github.com/realm/jazzy

a soulful way to generate docs for Swift & Objective-C

Soulful docs for Swift & Objective-C

What's a documentation generator?

Instead of parsing your source files, jazzy hooks into clang/SourceKit and uses the AST representation of your code and its comments for more accurate results.

```
JAZMusician.h
      JazzyApp
   #import <Foundation/Foundation.h>
   /**
    JAZMusician models, you guessed it... Jazz Musicians!
    From Ellington to Marsalis, this class has you covered.
11
   @interface JAZMusician : NSObject
14
    /**
    The name of the musician. i.e. "John Coltrane"
   @property (nonatomic, readonly) NSString *name;
19
    The year the musician was born. i.e. 1926
   @property (nonatomic, readonly) NSUInteger birthyear;
24
    Initialize a JAZMusician.
    Don't forget to have a name and a birthyear.
    @warning Jazz can be addicting.
    Please be careful out there.
30
                     The name of the musician.
    @param name
    @param birthyear The year the musician was born.
34
    @return
                     An initialized JAZMusician instance.
   - (instancetype)initWithName:(NSString *)name birthyear:(NSUInteger)birthyear;
   @end
```

Language: Swift Obj-C Both

JAZMusician

JAZMusician models, you guessed it... Jazz Musicians! From Ellington to Marsalis, this class has you covered.

Inheritance

Conforms To

Import Statement

└─○ JAZMusician

NS0bject

@import Foundation;

Methods

- initWithName:birthyear:

Initialize a JAZMusician. Don't forget to have a name and a birthyear.

Declaration

SWIFT

init(name name: String!,
birthyear birthyear: Int)

OBJECTIVE-C

- (instancetype)initWithName:(NSString *)name birthyear:(NSUInteger)birthyear;

Parameters

name

The name of the musician.

Alamofire Docs



Alamofire Reference > Manager Class Reference

Classes

Manager

Request

Global Variables

AlamofireErrorDomain

Enums

Method

ParameterEncoding

Extensions

String

NSURL

NSURLComponents

NSURLRequest

NSURLRequest

Request

Manager

Request

Manager

deinit

```
request(_:_:parameters:encoding:)
```

Creates a request for the specified method, URL string, parameters, and parameter encoding.

Declaration

SWIFT

```
public func request(method: Method, _ URLString: URLStringConvertible, parameters: [String :
AnyObject]? = default, encoding: ParameterEncoding = default) -> Request
```

Parameters

method	The HTTP method.
URLString	The URL string.
parameters	The parameters. nil by default.
encoding	The parameter encodingurl by default.

Return Value

The created request.

Show on GitHub

```
request(_:)
```

SessionDelegate

How do you USE it?

First off, you have to write documentation comments. Which is beneficial not only for jazzy, but for option-clicking in Xcode

Doxygen (ObjC-style)

```
/**
    Lorem ipsum dolor sit amet.
    @param bar Consectetur adipisicing elit.
    @return Sed do eiusmod tempor.
func foo(bar: String) -> AnyObject { ... }
```

Restructured Text (ReST)

```
/**
    Lorem ipsum dolor sit amet.
    :param: bar Consectetur adipisicing elit.
    :returns: Sed do eiusmod tempor.
func foo(bar: String) -> AnyObject { ... }
```

\$ [sudo] gem install jazzy

Jazzy

\$ jazzy

- Grabs all the *.swift files from the specified target and builds docs for them
- Target & destination are configurable...
- Outputs static site in docs/ by default

Design goals

- Generate source code docs matching Apple's official reference documentation
- Support for Xcode and Dash docsets
- High readability of source code comments
- Leverage modern HTML templating (Mustache)
- Let Clang/SourceKit do all the heavy lifting
- Compatibility with appledoc when possible

\$ jazzy help

```
-o, --output FOLDER
-c, --[no-]clean
-x arg1,arg2,...argN,
-a, --author AUTHOR_NAME
-u, --author_url URL
-m, --module MODULE_NAME
-d, --dash_url URL
-q, --qithub_url URL
--github-file-prefix PREFIX
-s FILEPATH,
-r, --root-url URL
--module-version VERSION
--min-acl [private | internal |
--[no-]skip-undocumented
--podspec FILEPATH
--docset-icon FILEPATH
--docset-path DIRPATH
--source-directory DIRPATH
-v, --version
-h, --help
```

```
Folder to output the HTML docs to
Delete contents of output directory before running.

WARNING: If --output is set to ~/Desktop, this will delete the ~/Desktop directory.

Arguments to forward to xcodebuild --xcodebuild-arguments

Name of author to attribute in docs (i.e. Realm)

Author URL of this project (i.e. http://realm.io)

Name of module being documented. (i.e. RealmSwift)

Location of the dash XML feed (i.e. http://realm.io/docsets/realm.xml

GitHub URL of this project (i.e. https://github.com/realm/realm-cocoa)

GitHub URL file prefix of this project (i.e. https://github.com/realm/realm-cocoa/tree/v0.87.1)

XML doc file generated from sourcekitten to parse

Absolute URL root where these docs will be stored

module version. will be used when generating docset

public] minimum access control level to document (default is internal)

Don't document declarations that have no documentation comments.
```

The relative path for the generated docset
The directory that contains the source to be documented
Print version number
Print this help message

A few feature highlights

Getting there

```
| E29CA807 01080000 22000000 0701382C 40ADF00A A4500BAC 500ABF40 0AAF300A BF200AAC
36 F00AA3B0 0A0741B2 D08CC22B B8022DC8 C22BB0C2 2F88022B BCC228AC C24312B4 4229D042
   28904228 D042283C 30422BBC 0229D402 2B94C22F B84228B4 42291C04 E1B0D08C C22BB442
   2B94822B D0C22F88 022BBCC2 28ACC283 13904229 8C022BFC C228BC42 2BB44229 B8022DCC
   02000000 81090000 B4000000 250C0000 0C000000 12055464 80C02030 28150000 53776966
   74467261 6D330000 0500F003 58000000 4C4C564D 20332E35 73766E00 00000000 85110000
   A3000000 3206100C 4A7401FC 04000000 00000000 010045EA 7C741600 00003F00 0000733A
   43313053 77696674 4672616D 33364243 6C617373 15000000 54686973 20697320 74686520
   27422720 636C6173 73010000 00010000 001A0000 002F2F2F 20546869 73206973 20746865
   20274227 20636C61 73730A01 00511619 182C0000 006E0000 00733A46 43313053 77696674
   4672616D 33364243 6C617373 63464D53 305F4654 36737472 696E6753 535F5330 5F160000
   00422773 20737472 696E6720 696E6974 69616C69 7A657201 00000005 00000048 0000002F
   2A2A0A20 20202042 27732073 7472696E 6720696E 69746961 6C697A65 720A2020 20200A20
  2020203A 70617261 6D3A2073 7472696E 67205468 65207374 72696E67 0A202020 202A2F01
  00A4C127 72160000 00410000 00733A43 31305377 69667446 72616D33 3641436C 61737315
   00000054 68697320 69732074 68652027 41272063 6C617373 01000000 01000000 1C000000
   2F2A2A0A 54686973 20697320 74686520 27412720 636C6173 730A2A2F 40000000 03000000
   864 | 00000000 00000000 00000000
```

```
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(eB(-B(<0B+°) +î¬/∏B(¥B) ·∞-å¬+¥B
+îÇ+-¬/à +°¬("¬È êB)å +¸¬(°B+¥B)∏ -Ä
                   TdA; 0(
      ¥ %
tFram3
        ≰ X
             LLVM 3.5svn
                            Ö
      Jt į
                   Eİlt
C10SwiftFram36BClass
                    This is the
'B' class
                  /// This is the
 'B' class
                     s:FC10Swift
Fram36BClasscFMS0_FT6strinaSS_S0_
B's string initializer H /
      B's strina initializer
  :param: string The string
§;'r A s:C10SwiftFram36AClass
  This is the 'A' class
/** This is the 'A' class */@
```

SourceKit

```
tilViewController = segue!.destinationViewContro
as String SourceKitService
             Terminated
        Editor functionality
        temporarily limited.
                    You selected cell #0!
```

SourceKitten

github.com/jpsim/SourceKitten

An adorable little framework and command line tool for interacting with SourceKit

SourceKitten

- 1. Swift code highlighting
- 2. Swift interface generation from ObjC headers
- 3. Generate Swift docs from Swift source
- 4. General purpose AST manipulation
- 5. USR generation

SourceKitten

\$ sourcekitten
Available commands:

doc Print Swift docs as JSON or Objective-C docs as XML help Display general or command-specific help structure Print Swift structure information as JSON syntax Print Swift syntax information as JSON version Display the current version of SourceKitten

SourceKitten Info

- 1. Written in Swift
- 2. Split in two parts: SourceKittenFramework + sourcekitten
- 3. Uses XPC connection to sourcekitd.framework, just like Xcode
- 4. Installable via Homebrew (brew install sourcekitten)
- 5. Similar architecture to Carthage, Commandant, package installer

You could do a *lot more* with SourceKitten

- 1. Swift editor/IDE
- 2. Swift linter
- 3. Test generator from doc comments
- 4. Swift mocks
- 5. Static analysis
- 6. Holistic way to diff Swift syntax versions

What's next for jazzy?

- 1. Objective-C
- 2. Mixed projects
- 3. Cross-language (calling ObjC from Swift, calling Swift from ObjC)
- 4. Cross-project hyperlinking on Cocoadocs

Resources

- jazzy: github.com/realm/jazzy
- SourceKitten: <u>github.com/jpsim/SourceKitten</u>
- appledoc: github.com/tomaz/appledoc
- swift doc syntax: <u>nshipster.com/swift-documentation</u>
- SourceKit: <u>jpsim.com/uncovering-sourcekit</u>

SwiftLDN().questions?.askThem!

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