

Protocol

Class

Structure

method

>> return

[input]

ARKitSession

ARKitSession

init() >> void

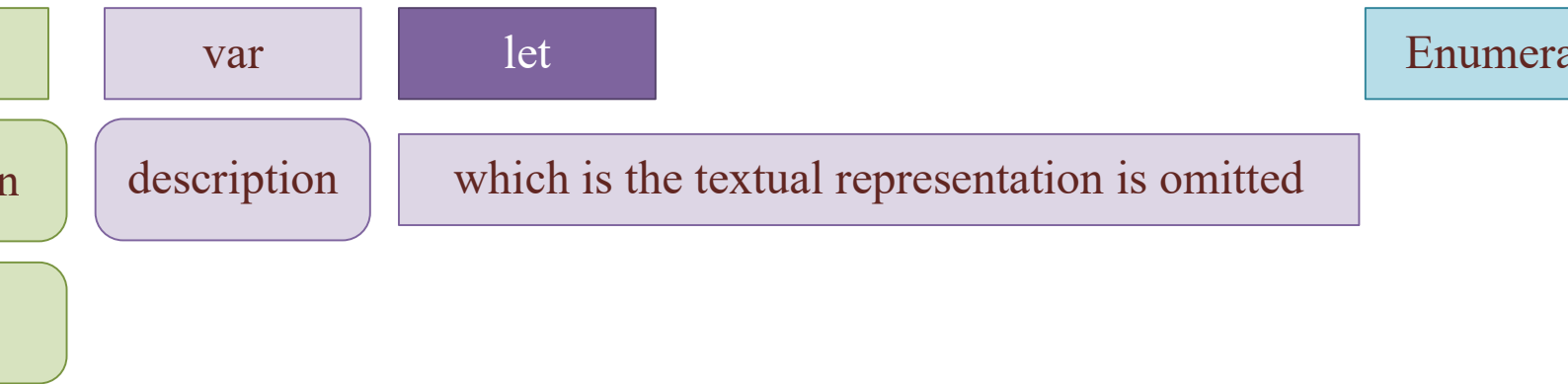
run( [DataProvider]) >> void

stop() >> void

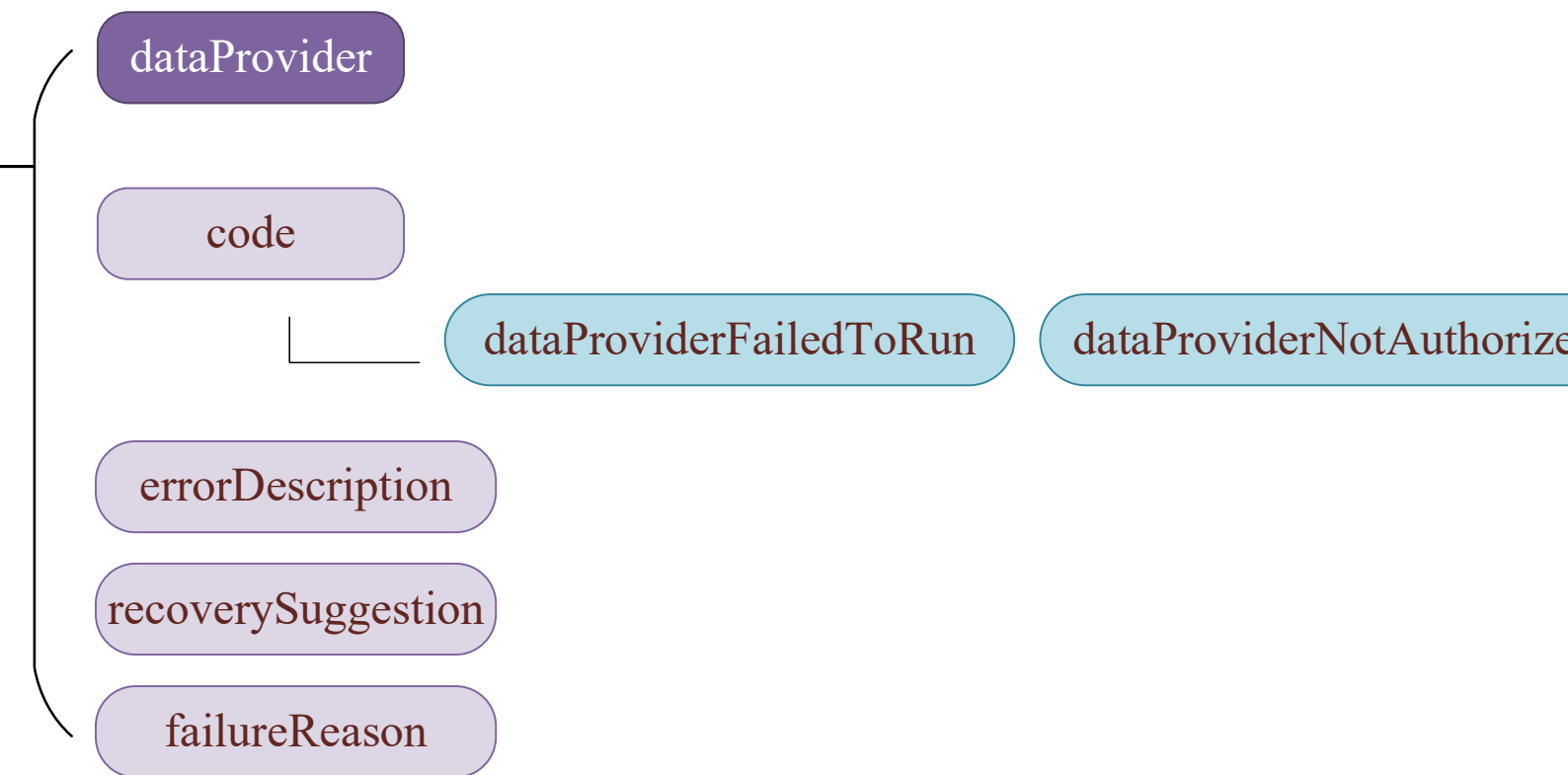
Error

requestAuthorization  
>>[ARKitSession.AuthorizationStatus]

queryAuthorizationStatus  
>>[ARKitSession.AuthorizationStatus]



r]) >> void



Authorization [ARKitSession.AuthorizationType]  
AuthorizationType : ARKitSession.AuthorizationStatus]

Authorization[ARKitSession.AuthorizationType]  
AuthorizationType : ARKitSession.AuthorizationStatus]

enumeration

Case

typealias

normalized

queryAuthorization  
>>[ARKitSession.Auth

AuthorizationSta

AuthorizationTy

events

Event

type:  
status:

DataProvider

state

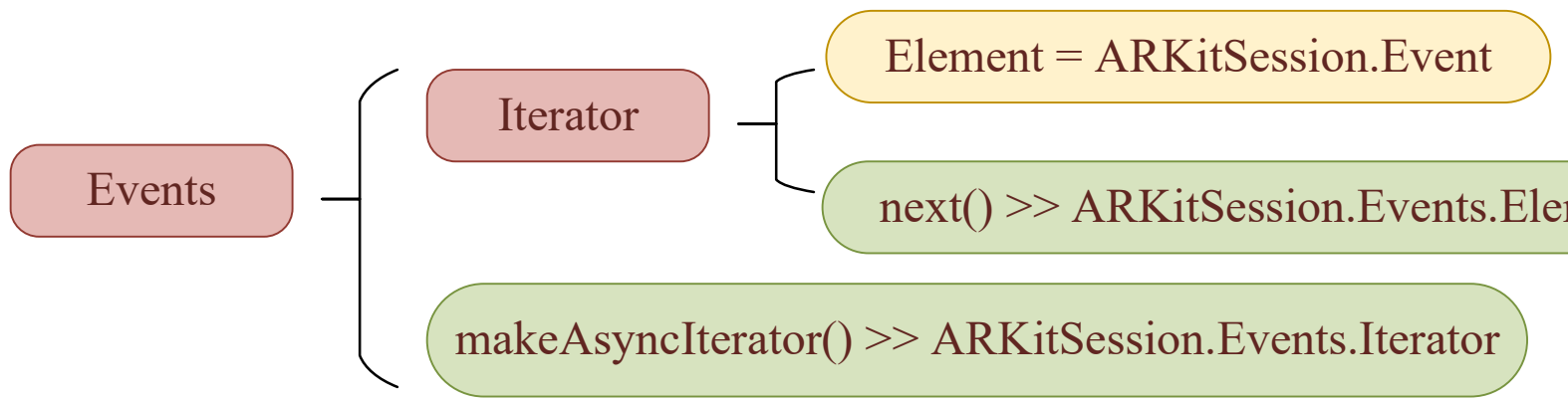
DataProvider

Authorization[ARKitSession.AuthorizationType]  
AuthorizationType : ARKitSession.AuthorizationStatus]

onStatus



onType



case authorizationChanged(  
type: ARKitSession.AuthorizationType,  
status: ARKitSession.AuthorizationStatus)

case dataProviderStateChanged(  
dataProviders: [any DataProvide  
newState: DataProviderState,  
error: ARKitSession.Error?)

DataProviderState



at

s.Element

or

nged(  
provider],  
State,  
or?)

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DataProvider

requiredAuthorizations

isSupported

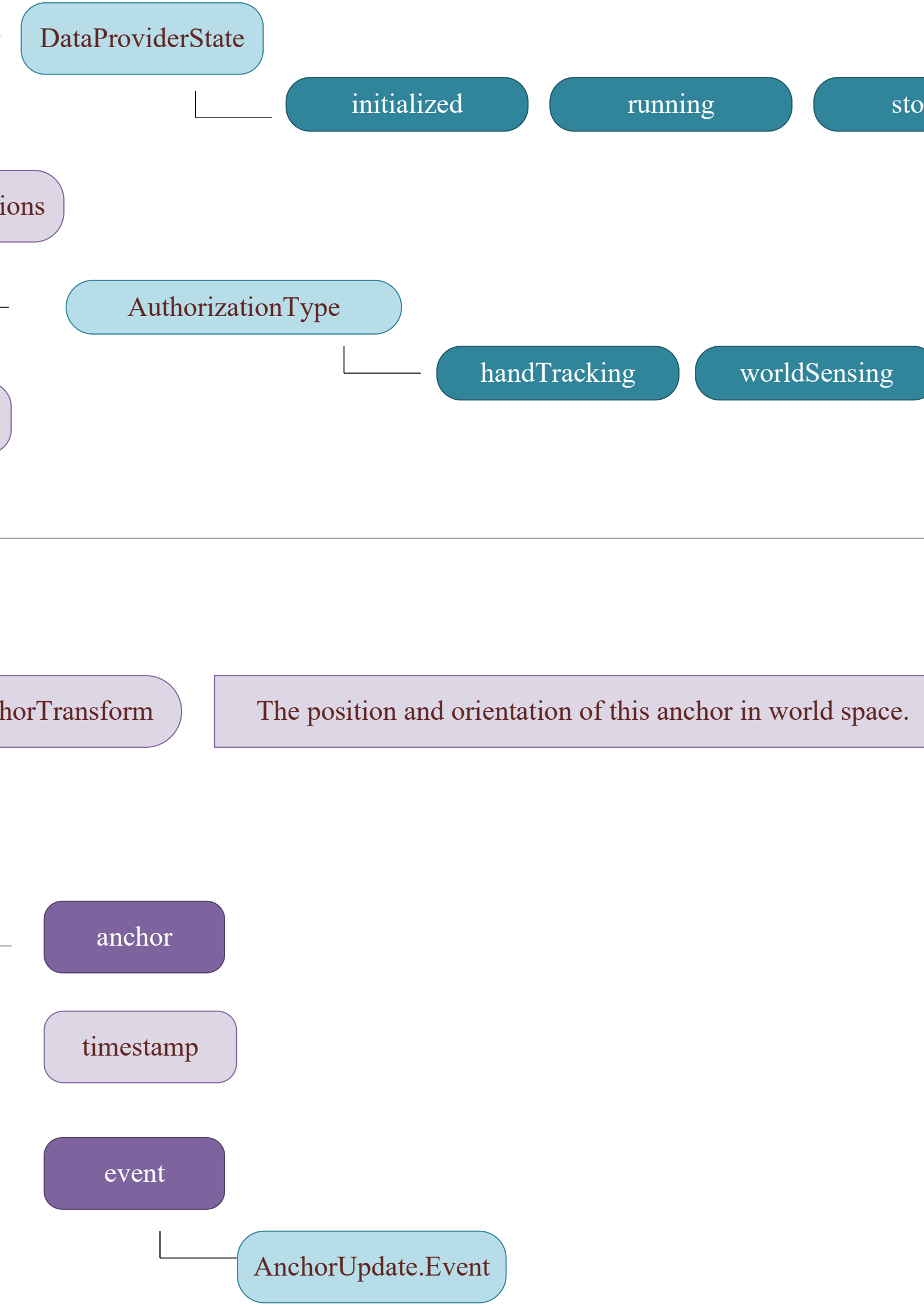
Anchor

Anchor

UUID

originFromAnchorTr

AnchorUpdate





stopped

paused

ng

cameraAccess

ace.

AnchorUpdateSe

BarcodeDetectionProvider

BarcodeDetectionProvider

state

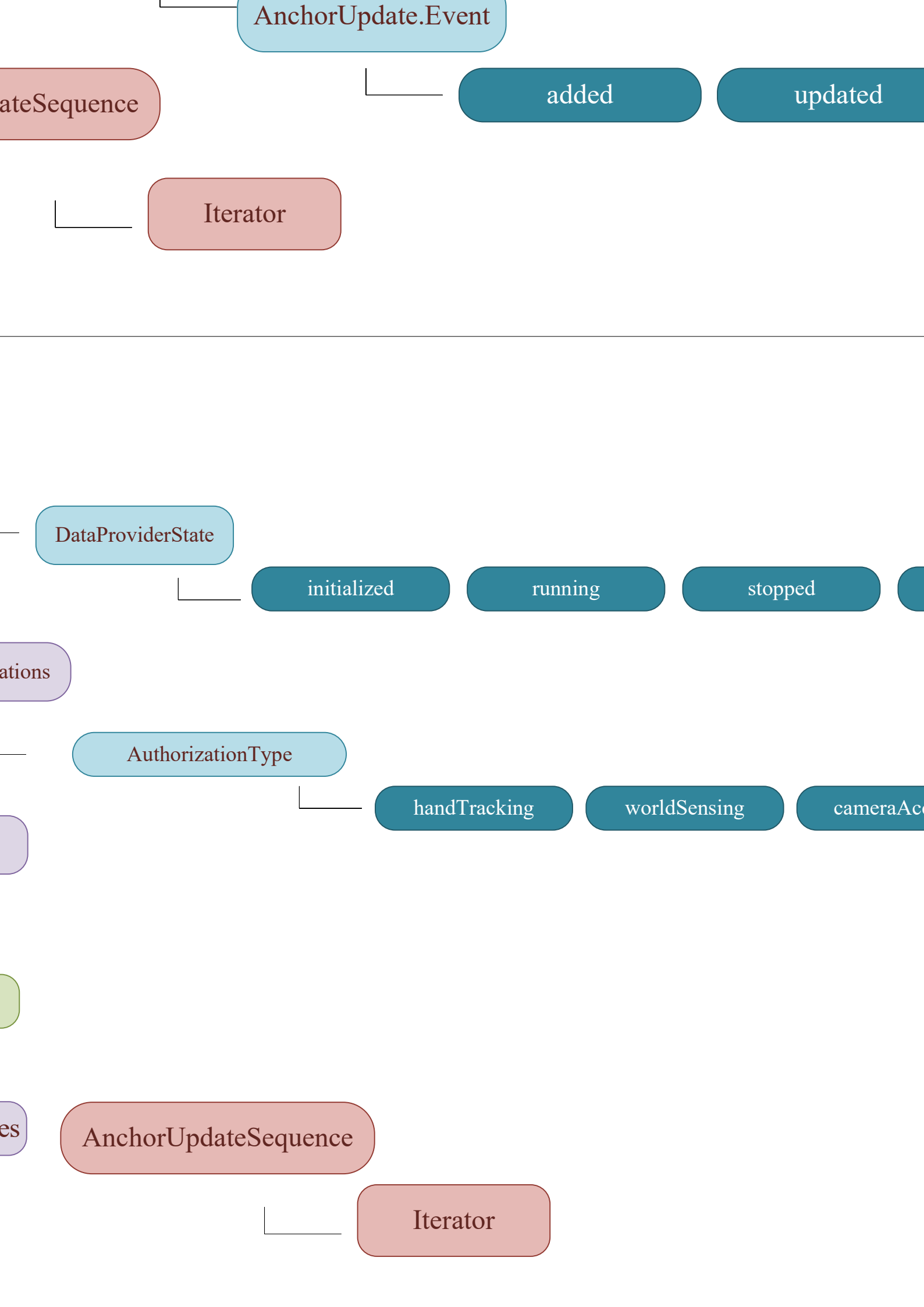
requiredAuthorizations

isSupported

init()

anchorUpdates

UUID



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removed

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paused

eraAccess

BarcodeAnchor

UUID

originFromAnchorTran

AnchorUpdate

extent

payloadData

payloadString

sybology

orTransform

anchor

timestamp

event

AnchorUpdate.Event

added

updated

removed

Data

String

logy

BarcodeAnchor.Symbology

aztec

codabar

code39

code39Checksum

code39FullAsciiChecksum

oved

code128

ksum

code39FullAscii

code93

code93i

CameraFrameProvider

CameraFrameProvider

state

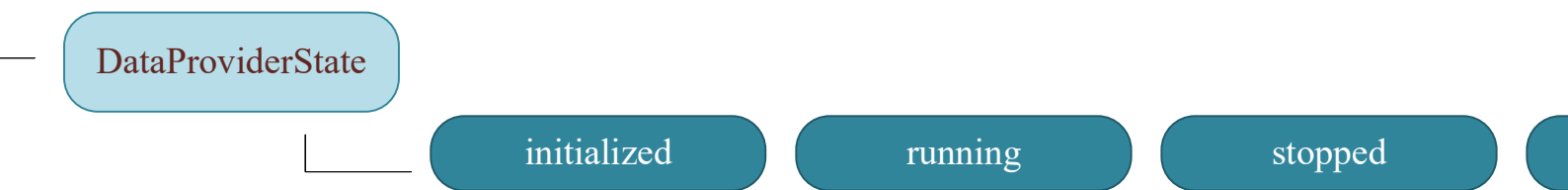
requiredAuthorizations

isSupported

init()

cameraFrameU  
>> Ca





```
FrameUpdates( cameraVideoFormat: CameraVideoFormat)  
>> CameraFrameProvider.CameraFrameUpdates
```

code93

code931

ean8

expanded

gs1DataBarLimited

checksum

microPDF417

7

qr

upce

paused

neraAccess

cameraFrameU

>> Ca

CameraFrameU

CameraPosi

CameraT

CameraRec

CameraFrameUpdates( cameraVideoFormat. CameraVideoFormat)  
>> CameraFrameProvider.CameraFrameUpdates

CameraFrameUpdates

└─ makeAsyncIterator()  
>> CameraFrameProvider.CameraFrameUpdates.Iterator

Iterator

└─ next()  
>> CameraFrameProvider.CameraFrameUpdates.

Element

CameraPosition

└─ left right

CameraType

└─ main

CameraRectification

dates.Element

CameraRec

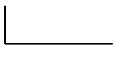
primarySample

Sample

pa

CameraFrame

aRectification



mono

stereoCorrected

e



parameters

Parameters

cameraPosition

cameraType

captureTimestamp

colorTemperature

exposureDuration

extrinsics

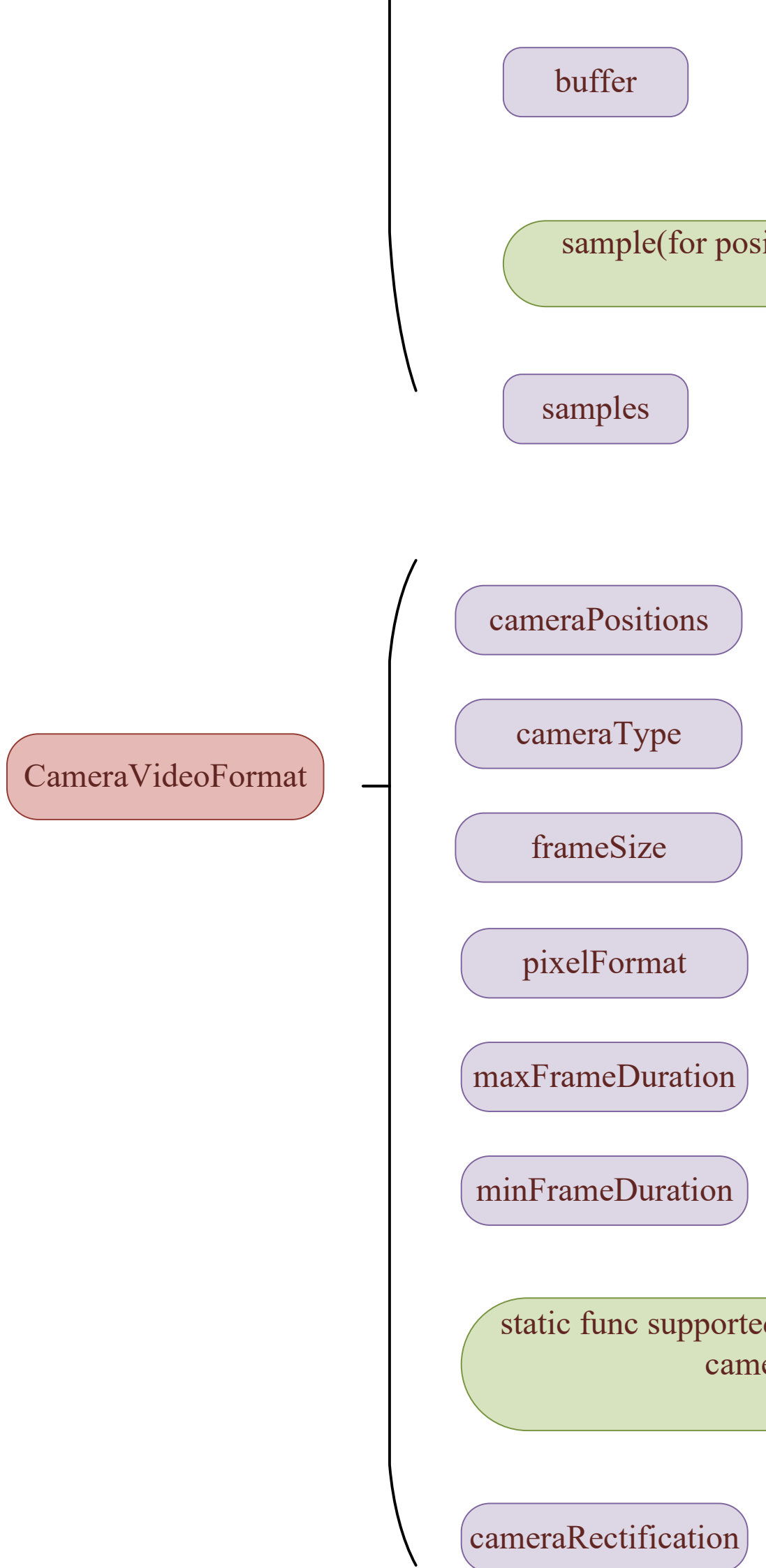
intrinsics

midExposureTimestamp









CVReadOnlyPixelBuffer

Core Video

position: CameraFrameProvider.CameraPosition)  
>> CameraFrame.Sample

s

ion

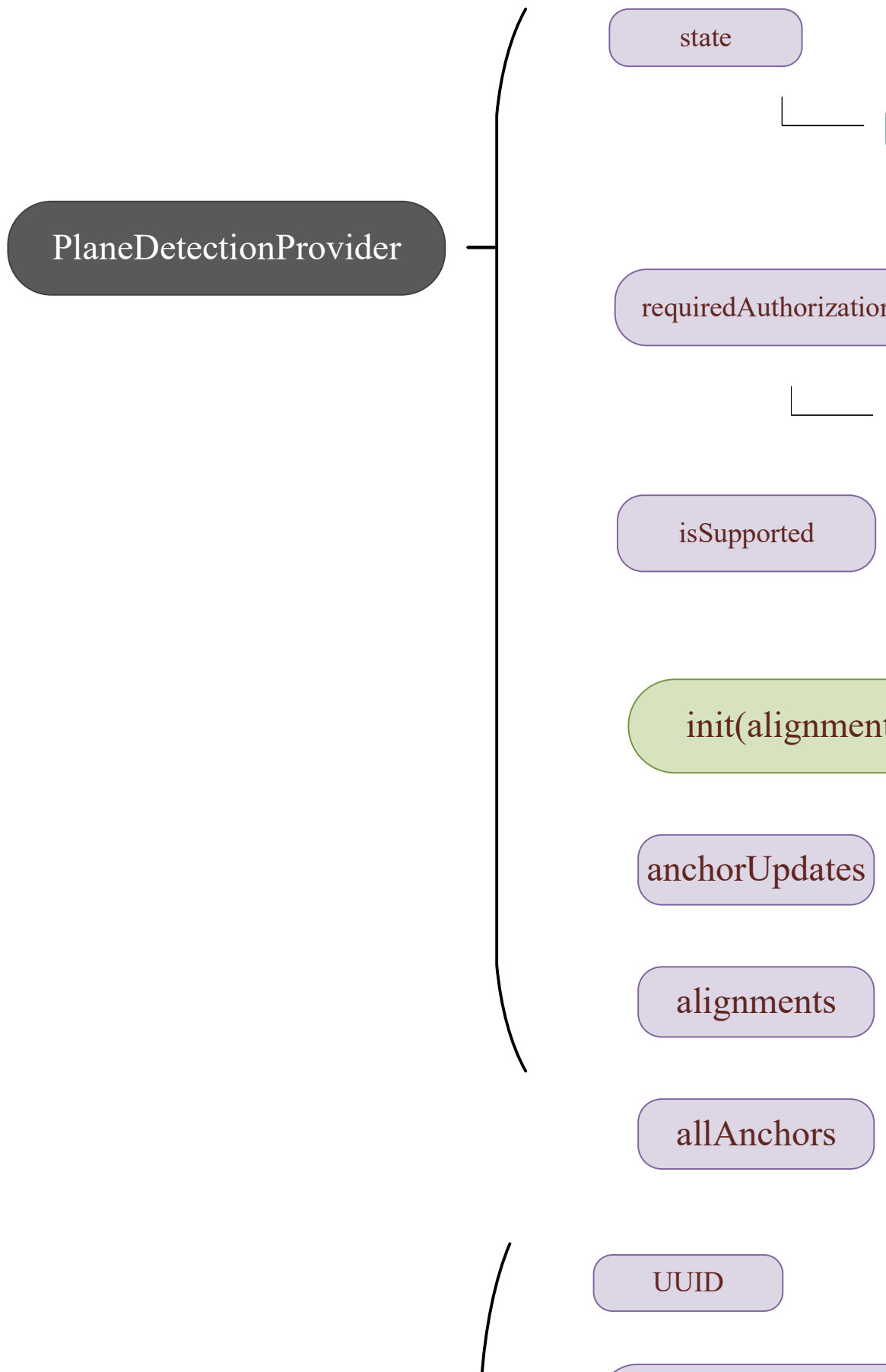
on

upportedVideoFormats(for cameraType:CameraFrameProvider.CameraType,  
cameraPositions:[CameraFrameProvider.CameraPosition])  
>> [CameraVideoFormat]

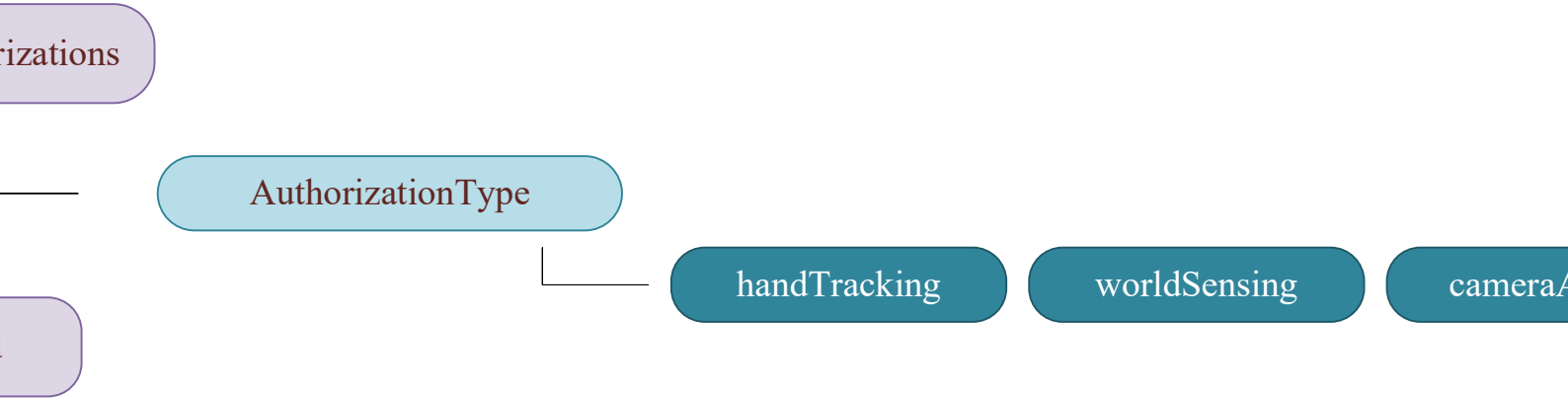
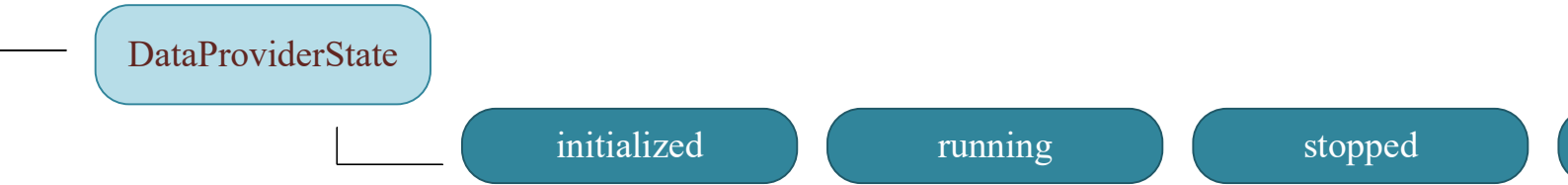
ion



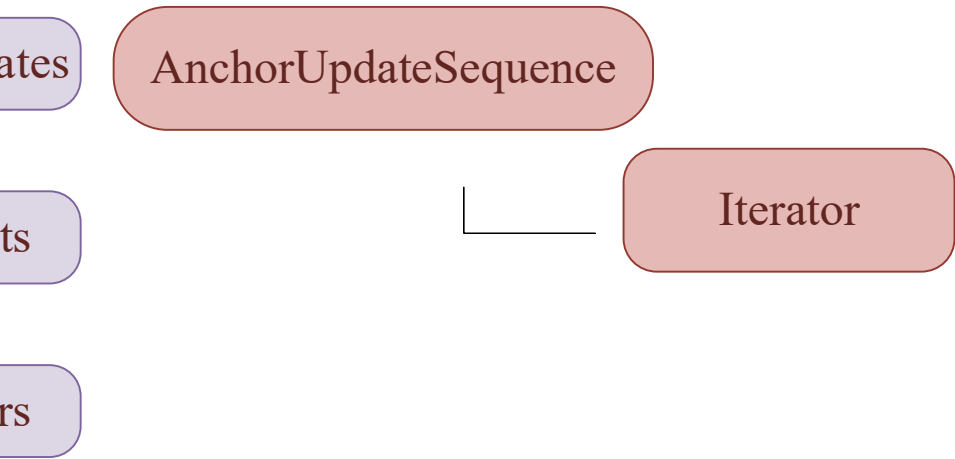
## PlaneDetectionProvider



ion



ments: [PlaneAnchor.Alignment] = [.horizontal, .vertical])



---

paused

cameraAccess

PlaneAnchor

originFromAnchorTra

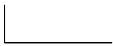
alignment

geometry

surfaceClassif

horTransform

Alignment



horizontal

vertical

slanted

Geometry

meshFaces

meshVertices

extent

Extent

width

height

anchorFromExtentTransform

lassification

SurfaceClassification



bed

cabinet

ce

door

floor

hom



form

ceiling

homeAppliance

---

WorldTrackingProvider

WorldTrackingProvider

state

requiredAuthorization

isSupported

init()

anchorUpdates

allAnchors

none

plant

so

stairs

table

wall

window

DataProviderState

initialized

running

stopped

izations

AuthorizationType

handTracking

worldSensing

cameraA

ates

AnchorUpdateSequence

Iterator

rg

seat

tv

---

paused

ameraAccess

allAnchors

addAnchor(

Error

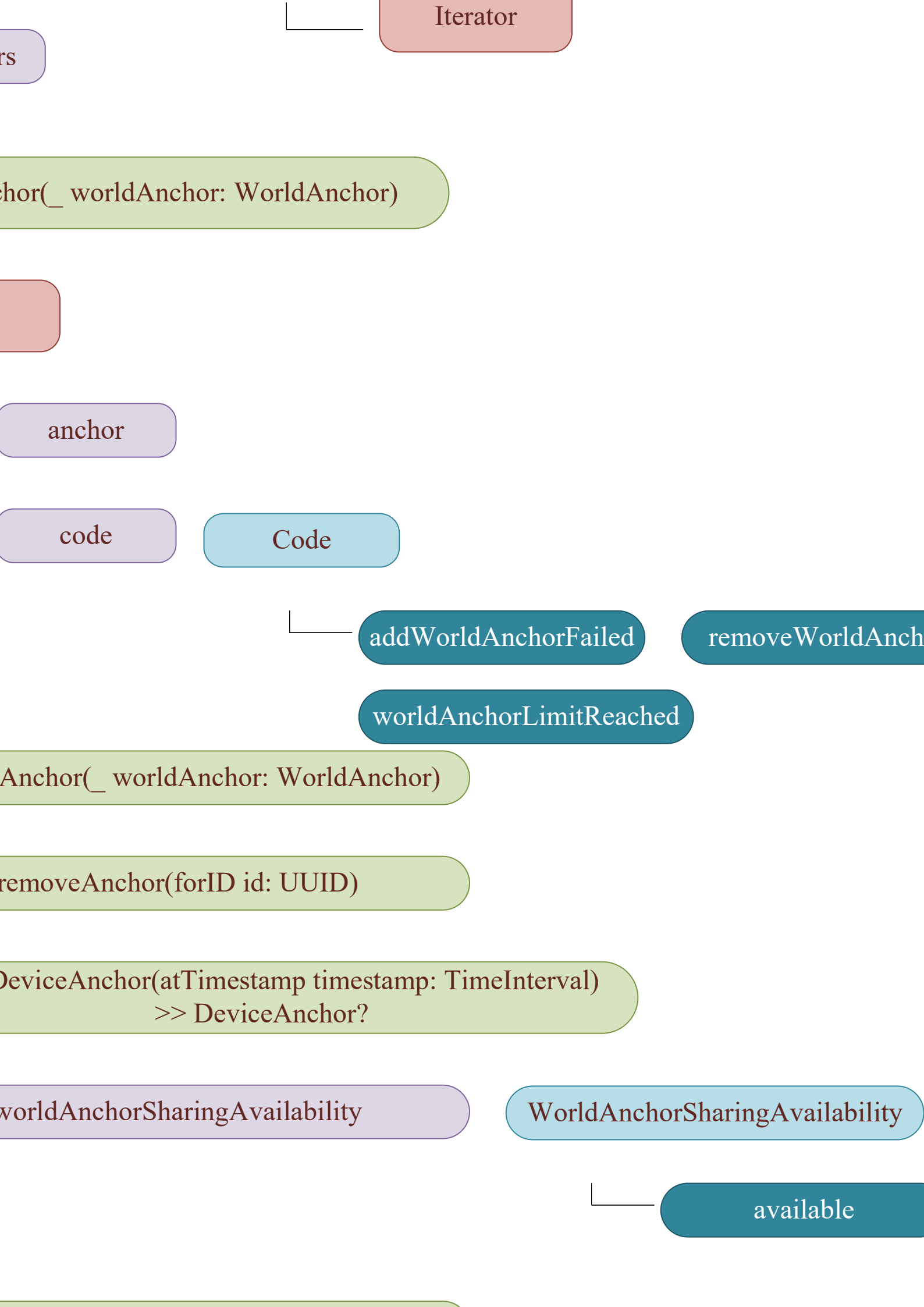
a

removeAnchor

remo

queryDevice

world



AnchorFailed

lity

unavailable

WorldAnchor

UUID

originFromAnchorTra

init(originFromA

isTracked

init(originFro

alignment

isSharedWithNea



removeAllAnchors()

AnchorTransform

fromAnchorTransform: simd\_float4x4)

1

inFromAnchorTransform: simd\_float4x4,sharedWithNearbyParticipants: Bool)

Alignment



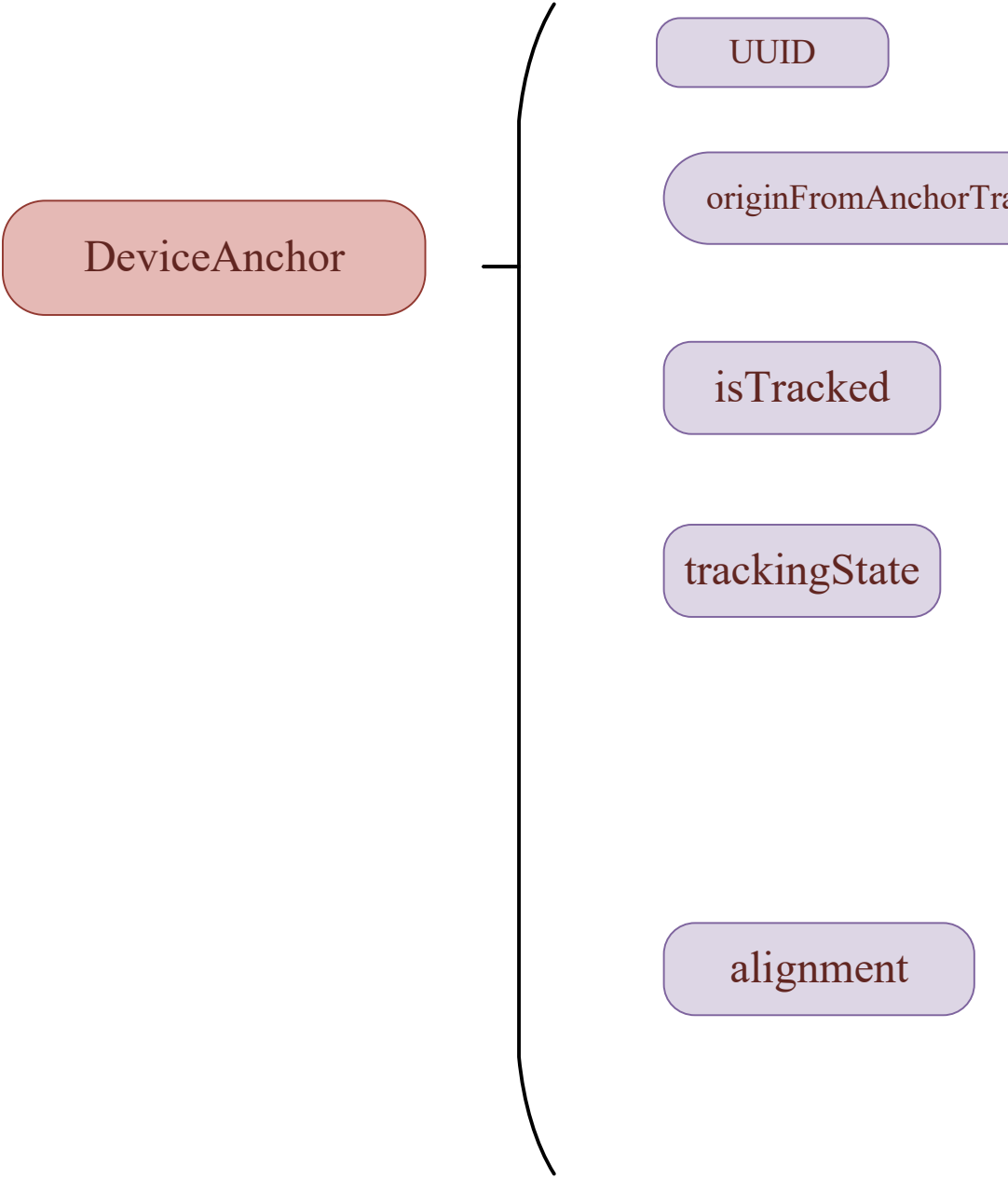
horizontal

vertical

slanted

withNearbyParticipants

1)



HandTrackingProvider

state

AnchorTransform

TrackingState



orientationTracked

tracked

untracked

Alignment



horizontal

vertical

slanted

acked

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HandTrackingProvider

state

requiredAuthorization

isSupported

init()

anchorUpdates

latestAnchors

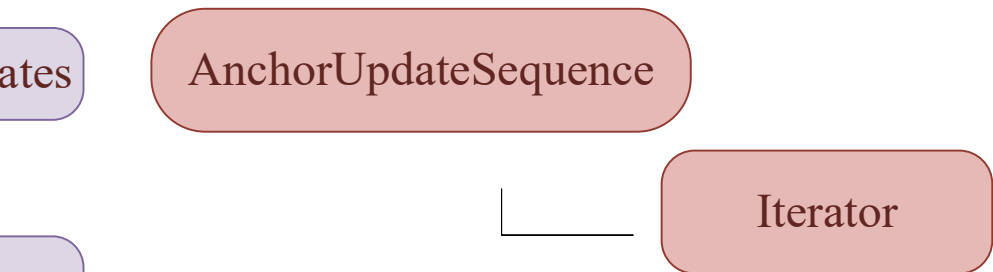
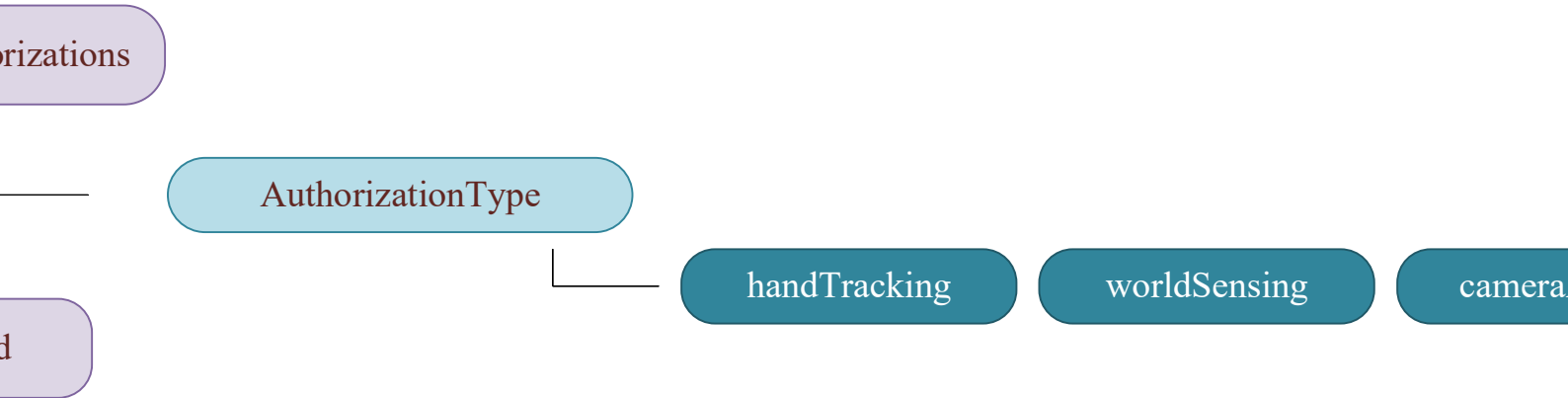
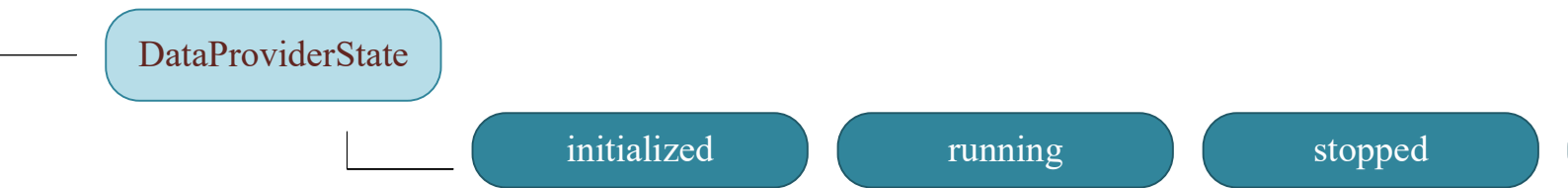
handAnchors

HandAnchor

UUID

originFromAnchorTra

isTracked



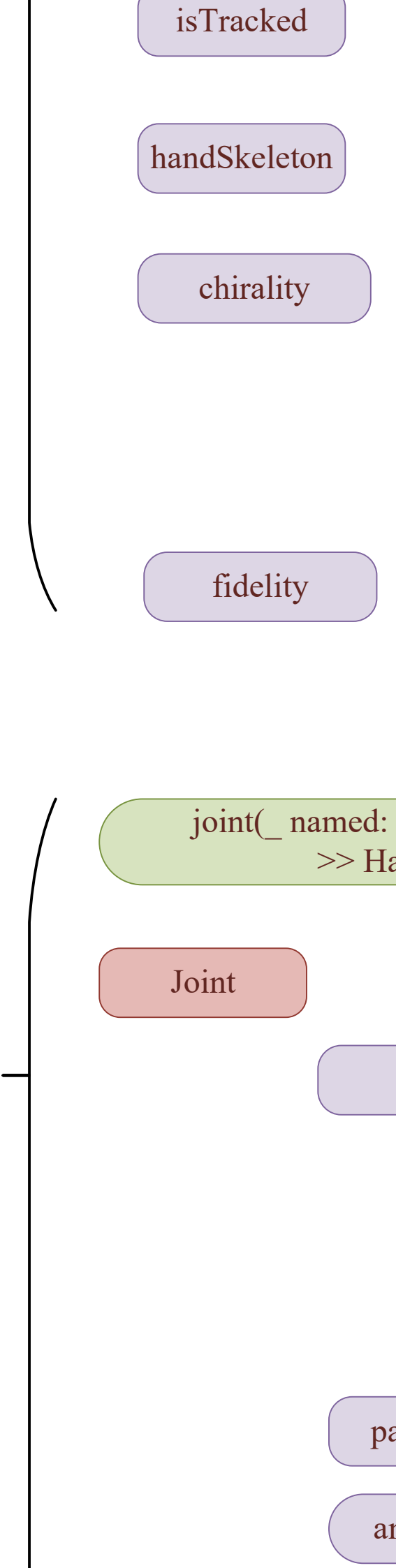
AnchorTransform

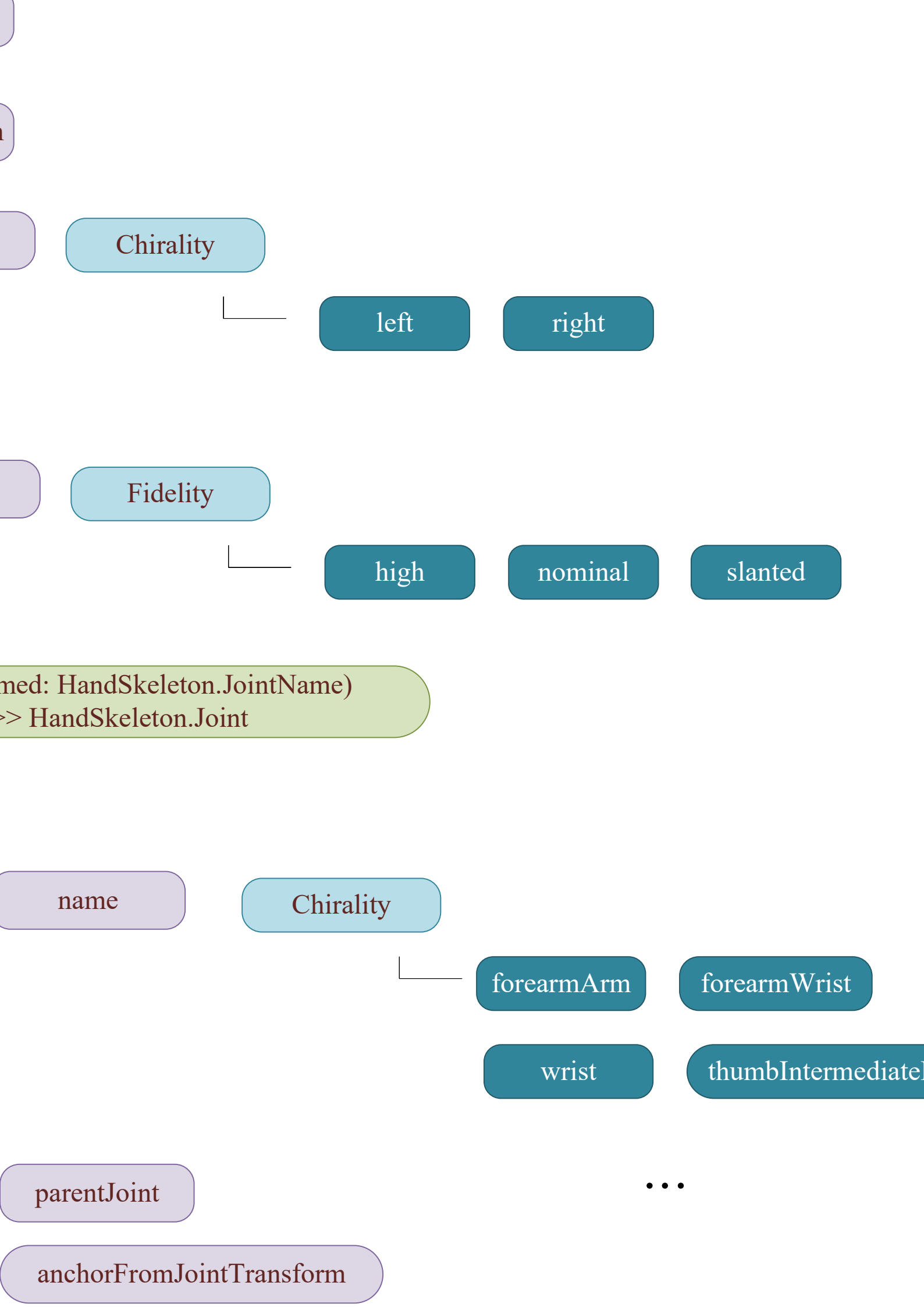
paused

cameraAccess



HandSkeleton







an  
p  
is

allJoints

neutralPose

## SceneReconstructionProvider

SceneReconstructionProvider

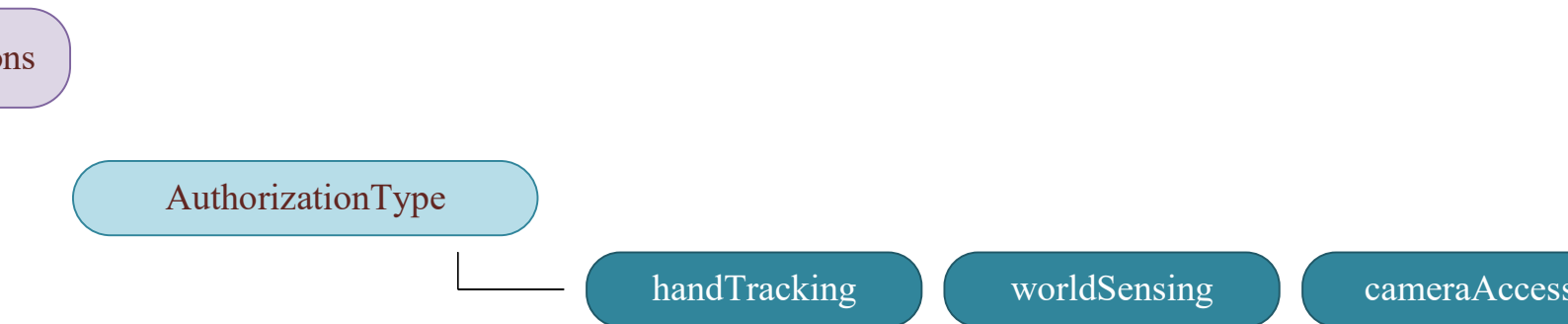
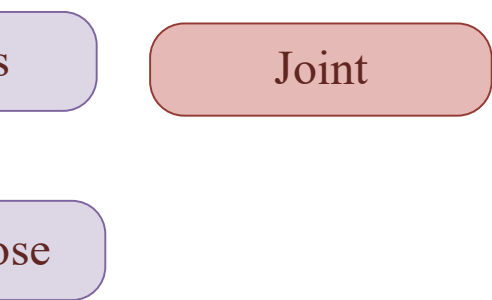
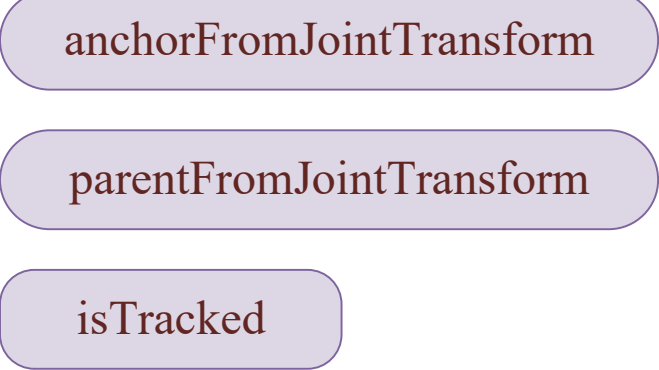
state

Dat

requiredAuthorizations

isSupported

anchorUpdates



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paused

Access

MeshAnchor

allAnchors

init(modes: [Scene]

modes

UUID

originFromAnchorTransform

geometry

Anchor

ImageTrackingProvider

state

Iterator

ceneReconstructionProvider.Mode] = [])

Mode

classification

ansform

AnchorUpdateSequence

faces

vertices

normals

classifications





ImageTrackingProvider

state

requiredAuthorizations

isSupported

anchorUpdates

allAnchors

init(referenc

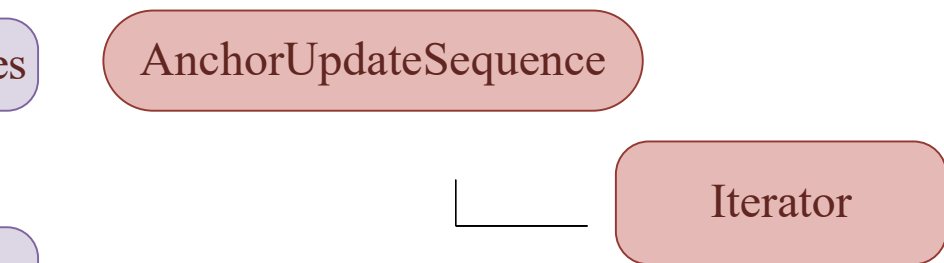
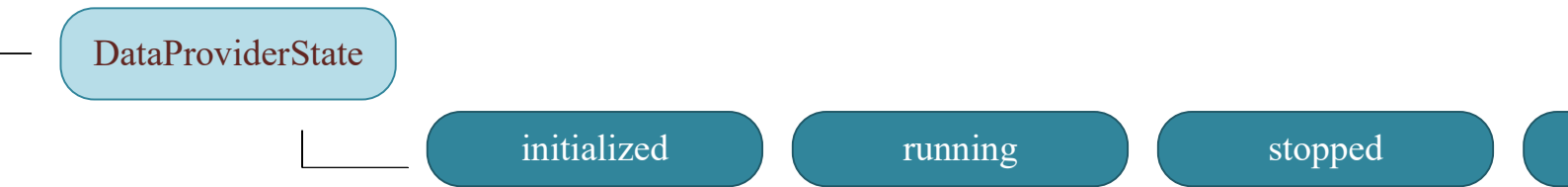
ImageAnchor

UUID

originFromAnchorTrans

geometry

An



referenceImages: [ReferenceImage])

rTransform

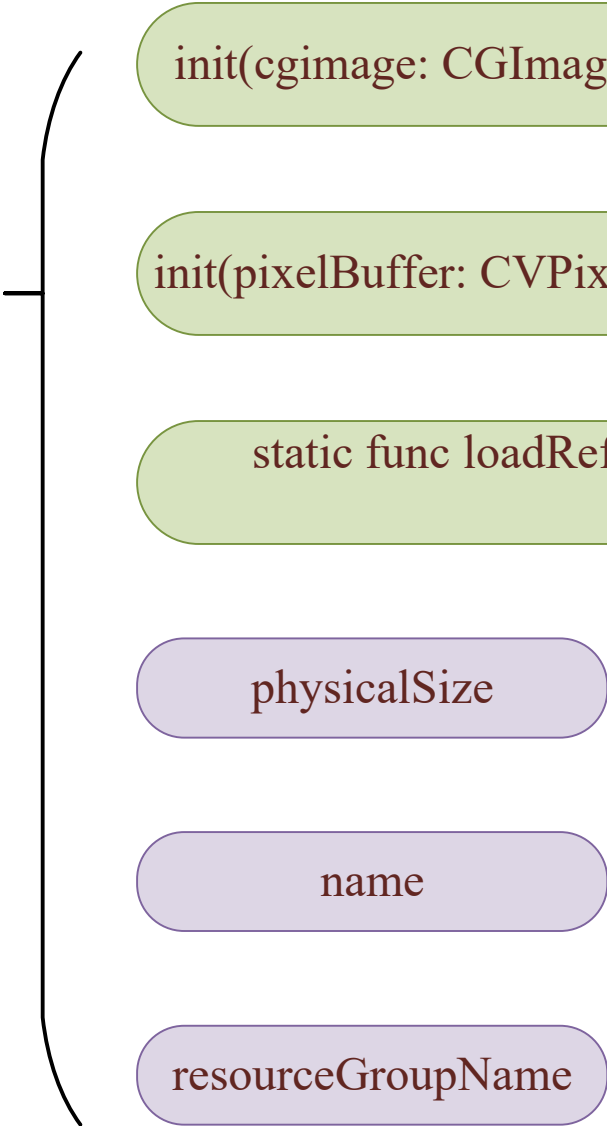
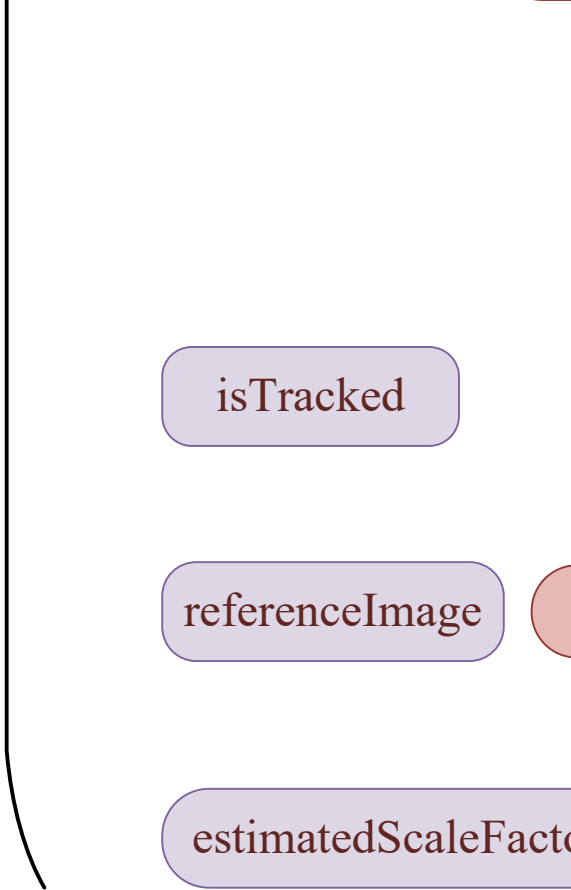
AnchorUpdateSequence

faces vertices

paused

eraAccess

ReferenceImage



faces

vertices

normals

classifications

ReferenceImage

Factor

```
Image,physicalSize: CGSize,orientation: CGImagePropertyOrientation = .up)
```

```
VPixelBuffer,physicalSize: CGSize, orientation: CGImagePropertyOrientation= .u
```

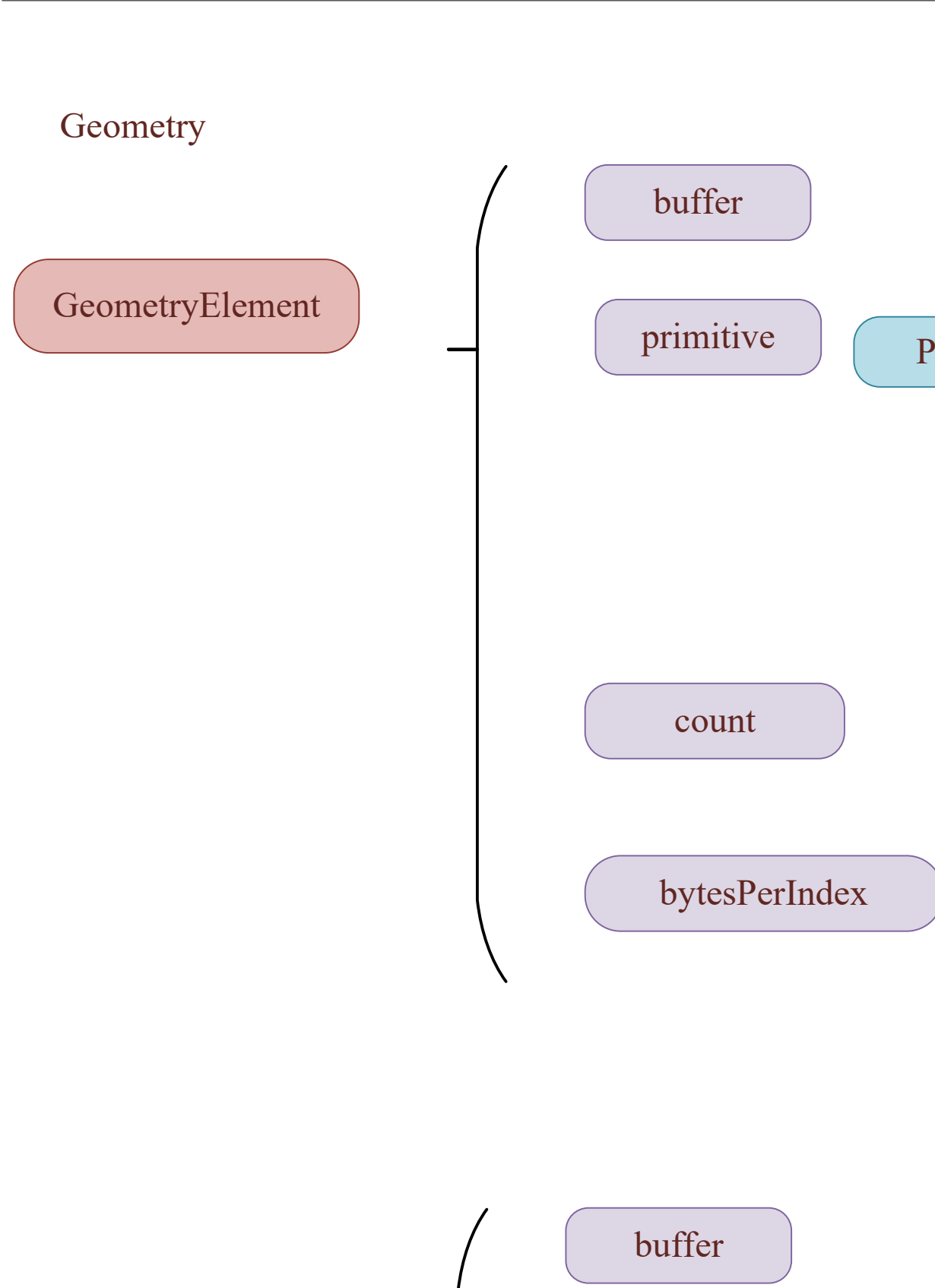
```
adReferenceImages( inGroupName: String, bundle: Bundle? = nil)  
    >> [ReferenceImage]
```

me



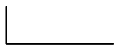
n= .up)

il)





Primitive



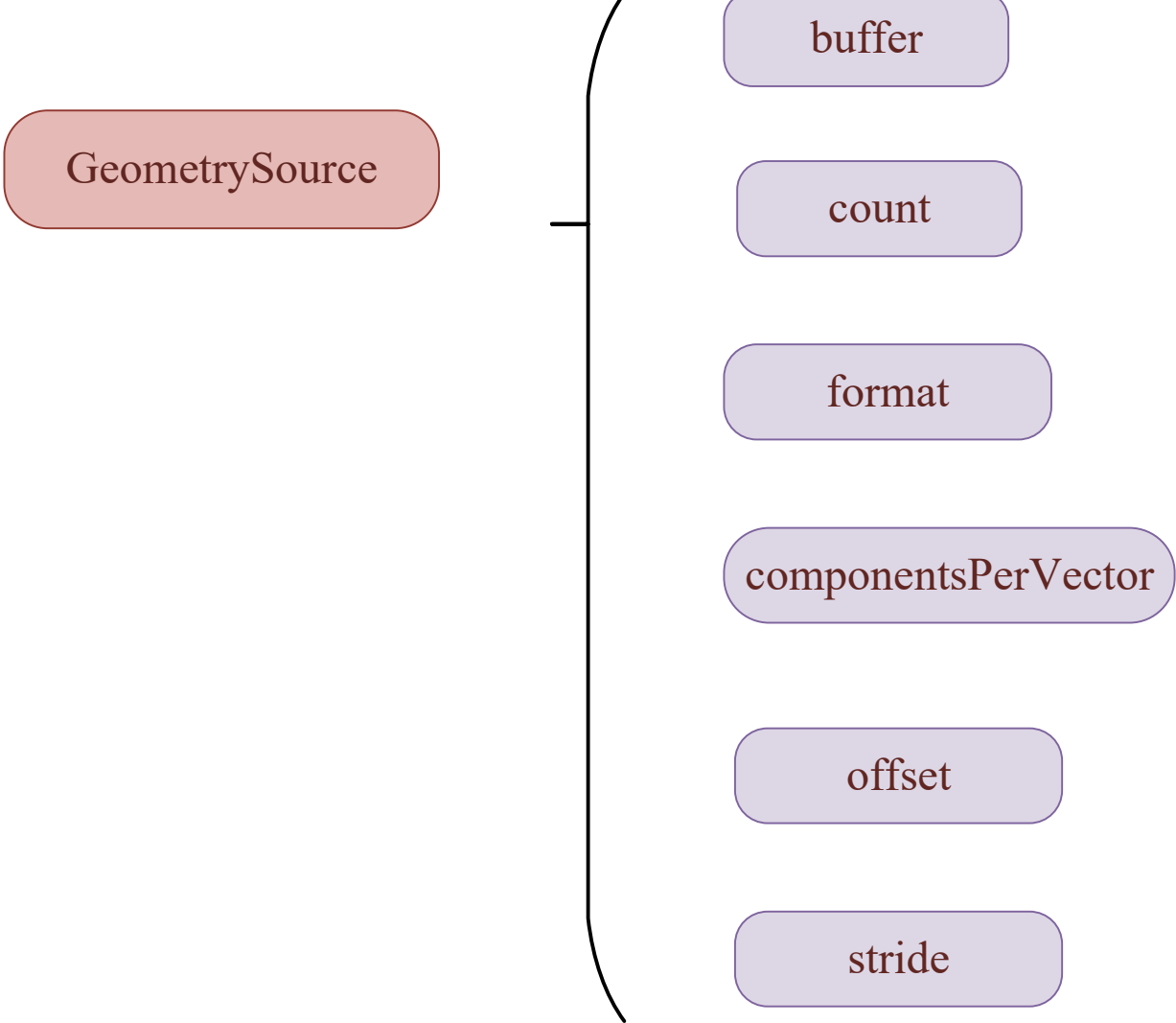
line

triangle

triangletriangle

K

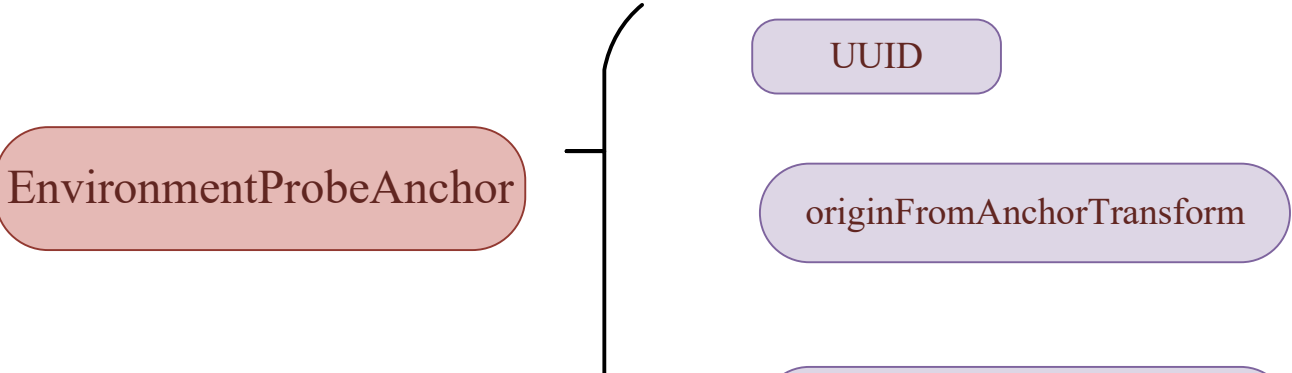
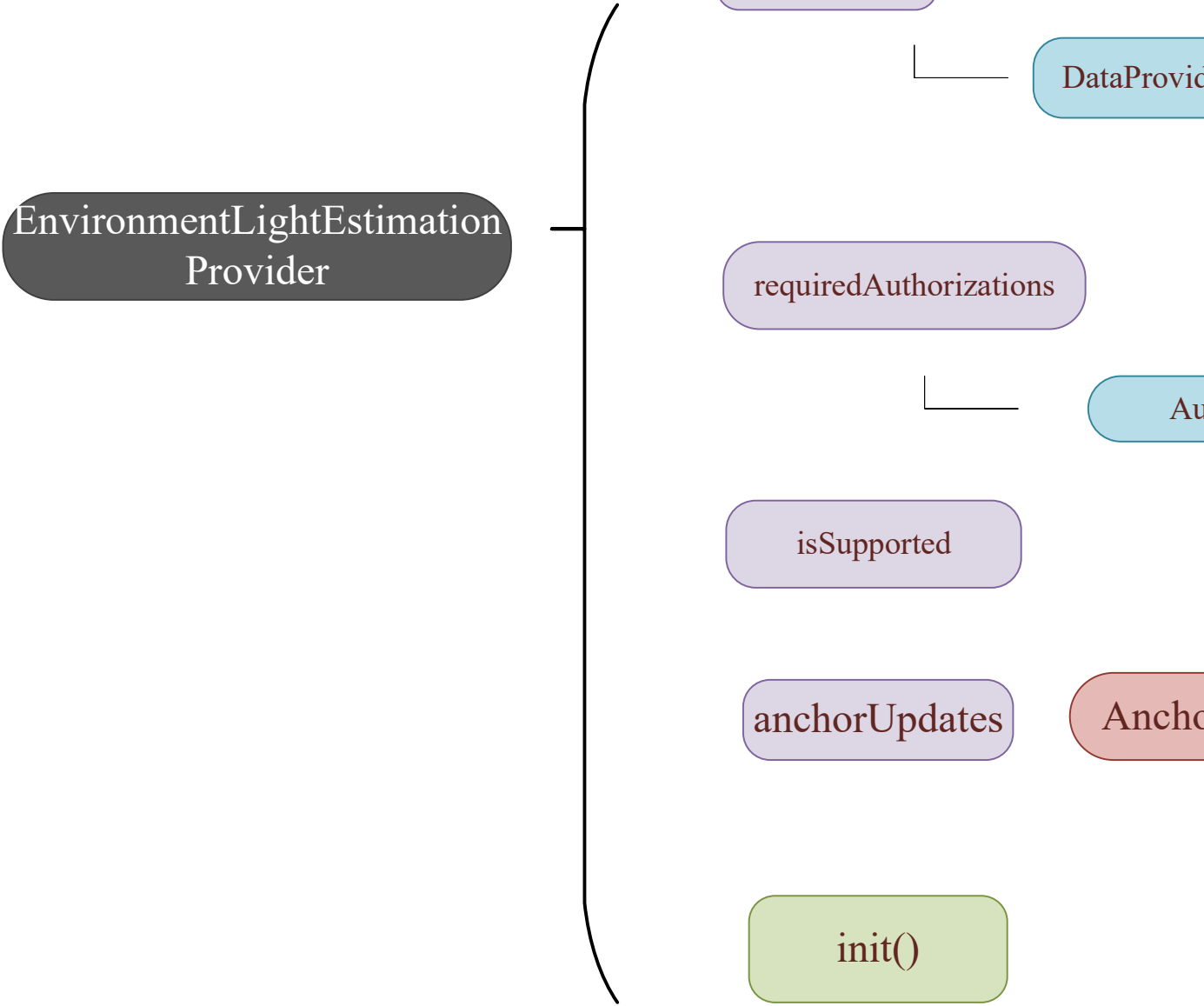




tor



EnvironmentLightEstimationProvider



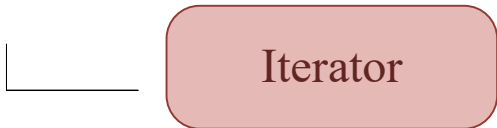
ProviderState



AuthorizationType



AnchorUpdateSequence



paused



environmentTexture

cameraScaleReference

ObjectTrackingProvider

ObjectTrackingProvider

state

DataProv

requiredAuthorizations

A

isSupported

anchorUpdates

Anch

allAnchors

taProviderState

initialized

running

stopped

paus

AuthorizationType

handTracking

worldSensing

cameraAccess

AnchorUpdateSequence

Iterator

paused

S

init( referenceObjects:[Re

trackingConfiguration

Error

err

s:[ReferenceObject],trackingConfiguration:ObjectTrackingProvider.TrackingConf

ation

TrackingConfiguration

init()

detectionRate

maximumInstancesPerReferenceObject

maximumTrackableInstances

movingObjectTrackingRate

stationaryObjectTrackingRate

code

Code

referenceObjectLoadingFailed

errorDescription

Configuration?=nil)

ObjectAnchor

UUID

originFromAnchorTransform

boundingBox

failureReason

bundle

name

recoverySuggestion

url

rm

AxisAlignedBoundingBox

center

extent

max

min





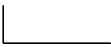
isTracked

referenceObject



RoomTrackingProvider

state



DataProviderS

RoomTrackingProvider

requiredAuthorizations

min

ReferenceObject

init(from url: URL)

init( named: String,from bundle:Bundle? = nil)

UUID

inputFile

usdzFile

name

ProviderState

initialized

running

stopped

paused





requiredAuthorizations

Authorizations

isSupported

anchorUpdates

AnchorUpdates

allAnchors

init()

currentRoomAnchor

RoomAnchor

UUID

originFromAnchorTransform

geometry

isCurrentRoom

AuthorizationType

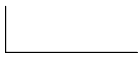


handTracking

worldSensing

cameraAccess

AnchorUpdateSequence



Iterator

MeshAnchor.Geometry



isCurrentRoom

meshAnchorIDs

planeAnchorIDs

contains(\_ point: SIMD  
>>Bool

func geometries(classifiedAs  
>> [Mesh



SIMD3<Float>)

ool

edAs classification: SurfaceClassification)  
MeshAnchor.Geometry]

