

# PMA Power of Art Hackathon

## March 11—13, 2016

### pmaToolkit Documentation

#### Requirements

- iOS 8.0+
- Xcode 7.2+
- CocoaPods

#### Getting started

##### Install CocoaPods (if not already installed)

```
$ gem install cocoapods
```

##### Add to your Podfile:

```
platform :ios, '8.0'  
use_frameworks!
```

```
pod 'SwiftJSON', :git => 'https://github.com/SwiftyJSON/SwiftyJSON.git'  
pod 'pmaToolkit', :git => 'https://github.com/philamuseum/pmaToolkit.git'
```

##### Then run pod install

```
$ pod install
```

## Configuration

In order for the framework to work, the following information has to be supplied:

- iBeacon UUID  
`pmaToolkit.settings.iBeaconUUID = "f7826da6-4fa2-4e98-8024-bc5b71e0893e"`
- Remote Location & iBeacon definitions  
`pmaToolkit.settings.cacheSettings.  
  hostProtocol = "https"  
  hostname = ""  
  urlBeacons = ""  
  urlLocations = ""`

# Features

## Heading

The framework outputs the current heading in 10 degree steps as a NSNotification (`didUpdateHeading`). There are two values that come along with the notification for an updated heading: `actualHeadingDegrees` and `calculatedHeadingRadians`, with the latter already converted for the actual orientation of the building.

## Ranging beacons

The following NSNotification-based notifications are being sent:

`locationChanged` with `currentLocation` as `pmaLocation`

This event will only be sent in case a location change happened, in other words, it will not fire while a user stays in the same space in a gallery (except if that location happens to be at the intersection of two galleries, so the signal could bounce)

`locationUnknown` with `lastKnownLocation` as `pmaLocation` (optional, can be nil)

This notification is only sent every 30s in case no location can be determined. Since we placed our beacons at the entrance ways of a gallery, it can certainly happen that the device loses its signal.

This event should be treated with care for this reason.

## Logging

The framework has four log levels with 4 being the most verbose. By default, it is set to 3. If you want to make changes, use `pmaToolkit.settings.logLevel = X`.

To use the supplied logger, simply call

```
pmaToolkit.logDebug("")
pmaToolkit.logInfo("")
pmaToolkit.logError("")
```