Structure

HKActivitySummaryQueryDescriptor

A query interface that reads activity summaries using Swift concurrency.

iOS 15.4+ | iPadOS 15.4+ | Mac Catalyst 15.4+ | macOS 13.0+ | visionOS | watchOS 8.5+

```
struct HKActivitySummaryQueryDescriptor
```

Mentioned in

📄 Reading data from HealthKit

📄 Running Queries with Swift Concurrency

Overview

Use HKActivitySummaryQueryDescriptor to run a query that reads activity summary objects from the HealthKit store. To get a snapshot of activity summaries currently in the store, create a descriptor and call its result(for:) method.

```swift
// Get the start and end date components.
let calendar = Calendar(identifier: .gregorian)

var startComponents = calendar.dateComponents([.day, .month, .year], from: Date())
startComponents.hour = 0
startComponents.minute = 0
startComponents.second = 0

var endComponents = startComponents
endComponents.day = 1 + (endComponents.day ?? 0)
```

```
// Create a predicate for the query.
let today = HKQuery.predicate(forActivitySummariesBetweenStart: startComponents, end

// Create the descriptor.
let activeSummaryDescriptor = HKActivitySummaryQueryDescriptor(predicate:today)

// Run the query.
let results = try await activeSummaryDescriptor.result(for: store)
```

To set up a long-running query that returns both matching values currently in the HealthKit store, and any updates that arrive while the query is running, call the <u>results(for:)</u> method instead.

```
// Run a long-running query and monitor for updates.
let updateQueue = activeSummaryDescriptor.results(for: store)

// Wait for the initial results and updates.
updateTask = Task {
    for try await results in updateQueue {
        // Process results here.
    }
}
```

Topics

Creating query descriptors

`init(predicate: NSPredicate?)`

Instantiates an activity summary query descriptor.

Running queries

`func result(for: HKHealthStore) async throws -> [HKActivitySummary]`

Runs a one-shot query and asynchronously returns a snapshot of the current matching results.

`func results(for: HKHealthStore) -> HKActivitySummaryQueryDescriptor.Results`

Initiates a long-running query that returns its results using an asynchronous sequence.

`struct` `Results`

An asynchronous sequence that emits updates from an activity summary query.

Accessing query properties

`var` `predicate: NSPredicate?`

A predicate that limits the results that the query returned.

Default Implementations

≔   HKAsyncQuery Implementations

≔   HKAsyncSequenceQuery Implementations

Relationships

Conforms To

`Copyable, HKAsyncQuery, HKAsyncSequenceQuery`

See Also

Long-running queries

`class` `HKActivitySummaryQuery`

A query for reading activity summary objects from the HealthKit store.

`struct` `HKAnchoredObjectQueryDescriptor`

A query interface that runs anchored object queries using Swift concurrency.

`class` `HKAnchoredObjectQuery`

A query that returns changes to the HealthKit store, including a snapshot of new changes and continuous monitoring as a long-running query.

`class` `HKObserverQuery`

A long-running query that monitors the HealthKit store and updates your app when the HealthKit store saves or deletes a matching sample.