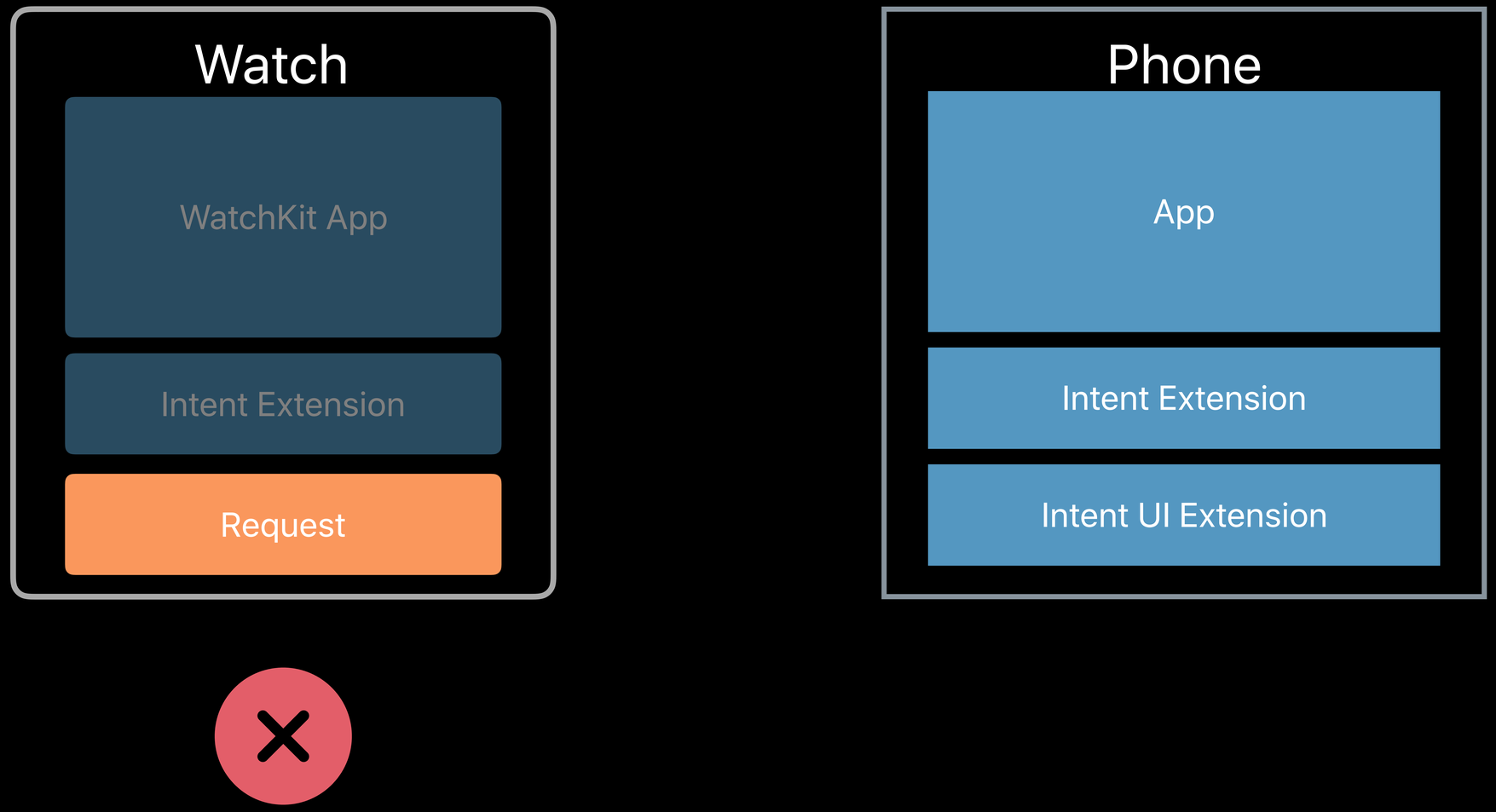

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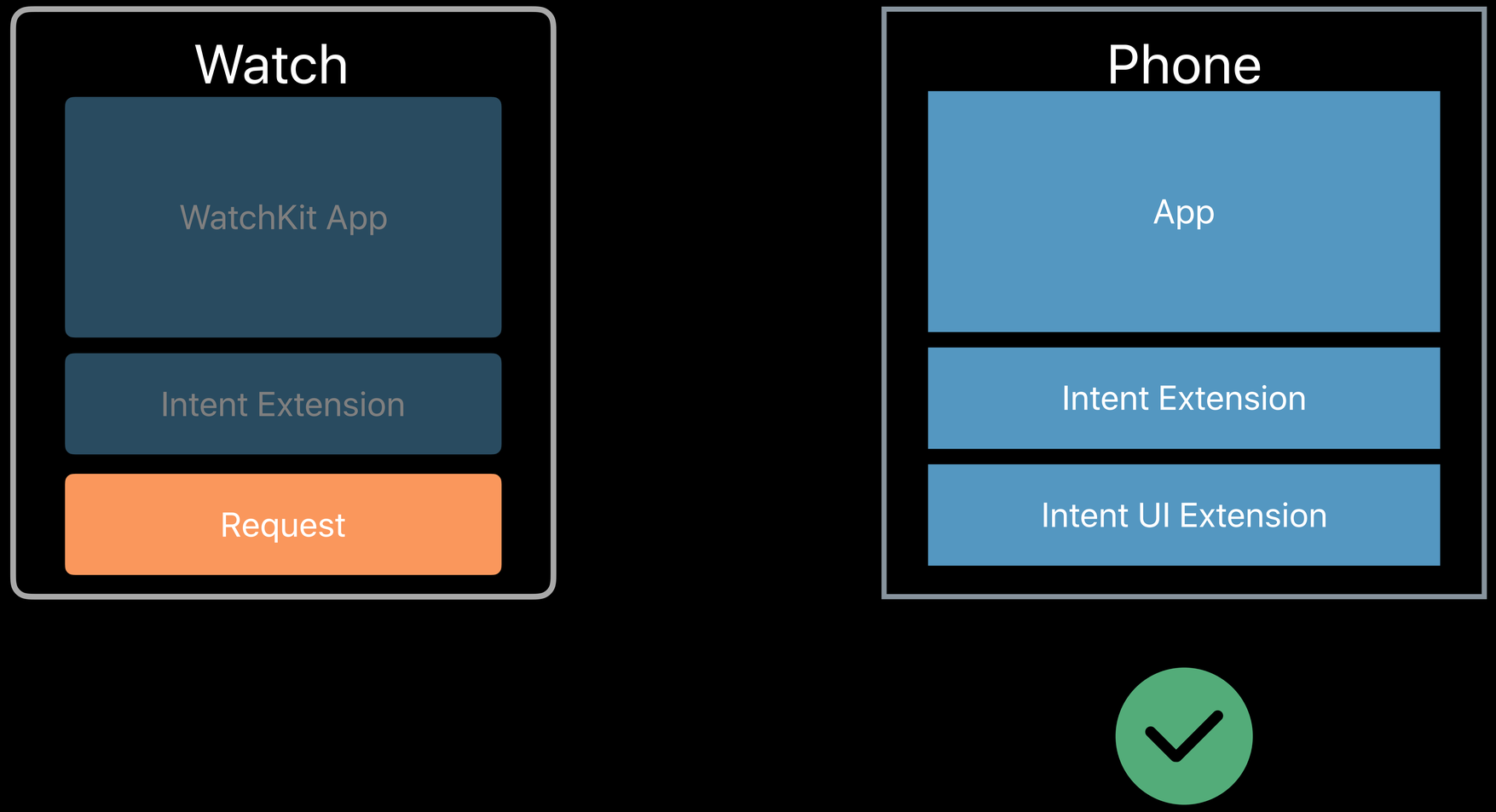

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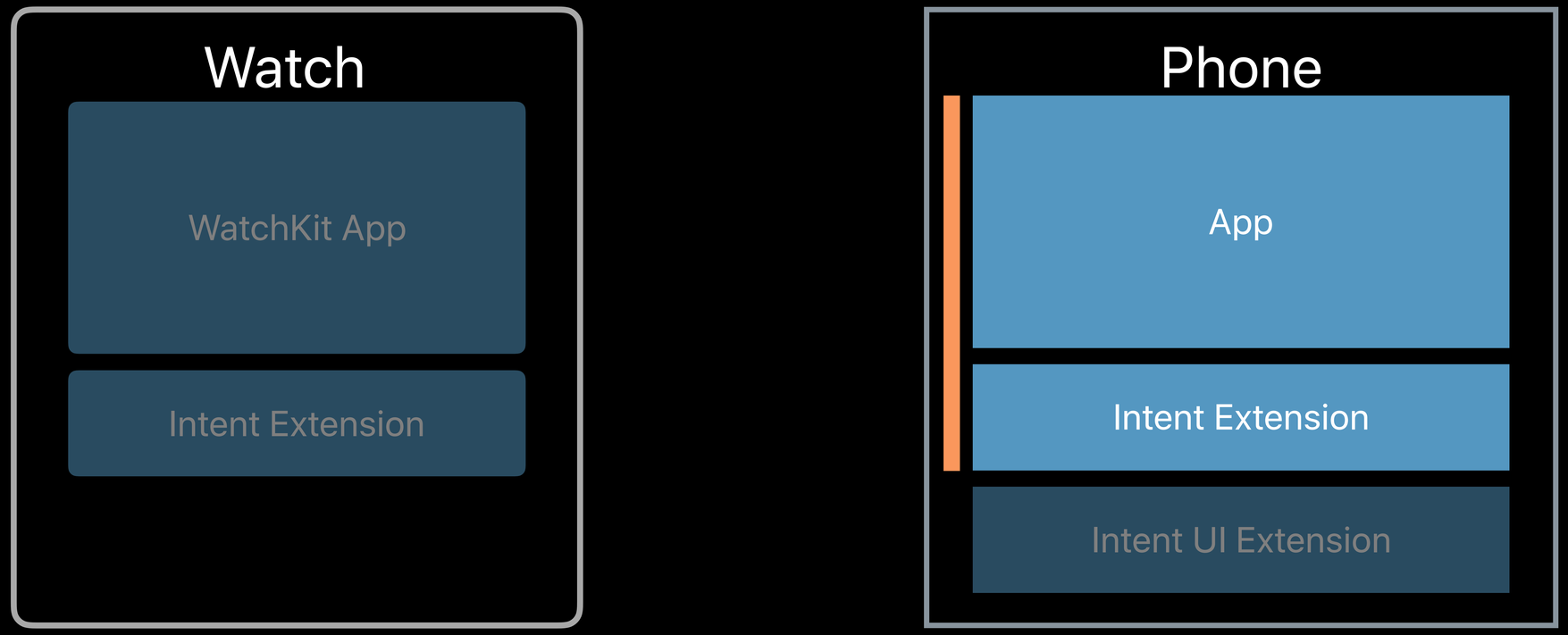

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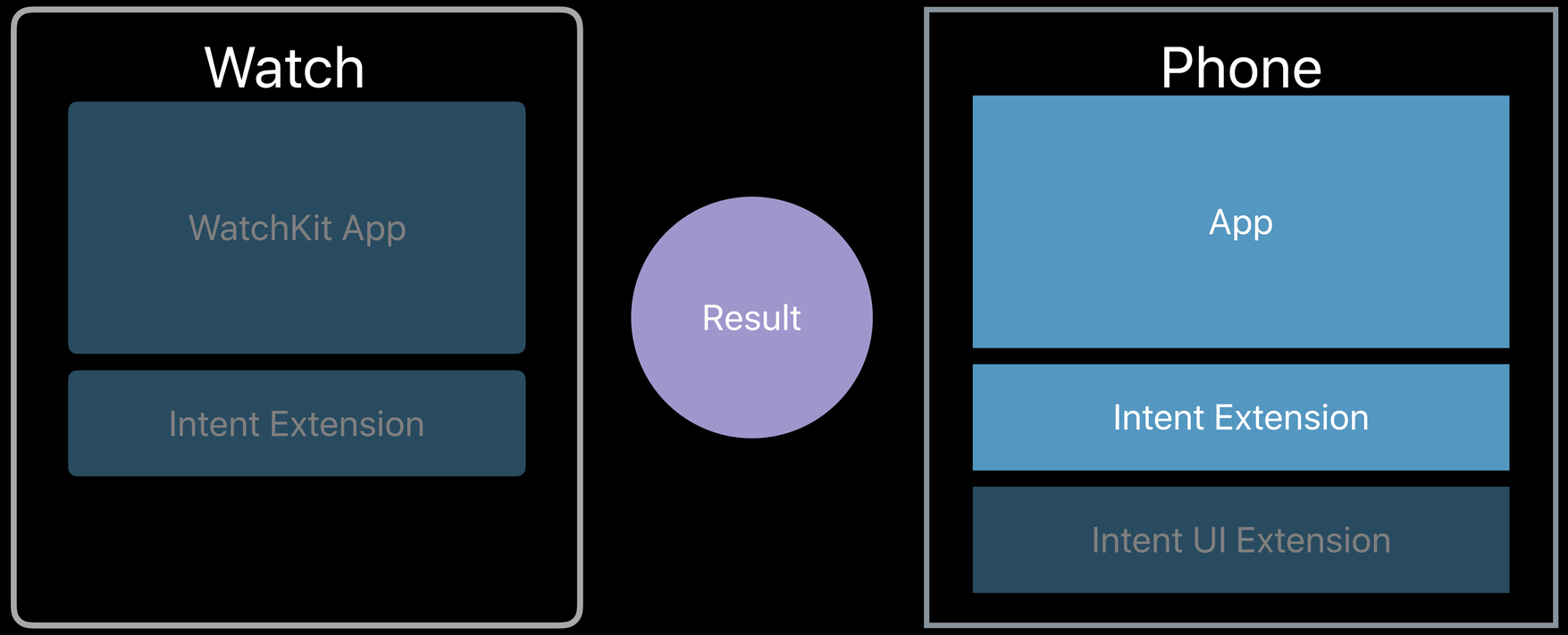

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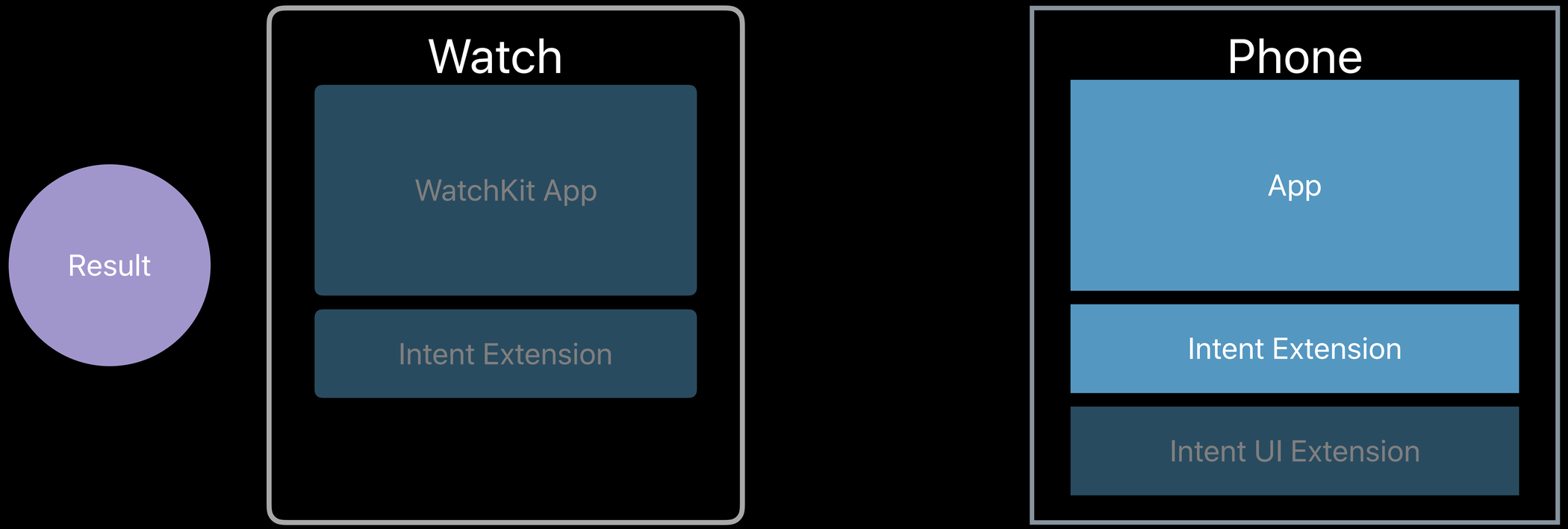

Relevant Shortcut

Relevant Shortcut

Displayed when most relevant

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

- Launch for user activity

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

- Launch for user activity

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

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Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

- Launch for user activity
- Confirmation for intents

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

- Launch for user activity
- Confirmation for intents

Relevant Shortcut

Displayed when most relevant

Customizable platter UI

Tap activates shortcut

- Launch for user activity
- Confirmation for intents

```swift
// Relevant Shortcut

open class INRelevantShortcut : NSObject, NSCopying, NSSecureCoding {
    @NSCopying open var shortcut: INShortcut { get }
    @NSCopying open var relevanceProviders: [INRelevanceProvider]
    @NSCopying open var watchTemplate: INDefaultCardTemplate?

    public init(shortcut: INShortcut)
}
```

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    public init(shortcut: INShortcut)
}
```

```
// Relevant Shortcut Store

open class INRelevantShortcutStore : NSObject {
    open class var `default`: INRelevantShortcutStore { get }
    open func setRelevantShortcuts(_ shortcuts: [INRelevantShortcut],
                                   completionHandler: ((Error?) -> Void)? = nil)
}
```

```
// Relevant Shortcut Store

open class INRelevantShortcutStore : NSObject {
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}
```

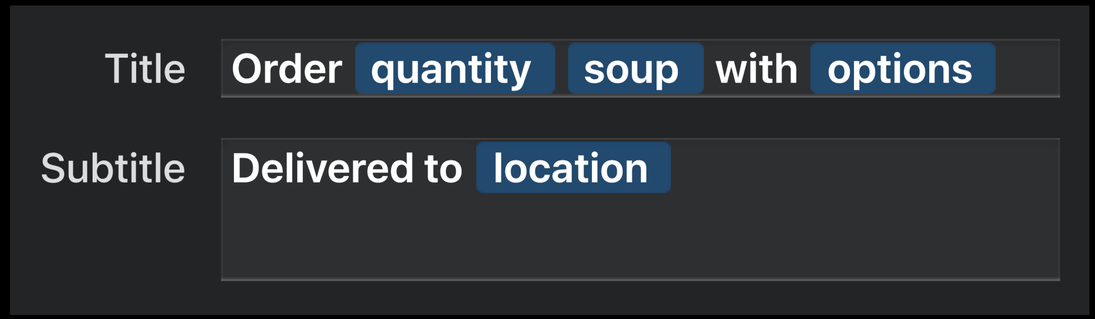
Relevant Shortcut Appearance

Platter

Relevant Shortcut Appearance

Platter

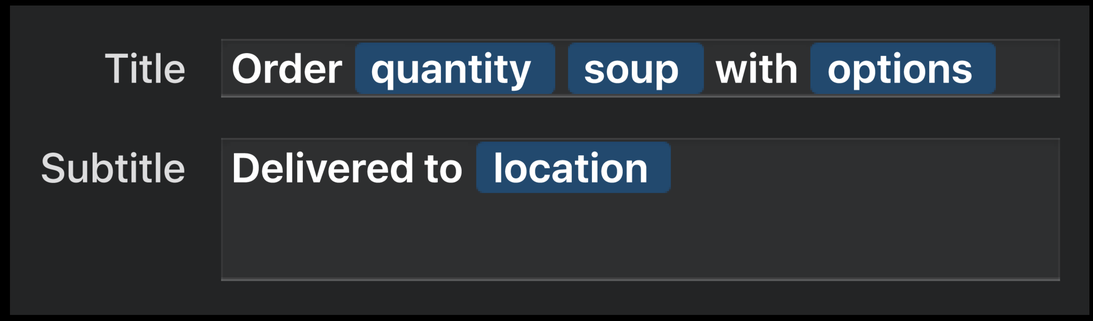
Custom Intent



Relevant Shortcut Appearance

Platter

Custom Intent




```
intent.setImage(INImage(named: "Chowder"),
forParameterNamed: "soup")
intent.setImage(INImage(named: "Office"),
forParameterNamed: "location")
```

```
// User Activity Default UI

let userActivity = NSUserActivity(activityType: "com.myapp.myactivity")

userActivity.title = "Title"

let attributes = CSSearchableItemAttributeSet(itemContentType: kUTTypeItem as String)

attributes.contentDescription = "Subtitle"

let image = UIImage(named: "CustomImage")
attributes.thumbnailData = UIImagePNGRepresentation(image)

userActivity.contentAttributeSet = attributes
```

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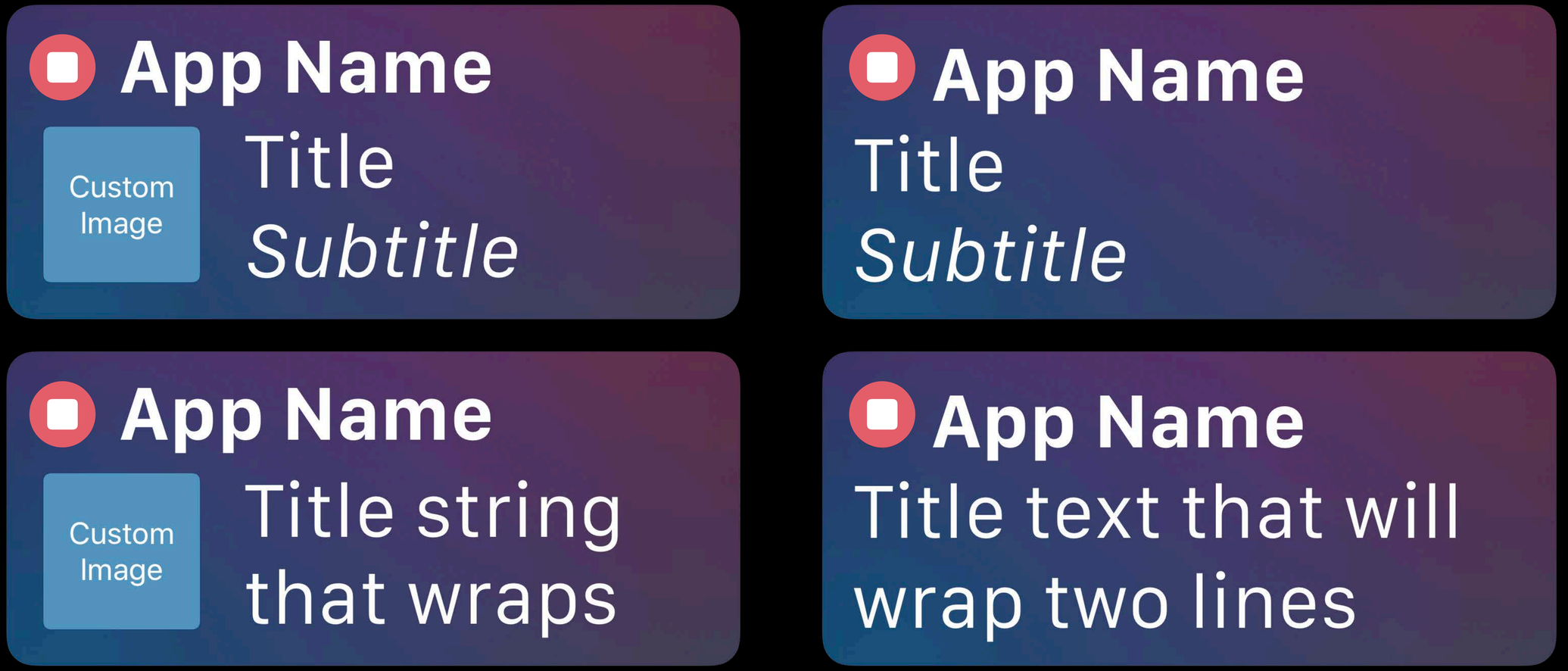
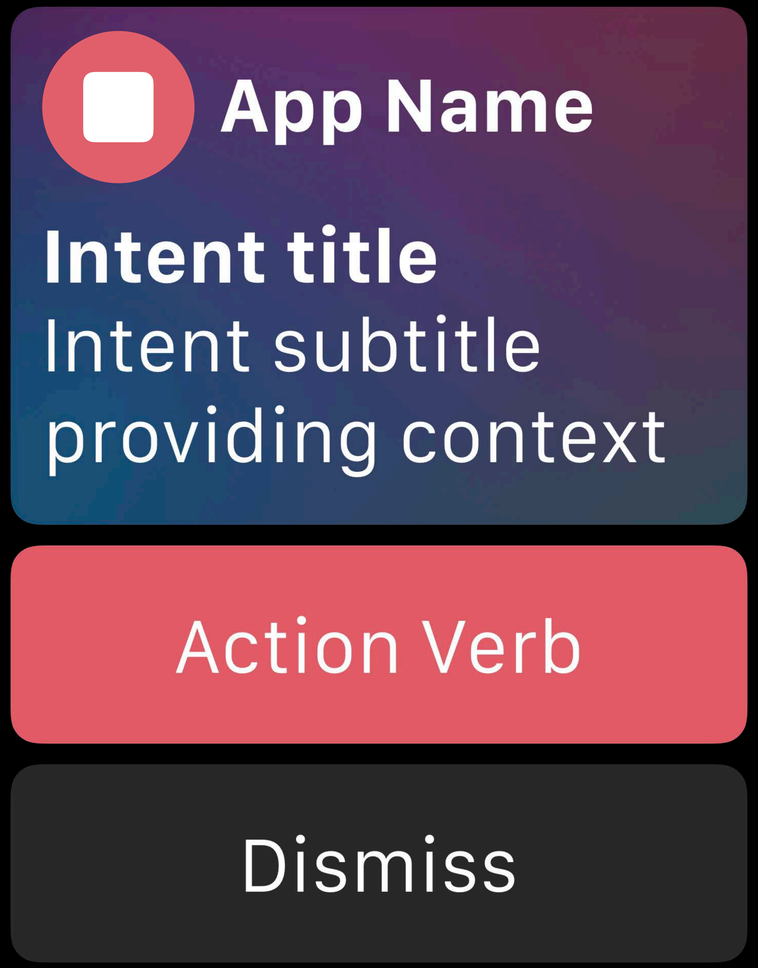
```

Default Card Template



Relevant Shortcut Appearance

Intent Confirmation



Relevant Shortcut Appearance

Intent Confirmation

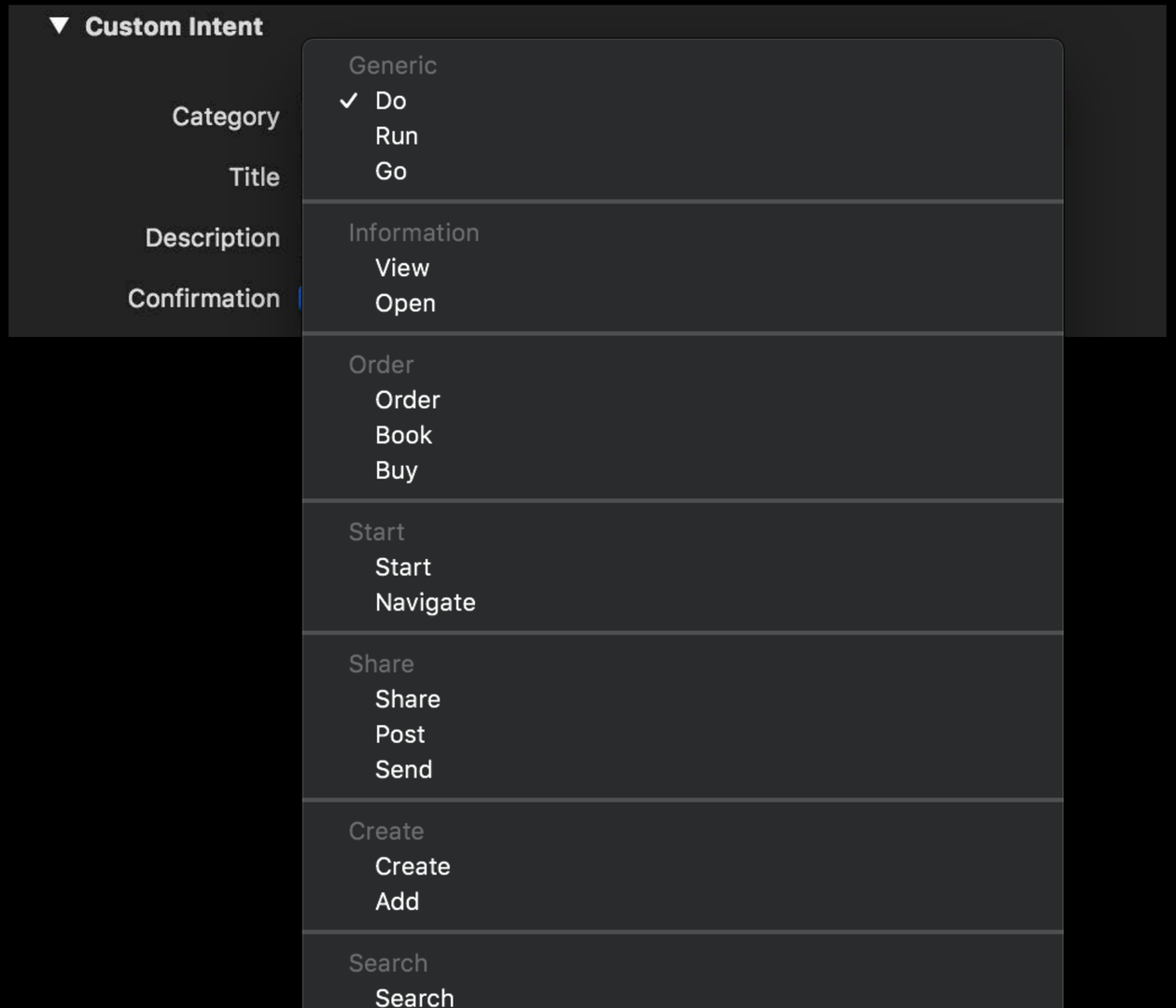
App Name

Intent title

Intent subtitle providing context

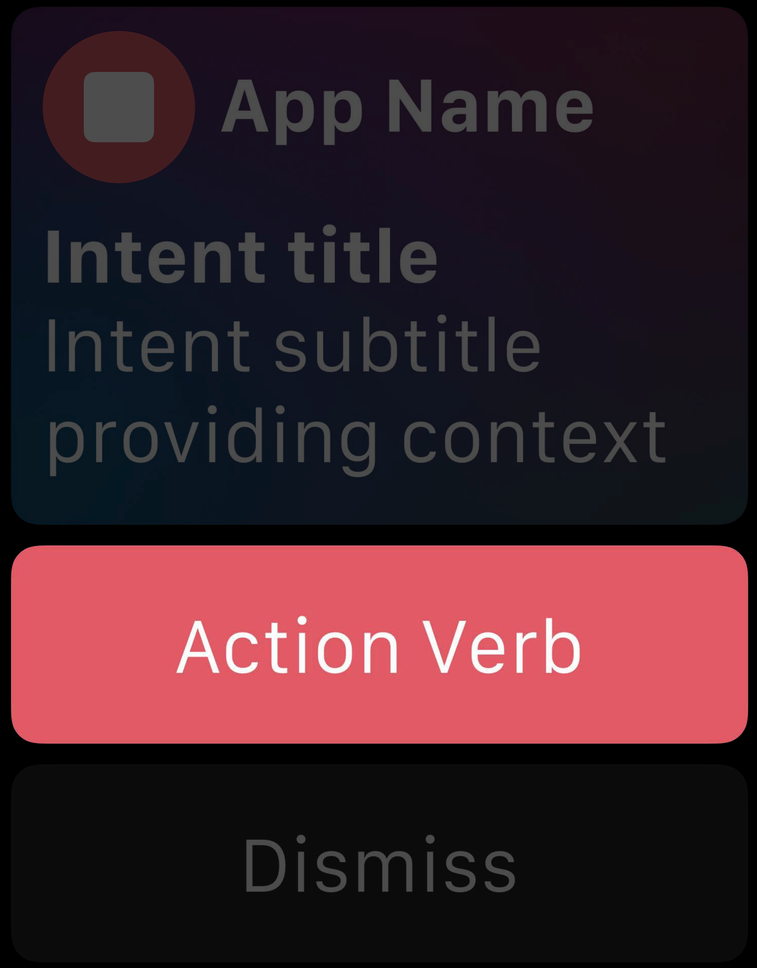
Action Verb

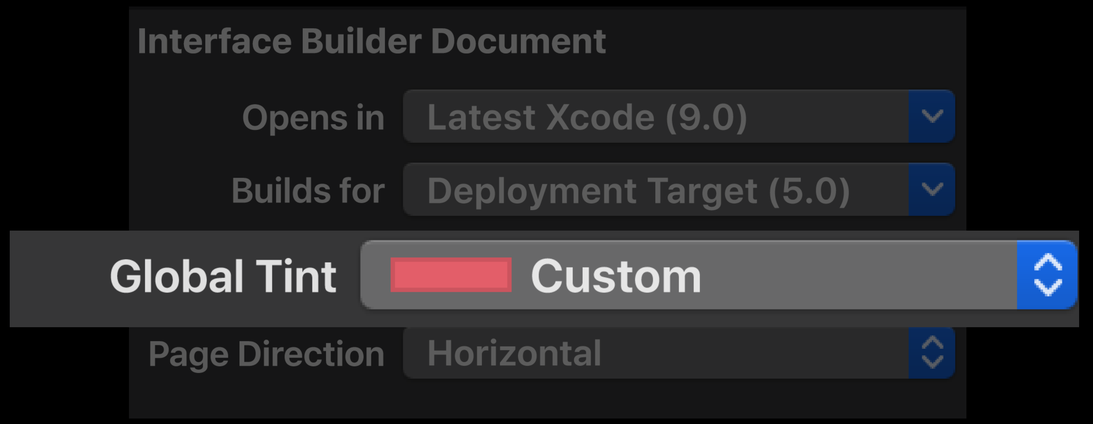
Dismiss



Relevant Shortcut Appearance

Intent Confirmation





Short Strings

Short Strings

Limited space

Short Strings

Limited space

`NSStringVariableWidthRuleType` in stringsdict

Key	Type	Value
▼ Strings Dictionary	Dictionary	(1 item)
▼ Start a ${timerName} timer	Dictionary	(1 item)
▼ NSStringVariableWidthRuleType	Dictionary	(2 items)
20	String	Start ${timerName}
24	String	Start a ${timerName} timer

Short Strings

Limited space

`NSStringVariableWidthRuleType` in stringsdict

Options for context

- 38mm: 20
- 42mm: 24

Key	Type	Value
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Relevance Providers

Relevance Provider

Relevance Provider

Describe content relevance

Relevance Provider

Describe content relevance

Evaluated against time, location, and routine

Relevance Provider

Describe content relevance

Evaluated against time, location, and routine

Provide array to INRelevantShortcut

- Intersection of supplied relevance

```
//Relevance Providers

open class INDateRelevanceProvider : INRelevanceProvider {
    open var startDate: Date { get }
    open var endDate: Date? { get }
    public init(start startDate: Date, end endDate: Date?)
}

let startEvent = /* event start time */
let endEvent = /* event end time */
let relevanceProvider = INDateRelevanceProvider(start: startEvent, end: endEvent)
```

```
//Relevance Providers

open class INDateRelevanceProvider : INRelevanceProvider {
    open var startDate: Date { get }
    open var endDate: Date? { get }
    public init(start startDate: Date, end endDate: Date?)
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}

let startEvent = /* event start time */
let endEvent = /* event end time */
let relevanceProvider = INDateRelevanceProvider(start: startEvent, end: endEvent)
```

```
//Relevance Providers

open class INLocationRelevanceProvider : INRelevanceProvider {
    @NSCopying open var region: CLRegion { get }
    public init(region: CLRegion)
}

let center = CLLocationCoordinate2D(latitude: 37.334728, longitude: -122.008883)
let region = CLCircularRegion(center: center, radius: 2.0, identifier: "Apple Park")
let relevanceProvider = INLocationRelevanceProvider(region: region)
```

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//Relevance Providers

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```

```
//Relevance Providers

open class INDailyRoutineRelevanceProvider : INRelevanceProvider {
    public enum Situation : Int {
        case morning
        case evening
        case home
        case work
        case school
        case gym
    }
    open var situation: Situation { get }
    public init(situation: Situation)
}

let relevanceProvider = INDailyRoutineRelevanceProvider(situation: .gym)
```

```
//Relevance Providers

open class INDailyRoutineRelevanceProvider : INRelevanceProvider {
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        case evening
        case home
        case work
        case school
        case gym
    }
    open var situation: Situation { get }
    public init(situation: Situation)
}

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        case home
        case work
        case school
        case gym
    }
    open var situation: Situation { get }
    public init(situation: Situation)
}
```

```
let relevanceProvider = INDailyRoutineRelevanceProvider(situation: .gym)
```

```swift
// Setting INRelevantShortcuts
let userActivity = NSUserActivity(activityType: "com.myapp.LogMeal")
userActivity.userInfo["meal"] = "Dinner"
let shortcut = INShortcut(userActivity: userActivity)
let relevantShortcut = INRelevantShortcut(shortcut: shortcut!)

let cardTemplate = INDefaultCardTemplate(title: "Log Dinner")
cardTemplate.subtitle = "Beat the veggie challenge!"
cardTemplate.image = INImage(named: "MenacingBroccoli")
relevantShortcut.watchTemplate = cardTemplate

let relevanceProvider = INDailyRoutineRelevanceProvider(situation: .evening)
relevantShortcut.relevanceProviders = [relevanceProvider]

INRelevantShortcutStore.default.setRelevantShortcuts([relevantShortcut]) { error in
    if let error = error { /* */ }
}
```

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relevantShortcut.relevanceProviders = [relevanceProvider]

INRelevantShortcutStore.default.setRelevantShortcuts([relevantShortcut]) { error in
    if let error = error { /* */ }
}
```

```swift
// Setting INRelevantShortcuts

let intent = LogFavoriteIntent()
intent.favorite = "Cookies"
intent.setImage(INImage(named: "Cookies"), forParameterNamed: "favorite")

let shortcut = INShortcut(intent: intent)
let relevantShortcut = INRelevantShortcut(shortcut: shortcut!)

INRelevantShortcutStore.default.setRelevantShortcuts([relevantShortcut]) { error in
    if let error = error { /* */ }
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```

```
// Setting INRelevantShortcuts

let intent = LogFavoriteIntent()
intent.favorite = "Cookies"
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let relevantShortcut = INRelevantShortcut(shortcut: shortcut!)

INRelevantShortcutStore.default.setRelevantShortcuts([relevantShortcut]) { error in
    if let error = error { /* */ }
}
```

NEW

```
// Handle restoring from NSUserActivity

class ExtensionDelegate: NSObject, WKExtensionDelegate {
    func handle(_ userActivity: NSUserActivity) {
        if userActivity.activityType == "com.myapp.LogMeal" {
            WKExtension.shared().rootInterfaceController?.popToRootController()
            WKExtension.shared().rootInterfaceController?.pushController(withName:
                "LogMealInterfaceController", context: userActivity.userInfo!["meal"])
        }
        else if userActivity.activityType == "LogFavoriteIntent" {
            let interaction = userActivity!.interaction
            let intent = interaction.intent
            // restore
        }
    }
}
```

NEW

```
// Handle restoring from NSUserActivity

class ExtensionDelegate: NSObject, WKExtensionDelegate {
    func handle(_ userActivity: NSUserActivity) {
        if userActivity.activityType == "com.myapp.LogMeal" {
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        }
        else if userActivity.activityType == "LogFavoriteIntent" {
            let interaction = userActivity!.interaction
            let intent = interaction.intent
            // restore
        }
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            let intent = interaction.intent
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NEW

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        }
        else if userActivity.activityType == "LogFavoriteIntent" {
            let interaction = userActivity!.interaction
            let intent = interaction.intent
            // restore
        }
    }
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```

NEW

```
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class ExtensionDelegate: NSObject, WKExtensionDelegate {
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            let interaction = userActivity!.interaction
            let intent = interaction.intent
            // restore
        }
    }
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```

NEW

```
// Handle restoring from NSUserActivity

class ExtensionDelegate: NSObject, WKExtensionDelegate {
    func handle(_ userActivity: NSUserActivity) {
        if userActivity.activityType == "com.myapp.LogMeal" {
            WKExtension.shared().rootInterfaceController?.popToRootController()
            WKExtension.shared().rootInterfaceController?.pushController(withName:
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        }
        else if userActivity.activityType == "LogFavoriteIntent" {
            let interaction = userActivity!.interaction
            let intent = interaction.intent
            // restore
        }
    }
}
```

Refresh Background Task

Provide relevant shortcuts

Refresh Background Task

Provide relevant shortcuts

Apps in platters not running

Refresh Background Task

Provide relevant shortcuts

Apps in platters not running

```
WKRelevantShortcutRefreshBackgroundTask
```

Refresh Background Task

Provide relevant shortcuts

Apps in platters not running

```
WKRelevantShortcutRefreshBackgroundTask
```

- Scheduled by user engagement

Refresh Background Task

Provide relevant shortcuts

Apps in platters not running

`WKRelevantShortcutRefreshBackgroundTask`

- Scheduled by user engagement
- Refresh data and relevant shortcuts

Refresh Background Task

Update after running intent

Refresh Background Task

Update after running intent

Intents extension separate process

Refresh Background Task

Update after running intent

Intents extension separate process

`WKIntentDidRunRefreshBackgroundTask` after intent execution

Refresh Background Task

Update after running intent

Intents extension separate process

`WKIntentDidRunRefreshBackgroundTask` after intent execution

Update appropriate UI

Refresh Background Task

Update after running intent

Intents extension separate process

`WKIntentDidRunRefreshBackgroundTask` after intent execution

Update appropriate UI

- Snapshot

Refresh Background Task

Update after running intent

Intents extension separate process

`WKIntentDidRunRefreshBackgroundTask` after intent execution

Update appropriate UI

- Snapshot
- Complication

Relevant Shortcuts from iOS

iOS Relevant Shortcuts on Siri Watch Face

iOS Relevant Shortcuts on Siri Watch Face

iOS apps use same API

iOS Relevant Shortcuts on Siri Watch Face

iOS apps use same API

Periodic sync

iOS Relevant Shortcuts on Siri Watch Face

iOS apps use same API

Periodic sync

Same UI options with iOS app icon

iOS Relevant Shortcuts on Siri Watch Face

iOS Relevant Shortcuts on Siri Watch Face

WatchKit app support —> execute on watch

iOS Relevant Shortcuts on Siri Watch Face

WatchKit app support —> execute on watch

- `NSUserActivityTypes` in Info.plist

iOS Relevant Shortcuts on Siri Watch Face

WatchKit app support —> execute on watch

- `NSUserActivityTypes` in Info.plist
- `IntentsSupported` in Intent Info.plist

iOS Relevant Shortcuts on Siri Watch Face

WatchKit app support —> execute on watch

- `NSUserActivityTypes` in Info.plist
- `IntentsSupported` in Intent Info.plist

No WatchKit app support —> execute on phone over Internet

iOS Relevant Shortcuts on Siri Watch Face

iOS Relevant Shortcuts on Siri Watch Face

Surfacing/executing iOS only shortcuts requires

iOS Relevant Shortcuts on Siri Watch Face

Surfacing/executing iOS only shortcuts requires

- Intent based

iOS Relevant Shortcuts on Siri Watch Face

Surfacing/executing iOS only shortcuts requires

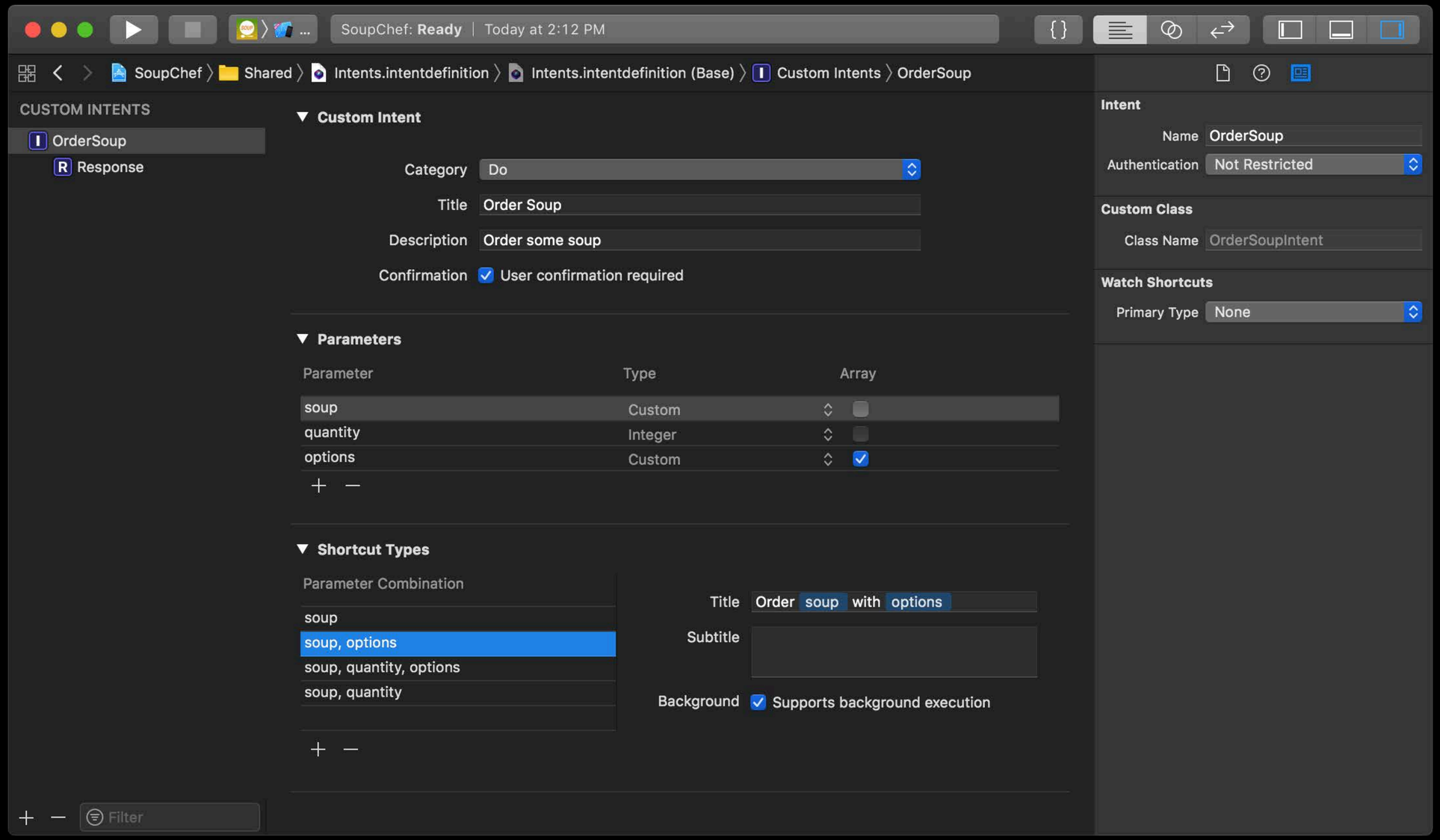
- Intent based
- Background execution

iOS Relevant Shortcuts on Siri Watch Face

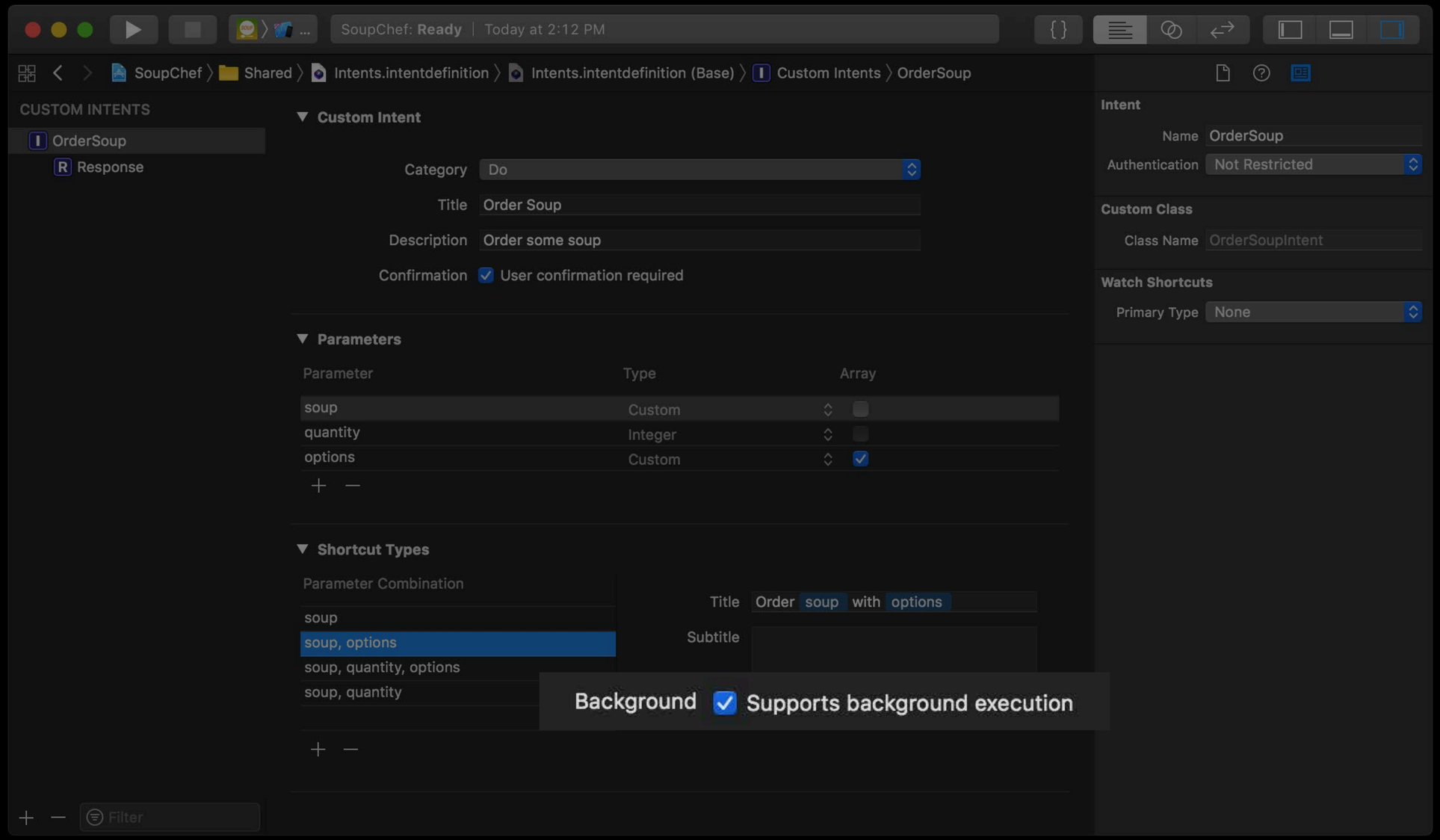
Surfacing/executing iOS only shortcuts requires

- Intent based
- Background execution
- No protected data needed

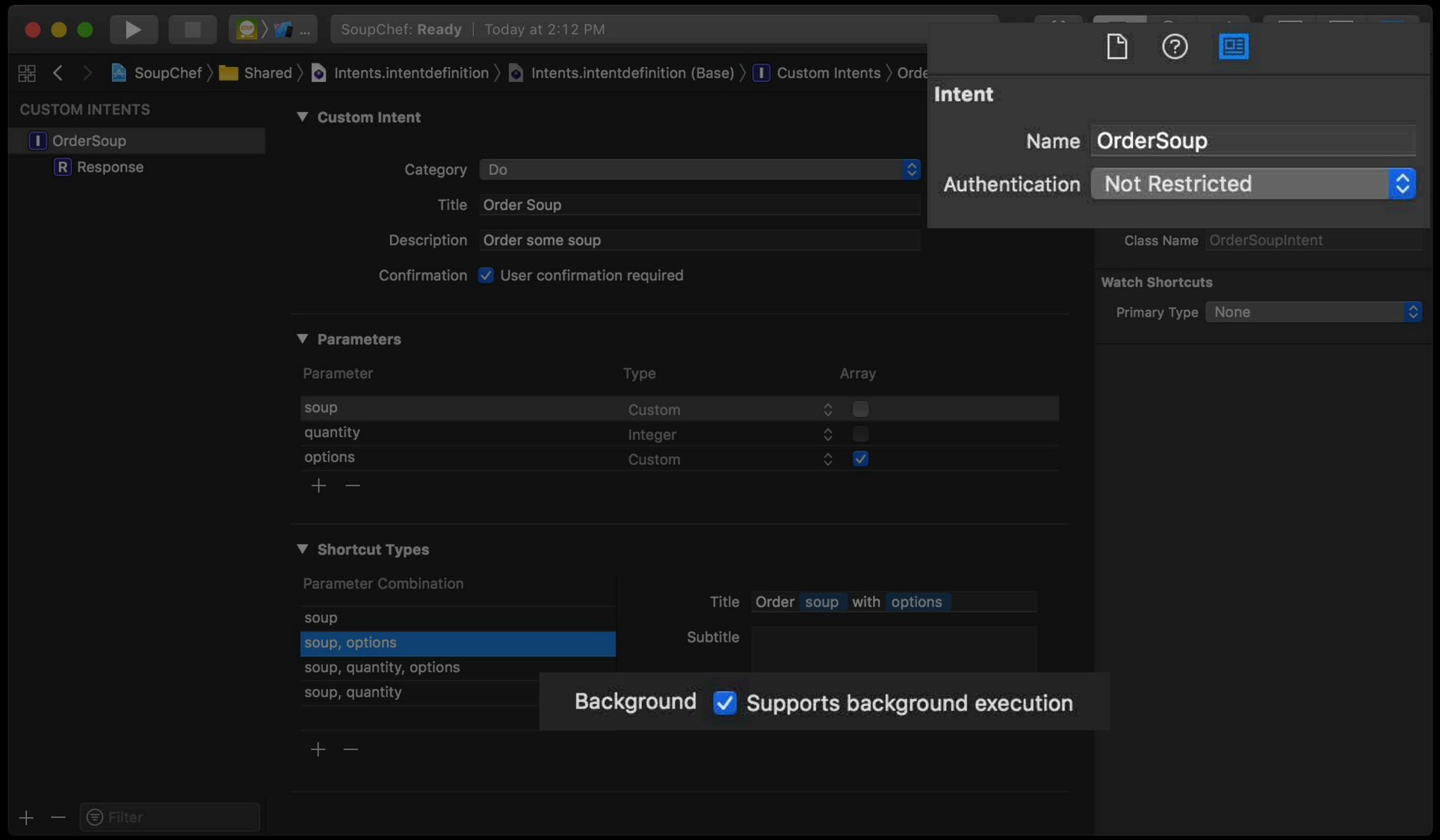
iOS Relevant Shortcuts on Siri Watch Face



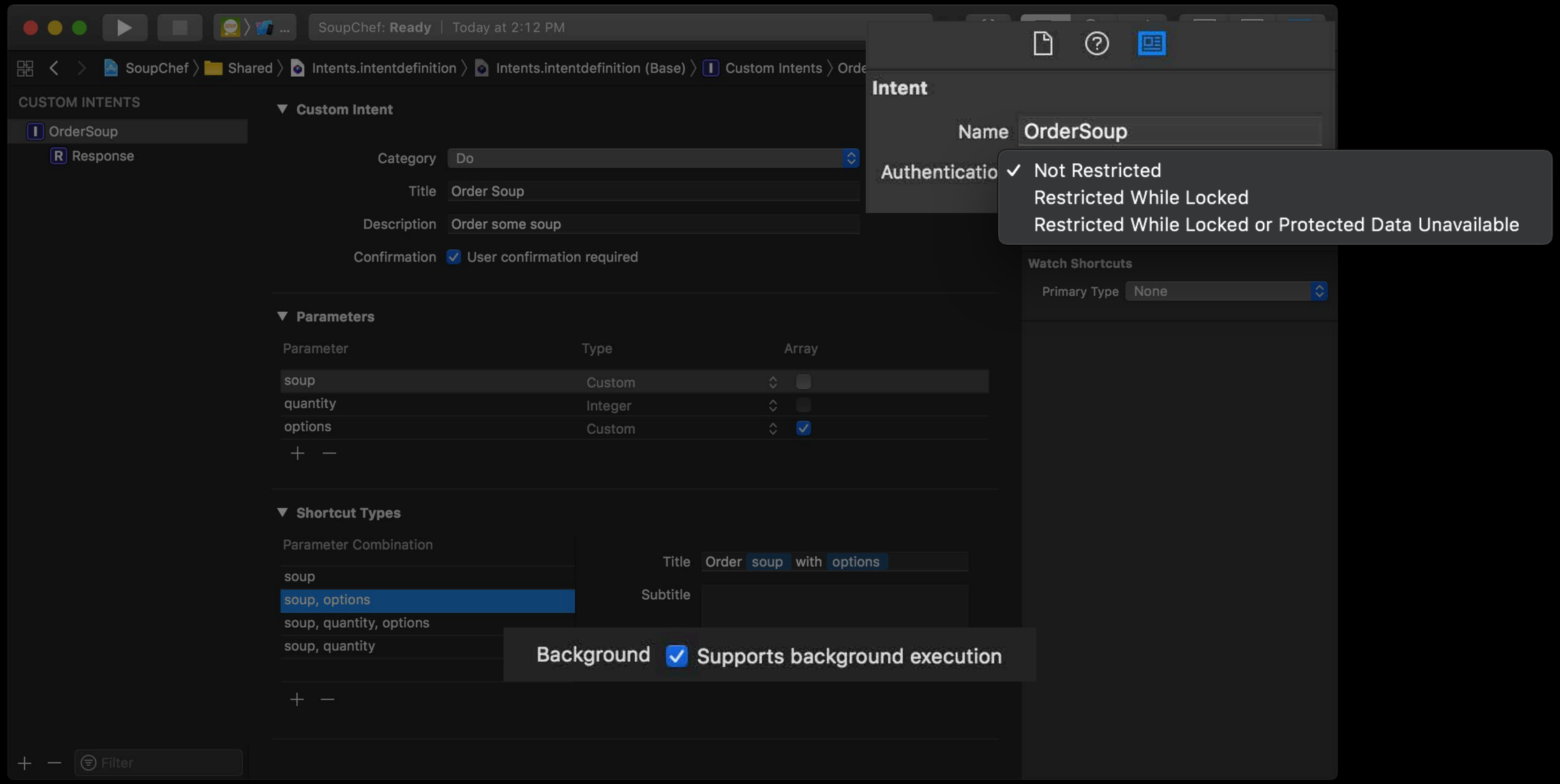
iOS Relevant Shortcuts on Siri Watch Face



iOS Relevant Shortcuts on Siri Watch Face



iOS Relevant Shortcuts on Siri Watch Face

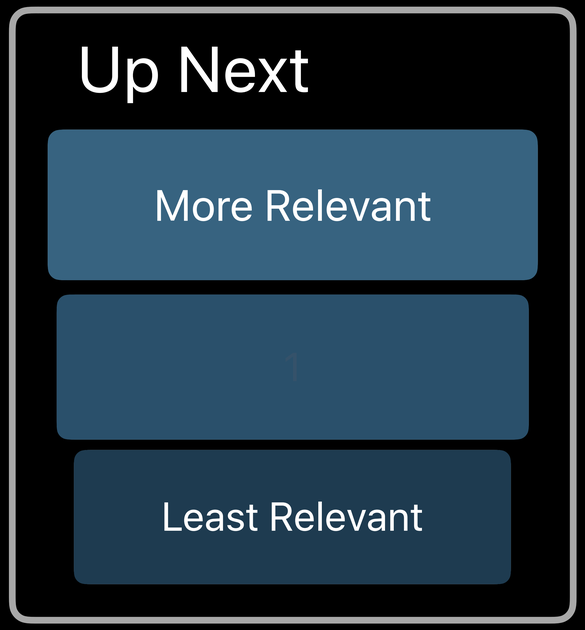


Predicting Shortcuts on watchOS

Josh Ford, watchOS Engineer

Predicting Shortcuts

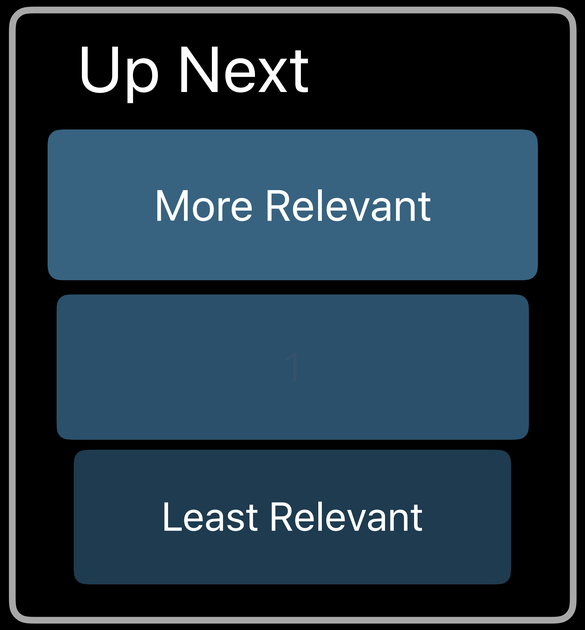
Content is ordered by relevance



Predicting Shortcuts

Content is ordered by relevance

User interaction instructs ordering

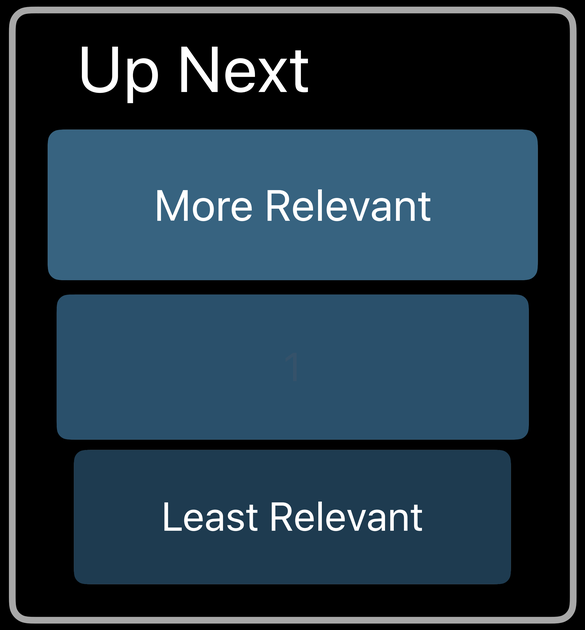


Predicting Shortcuts

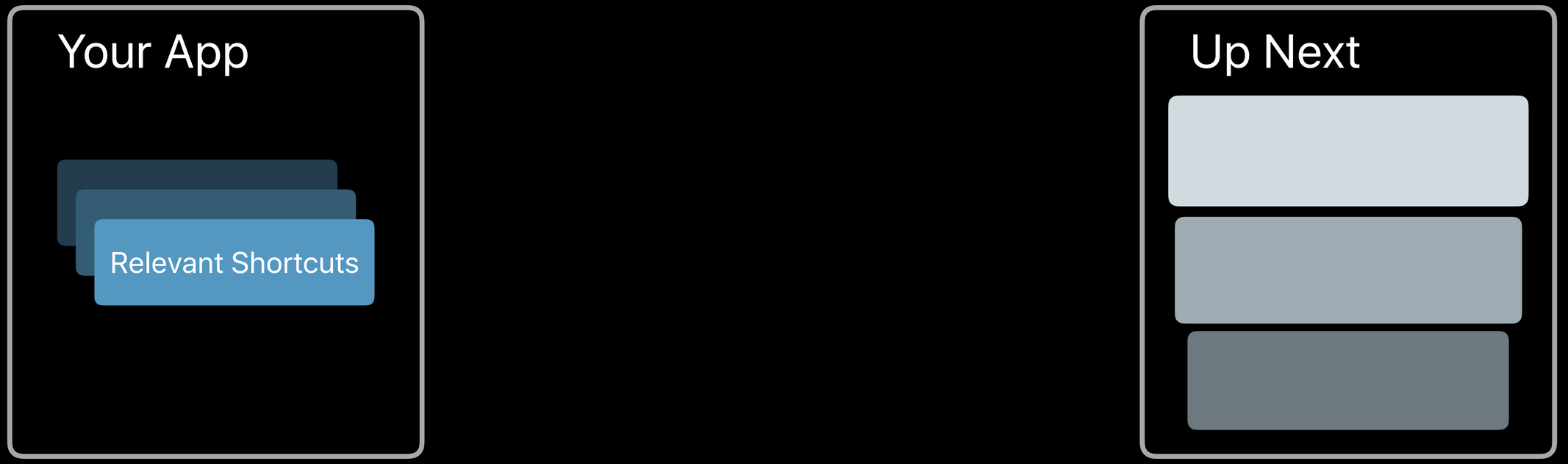
Content is ordered by relevance

User interaction instructs ordering

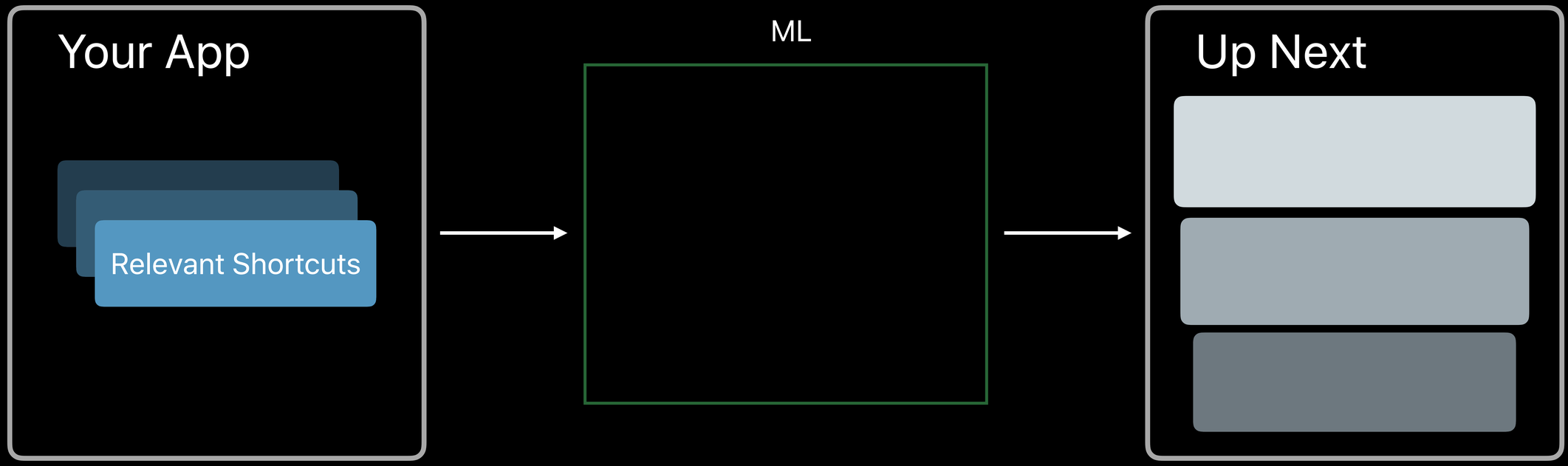
Provide engaging and relevant content



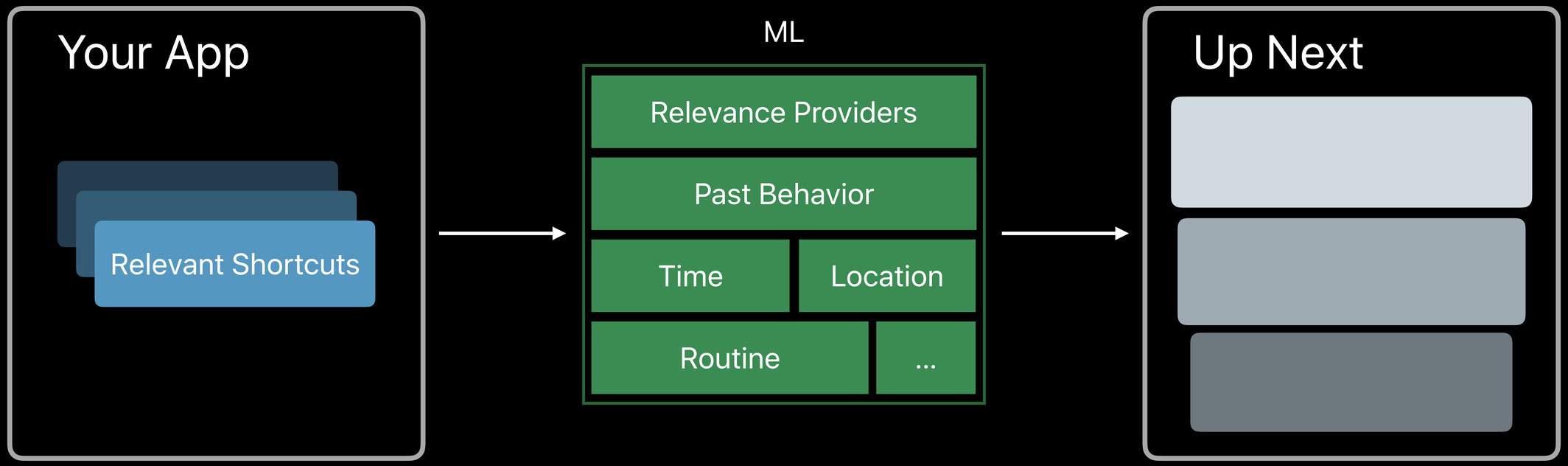
Predicting Shortcuts



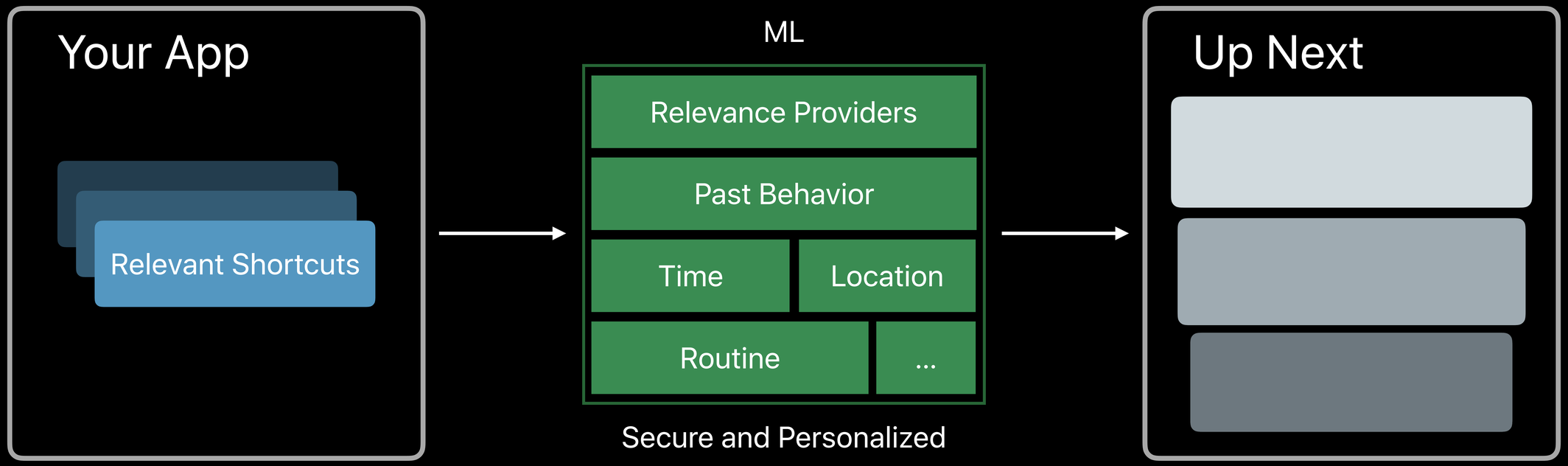
Predicting Shortcuts



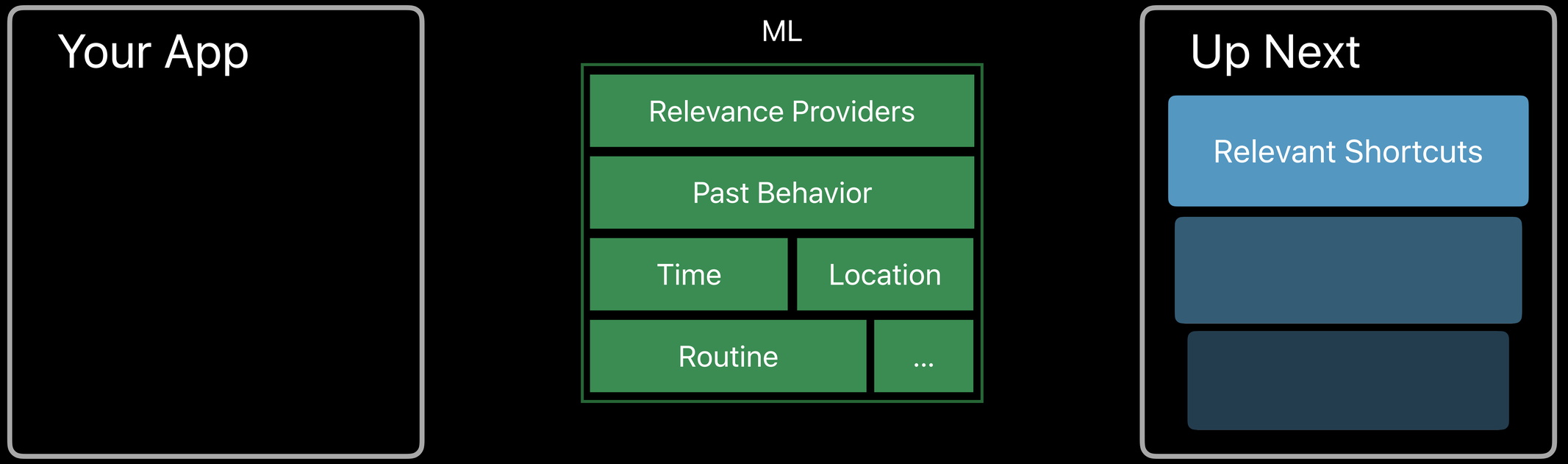
Predicting Shortcuts



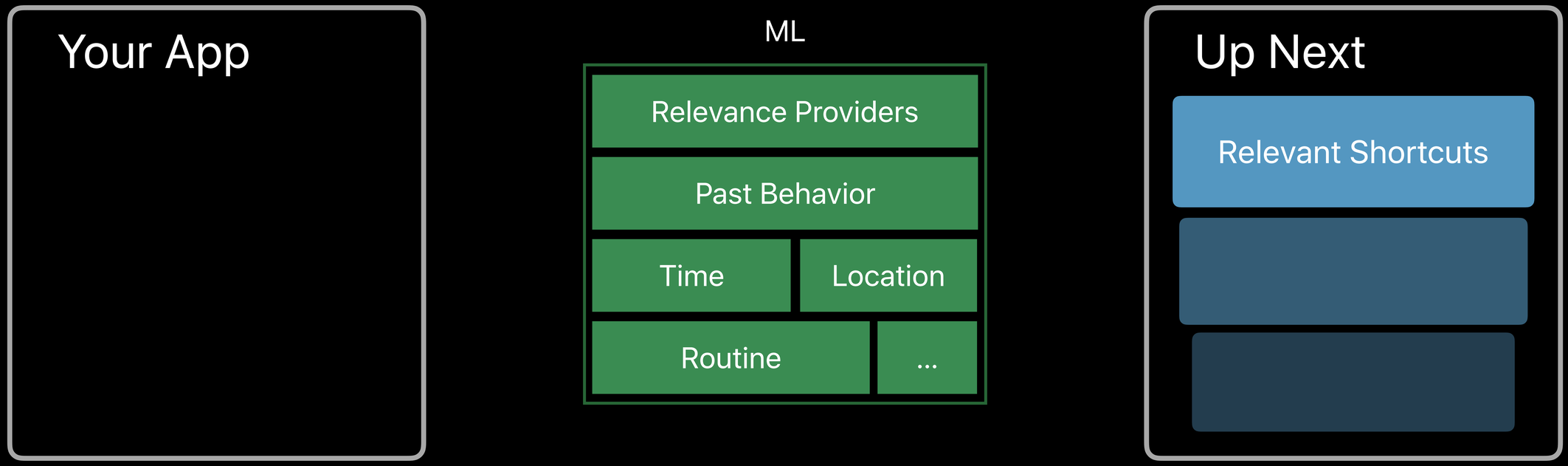
Predicting Shortcuts



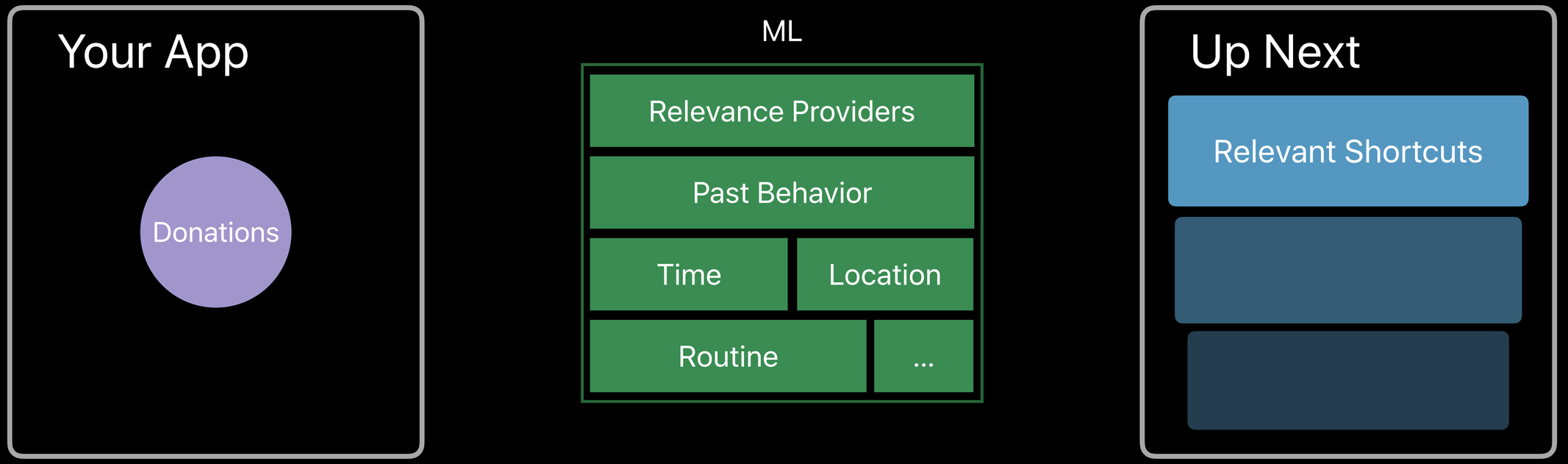
Predicting Shortcuts



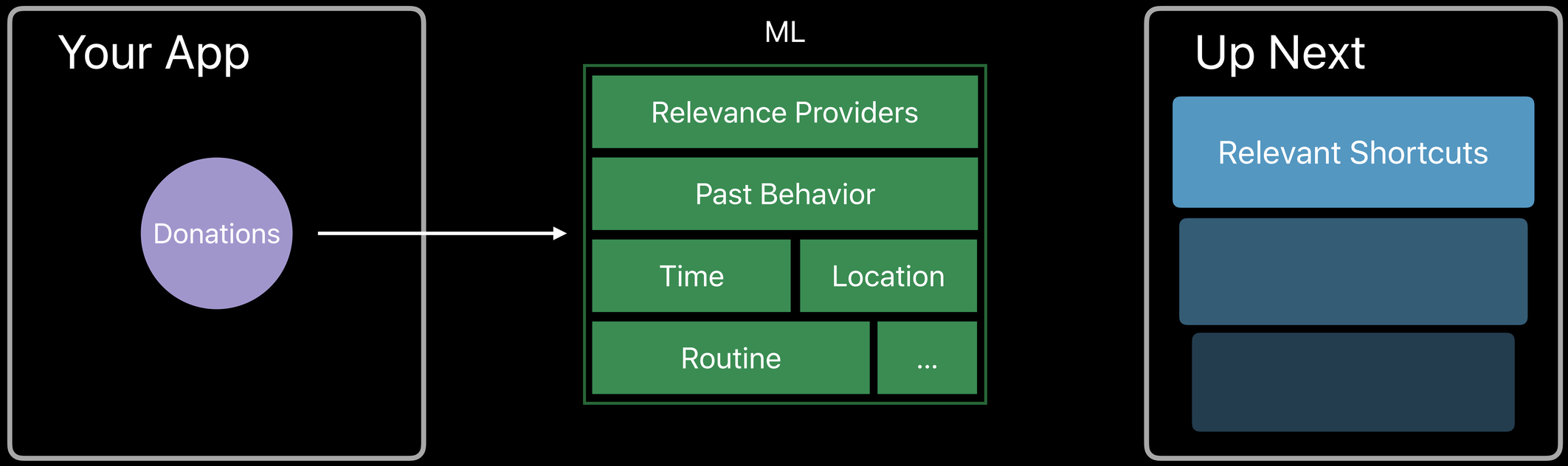
Predicting Shortcuts



Predicting Shortcuts



Predicting Shortcuts



Donations

Indicate important tasks within app

Donations

Indicate important tasks within app

Inform predictions

Donations

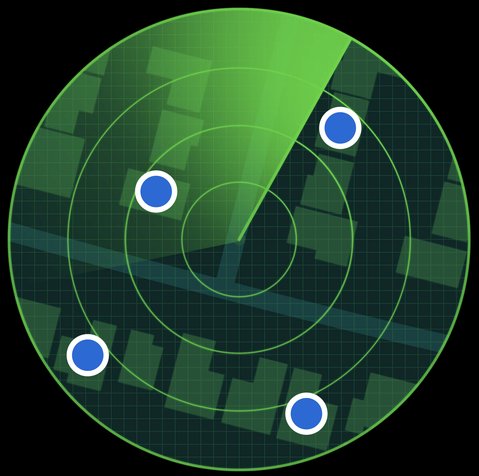
Indicate important tasks within app

Inform predictions

Donations

Indicate important tasks within app

Inform predictions



NSUserActivity Donations

Set `eligibleForPrediction` and `eligibleForSearch`

NSUserActivity Donations

Set `eligibleForPrediction` and `eligibleForSearch`

Supported activity types in Info.plist

NSUserActivity Donations

Set `eligibleForPrediction` and `eligibleForSearch`

Supported activity types in Info.plist

Donate when visible

NSUserActivity Donations

Set `eligibleForPrediction` and `eligibleForSearch`

Supported activity types in Info.plist

Donate when visible

```
let userActivity = NSUserActivity(activityType: "MyActivityType")
userActivity.becomeCurrent()
```

NSUserActivity Donations

NEW

Set `eligibleForPrediction` and `eligibleForSearch`

Supported activity types in Info.plist

Donate when visible

```
let userActivity = NSUserActivity(activityType: "MyActivityType")
userActivity.becomeCurrent()
```

```
let userActivity = NSUserActivity(activityType: "MyActivityType")
interfaceController.updateUserActivity(activityType)
```

NSUserActivity Donations

NEW

Set `eligibleForPrediction` and `eligibleForSearch`

Supported activity types in Info.plist

Donate when visible

```
let userActivity = NSUserActivity(activityType: "MyActivityType")
userActivity.becomeCurrent()
```

```
let userActivity = NSUserActivity(activityType: "MyActivityType")
interfaceController.updateUserActivity(activityType)
```

INIntent Donations

Donate using `INInteraction`

INIntent Donations

Donate using `INInteraction`

```
let intent = /* Create intent and set parameters */
let interaction = INInteraction(intent: intent, response: nil)
interaction.donate(completion: nil)
```

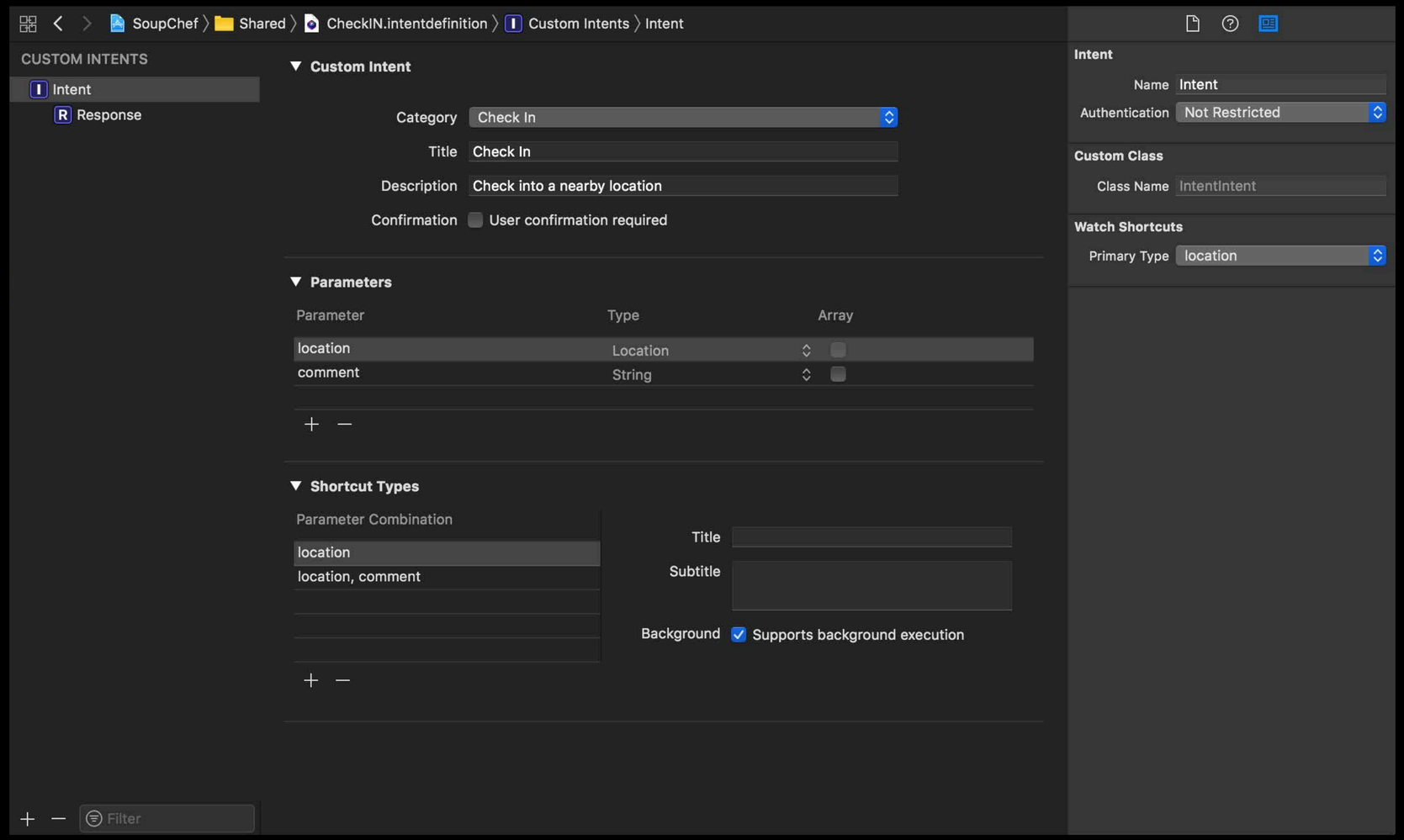
INIntent Donations

Donate using `INInteraction`

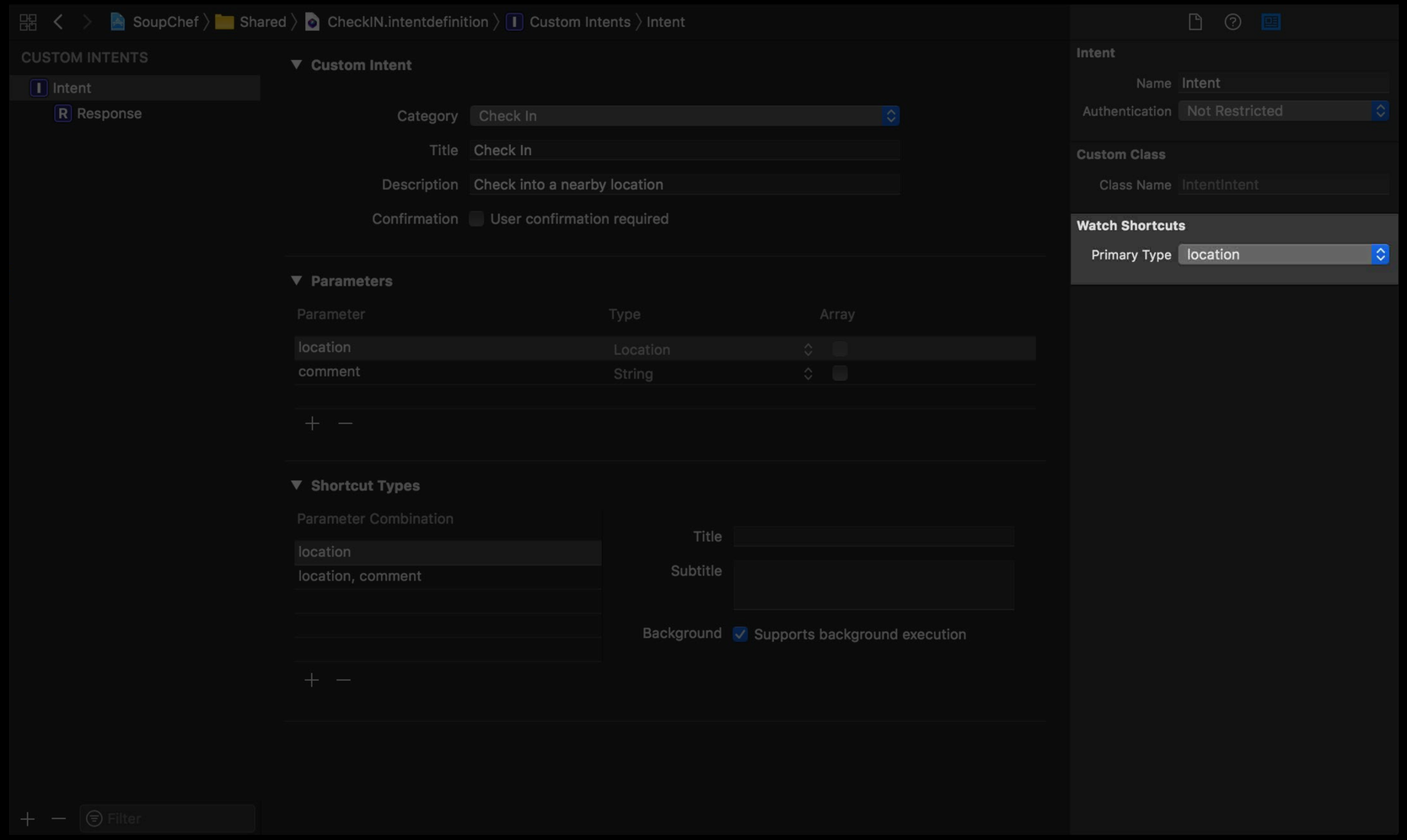
```
let intent = /* Create intent and set parameters */
let interaction = INInteraction(intent: intent, response: nil)
interaction.donate(completion: nil)
```

Indicate primary shortcut type

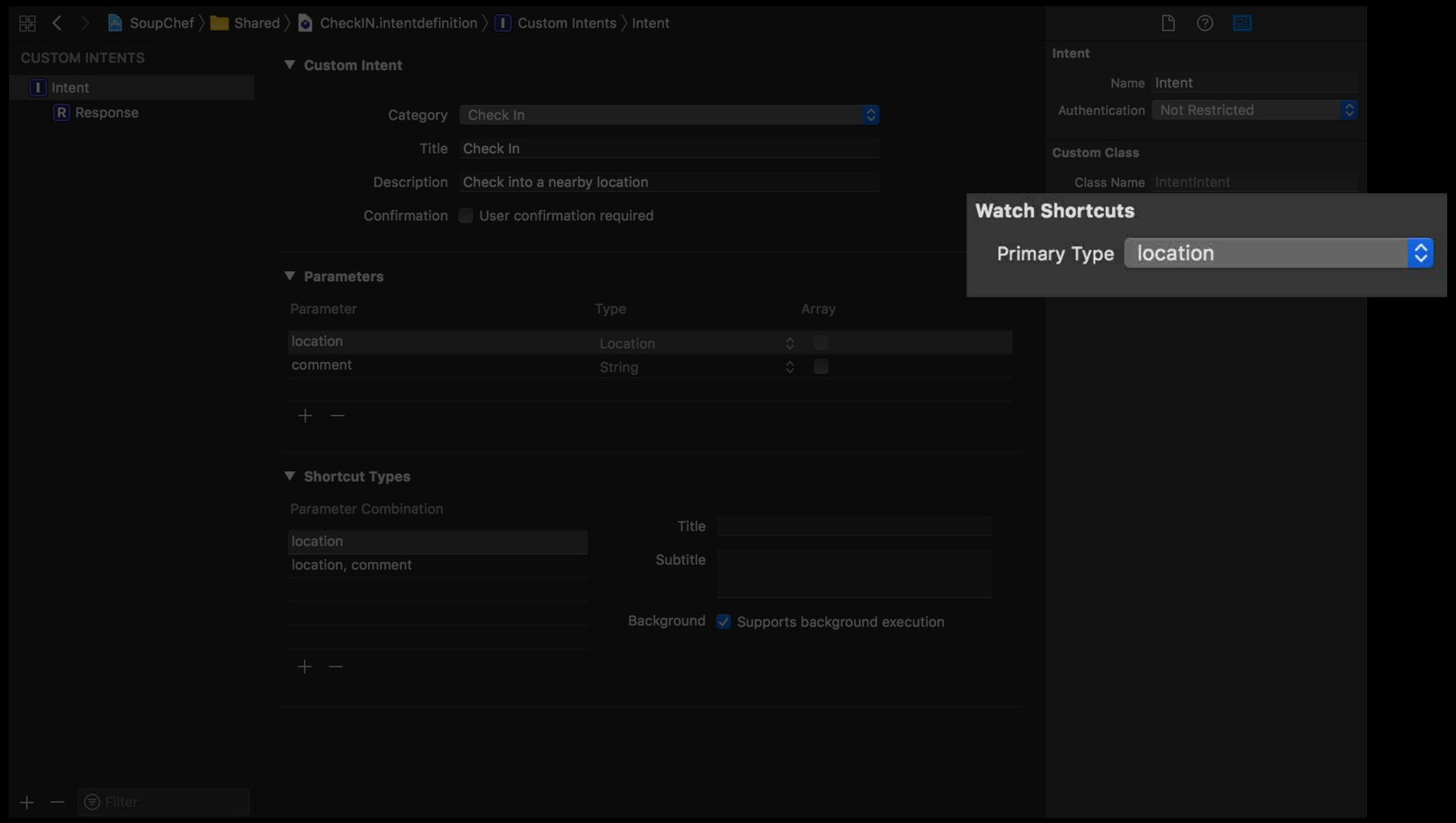
Primary Shortcut Type



Primary Shortcut Type



Primary Shortcut Type



Primary Shortcut Type

Indicate primary use case

Primary Shortcut Type

Indicate primary use case

One per intent

Primary Shortcut Type

Indicate primary use case

One per intent

Subset of Relevant Shortcut parameters

Primary Shortcut Type

Indicate primary use case

One per intent

Subset of Relevant Shortcut parameters

Quickly identify patterns

Primary Shortcut Type

Primary Shortcut Type

Recipient, Message

Recipient

Primary Shortcut Type

Recipient, Message

Recipient

Primary Shortcut Type

Recipient, Message

Recipient

Primary Shortcut Type

Primary Shortcut Type

Coffee, Condiment, Location

Coffee, Condiment

Coffee

Primary Shortcut Type

Coffee, Condiment, Location

Coffee, Condiment

Coffee

Primary Shortcut Type

Coffee, Condiment, Location

Coffee, Condiment

Coffee

Primary Shortcut Type

- ✗ Coffee, Condiment, Location
- ✓ Coffee, Condiment
- ✗ Coffee

Predicting Relevant Shortcuts

Recipes

Chicken Parmesan

Fitness Trainer

Evening Run

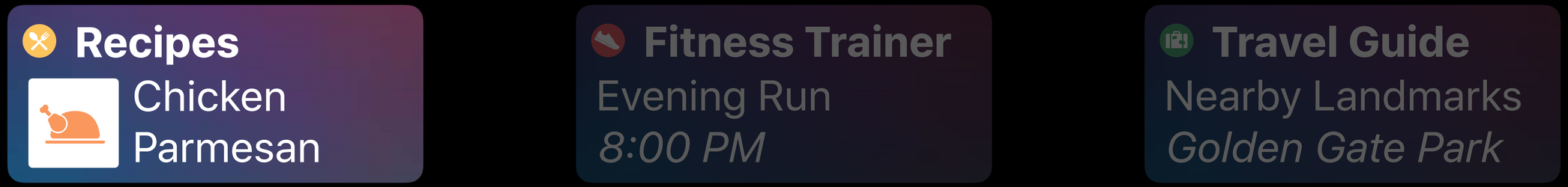
8:00 PM

Travel Guide

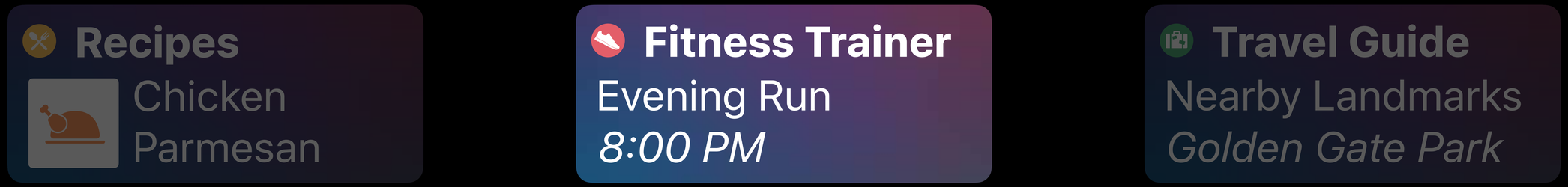
Nearby Landmarks

Golden Gate Park

Predicting Relevant Shortcuts



Predicting Relevant Shortcuts



Predicting Relevant Shortcuts

Recipes

Chicken
Parmesan

Fitness Trainer

Evening Run
8:00 PM

Travel Guide

Nearby Landmarks
Golden Gate Park

Predicting Relevant Shortcuts

Recipes

Chicken Parmesan

Downtime

Fitness Trainer

Evening Run

8:00 PM

Time

Travel Guide

Nearby Landmarks

Golden Gate Park

Location

Relevance Providers

Hint ideal time to surface

Relevance Providers

Hint ideal time to surface

Surface new content

Relevance Providers

Hint ideal time to surface

Surface new content

User engagement paramount

Relevance Providers

Relevance Providers

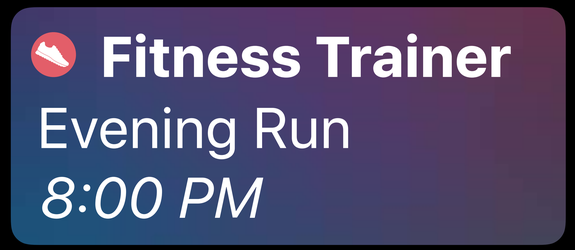

```
relevantShortcut.relevanceProviders = []
```

Relevance Providers

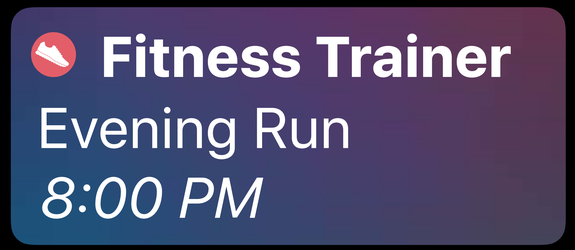

```
relevantShortcut.relevanceProviders = []
```

Based on user engagement

INDateRelevanceProvider

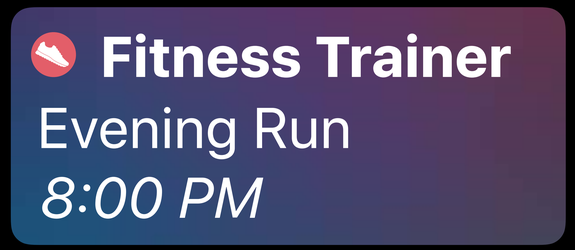


INDateRelevanceProvider




```
let dateRelevanceProvider = INDateRelevanceProvider(start: eventDate, end: nil)
relevantShortcut.relevanceProviders = [dateRelevanceProvider]
```

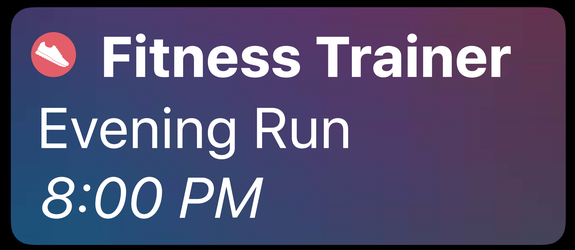
INDateRelevanceProvider




```
let dateRelevanceProvider = INDateRelevanceProvider(start: eventDate, end: nil)
relevantShortcut.relevanceProviders = [dateRelevanceProvider]
```

Surface at specific time

INDateRelevanceProvider

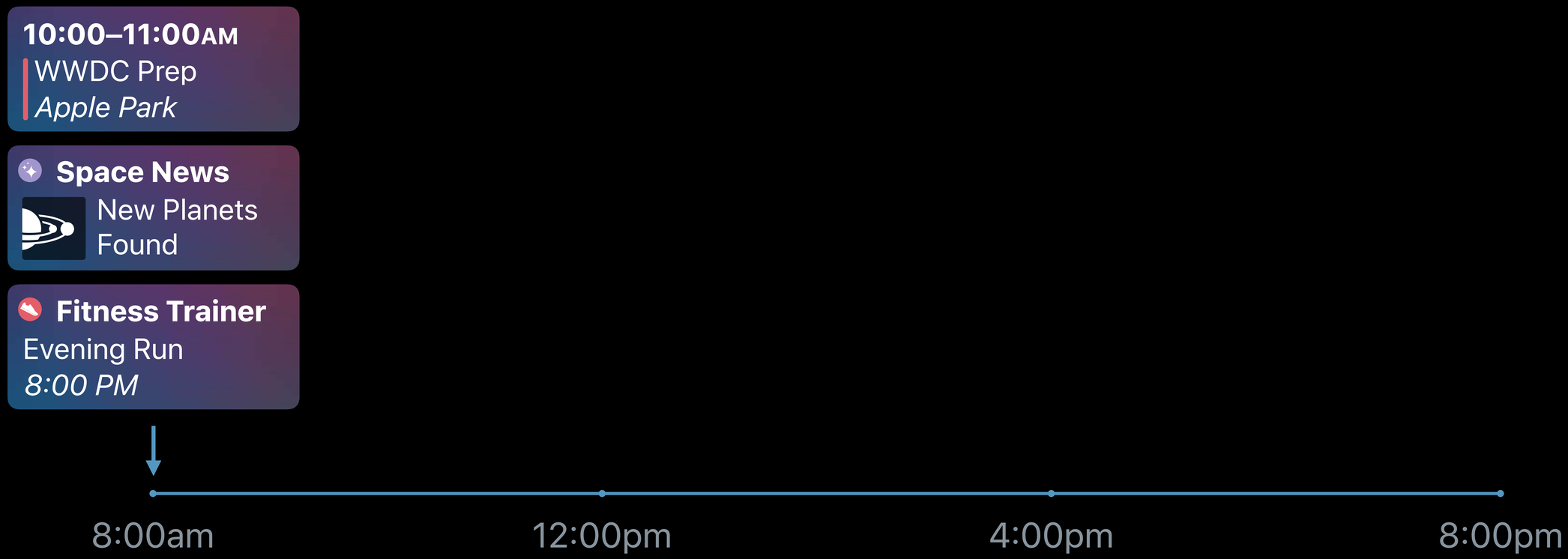



```
let dateRelevanceProvider = INDateRelevanceProvider(start: eventDate, end: nil)
relevantShortcut.relevanceProviders = [dateRelevanceProvider]
```

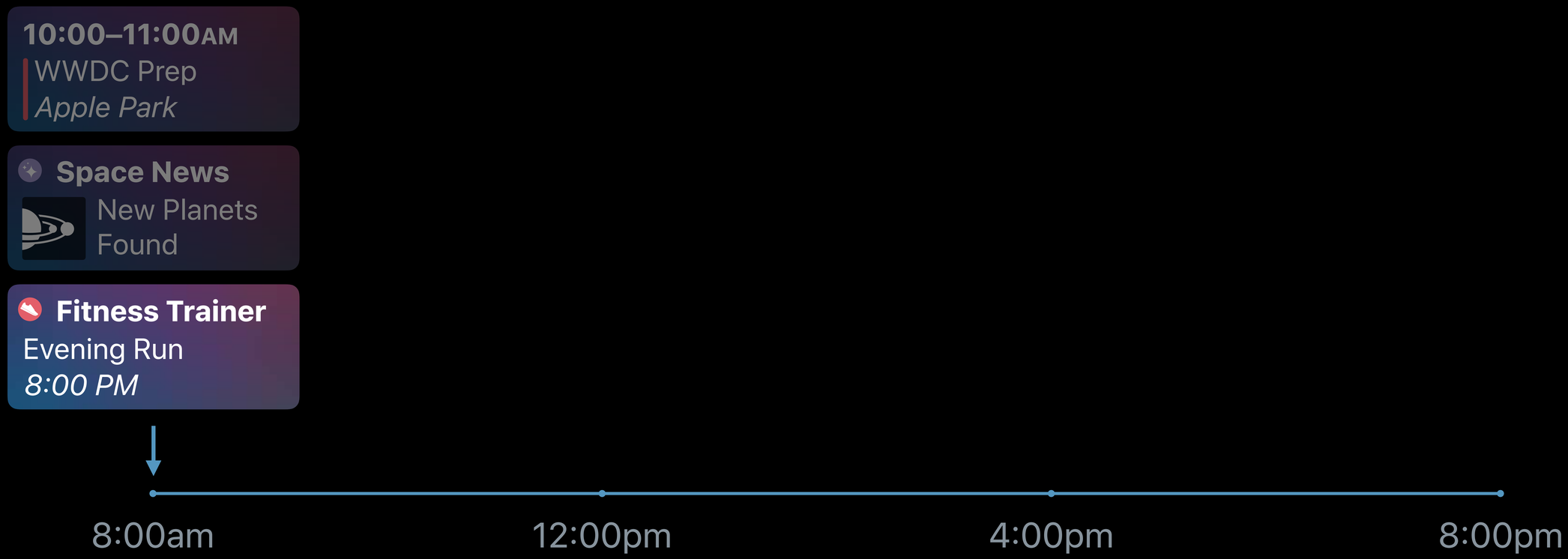
Surface at specific time

More relevant closer to event

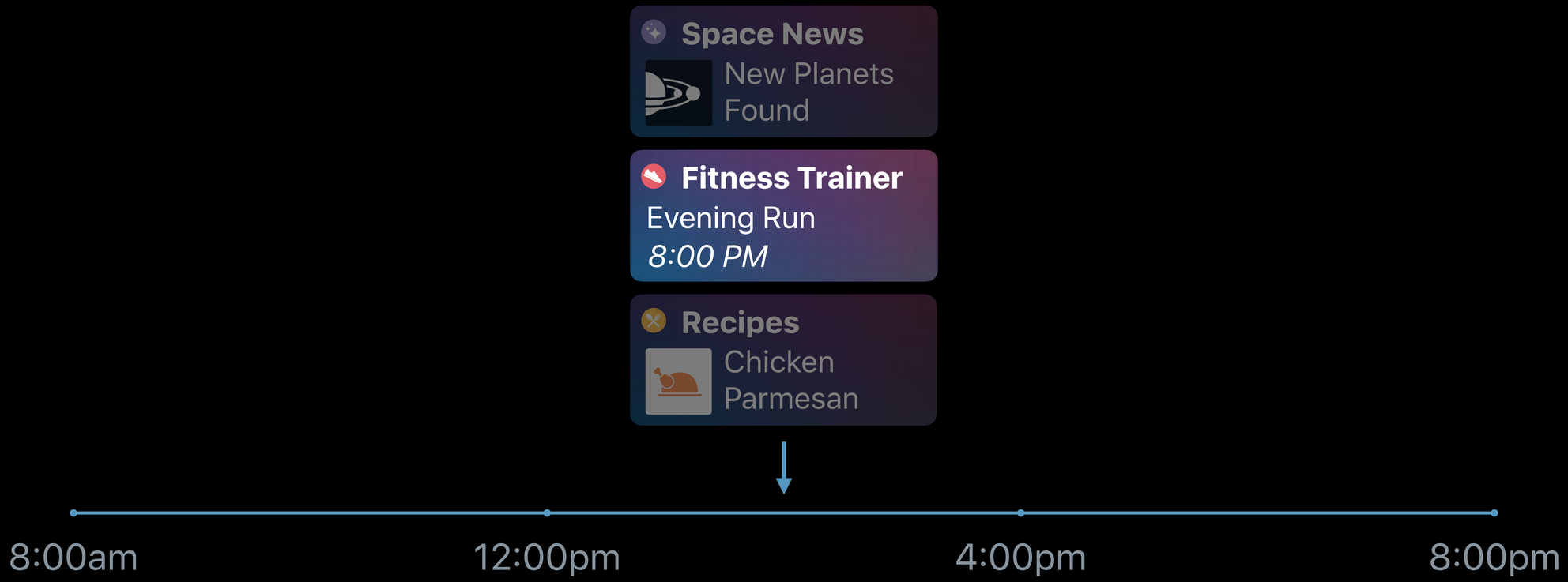
INDateRelevanceProvider



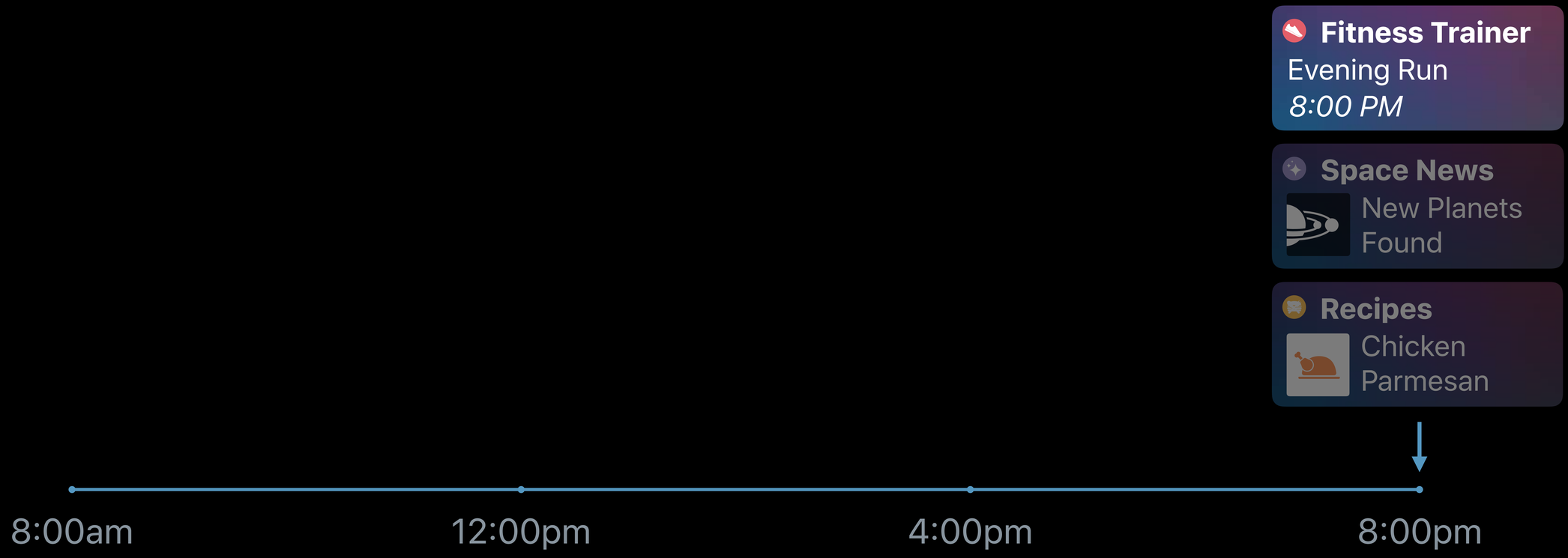
INDateRelevanceProvider



INDateRelevanceProvider



INDateRelevanceProvider



INLocationRelevanceProvider

INLocationRelevanceProvider


```
let locationRelevanceProvider = INLocationRelevanceProvider(region: region)
relevantShortcut.relevanceProviders = [locationRelevanceProvider]
```

INLocationRelevanceProvider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```

Surface around location

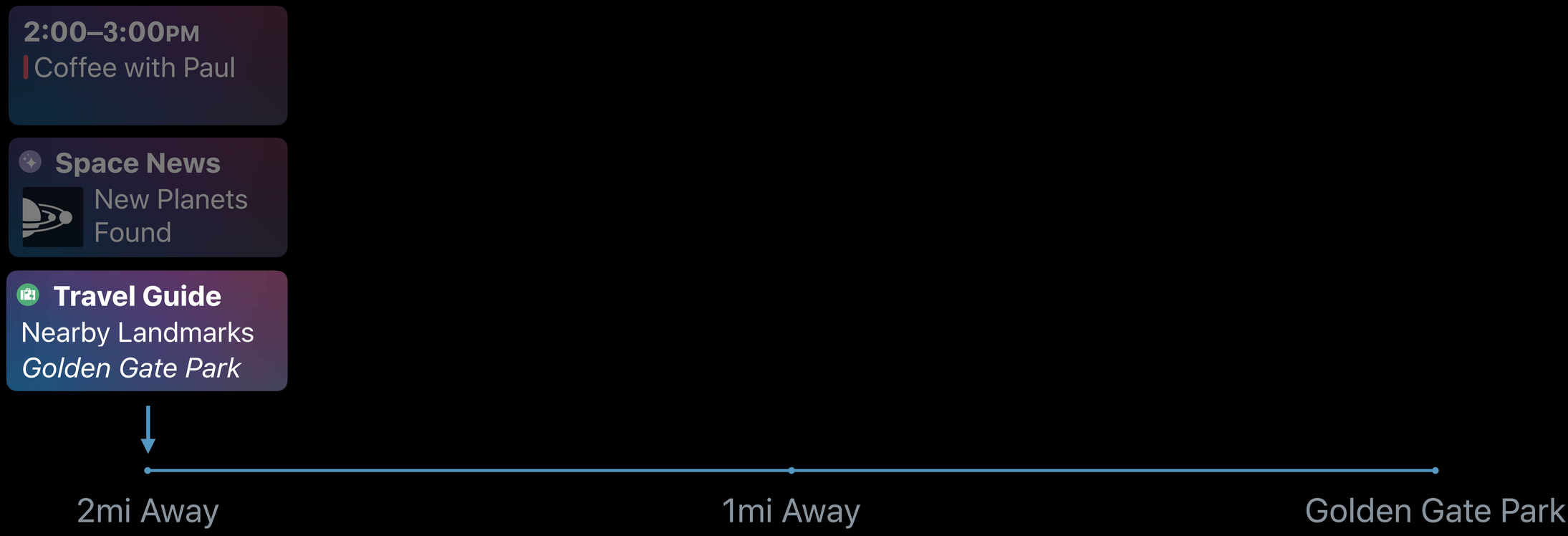
INLocationRelevanceProvider


```
let locationRelevanceProvider = INLocationRelevanceProvider(region: region)
relevantShortcut.relevanceProviders = [locationRelevanceProvider]
```

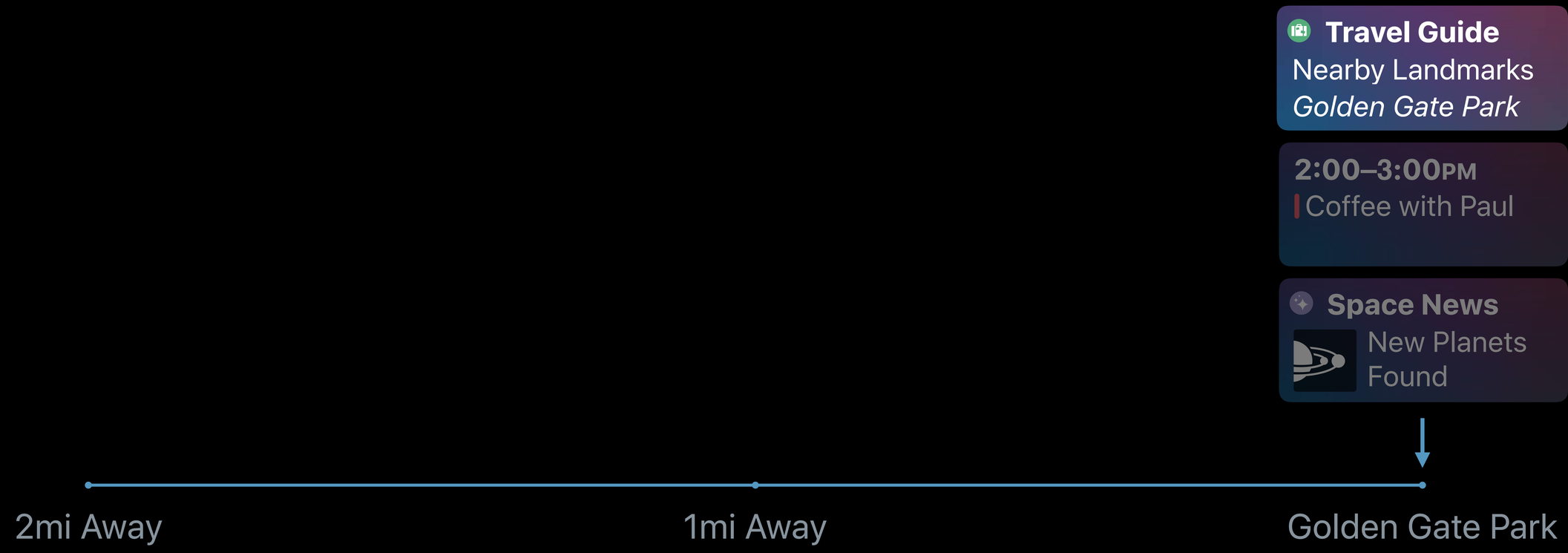
Surface around location

More relevant closer to region

INLocationRelevanceProvider

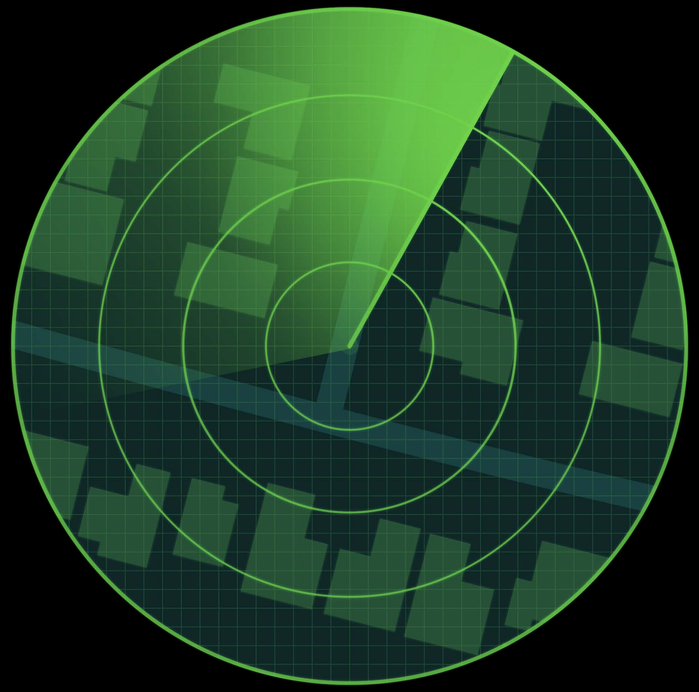


INLocationRelevanceProvider



INLocationRelevanceProvider

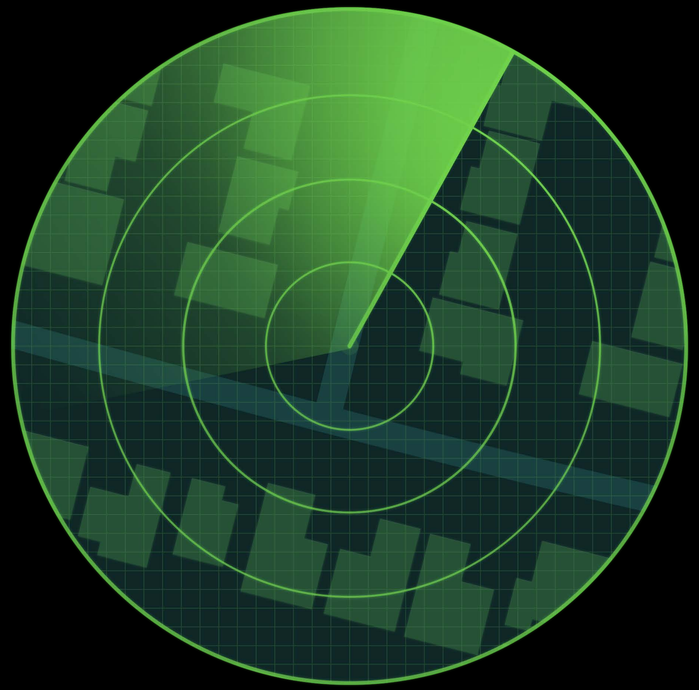
Provide a `CLRegion`



INLocationRelevanceProvider

Provide a `CLRegion`

Change region interpretation

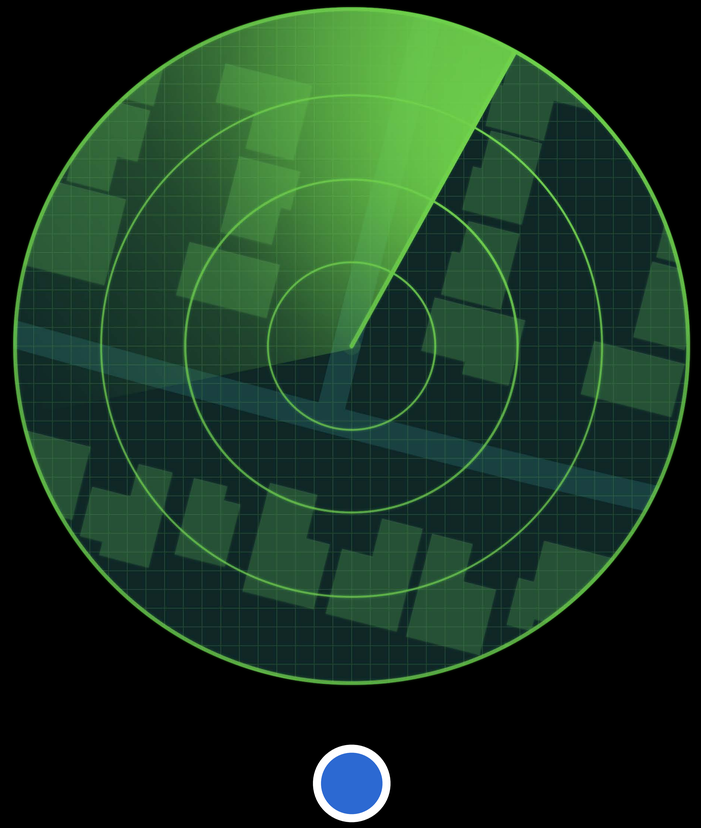


INLocationRelevanceProvider

Provide a `CLRegion`

Change region interpretation

- `notifyOnEntry`

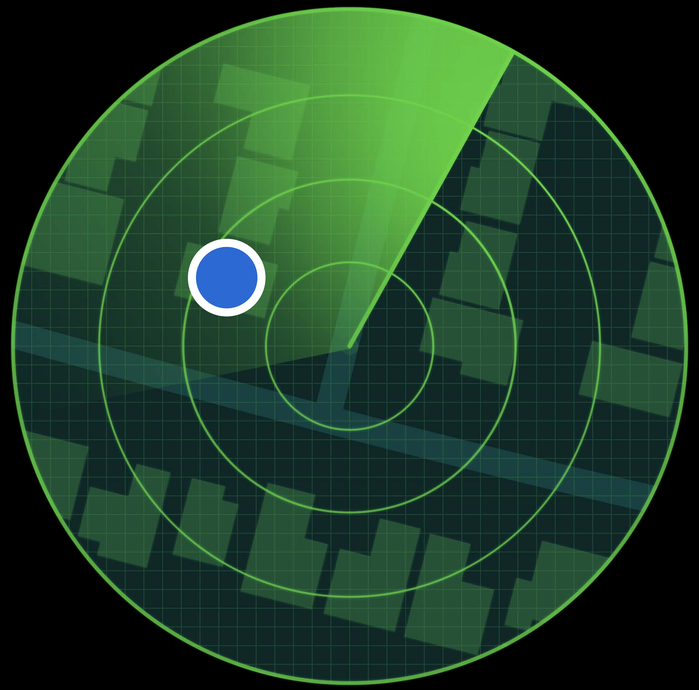


INLocationRelevanceProvider

Provide a `CLRegion`

Change region interpretation

- `notifyOnEntry`

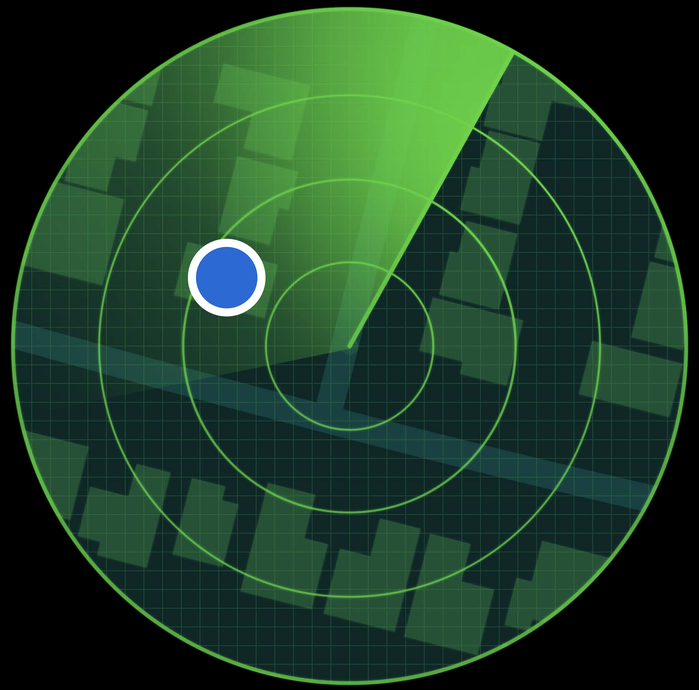


INLocationRelevanceProvider

Provide a `CLRegion`

Change region interpretation

- `notifyOnEntry`
- `notifyOnExit`



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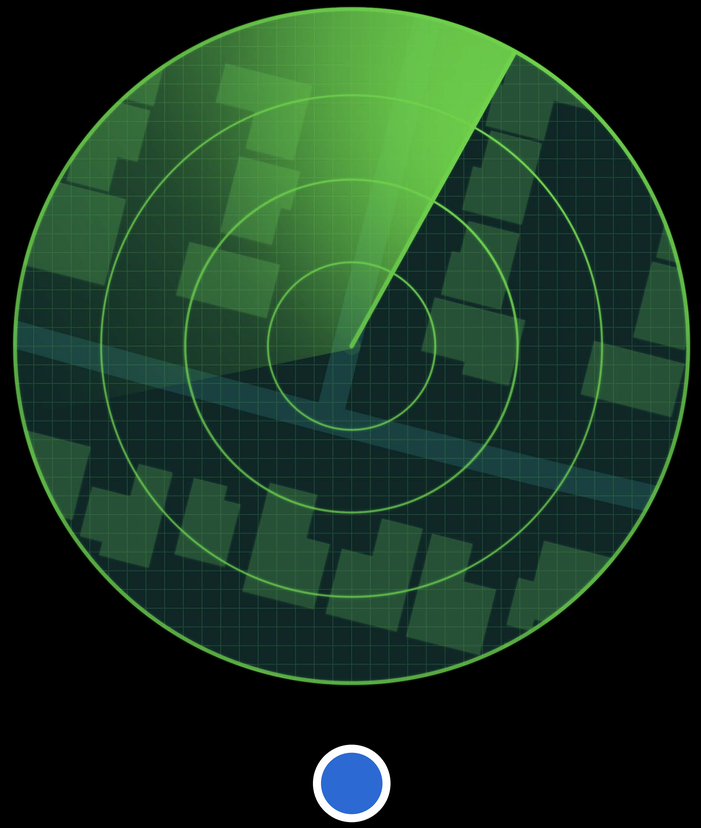

```swift
// Creating a Region

let center = CLLocationCoordinate2D(latitude: 37.334728, longitude: -122.008883)
let region = CLCircularRegion(center: center, radius: 2.0, identifier: "Apple Park")

region.notifyOnEntry = true
region.notifyOnExit = false

let relevanceProvider = INLocationRelevanceProvider(region: region)
```

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```

INLocationRelevanceProvider

Requires location authorization

INLocationRelevanceProvider

Requires location authorization

Location updates are limited

Providing Personalization

Use `INDailyRoutineRelevanceProvider`

Providing Personalization

Use `INDailyRoutineRelevanceProvider`

Meaningful times or locations to the user

Providing Personalization

Use `INDailyRoutineRelevanceProvider`

Meaningful times or locations to the user

Personalized to each user

Providing Personalization

Morning

Providing Personalization

Morning

- After user wakes up

Providing Personalization

Morning

- After user wakes up

Evening

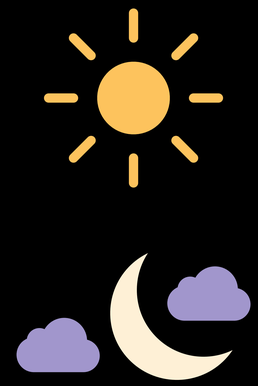
Providing Personalization

Morning

- After user wakes up

Evening

- Before going to bed



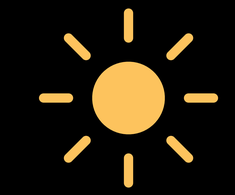
Providing Personalization

Morning

- After user wakes up

Evening

- Before going to bed



```
let morningRelevanceProvider = INDailyRoutineRelevanceProvider(situation: .morning)
```

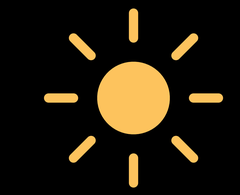
Providing Personalization

Morning

- After user wakes up

Evening

- Before going to bed



```
let morningRelevanceProvider = INDailyRoutineRelevanceProvider(situation: .morning)
```

Similar to `INDateRelevanceProvider`

Providing Personalization

Important locations to user

Providing Personalization

Important locations to user

- Home 

Providing Personalization

Important locations to user

- Home 
- Work 

Providing Personalization

Important locations to user

- Home 
- Work 
- School 

Providing Personalization

Important locations to user

- Home 
- Work 
- School 
- Gym 

Providing Personalization

Important locations to user

- Home 
- Work 
- School 
- Gym 

```
let homeRelevanceProvider = INDailyRoutineRelevanceProvider(situation: .home)
```

Providing Personalization

Important locations to user

- Home 
- Work 
- School 
- Gym 

```
let homeRelevanceProvider = INDailyRoutineRelevanceProvider(situation: .home)
```

Similar to `INLocationRelevanceProvider`

Making a Great Experience

Making a Great Experience

Glanceable Information

Tappable Actions


WED 6
10:09
Recipes
Chicken Parmesan
Space News
New Planets Found


WED 6
10:09
Recipes
Chicken Parmesan
Space News
New Planets Found


Recipes
10:09
Chicken Parmesan
Ingredients
2 eggs
1 cup bread crumbs


Recipes
10:09
Chicken Parmesan
Ingredients
2 eggs
1 cup bread crumbs


Recipes
10:09
Chicken Parmesan
Ingredients
2 eggs
1 cup bread crumbs

Making a Great Experience

Provide most critical information

Glanceable Information

Making a Great Experience

Provide most critical information

Open to location in app

Glanceable Information

Making a Great Experience

Provide most critical information

Open to location in app

Take advantage of background runtime

Glanceable Information

Making a Great Experience

Provide most critical information

Open to location in app

Take advantage of background runtime

Update relevant shortcuts with data

Glanceable Information

Making a Great Experience

Provide most critical information

Open to location in app

Take advantage of background runtime

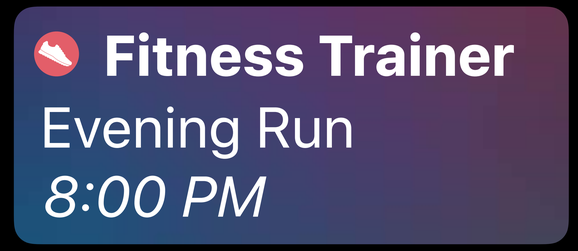
Update relevant shortcuts with data

Relevance providers for timely information

Glanceable Information

Making a Great Experience

Glanceable Information



Tappable Actions


WED 6
10:09
Fitness Trainer
Evening Run
8:00 PM
Space News
New Planets
Found


WED 6
10:09
Fitness Trainer
Evening Run
8:00 PM
Space News
New Planets
Found

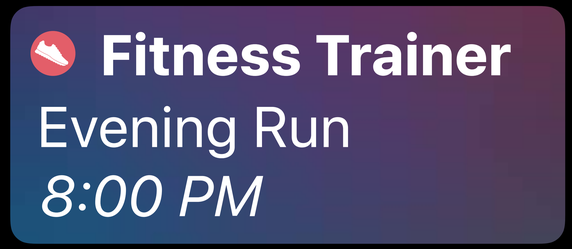

WED 6
10:09
Fitness Trainer
Evening Run
8:00 PM
Space News
New Planets
Found


Fitness Trai...
Start Evening Run
Take a 5 mile run around Golden Gate Park
Confirm


Fitness Trai...
Start Evening Run
Take a 5 mile run around Golden Gate Park
Confirm

Making a Great Experience

Run action in Intents extension

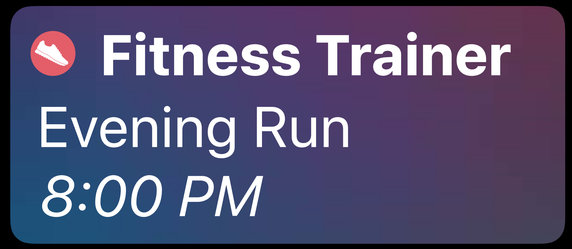


Tappable Actions

Making a Great Experience

Run action in Intents extension

Standard system confirmation UI



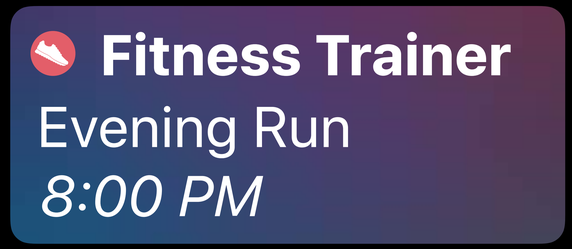
Tappable Actions

Making a Great Experience

Run action in Intents extension

Standard system confirmation UI

Fully specified Intents



Tappable Actions

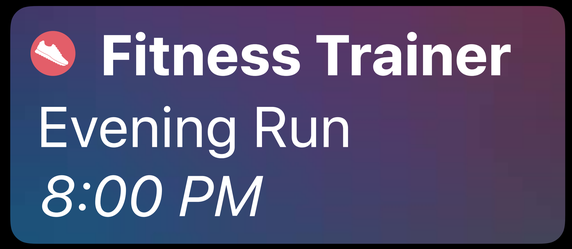
Making a Great Experience

Run action in Intents extension

Standard system confirmation UI

Fully specified Intents

Provide actions commonly performed



Tappable Actions

Making a Great Experience

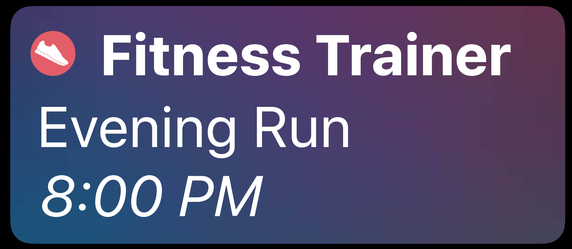
Run action in Intents extension

Standard system confirmation UI

Fully specified Intents

Provide actions commonly performed

Create relevant shortcuts often



Tappable Actions

Summary

Relevant shortcuts on Siri watch face

Summary

Relevant shortcuts on Siri watch face

Provide great content

Summary

Relevant shortcuts on Siri watch face

Provide great content

Richest experience with watchOS app

More Information

https://developer.apple.com/wwdc18/217

WatchKit, ClockKit, and Siri Shortcuts Lab	Technology Lab 7	Wednesday 3:00PM


WWDC18