Class

# HKWorkoutActivity

An object that describes an activity within a longer workout.

iOS 16.0+ | iPadOS 16.0+ | Mac Catalyst 16.0+ | macOS 13.0+ | visionOS 1.0+ | watchOS 9.0+

```
class HKWorkoutActivity
```

## Mentioned in

Dividing a HealthKit workout into activities

## Overview

Workout activity objects partition a workout into a set of separate activities. For example, you can use workout activities to record the swim, bike, and running portions of a multisport event, like a triathlon, or to represent the active and rest periods during interval training. All `HKWorkout` instance have at least one, associated `HKWorkoutActivity`. If you don't explicitly set workout activities, HealthKit assigns a workout activity that matches the `HKWorkout` object's activity type. For more information, see Dividing a HealthKit workout into activities.

## Topics

### Creating workout activities

```
init(workoutConfiguration: HKWorkoutConfiguration, start: Date, end: Date?, metadata: [String : Any]?)
```

Creates a workout activity using the provided configuration, start date, end date, and metadata.

## Accessing workout data

`var uuid: UUID`

The activity's universally unique identifier (UUID).

`var startDate: Date`

The activitiy's start date and time.

`var endDate: Date?`

The activity's end date and time.

`var duration: TimeInterval`

The activity's duration, measured in seconds.

`var allStatistics: [HKQuantityType : HKStatistics]`

A dictionary that contains all the statistics for the activity.

`func statistics(for: HKQuantityType) -> HKStatistics?`

Returns the activity's statistics for the provided quantity type.

`var metadata: [String : Any]?`

Metadata that describes the activity.

`var workoutConfiguration: HKWorkoutConfiguration`

The configuration information for this part of the workout.

`var workoutEvents: [HKWorkoutEvent]`

An array of events associated with the containing workout and occurring during the activity's duration.

## Specifying predicate key paths

`let HKPredicateKeyPathWorkoutActivity: String`

The key path for accessing a specific workout activity.

`let HKPredicateKeyPathWorkoutActivityType: String`

The key path for accessing activities that match a workout activity type.

`let HKPredicateKeyPathWorkoutActivityStartDate: String`

The key path for accessing activities with a matching start date.

`let HKPredicateKeyPathWorkoutActivityEndDate: String`

The key path for accessing activities with a matching end date.

`let HKPredicateKeyPathWorkoutActivityDuration: String`

The key path for accessing activities with a matching duration.

`let HKPredicateKeyPathWorkoutActivityAverageQuantity: String`

The key path for accessing activities with a matching average quantity.

`let HKPredicateKeyPathWorkoutActivityMaximumQuantity: String`

The key path for accessing activities with a matching maximum quantity.

`let HKPredicateKeyPathWorkoutActivityMinimumQuantity: String`

The key path for accessing activities with a matching minimum quantity.

`let HKPredicateKeyPathWorkoutActivitySumQuantity: String`

The key path for accessing activities with a matching sum.

---

# Relationships

## Inherits From

`NSObject`

## Conforms To

`CVarArg`
`CustomDebugStringConvertible`
`CustomStringConvertible`
`Equatable`
`Hashable`
`NSCoding`
`NSCopying`
`NSObjectProtocol`
`NSSecureCoding`
`Sendable`

`SendableMetatype`

---

# See Also

## Samples

- Adding samples to a workout
  Create associated samples that add details to a workout.
- Accessing condensed workout samples
  Read series data from condensed workouts.
- Dividing a HealthKit workout into activities
  Partition multisport and interval workouts into activities that represent the different parts of the workout.

`class HKWorkout`
A workout sample that stores information about a single physical activity.

`class HKWorkoutBuilder`
A builder object that incrementally constructs a workout.

`class HKWorkoutType`
A type that identifies samples that store information about a workout.

`let HKWorkoutTypeIdentifier: String`
The workout type identifier.

`enum HKWorkoutActivityType`
The type of activity performed during a workout.

`enum HKWorkoutSessionType`
The type of session.

`class HKWorkoutEvent`
An object representing an important event during a workout.