

Chapter 2: Basic Swift

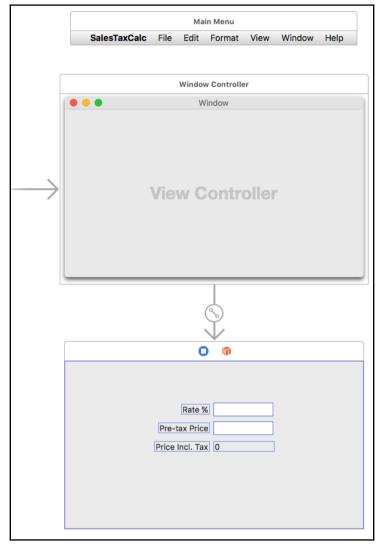
| 7 | |
|---|---|
| ○ 8 b = 3 | Cannot assign to value: 'b' is a 'let' constant |
| 9 | |
| • Cannot assign to value: 'b' is a 'let' constant | |
| Fix-it Change 'let' to 'var' to make it mutable | |
| 12 //lot ic ruptimo | |
| | |

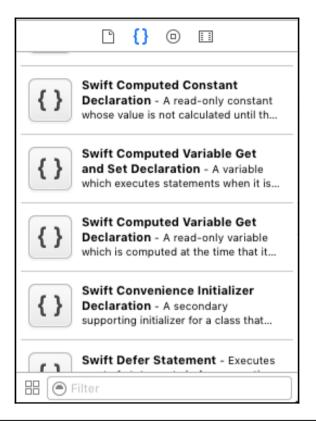
| 27 | | | | | | | | |
|-------|---|---------------------|--|--|--|--|--|--|
| 🛆 28 | let 🖕 = 1 🦾 Variable 'b' was never mutated; consider changin | g to 'let' constant | | | | | | |
| 29 | $\overline{\Lambda}$ | | | | | | | |
| Δ ۷ | △ Variable 'b' was never mutated; consider changing to 'let' constant | | | | | | | |
| Fix-i | t Replace "var" with "let" | | | | | | | |
| 33 | | | | | | | | |

| 210 | | | | | | | |
|-------|---------|------|-------|------|---------------------|---|--------|
| C211 | let | x: | Int | = | squareOfTwo! | Value of optional type 'Int?' not unwrapped; did you mean to use '!' or | r '?'? |
| 212 | | | | 1 | <u>_</u> | | |
| 20 | Value | of c | ption | al t | type 'Int?' not unw | rapped; did you mean to use '!' or '?'? | |
| 2 Fix | r−it In | sert | "!" | | | | |
| 216 | | | | | | | |

| 247 | | | | | | | | |
|-------------|---|---------------------------|--|--|--|--|--|--|
| 248 | if (possibleNil != nil) | | | | | | | |
| 249 | Optional type 'Int?' cannot be used as a boolean; | test for '!= nil' instead | | | | | | |
| 20 | Optional type 'Int?' cannot be used as a boolean; test for '!= nil' instead | | | | | | | |
| 2 Fb 253 | <pre>c-it Replace "possibleNil" with "(possibleNil != nil)"</pre> | | | | | | | |

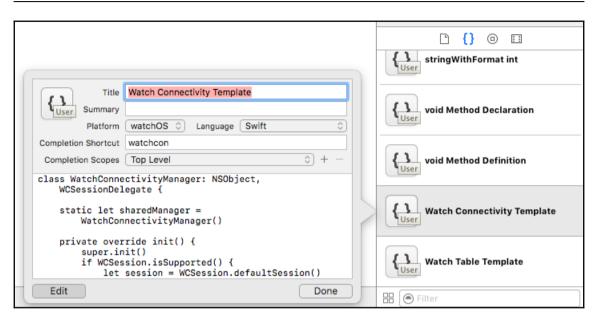
Chapter 3: Checking Out the Power of Xcode

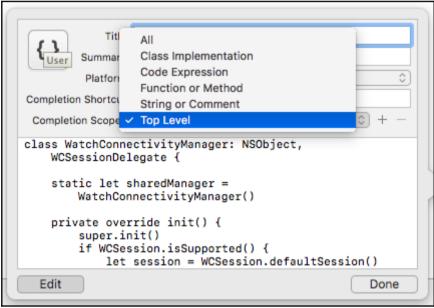




| | l {} o I |
|---|-----------------------------|
| | StringWithFormat int |
| Watch Connectivity Template watchOS | Void Method Declaration |
| class WatchConnectivityManager: NSObject, WCSessionDelegate { static let sharedManager = WatchConnectivityManager() | void Method Definition |
| <pre>private override init() { super.init() if WCSession.isSupported() { let session = WCSession.defaultSession() session.delegate = self</pre> | Watch Connectivity Template |
| <pre>session.activateSession() }</pre> | Watch Table Template |
| Edit Done | H 🕒 Filter |

```
Graphic Bundle
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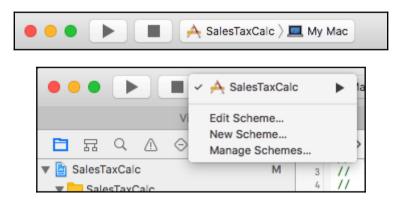




| | 17 { | ishLaunching(_ aNotification: Notification) |
|-----------|--|--|
| | 18 let b = true 19 20 20 let s = "Stop here | a second" |
| AppDele | gate.swift:20 | |
| Condition | b == true | |
| Ignore | 0 🗘 times before stopping | |
| Action | Log Message | + - |
| | %B b is true | |
| | Log message to console @exp@ = express | sion |
| | Speak message %B = breakpoint na %H = breakpoint hit co | |
| | (Sound ♦) (◄>) Ping ♦) | staging-server.com/api/" + - |
| Options | Automatically continue after evaluating actions | compiler won't catch it, but build /production-server.com/api/" |

| | Behaviors | |
|------------------------------------|--|----------|
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| eral Accounts Behaviors Navigation | Fonts & Colors Text Editing Key Bindings Source Control Components Locations | |
| | | |
| Build | | |
| Starts | Play sound Sosumi | 0 |
| ✓ Generates new issues | Speak announcement using Alex | 0 |
| ✓ Succeeds | | ×. |
| √ Fails | Notify using bezel or system notification | |
| Testing | | |
| Starts | Bounce Xcode icon in Dock if application inactive | |
| V Pauses | | _ |
| Generates new issues | Show tab named Debug Console in separate window | ۵. |
| Generates output | | |
| ✓ Succeeds | Hide ᅌ navigator | |
| √ Fails | Show O debugger with Console View | ٢ |
| Running | | <u> </u> |
| Starts | ✓ Hide | |
| ✓ Pauses | | |
| ✓ Generates output ✓ Completes | V Hide ᅌ toolbar | |
| Exits unexpectedly | Hide clitor | |
| GPU Frame Capture | | |
| Starts | Navigate to first new issue 🗘 | |
| ✓ Completes | | |
| + - | Run Choose Script | \$ |

| eral Accounts Behaviors Navigation | Behaviors Fonts & Colors Text Editing Key Bindings Source Control Components Locations |
|--|---|
| Running Exit of the spectruly | Play sound Sosumi |
| GPU Frame Capture | |
| Starts ✓ Completes Finds issues | Speak announcement using Alex Notify using bezel or system notification |
| Search Starts Completes with results | Bounce Xcode icon in Dock if application inactive Show tab named in active window |
| Completes with no results Bots | |
| Succeeds Succeeds with warnings | Hide debugger |
| Fails | ✓ Hide tillities |
| ✓ I Caused Failure File Unlock | Hide toolbar |
| Playgrounds | Show ᅌ editor as Standard Editor |
| ✓ Generates output | |
| Custom | □ Navigate to first new issue < |
| ✓ Big Reset | |
| + - | Run Choose Script \$ |



| • • • v | Window | | | | | | | |
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| | 멾 < > 🤷 SalesTaxCalc | | | | | | |
|-----------------------|----------------------|---------------------------------------|-----------------------------|--|--|--|--|
| 🔻 🔄 SalesTaxCalc 🛛 M | | Info Build Settings | | | | | |
| SalesTaxCalc | PROJECT | Deployment Target | | | | | |
| AppDelegate.swift M | 🛓 SalesTaxCalc | | | | | | |
| Assets.xcassets | TARGETS | macOS Deployment Target 10.12 | | | | | |
| 💽 Main.storyboard 🛛 M | 🕂 SalesTaxCalc | | | | | | |
| Info.plist | | Configurations | | | | | |
| Products | | Name | Based on Configuration File | | | | |
| | | ▶ Debug | No Configurations Set | | | | |
| | | ▶ Release | No Configurations Set | | | | |
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| | | Use Release of for command-line build | s | | | | |
| | | ▼ Localizations | | | | | |
| | | Language | Resources | | | | |
| | | English — Development Language | 1 File Localized | | | | |
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| | | Use Base Internationalization | | | | | |
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| V SalesTaxCalc | М | | À SalesTaxCalc | Dev 👌 🔜 My M | lac | | | | | |
| ▼ SalesTaxCalc | | E | Duild | | | | | | | |
| AppDelegate.swift | м | | ► ► Build 1 target | | | | Info Argun | nents | Options | Diagnostics |
| ViewController.swift | | | Run | | | | | - | | |
| a Assets.xcassets | | | Dev | | | | Build Configuration | Dev | | S |
| Nain.storyboard | М | | ► F Test | | | | Executable | 🔺 Sale | esTaxCalc.app | |
| Info.plist | | | Debug | | | | | 🗸 Debu | ig executable | |
| Products | | | ► ➡ Profile Release | | | | Debug Process As | O Me (: | etu) | |
| | | | 🔉 🗖 Analyze | | | | Debug Flocess As | o root | stuj | |
| | | | - Debug | | | | Leurah | _ | | |
| | | | ► ₽ Archive Release | | | | Launch | - | matically for executable t | te le le mehod |
| | | | Neicass | | | | | U wait | TOP executable | to be launched |
| | | | | | | | | | | |
| | | | _ | | | | | | | |
| | 88 | | SalesTaxCalc | | | | | | | |
| V SalesTaxCalc M | | | | | | Info | Build Settings | | | |
| SalesTaxCalc | | PROJEC | т | Basic Cu | stomized All | Combi | ned Levels + | | Q× | |
| AppDelegate.swift M | | 📄 S | alesTaxCalc | | | | | | | |
| Assets.xcassets | | TARGET | S | ▼ Architectur | es | | | | | |
| Nain.storyboard M | | 🕂 s | alesTaxCalc | | Setting | | 💁 s | alesTaxCal | с | |
| Info.plist | | | | Additional S | DKs | | | | | |
| Products | | | | Architecture | S | | | | | ntel) (x86_64) - \$ |
| | | | | Base SDK | | | Late | est macOS | (macOS 10.12) 🗘 | |
| | | | | | | | | | | |
| 器 < > 🤷 Sales | sTax | Calc | | | | | | | | |
| | Ģ | Gener | al Cap | abilities | Resource | Tag | s Info | Build | Settings | Build Phases |
| PROJECT | | | ▼ Iden | tity | | | | | | |
| SalesTaxCalo | 1 | | | iliy | | | | | | |
| TARGETS | | | | Ap | olication Categ | ory | None | | | \$ |
| A SalesTaxCalo | | | | | Bundle Identi | fier | com.stusoft.Sales | TaxCal | с | |
| | | | | | | | | | | |
| | | | | | Vers | ion | 1.0 | | | |

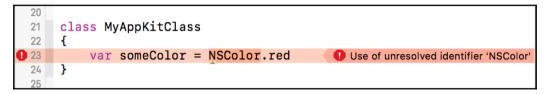
Build 1

| | | Info B | Build Settings | | | | |
|--|-----------------------------------|----------|----------------|---|------------------|--|--|
| PROJECT | Basic Customized All | Combined | Levels + | | Q~ | | |
| 🔄 SalesTaxCalc | | | | | <u></u> | | |
| TARGETS | Swift Compiler - Warnings Policie | 25 | | | | | |
| À SalesTaxCalc | | . – | | | | | |
| ▼ User-Defined Setting SalesTaxCalc | | | | | | | |
| | Setting | | | <multiple th="" val<=""><th></th></multiple> | | | |
| | Debug | | | com.stusoft. | | | |
| | Dev | | e | com.stusoft. | SalesTaxCalc.dev | | |
| | Release | | | com.stusoft. | SalesTaxCalc | | |
| | CLANG_WARN_SUSPICIOUS_MOV | ES | | YES | | | |
| + — 🕑 Filter | MTL_ENABLE_DEBUG_INFO | | | <multiple th="" val<=""><th>ues></th></multiple> | ues> | | |

| ▼ Other Swift Flags | <multiple values=""></multiple> |
|------------------------------------|---------------------------------|
| Debug | |
| Dev | O -DDEV |
| Release | |
| | -DDEV |
| Swift Compiler - General | |
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| Swift Compiler - Search Paths | |
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| Swift Compiler - Version | |
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| Swift Compiler - Warnings Policies | |

Chapter 6: Cocoa Frameworks -The Backbone of Your Apps

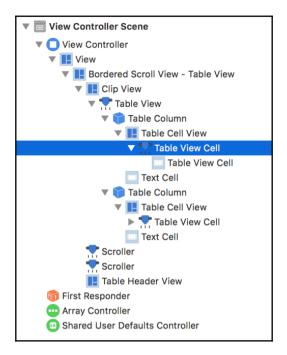
| 15 | | |
|----|-----------------------------------|-------------------------------------|
| 16 | class MyFoundationClass: NSObject | Use of undeclared type 'NSObject' |
| 17 | { | |
| 18 | <pre>var someDate = Date()</pre> | Use of unresolved identifier 'Date' |
| 19 | } | |
| 20 | | |



| ▶ 🕅 Application Scene |
|-----------------------------|
| ▶ 🛅 Window Controller Scene |
| ▼ |
| View Controller |
| L View |
| 窷 First Responder |
| 🚥 Array Controller |
| |

| Availability | | |
|--|--|--|
| Editable | | |
| Controller Content | | |
| Content Array (View Controller.people) | | |
| ✓ Bind to View Controller | | |
| Controller Key | | |
| | | |
| Model Key Path | | |
| people | | |
| Value Transformer | | |
| | | |

| Action Invocation | | |
|--|--|--|
| Double Click Argument | | |
| Double Click Target | | |
| Availability | | |
| Enabled | | |
| ▶ Hidden | | |
| Font | | |
| ▶ Font | | |
| Font Bold | | |
| Font Family Name | | |
| ► Font Italic | | |
| Font Name | | |
| ► Font Size | | |
| Table Content | | |
| Content (Array Controller.arrangedObjects) | | |
| Bind to Array Controller | | |
| Controller Key | | |
| arrangedObjects | | |
| Model Key Path | | |
| | | |
| Value Transformer | | |
| | | |
| ✓ Raises For Not Applicable Keys | | |

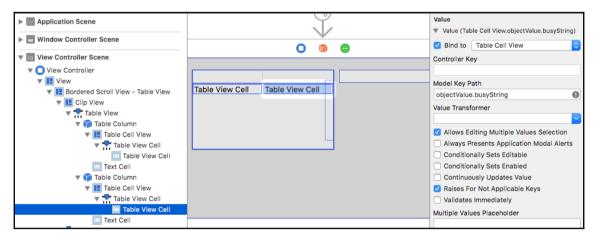


| Value | | |
|--|---|--|
| Value (Table Cell View.objectValue.name) | | |
| Bind to Table Cell View | ¢ | |
| Controller Key | | |
| | | |
| Model Key Path | | |
| objectValue.name | 0 | |
| Value Transformer | | |
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| | Window | |
|-----------------|--------|--|
| Scottie Kirk | 1 0 | |
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| Table Content | | |
|---|--|--|
| Content (Array Controller.arrangedObjects) | | |
| ✓ Bind to Array Controller | | |
| Controller Key | | |
| arrangedObjects | | |
| Model Key Path | | |
| | | |
| Value Transformer | | |
| | | |
| ✓ Raises For Not Applicable Keys | | |
| Selection Indexes (Array Controller.selectionIn | | |
| ✓ Bind to Array Controller | | |
| Controller Key | | |
| selectionIndexes | | |
| Model Key Path | | |
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| Value Transformer | | |
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| Graph | 1ic | Bundi | е |
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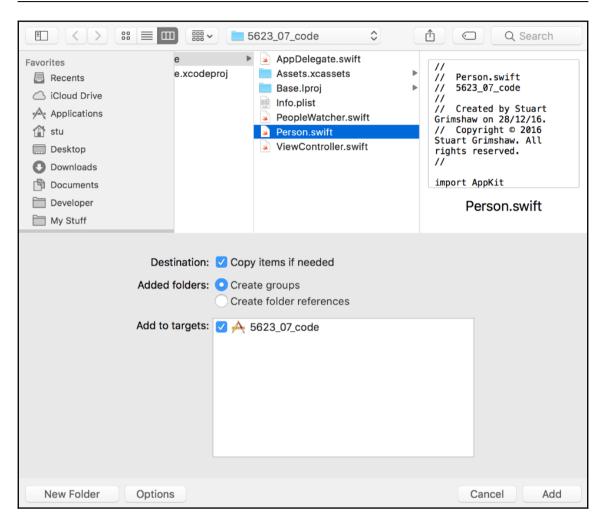
| Vindow | | | |
|---------|----------|------|--|
| Name | Status | Kirk | |
| Scottie | Busy | | |
| Kirk | Not busy | | |
| Spock | Busy | | |
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Chapter 7: Creating Views Programmatically

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| | | |
| Name | Status | Kirk |
| Scottie | Busy | |
| Kirk | Not busy | |
| Spock | Busy | |
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Graphic Bundle
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| ● ● ● ▶ ■ 🔶 56e > ■ | My Mac | Finished running 5623_07_code : 5623_07_code | | |
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| 5623_07_code.xcodeproj | | ViewController.swift | Peop | le.plist + |
| | 昭 く | > 🧕 5623_07_code > 📒 562code > 📄 People.plist > No Selection | | D 🖸 |
| ▼ 🔓 5623_07_code M | Key | Type Value | Identity and Ty | ре |
| Person.swift A | ▼ Root | Dictionary (0 items) | Name | People.plist |
| ▼ 5623_07_code | | | Туре | Default - Property List XML ᅌ |
| PeopleArrayWrapper.swift A | | | | Ŋ {} □ □ |
| People.plist A | | | | |
| ViewController.swift M | | | | |
| Assets.xcassets | | | | |
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| ▼ 🔄 5623_07_code M | 1 | xml version="1.0" encoding="UTF-8"? plist PUBLIC "-//Apple Computer//DTD PLIST</th <th>Identity and Type</th> | Identity and Type |
| ▼ <u>5623_07_code</u> | | 1.0//EN" "http://www.apple.com/DTDs/ | Name People.plist |
| People.plist A | 3 | <pre>PropertyList=1.0.dtd"> <!--</pre--></pre> | Type Default - Property List XML 🗘 |
| ColorUtilities.swift A DataManager.swift A | 4 5 6 | People.plist 5623_07_code | Ľ {} 🧿 🛙 |
| PeopleArrayWrapper.swift A Person.swift A | 7 | Created by Stuart Grimshaw on 28/12/16. Copyright (c) 2016 Stuart Grimshaw. All rights reserved. | |
| AppDelegate.swift | 9 10 11 | <pre>> <pre><plist version="1.0"></plist></pre></pre> | |
| Assets.xcassets Main.storyboard Info.plist | 12 13 14 15 | | No Matches |
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Graphic Bundle
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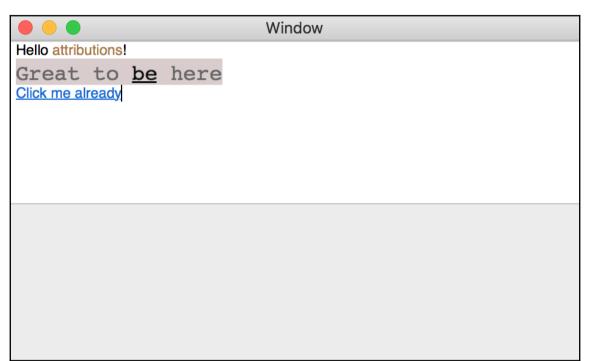
| | | Window |
|---------|----------|--------|
| Name | Status | |
| Kirk | Busy | |
| Scottie | Not busy | |
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Graphic Bundle
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| Name | Status | | Jim |
| Jim | Busy | | Cort |
| Scottie | Not busy | | Sort |
| Lt. Uhura | Busy | | |
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Chapter 8: Strings and Text





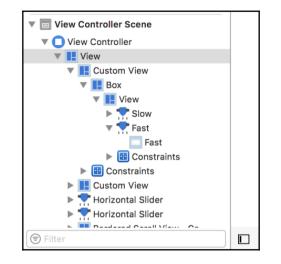
| | Window |
|-------------------------|--------|
| Hello attributions! | |
| Great to <u>be</u> here | |
| <u>Click me already</u> | |
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| | |
| Type some colors here | |
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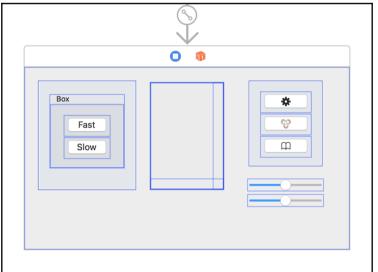
| | Window |
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| Hello attributions! | |
| Great to <u>be</u> here | |
| Click me already | |
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| Type some colors here | |
| red | |
| blue | |
| green standart text | |
| Standart lext | |
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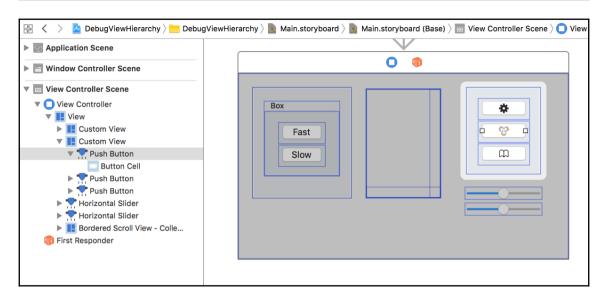
Chapter 9: Getting More from Interface Builder

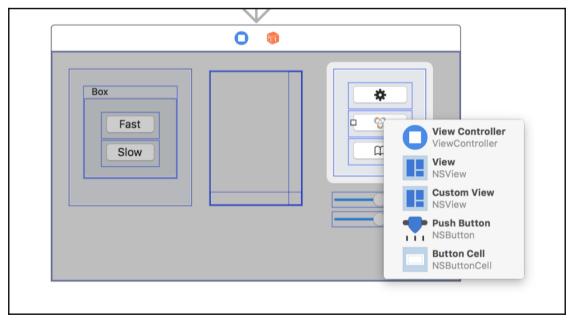


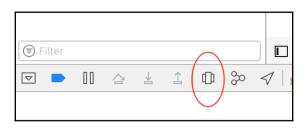




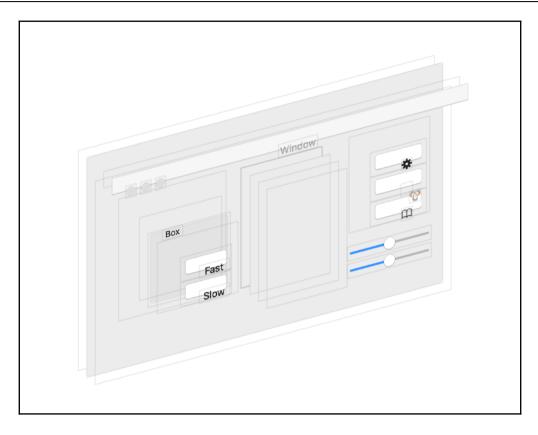




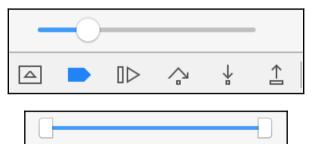


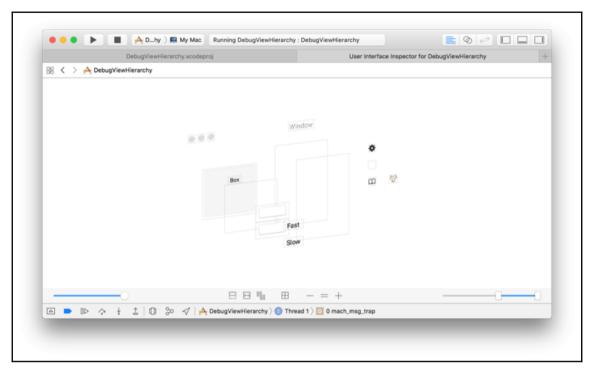


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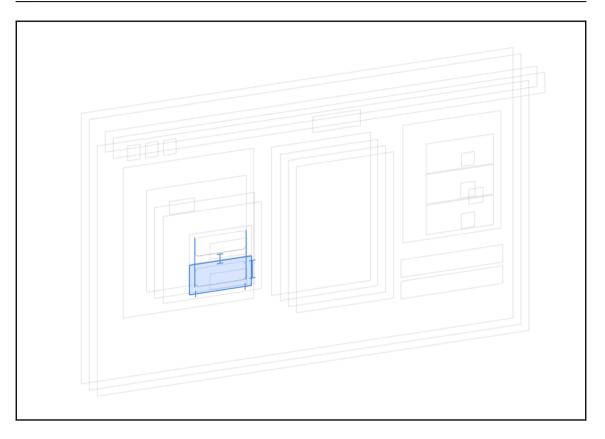


| DebugViewHi | erarchy.xcodeproj | User Interface Inspect | or for DebugViewHierarchy | + |
|-------------|---|-------------------------------|--|----|
| | Nw) Ne) Nw) Nw) | Nox) NSView) NSButton - Fast | Image: Class Name NSButton Address 0x608000140420 Button Style Rounded Type Momentary Push In Visual Bordered On Transparent Off State Off Allows Mixed State Off Behavior Spring Loaded Off Title Fast Allgement Center Font System Font Regular 13.00p Target <nil> Action <nil></nil></nil> | ot |
| | \square | Thread 1) 🖸 0 mach msg. trap | Image No Image Alternate No Image | |





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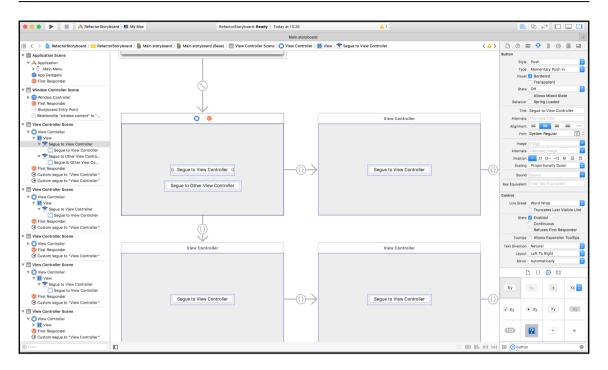
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| Short Long Button Title Long Label text | |

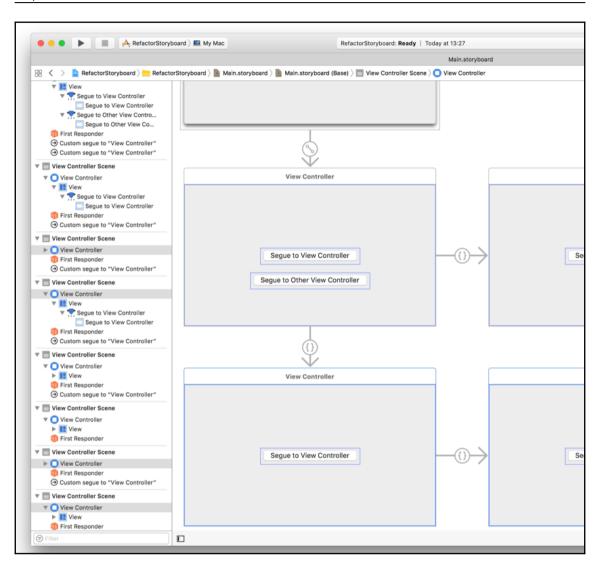
| Stack View | | |
|--------------|-------------------------|----|
| Orientation | Vertical | \$ |
| Alignment | Center X | \$ |
| Distribution | Fill | \$ |
| Spacing | 8 | 0 |
| | 🗸 Detaches Hidden Views | |
| | | |

| Orientation | Horizontal | \$ |
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| Alignment | First Baseline | ¢ |
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| Short Long Button Title Long Label text | |

Graphic Bundle



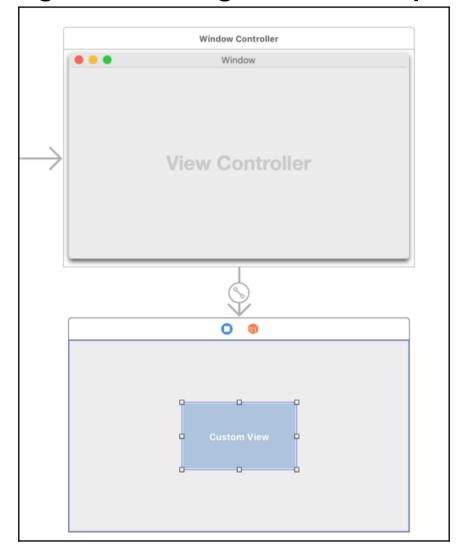


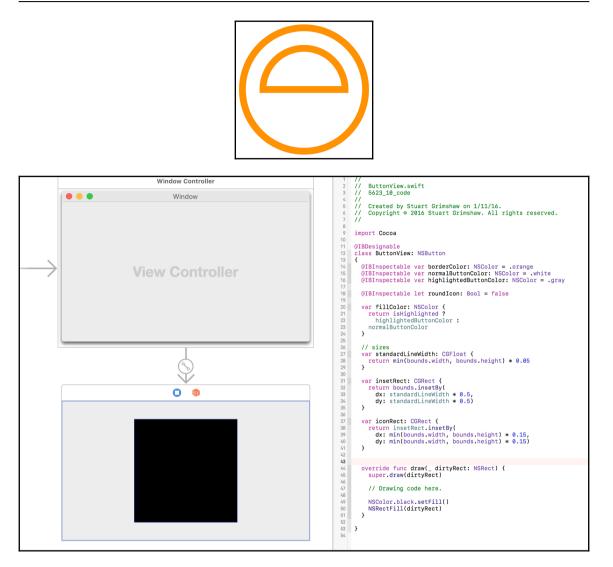
| < > ःः ≡ III ः Q Search | C Search Favorites RefactorStoryboard RefactorStoryboard AppDelegate.swift Assets.xcassets RefactorStorard.xcodeproj Base.lproj Cloud Drive Applications stu Desktop Downloads Documents Documents Developer Format Interface Builder Storyboard Group RefactorStoryboard | | | SecondRow storyboard | | <u>^</u> | | |
|---|--|--|-------|----------------------|--------------------------|----------|--------|--------------|
| Favorites RefactorStoryboard AppDelegate.swift Main.stor Recents RefactorStorard.xcodeproj Base.lproj Info.plist Applications ViewController.swift ViewController.swift Desktop Documents Developer Developer Format Interface Builder Storyboard Group | Favorites RefactorStoryboard AppDelegate.swift Main.storyb Recents RefactorStorard.xcodeproj Assets.xcassets Base.lproj Applications Info.plist ViewController.swift Desktop Documents Documents Developer Format Interface Builder Storyboard Group RefactorStoryboard O | | Tags: | | | | | |
| Recents Cloud Drive Applications stu Desktop Downloads Documents Developer Format Interface Builder Storyboard © Group RefactorStoryboard © | Image: Reference of the second se | < > :: = • | 000 ~ | Base.lproj | 0 | Q | Search | |
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| | | Developer | | | | | | |
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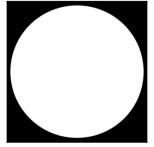


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| |
| Carrots Button Button |
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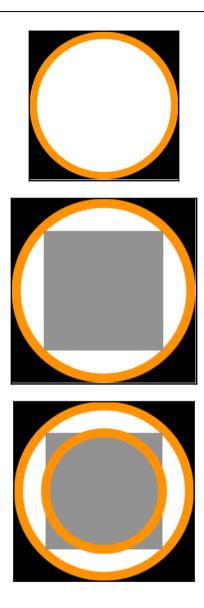
Chapter 10: Drawing on the Strength of Core Graphics







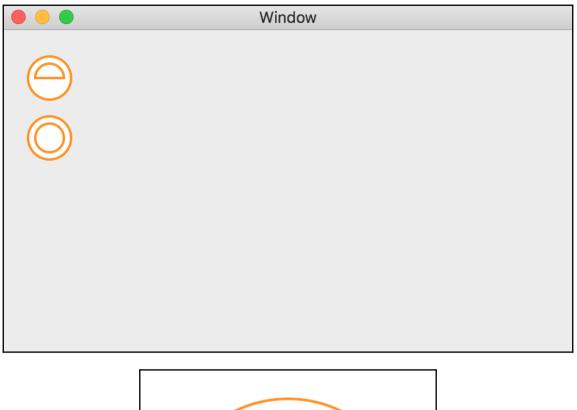
[42]



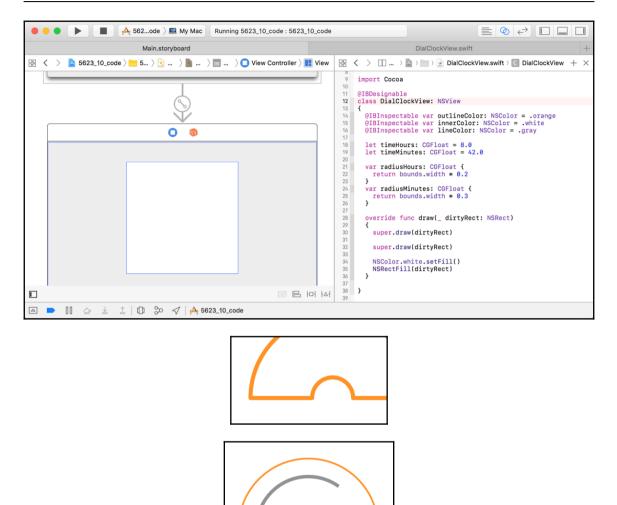
-

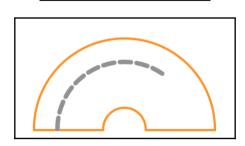
| | ≞ 🕂 [⊖ [| |
|---------------|-------------------|----|
| Custom Button | | |
| Border Color | Default | \$ |
| Normal Butto | Default | \$ |
| Highlighted B | Default | \$ |
| Round Icon | Default | \$ |
| Button | | |
| Style | Square | \$ |
| Туре | Momentary Push In | \$ |
| Visual | Bordered | |
| (| Transparent | |
| State | Off | \$ |

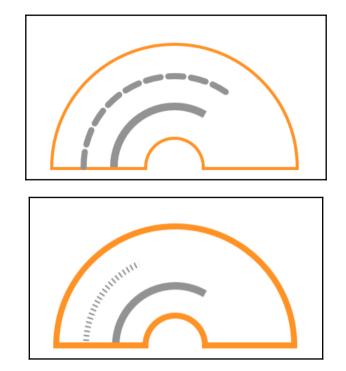
```
Graphic Bundle
```

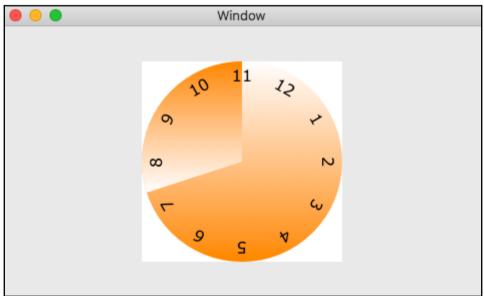


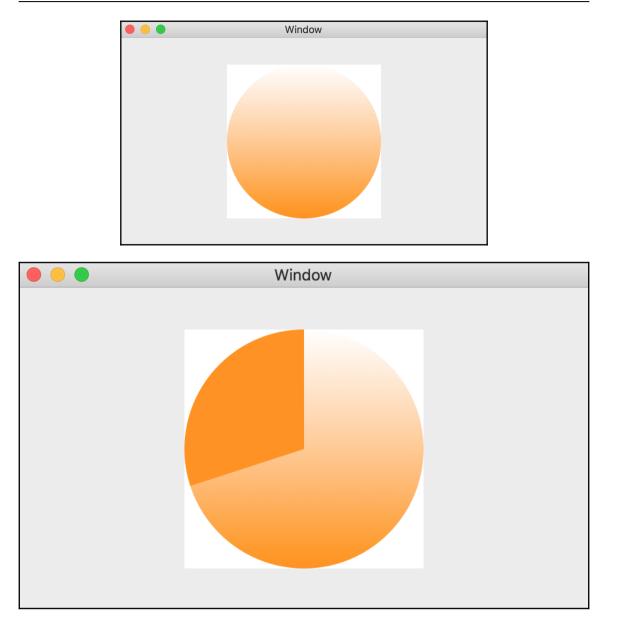




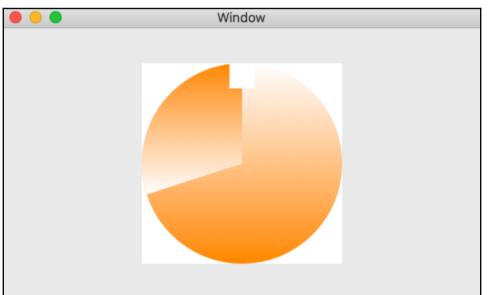




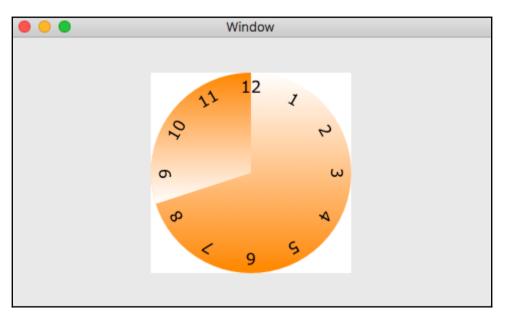




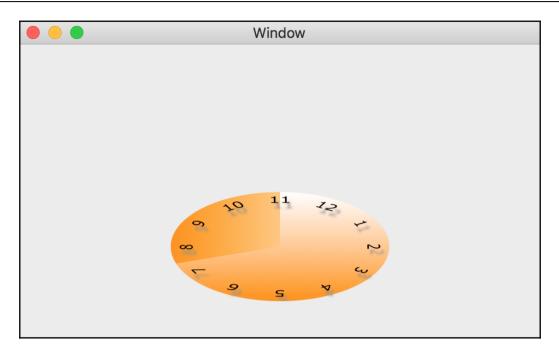








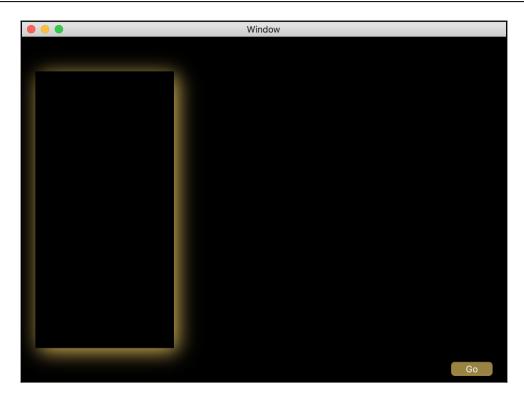


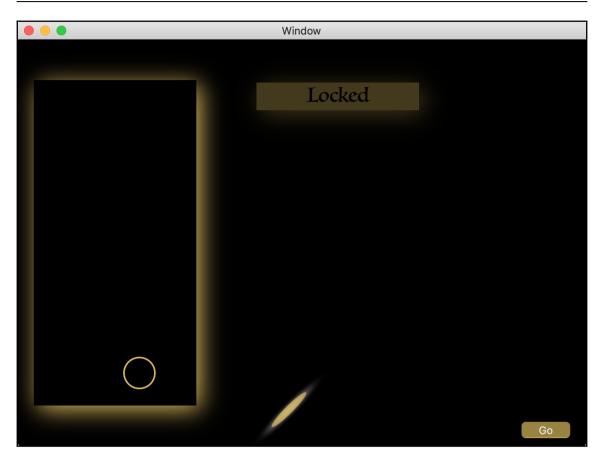


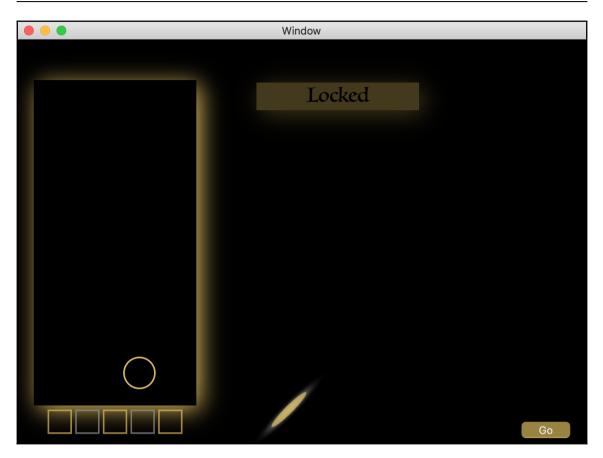
Chapter 11: Core Animation

| Α | ppKit |
|----------------|---------------|
| Core Animation | |
| Open GL | Core Graphics |
| Graphic | s Hardware |

| View | | |
|--------------|---------------|----------|
| Show | Alignment Rec | tangle ᅌ |
| ſ | 0 0 | 0 🗘 |
| | X | Y |
| | 700 🗘 | 500 🗘 |
| | Width | Height |
| Arrange | Position View | _ |
| Autoresizing | | |

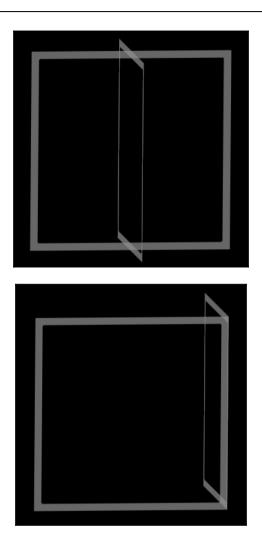




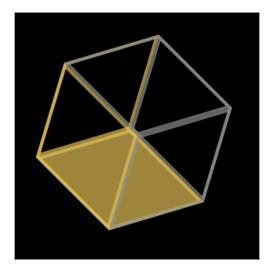




- [56] -

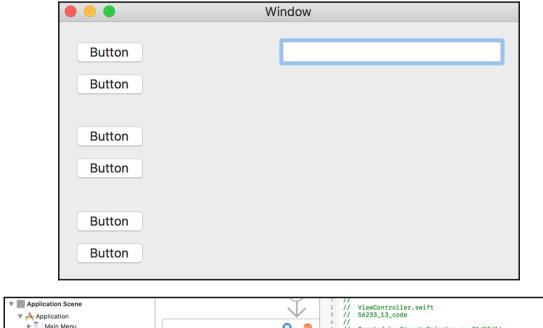


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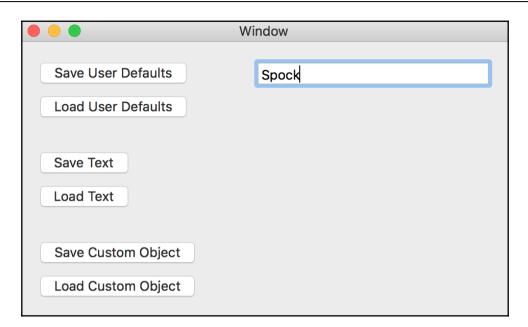
Chapter 13: Persistent Storage



| Application Application Main Menu App Delegate First Responder Window Controller Scene | Save User Defaults | 3 3 4 5 6 7 8 9 10 | <pre>// 56233_13_code // // Created by Stuart Grimshaw on 31/12/16. // Copyright © 2016 Stuart Grimshaw. All rights reserved. // import Cocoa</pre> |
|--|--------------------|--|---|
| View Controller Scene | Load User Deaults | 11 | <pre>class ViewController: NSViewController {</pre> |
| View Controller | | 13 | <pre>let customFileManager = CustomFileManager.sharedManager</pre> |
| View | Button | 15 16 | <pre>@IBAction func saveUserDefaults(_ sender: Any) </pre> |
| Text Field Cell | Button | 17 | customFileManager.saveDefaults() |
| ▼ 🌄 Save User Defaults | | I9 | @IBAction func loadUserDefaults(_ sender: Any) |
| Save User Defaults Coad User Deaults Coad User Deaults State Deaults Coad User Deault | Button | 20 21 22 23 24 25 | <pre>{ customFileManager.loadDefaults() } </pre> |
| ▶ T Button | | 26 | |
| ▶ 🔭 Button ▶ 💏 Button 🌍 First Responder | | | |

| ••• | Window |
|--------------------|--------|
| Save User Defaults | |
| Load User Defaults | |
| Save Text | |
| Load Text | |
| Button | |
| Button | |

| | Window |
|--------------------|--------|
| Save User Defaults | |
| Load User Defaults | |
| | |
| Save Text | |
| Load Text | |
| | |
| Save Custom Object | |
| Load Custom Object | |



| | test1 | ٢ | C Q Search |
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| Favorites Cloud Drive Applications Stu Desktop Downloads Documents Developer My Stuff macOS Programming Movies | Books Documentation file.txt FILING CABINET Misc Static IP_Addresses test1 test2 test3 TestMe tex | test test | |
| | | | Cancel Open |

Chapter 14: The Benefits of Core Data

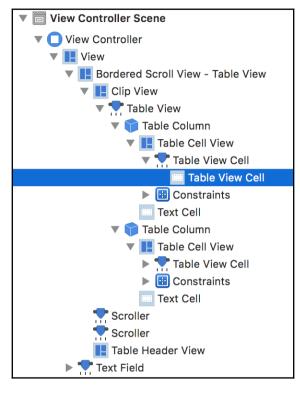
| Product Name: | 5623_14_code | |
|--------------------------|------------------------|-----------|
| Team: | Stuart Grimshaw | \$ |
| Organization Name: | Stuart Grimshaw | |
| Organization Identifier: | com.stusoft | |
| Bundle Identifier: | com.stusoft623-14-code | |
| Language: | Swift | ٥ |
| | ✓ Use Storyboards | |
| Document Extension: | mydoc | |
| | VUse Core Data | |
| | Include Unit Tests | |
| | | |

| Window Controller Scene | | |
|---------------------------------|-----------------|-----------------|
| View Controller Scene | 0 | N |
| ▼ 🔲 View Controller | | - |
| View | Table View Cell | Table View Cell |
| 🔻 📘 Bordered Scroll View - Tabl | | |
| Clip View | | |
| Troller | | |
| Scroller | | |
| 📘 Table Header View | | |
| Text Field | | |
| Text Field | | |
| Square | | |
| Square | | |
| Constraints | | |
| 📅 First Responder | | |

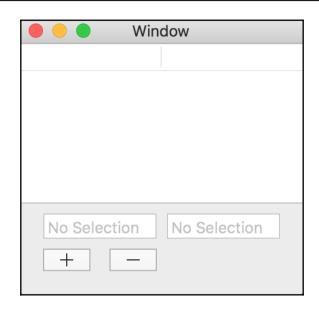
| | Window |
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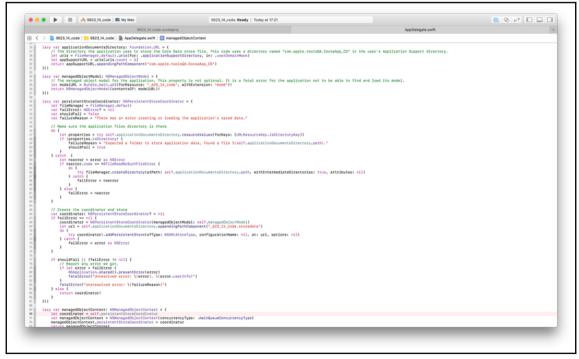
| Outlets content managedObjectContext Referencing Outlets New Referencing Outlet Received Actions add: * Square fetch: O insert: O remove: * Button Cell selectNext: O selectPrevious: O | Ð | Array Controller | |
|--|---------------------------------------|------------------|------------|
| managedObjectContext ○ Referencing Outlets New Referencing Outlet ○ Received Actions add: * Square ● fetch: ○ insert: ○ remove: * Button Cell ● selectNext: ○ | Outlets | | |
| ✓ Referencing Outlets New Referencing Outlet ✓ Received Actions add: * Square fetch: insert: remove: * Button Cell selectNext: | content | | 0 |
| New Referencing Outlet ○ ▼ Received Actions add: * Square add: * Square ○ fetch: ○ insert: ○ remove: * Button Cell ● selectNext: ○ | managedObjectCont | ext | 0 |
| ▼ Received Actions add: * Square ● fetch: ○ insert: ○ remove: * Button Cell ● selectNext: ○ | Referencing Outle | ets | |
| add: * Square fetch: O insert: O remove: * Button Cell selectNext: O | New Referencing Ou | tlet | 0 |
| fetch: O insert: O remove: * Button Cell selectNext: O | Received Actions | | |
| insert: O remove: * Button Cell O selectNext: O | add: | * Square | \bigcirc |
| remove: * Button Cell selectNext: | fetch: | | 0 |
| selectNext: | insert: | | 0 |
| , and the second s | remove: | * Button Cell | \bigcirc |
| selectPrevious: | selectNext: | | 0 |
| | selectPrevious: | | 0 |

| Object Controlle | er |
|------------------|--------------------|
| Mode | Entity Name |
| Entity Name | Person |
| | Prepares Content |
| | 🗸 Editable |
| | Uses Lazy Fetching |
| Fetch Predica | |



| Value | |
|--|----|
| Value (Table Cell View.objectValue.name) | |
| Bind to Table Cell View | \$ |
| Controller Key | |
| | |
| Model Key Path | |
| objectValue.name | |
| | |



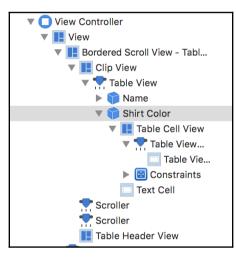


| Attributes | | |
|--------------|------------|----|
| Attribute 🖍 | Туре | |
| S name | String | \$ |
| N rank | Integer 16 | \$ |
| S shirtColor | String | \$ |

| | Window |
|------|--------|
| | |
| Kirk | Yellow |
| | |
| | |
| | |
| | |
| | |
| Kirk | Yellow |
| + | - |
| | |

| Relationship | | |
|--------------|----------------------------|-----|
| Name | superior | |
| Properties | 🗌 Transient 🛛 🗹 Optional | |
| Destination | Person | \$ |
| Inverse | No Inverse Relationship | ٢ |
| Delete Rule | Nullify | \$ |
| Туре | To One | ¢ |
| Advanced | Index in Spotlight | |
| | Store in External Record F | ile |

| Attri | butes | | | Relationship | |
|-------|----------------|-------------|--------------------|--------------|--------------------------|
| | A 4 4 - 11 4 - | T | | Name | subordinates |
| | Attribute 🔨 | Туре | | Properties | 🗌 Transient 🛛 🗹 Option |
| | S name | String | \$ | Destination | Person |
| | N rank | Integer 16 | \$ | | |
| | S shirtColor | String | \$ | Inverse | |
| | + - | | | Delete Rule | Nullify |
| | | | | Туре | To Many |
| Relat | tionships | | | Arrangement | Ordered |
| | Relationship | Destination | Inverse | Count | Unbounded 🗘 🗌 Minimu |
| | M subordinates | Person | \$ superior \$ | | Unbounded 🗘 🗌 Maxim |
| | 0 superior | Person | \$ subordinates \$ | Advanced | Index in Spotlight |
| | | | | | Store in External Record |

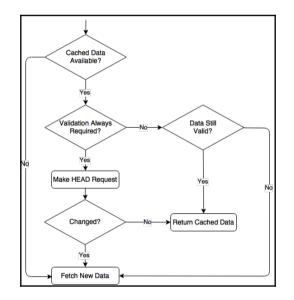


| | Window |
|-------------------|----------------------------|
| Name | ∧ Shirt Color |
| Kirk | Yellow |
| Nameless | Red |
| Spock | Blue |
| Sulu | Yellow |
| Uhura | Red |
| Kirk | Yellow |
| + | _ |
| | |
| | Data Model |
| Managed Object Co | ntext Managed Object Model |

| Managed Object Context | Managed Object Mode |
|------------------------|---------------------|
| | |
| Persistent Stor | e Coordinator |
| | |
| Persistent Store | Persistent Store |

Chapter 15: Connect to the World -Networking



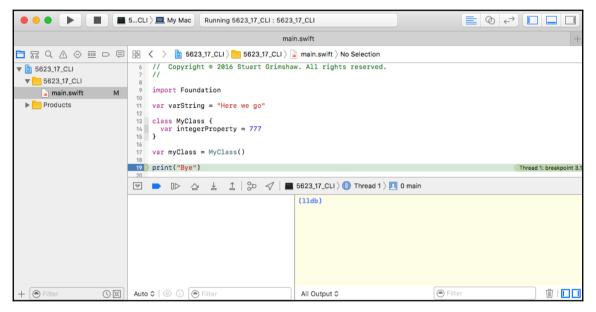


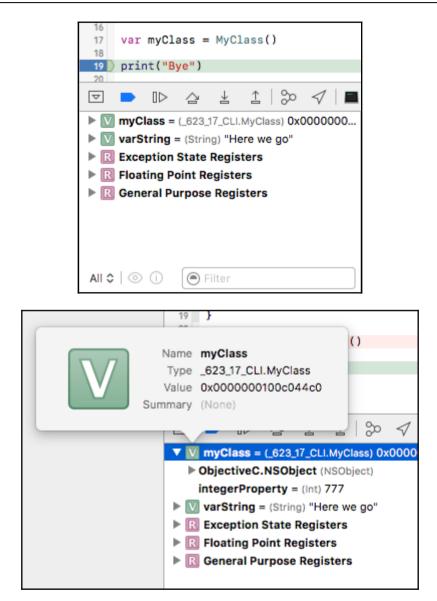
Chapter 16: Concurrency and Asynchronous Programmi ng

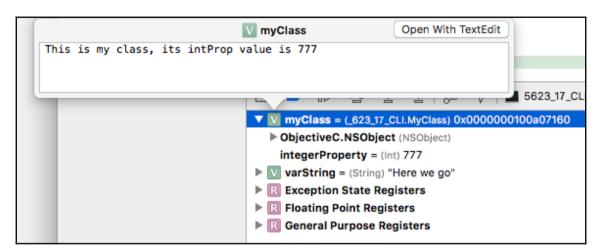
| | | Activity Monitor (My Processes) | | | | | | | |
|---------|----------------------------|---------------------------------|--------|-------|----------|---------------|-------|------|--------|
| 8 | 0 * ~ | CPU M | emory | Ener | rgy Disk | Network | | Q | Search |
| ocess N | Name | % CPU | CPU T | Time | Threads | Idle Wake Ups | PID | User | |
| M | icrosoft Word | 1. | 2 40 | 56.73 | 19 | 20 | 57789 | stu | |
| 🔤 Ac | ctivity Monitor | 1. | C | 10.82 | 6 | 3 | 72854 | stu | |
| 🇊 Xo | code | 0. | 9 1:33 | 42.32 | 27 | 1 | 44142 | stu | |
| co | om.apple.CoreSimulator.Cor | 0. | 6 23 | 07.41 | 4 | 0 | 35065 | stu | |
| ba | ackboardd | 0. | 5 19: | 25.52 | 10 | 23 | 44994 | stu | |
| ba | ackboardd | 0. | 5 18: | 48.09 | 11 | 23 | 44988 | stu | |
| 🝌 Sy | ystemUIServer | 0. | 4 4: | 31.51 | 6 | 0 | 378 | stu | |
| m | dworker | 0. | 3 | 0.07 | 5 | 0 | 72795 | stu | |
| 🝌 lo | ginwindow | 0. | 3 2 | 26.44 | 3 | 0 | 116 | stu | |
| 🔥 Co | oreServicesUIAgent | 0. | 2 | 0.38 | 6 | 0 | 70752 | stu | |
| se | ecinitd | 0. | 2 | 1.03 | 4 | 0 | 65806 | stu | |
| cf | prefsd | 0. | 1 3: | 00.55 | 7 | 0 | 355 | stu | |
| jav | va | 0. | 1 5: | 57.15 | 17 | 21 | 34480 | stu | |
| 💾 iTe | erm2 | 0. | 1 4: | 58.23 | 10 | 2 | 40375 | stu | |
| se | ecd | 0. | 1 | 2.61 | 5 | 0 | 65816 | stu | |
| 실 Fi | nder | 0. | 1 12: | 17.94 | 12 | 0 | 379 | stu | |
| di | stnoted | 0. | 1 1: | 20.34 | 4 | 0 | 353 | stu | |
| m | dworker | 0. | 1 | 0.06 | 4 | 0 | 72794 | stu | |
| | System: | 4.33% | | CPU L | OAD | Threads | | 19 | 35 |
| | User: | 5.28% | 5.28% | | | Processes: | | 3 | 58 |
| | Idle: | 90.39% | | | | | | | |
| | | | | | | A-4 | | | |

Chapter 17: Understanding Xcodes Debugging Tools

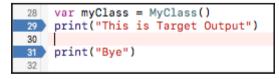








| - | 0.0 | |
|---|---|--|
| V | Name myClass Type _623_17_CLI.MyClass Value 0x000000100c06490 Summary (None) | Object() -> AnyObject is my class, its intP |
| | | 0 ⁰ 7 = 5023_1/ |
| | with myClass = (_623_17_CLI.MyC | Class) 0x0000000100c06490 |
| | integerProperty = (Int) 777 | |
| | varString = (String) "Here v | we go" |
| | Exception State Registers | 5 |
| | R Floating Point Registers | |
| | R General Purpose Register | s |



This is Debugger Output This is Target Output (11db)

| |) 🔲 🖻 🗐 |
|-----------------|-------------|
| ▼ 📕 5623_17_CLI | PI 🕜 🕕 |
| CPU | |
| Memory | |
| Energy Impac | st |
| 🗐 Disk | Zero KB/s |
| Network | Zero KB/s |
| 🔻 🕕 Thread 1 Q | ueu(serial) |
| 📔 🔍 🔍 📃 🛛 | |
| 🖸 1 start | |

| ••• • • • • • 562 | 3_17_CLI) 💻 My Mac | Running 5623_17_C | :LI : 5623_17_CLI | 🛕 1 | | | |
|---|--|---|--|------------------|---|----------------------|---------------|
| × | Network Activity Rep | port | | | main.swift | | + |
| | 🗄 < > 🕲 Netwo | ork Report | | | | | < 🛆 > |
| 🔻 🔳 5623_17_CLI PID 9587 🥥 🕕 | Network | | Bytes | Packets | | Profile in Instru | uments |
| CPU 99% | | Receiving | | | Sendin | g | |
| Energy Impact High Disk Zero KB/s Network Zero KB/s | | 0.0 KB/s | 5.5 кв | \bigcirc | 0.0 KB/s | 0.4 K | KB |
| | P | Per Second | Total | | Per Second | Total | |
| | Receiving and S | ions | Remote Address Remote P | 3 Sent | State Bytes In | Δ Bytes In Bytes Out | 98 A Bytes |
| | | | | No A | ctive Connections | | |
| ● Filter 王田田 | "Cache-Control" "Content-Encod" "Content-Lengtl "Content-Type" Date = "Wed, 22 Expires = "-1" P3P = "CP=\"Th Server = gws; "Set-Cookie" = iSX200_VU8TSnIfbvH2 | " = "private, max-age=0" ing" = gzip; h" = 4613; = "text/html; charset=1 8 Sep 2016 07:35:58 GMT"; ; is is not a P3P policy! "NID=87=ppjv4qvFPNIJ3z5 | { URL: http://www.google.co.nz ; ISO-8859-1"; ; See https://www.google.com/sup | pport/accounts/a | answer/151657?hl≈en for _H9Nmv15vV0tnK; expires= | more info.\""; | |

✓ (II) View Process by Thread
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| ▼ 🔄 5623_17_code 1 Breakpoint | |
|--|--|
| ▼ 🗵 viewDidLoad | |
| [2] _623_17_code.ViewController.viewDidLoad () -> () line 14 | |
| @objc_623_17_code.ViewController.viewDidLoad () -> () line 0 | |
| [NSViewController viewDidLoad] in AppKit | |
| [NSSplitViewController viewDidLoad] in AppKit | |
| [NSWindowSnappingPrefsViewController viewDidLoad] in AppKit | |
| [NSColorPickerGridViewController viewDidLoad] in AppKit | |
| [NSTabViewController viewDidLoad] in AppKit | |
| -[PDFThumbnailItem_osx viewDidLoad] in PDFKit | |
| | |

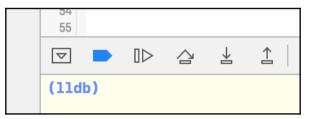
| roll | ler viewDidLoa | d] in AppKit super.viewDidLoad() | ~ | | | |
|----------|--|----------------------------------|---|--|--|--|
| ∕i(1 | ViewCor | troller.swift:13 | D | | | |
| 1 | Condition | | | | | |
| | Ignore | 0 🗘 times before stopping | e | | | |
| | Action | Add Action | r | | | |
| | Options Automatically continue after evaluating actions | | | | | |
| - | | 24 | | | | |

| Condition | total < 3 | |
|-----------|---|--|
| Ignore | 0 🗘 times before stopping | |
| Action | Log Message | + |
| | %B: Incrementing total, %H; tota Log message to console Speak message | II = @total@ @exp@ = expression %B = breakpoint name |
| | | %H = breakpoint hit count |

| ViewCon | troller.swift:35 | |
|-----------|---|------|
| Condition | b | ct: |
| Ignore | 0 🗘 times before stopping | |
| Action | Debugger Command \Diamond + - | . (|
| | print (s, i) | |
| | Debugger Command \Diamond + - | = 43 |
| | expression i * 2 | |
| Options | Automatically continue after evaluating actions | |
| | | |

| idl | 10.01 | 18 } | | | | |
|-----------------|--|--|----|--|--|--|
| .vi | ViewCon | troller.swift:41 | | | | |
| hΑ | Condition | | | | | |
| ad] | Ignore | 0 🗘 times before stopping | | | | |
| ntre | Action | AppleScript \Diamond + - | - | | | |
| vi d] pac | tell application "Finder" display dialog "AppleScript breakpoint" end tell | | | | | |
| | | CompileTest@exp@ = expression%B = breakpoint name%H = breakpoint hit count | nm | | | |
| | | Press compile to verify your script | | | | |
| | Options | Automatically continue after evaluating actions | | | | |
| | | // AppleScript | | | | |

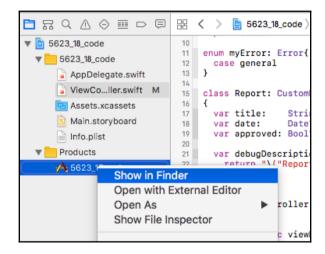
| AppleScript breakpoint | |
|------------------------|-----------|
| | Cancel OK |



| 46 | |
|----|---|
| 47 | <pre>func testStepCommands()</pre> |
| 48 | { |
| 49 | <pre>func printObservation()</pre> |
| 50 | { |
| 51 | print("Today you are you!") |
| 52 | <pre>print("That is truer than true!")</pre> |
| 53 | <pre>print("There is no one alive who is you-er than you!")</pre> |
| 54 | } |
| 55 | |
| 56 | <pre>func printPrediction()</pre> |
| 57 | { |
| 58 | <pre>print("And will you succeed?")</pre> |
| 59 | <pre>print("Yes you will indeed!")</pre> |
| 60 | <pre>print("98 and 3/4 percent guaranteed.")</pre> |
| 61 | } |
| 62 | |
| 63 | printObservation() |
| 64 | printPrediction() |
| 65 | } |
| 66 | |

Chapter 18: LLDB and the Command Line

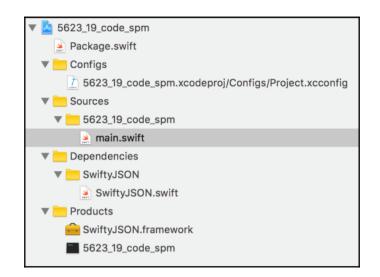


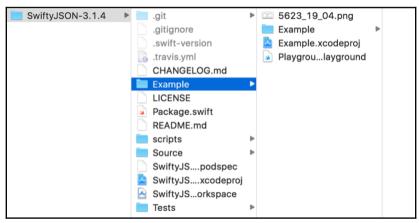


Chapter 19: Deploying Third - Party Code

| SwiftyJSON / SwiftyJSO | • Wat | tch 588 | ★ Star | 12,938 ¥ Fo | rk 2,405 | | |
|--------------------------------|--|-------------------------------|-------------------|---------------|------------------|-------------------|-----------------------|
| <> Code (1) Issues 40 | ຳ Pull requests 10 | II Projects 1 4- Pulse | III Gra | phs | | | |
| The better way to deal with J | ISON data in Swift | | | | | | |
| 🕝 582 commits | ဖို 5 branches | 🟷 21 releases | <u>11</u> | 115 contrib | outors | MIT د <u>آ</u> نه | |
| Branch: master - New pull requ | Jest | | | | Fin | d file Clone or | download - |
| 🗾 wongzigii committed on GitH | ub Merge pull request #775 t | from skyline75489/feature/hel | llo-2017 (| Clone wit | h HTTPS (| 9 | |
| Example | Conve | rt every target | l | Jse Git or cl | heckout with | SVN using the we | b URL. |
| Source Hello 2017 | | | https://g | ithub.com/S | wiftyJSON/Swifty | JS0 🔂 | |
| SwiftyJSON.xcodeproj | Update | e to recommended proj sett | ings | Open in | Desktop | Downloa | d ZIP |
| SwiftyJSON.xcworkspace | Chang | e example path for carthage | | | | 0 | years ago |

| 5623_19_code_spm | SwiftyJSON-3.1.4 | .git | ٣ |
|--------------------------|------------------|--------------------------|---|
| a 5623_19_copm.xcodeproj | | .gitignore | |
| Package.swift | | .swift-version | |
| Packages | • | 📑 .travis.yml | |
| | | CHANGELOG.md | |
| | | 📃 Example | |
| | | LICENSE | |
| | | Package.swift | |
| | | README.md | |
| | | 📃 scripts | ► |
| | | Source | ► |
| | | SwiftyJSON.podspec | |
| | | 🖄 SwiftyJSON.xcodeproj | |
| | | 🔄 SwiftyJSON.xcworkspace | |
| | | Tests | ₽ |
| | | | |





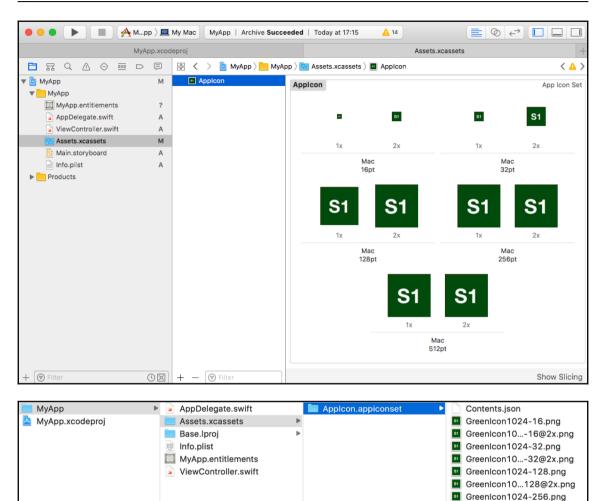
Chapter 20: Wrapping It Up

 Signing
 Target is ad hoc signed Enable development signing to use capabilities.
 Enable Development Signing

| | 🕂 Мрр 👌 | My Mac My | yApp Archive Su | Icceeded To | day at 15:45 🧧 | 14 | | $\leftrightarrow \square \square \square$ |
|---------------|-----------|--------------|-------------------|---------------|---------------------|-----------------|-------------|---|
| | MyApp.xco | odeproj | | | | Assets.) | cassets | + |
| 먎 < > 🖻 MyApp | | | | | | | | < 🛆 > |
| | General | Capabilities | Resource Tag | s Info | Build Settings | Build Phases | Build Rules | |
| PROJECT | ▼ Identit | У | | | | | | |
| TARGETS | | App | lication Category | Developer To | bls | \$ | | |
| si MyApp | | | Bundle Identifier | de.grimshaw.M | lyApp | | | |
| | | | Version | 1.0 | | | | |
| | | | Build | 1 | | | | |
| | | | | | | | | |
| | ▼ Signing | 3 | | | | | | |
| | | | | Enable develo | get is ad hoc sigr | e capabilities. | | |
| + - 🕞 Filter | | | | Ena | ble Development Sig | ning | | |

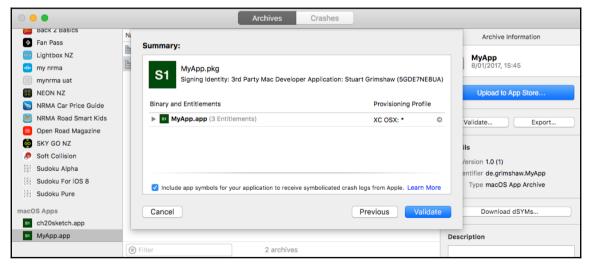
| | MyApp.xcodeproj | | | Assets.xcass | ets | + | |
|-----------------------|---|---|-----------------------|---------------------|-------------|-------|--|
| 🔡 < > 🛅 МуАрр | | | | | | < 🗛 > | |
| | General Capabilities Re | source Tags Info Buil | ld Settings Bu | ild Phases | Build Rules | | |
| PROJECT | ▼ [HI App Sandbox | | | | | ON | |
| TARGETS | | | | | | | |
| <mark>81</mark> МуАрр | Network: Incoming Connections (Server) Outgoing Connections (Client) | | | | | | |
| | Hardware: | Camera Microphone USB Printing | | | | | |
| | | Bluetooth | | | | | |
| | App Data: Contacts | | | | | | |
| | | Calendar | | | | | |
| | File Access: | Туре | Permission 8 | Permission & Access | | | |
| | | User Selected File | None | \$ | | | |
| | | Downloads Folder | None | \$ | | | |
| | | Pictures Folder | None | 0 | | | |
| | | Music Folder Movies Folder | None | 0 | | | |
| | | Movies Folder | None | \$ | | | |
| + - 🕞 Filter | Steps: | ✓ Add the App Sandbox entitlem | ent to your entitleme | ents file | | | |

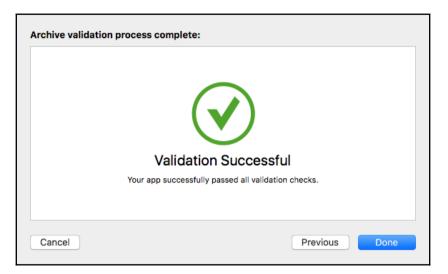
Graphic Bundle



Greenlcon10...256@2x.png
Greenlcon1024-512.png
Greenlcon10...512@2x.png

| Select a method for validation: | |
|--|---------------|
| Validate for the Mac App Store Perform a validation check of your app again Validate a Developer ID-signed Applica Perform a validation check of your app for disease | ition |
| Cancel | Previous Next |





| iTunes Connect My Apps ~ | | |
|--------------------------|--|--|
| + 000 | | |
| New App | | |
| New Mac App | | |
| New App Bundle | | |
| | | |

| Archive upload p | process complete: |
|------------------|---|
| | |
| | Upload Successful |
| | Thank you for submitting your app to the Mac App Store. |
| | |
| Cancel | Previous Done |

