

UIDevice

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UIDevice?

You already met it

- To check for the device type

 - ▶ Property `userInterfaceIdiom`

Gives many information about the device

- `name` device name
- `model`, `localizedModel` device model
- `systemName` name of OS
- `systemVersion` version of OS
- `orientation` device's orientation
- `batteryLevel` level of the battery
- `batteryState` state of the battery
- `proximityState` state of the proximity sensor
- etc.

A notification system

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Be informed of changes

Orientation

- ▶ `portrait`, `portraitUpsideDown`, `landscapeLeft`, `landscapeRight`, `faceUp`, `faceDown`

Battery state

- ▶ `full`, `unplugged`, `charging`

Battery level (when available)

- ▶ `CGFloat` between 0 and 1

Proximity sensor (iPhones only)

- ▶ `Boolean` value

Use of a standard notification mechanism




Basics about notifications

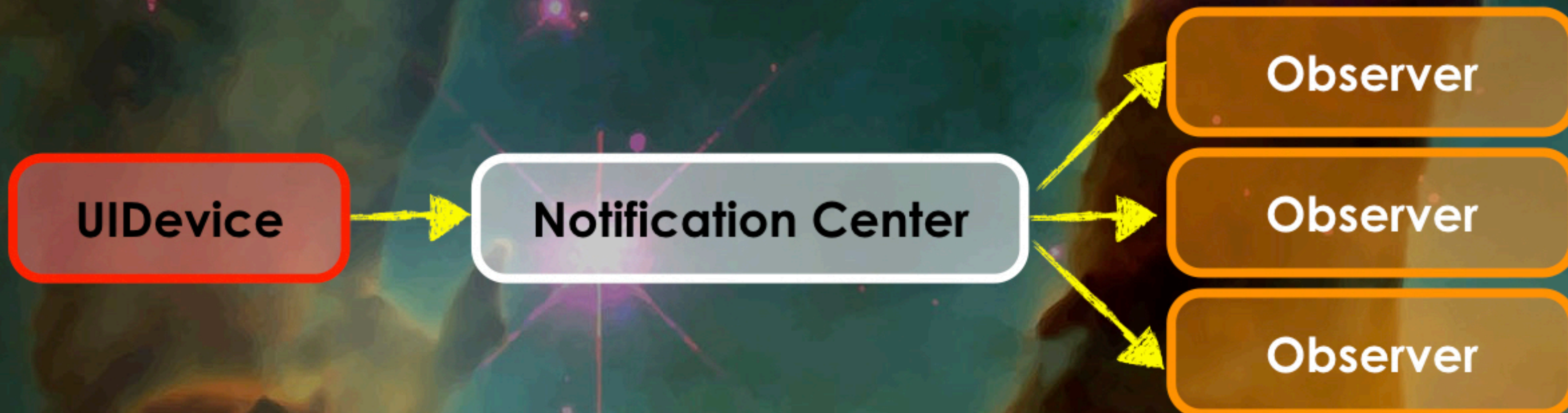
Minimum survival guide

 «I'll be back» on this later



In short... what are notification

-  A «multicast communication system»
-  Relies on a notification center (NotificationCenter)
 - ▶ Fetch a reference (one shared instance for all Apps)
 - ▶ Property default
-  One can handle several notification queues



Register & unregister

To follow events

Two methods

```
func addObserver(forName name: NSNotification.Name?,
                 object obj: Any?,
                 queue: OperationQueue?,
                 using block: @escaping (Notification) -> Void)
    -> NSObjectProtocol

func addObserver(_ observer: Any,
                 selector aSelector: Selector,
                 name aName: NSNotification.Name?,
                 object anObject: Any?)
```

To unregister

Via the notification center

```
func removeObserver(_ observer: Any,
                   name aName: NSNotification.Name?,
                   object anObject: Any?)

func removeObserver(_ observer: Any)
```

Standard notification in UIDevice

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Activate & deactivate notifications

Orientation

```
func beginGeneratingDeviceOrientationNotifications()
```

```
func endGeneratingDeviceOrientationNotifications()
```

▶ Current state in `isGeneratingDeviceOrientationNotifications`

Battery & proximity sensor

▶ `isBatteryMonitoringEnabled`, `isProximityMonitoringEnabled`

▶ True to activate monitoring

Predefined registration

 `UIDevice.orientationDidChangeNotification`

 `UIDevice.batteryLevelDidChangeNotification`

 `UIDevice.batteryStateDidChangeNotification`

 `UIDevice.proximityStateDidChangeNotification`

As a conclusion...

Querying a device is easy!

- Fetch battery state & level?
- Numerous applications only do this
 - ▶ And some are sold or raise money!

