How to build a Swift macOS app

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Target:
Build a Swift 4 macOS
app with Xcode 9

Requirements:
Xcode 9

Xcode (IDE)

Xcode components

- Project View
  - Debug Area
  - Utility Area
  - Navigator Area
  - Editor Area
  - Toolbar Area
- Interface Builder

1. Create a new Xcode project

Project settings

- Platform: macOS
- Application type: Cocoa App
- Language: Swift
- Use Storyboards

2. Build User Interface

UI elements

- Label: OS version
- Button: call `netstat` CLI binary using Process
- Text view: show `netstat` output

3. Connect UI elements to View Controller

IB -> View Controller

- Assistant Editor
- Connection Types
  - IBOutlet
  - IBAction

4. Add getOsVersion() method

Cocoa vs. CLI

- Cocoa ProcessInfo class
    - `ProcessInfo.processInfo.operatingSystemVersionString`
- sw_vers
    - `$ sw_vers -productVersion`

5. Add a new file

TaskHelper.swift

- Add a new file to project (⌘N)
  - Copy&paste TaskHelper.swift contents to the new file
- Or download TaskHelper.swift from GitHub
  - Drag&drop it to the Xcode project
- Call TaskHelper methods from View Controller

6. Add button code

Button code

- `$ netstat -an | grep ESTABLISHED`
- Command output to NSTextView

Swift Links

- The Swift Programming Language: https://itunes.apple.com/us/book/the-swift-programming-language-swift-4/id881256329?mt=11

- Using Swift with Cocoa and Objective-C: https://itunes.apple.com/us/book/using-swift-with-cocoa-and-objective-c-swift-4/id888894773?mt=11

- App Development with Swift: https://itunes.apple.com/us/book/app-development-with-swift/id1219117996?mt=11

GitHub Links

- Example project: https://github.com/jlehikoinen/DemoApp

- TaskHelper.swift: https://raw.githubusercontent.com/jlehikoinen/DemoApp/master/DemoApp/TaskHelper.swift