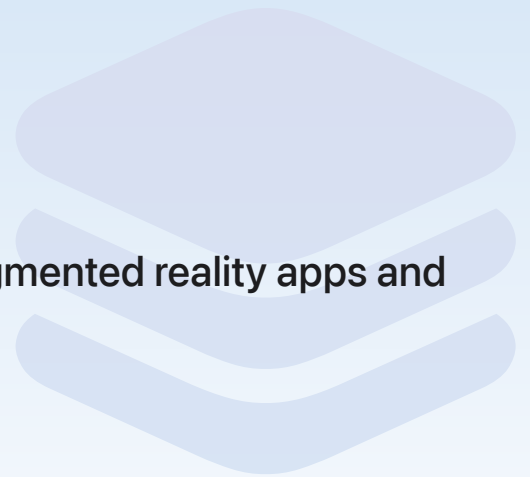Framework

ARKit

Integrate hardware sensing features to produce augmented reality apps and games.

iOS 11.0+ | iPadOS 11.0+ | Mac Catalyst 14.0+ | visionOS 1.0+

Overview

Augmented reality (AR) describes user experiences that add 2D or 3D elements to the live view from a device's sensors in a way that makes those elements appear to inhabit the real world. ARKit combines device motion tracking, world tracking, scene understanding, and display conveniences to simplify building an AR experience.

Topics

visionOS

📄 Setting up access to ARKit data

Check whether your app can use ARKit and respect people's privacy.

class `ARKitSession`

The main entry point for receiving data from ARKit.

protocol `DataProvider`

A source of live data from ARKit.

protocol `Anchor`

The identity, location, and orientation of an object in world space.

☰ **ARKit in visionOS**

Create immersive augmented reality experiences.

☰ **ARKit in visionOS C API**

Integrate ARKit with low-level libraries and functionality.

iOS

📄 **Verifying Device Support and User Permission**

Check whether your app can use ARKit and respect user privacy at runtime.

class `ARSession`

The object that manages the major tasks associated with every AR experience, such as motion tracking, camera passthrough, and image analysis.

class `ARAnchor`

An object that specifies the position and orientation of an item in the physical environment.

☰ **ARKit in iOS**

Integrate iOS device camera and motion features to produce augmented reality experiences in your app or game.