MapKit / MapCamera

Structure

MapCamera

Defines a virtual viewpoint above the map surface.

◈ MapKit | ◈ SwiftUI | iOS 17.0+ | iPadOS 17.0+ | Mac Catalyst | macOS 14.0+ | tvOS 17.0+ | visionOS | watchOS 10.0+

```
struct MapCamera
```

Overview

MapCamera allows you to specify the viewpoint of a Map, as well as affect how MapKit presents the map to the user.

To create a map view with a 3D perspective, MapCamera takes input from the camera and device:

- The location of the camera on the map.

- The compass heading to indicate the camera's viewing direction.

- The pitch of the camera relative to the map perpendicular.

- The camera's distance from the target point.

Topics

Creating a map camera

init(MKMapCamera)

    Creates a map camera from the given MapKit camera object.

```
init(centerCoordinate: CLLocationCoordinate2D, distance: Double,
heading: Double, pitch: Double)
```
Creates a camera using the specified distance, pitch, and heading information.

Accessing the camera properties

```
var centerCoordinate: CLLocationCoordinate2D
```
The map coordinate at the center of the map view.

```
var distance: Double
```
The distance from the center point of the map to the camera, in meters.

```
var heading: Double
```
The heading of the camera, in degrees, relative to true North.

```
var pitch: Double
```
The viewing angle of the camera, in degrees.

Relationships

Conforms To

```
Equatable
```

See Also

Map customization

```
struct MapCameraBounds
```
Defines an optional boundary of an area within which the map's center needs to remain.

```
struct MapCameraPosition
```
A structure that describes how to position the map's camera within the map.

```
struct MapCameraUpdateContext
```

A structure that defines additional information about the map camera.

struct MapCameraUpdateFrequency

A structure that describes when the map camera updates.