



Creating a Framework and Publishing to CocoaPods

Overview

- Create Framework in Xcode
- Develop Your Framework
- Prepare for CocoaPods
- Create and Configure Podspec
- Validate and Publish Pod
- Updating Versions

Create Framework in Xcode

- Open Xcode and select "File" > "New" > "Project"
- Choose "Framework" under iOS
- Name your framework (e.g., "RSPulse")
- Choose the location to save your project
- Xcode will create a basic structure for your framework

Develop Your Framework

- Add your Swift files to the framework target
- Implement your framework's functionality
- Mark classes, structs, and functions as `public` to expose them
- Write unit tests for your framework
- Create documentation using comments or a separate markdown file

Prepare for CocoaPods

- Create a GitHub repository for your framework
- Push your framework code to the repository
- Create a LICENSE file (e.g., MIT License)
- Create a README.md with basic usage instructions
- Create a .gitignore file for Xcode and Swift projects

Create and Configure Podspec

- Create a podspec file using the pod spec create command:

```
pod spec create RSPulse
```

- Edit the RSPulse.podspec file:

```
Pod::Spec.new do |spec|
  spec.name      = "RSPulse"
  spec.version   = "0.1.0"
  spec.summary   = "A short description of RSPulse."
  spec.description = <<-DESC
                    A longer description of RSPulse.
                    DESC
  spec.homepage  = "https://github.com/rshankras/RSPulse"
  spec.license   = { :type => "MIT", :file => "LICENSE" }
  spec.author    = { "Your Name" => "your@email.com" }
  spec.source    = { :git => "https://github.com/username/RSPulse.git",
                    :tag => "#{spec.version}" }
  spec.platform  = :ios, "13.0"
  spec.swift_version = "5.0"
  spec.source_files = "RSPulse/**/*.{h,m,swift}"
  spec.exclude_files = "RSPulseTests/**/*"
end
```

Validate and Publish Pod

- Validate your podspec:

```
pod spec lint RSPulse.podspec
```

- Fix any warnings or errors

- Tag your release in Git:

```
git add .
```

```
git commit -m "Release 0.1.0"
```

```
git tag 0.1.0
```

```
git push origin master --tags
```

- Register with CocoaPods trunk (first time only):

```
pod trunk register your@email.com 'Your Name'
```

- Publish your pod:

```
pod trunk push RSPulse.podspec
```

Updating Versions

- Update your framework code
- Increment the version in your podspec file
- Commit changes and create a new Git tag:

```
git add .  
git commit -m "Update to version X.X.X"  
git tag X.X.X  
git push origin master --tags
```

- Validate and push the new version:

```
pod spec lint RSPulse.podspec  
pod trunk push RSPulse.podspec
```