

Introduction to Xcode

Session 413

Najla Bulous Xcode Engineer

Rick Ballard Xcode Engineering Manager



Agenda

Agenda

Create and Run

Agenda

Create and Run
Test and Debug

Agenda

Create and Run

Test and Debug

Review and Commit

Agenda

Create and Run

Test and Debug

Review and Commit

Configure

Demo

Creating and running

Najla Bulous Xcode Engineer

Demo

Testing and debugging

Rick Ballard Xcode Engineering Manager

Configuring Your Project

Najla Bulous Xcode Engineer

Core Configuration Concepts

Core Configuration Concepts

Projects



Core Configuration Concepts

Projects

Targets



Core Configuration Concepts

Projects

Targets

Build Settings



Core Configuration Concepts

Projects

Targets

Build Settings

Capabilities



Core Configuration Concepts

Projects

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Build Settings

Capabilities

Workspaces



Core Configuration Concepts

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Build Settings

Capabilities

Workspaces



Core Configuration Concepts

Projects

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Build Settings

Capabilities

Workspaces





Projects

Projects



Projects



Files



Projects



Files



Targets

Projects



Files



Targets



Build settings

Projects



Files



Schemes



Targets



Build settings

Qua...ator > iPhone SE Quakenator: Ready | Today at 5:44 PM

Quakenator

- ▶ Quakenator
- ▶ QuakenatorTests
- ▶ QuakenatorUITests
- ▶ Products

Quakenator

Info Build Settings

▼ Deployment Target

iOS Deployment Target 10.0

▼ Configurations

Name	Based on Configuration File
▶ Debug	No Configurations Set
▶ Release	No Configurations Set

+ -

Use Release for command-line builds

▼ Localizations

Language	Resources
English — Development Language	2 Files Localized

+ -

Use Base Internationalization

+ Filter

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Use Release for command-line builds

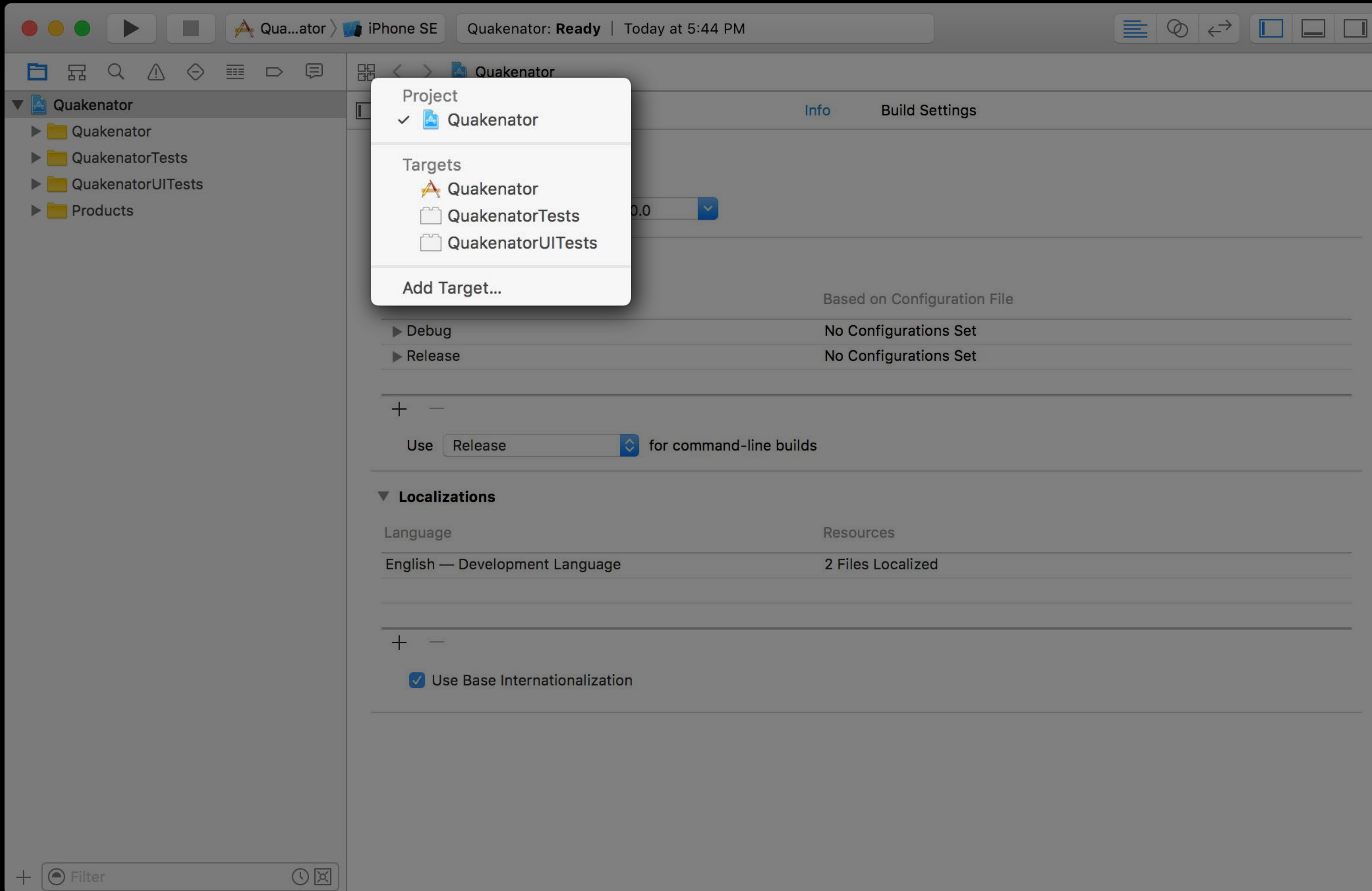
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English — Development Language	2 Files Localized

+ -

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+ Filter



Targets

Targets



Target

Targets



Targets



Target



Product

Targets



Target

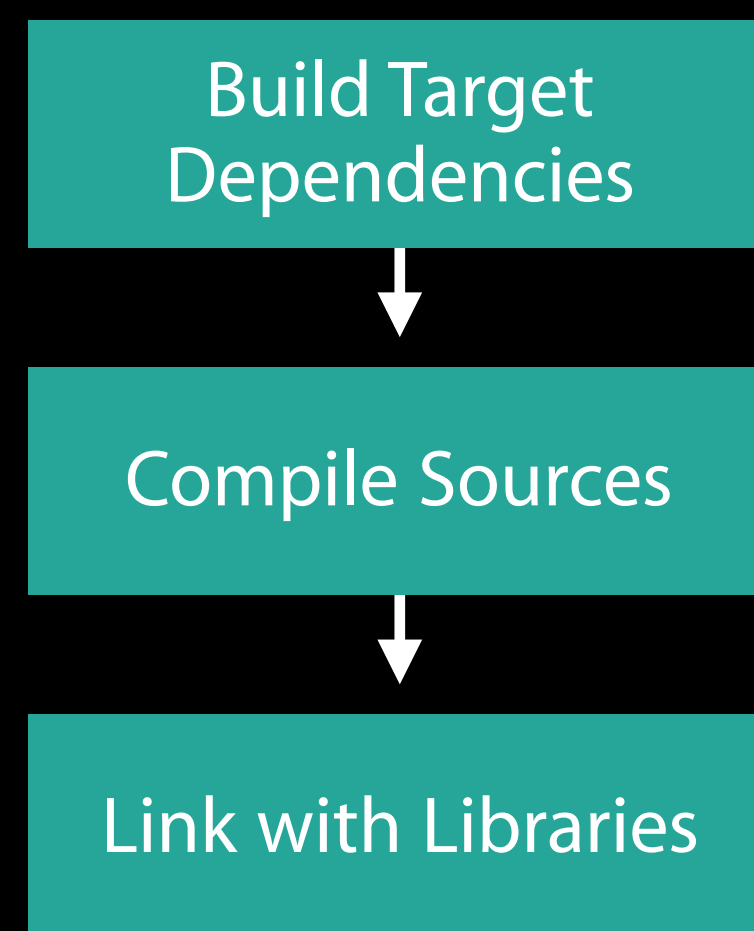


Product

Targets



Target



Build phases



Build settings

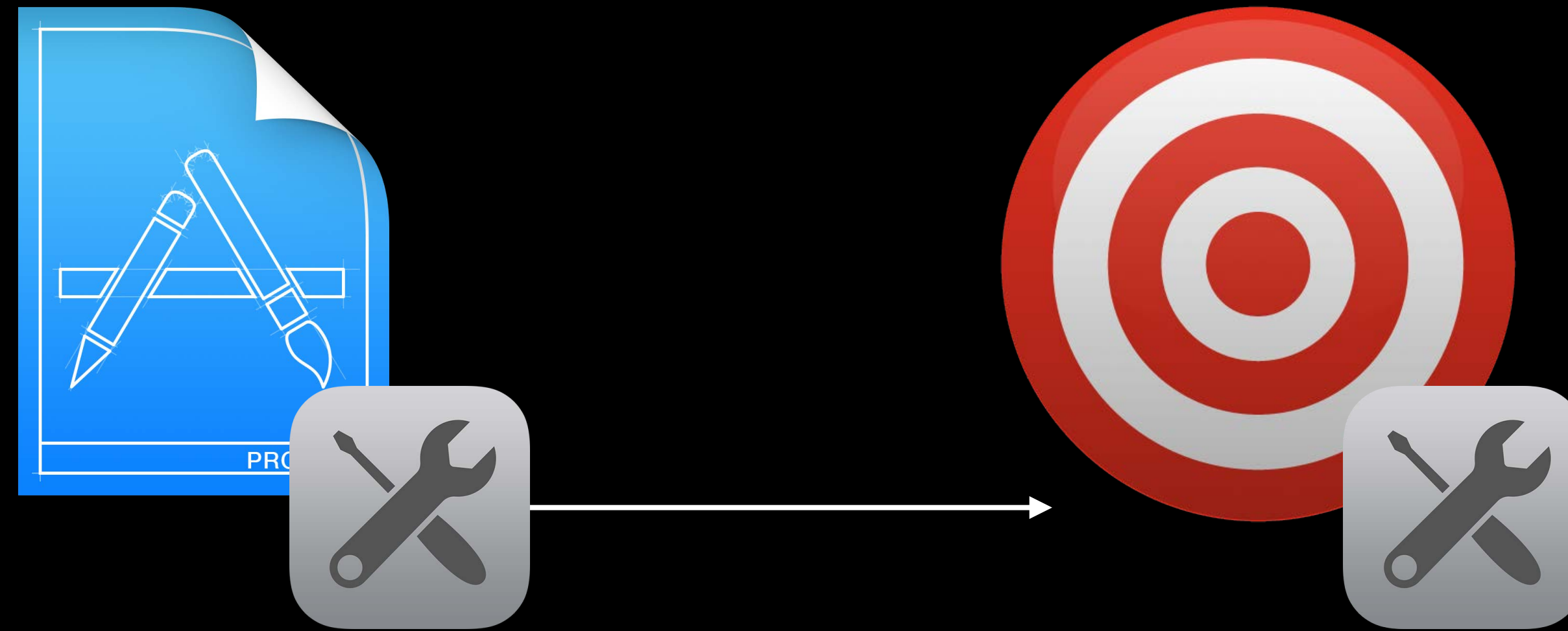


Product

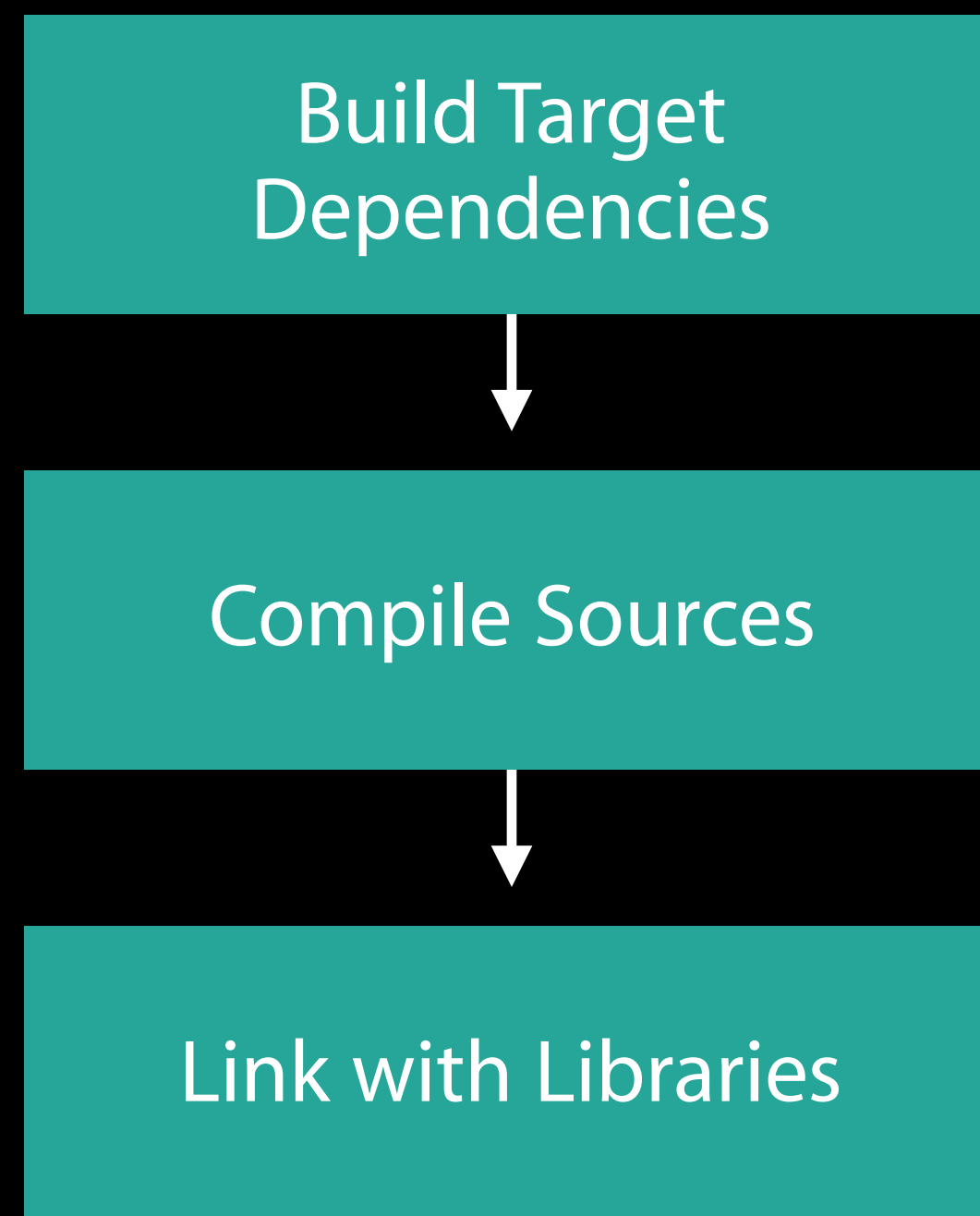
Targets



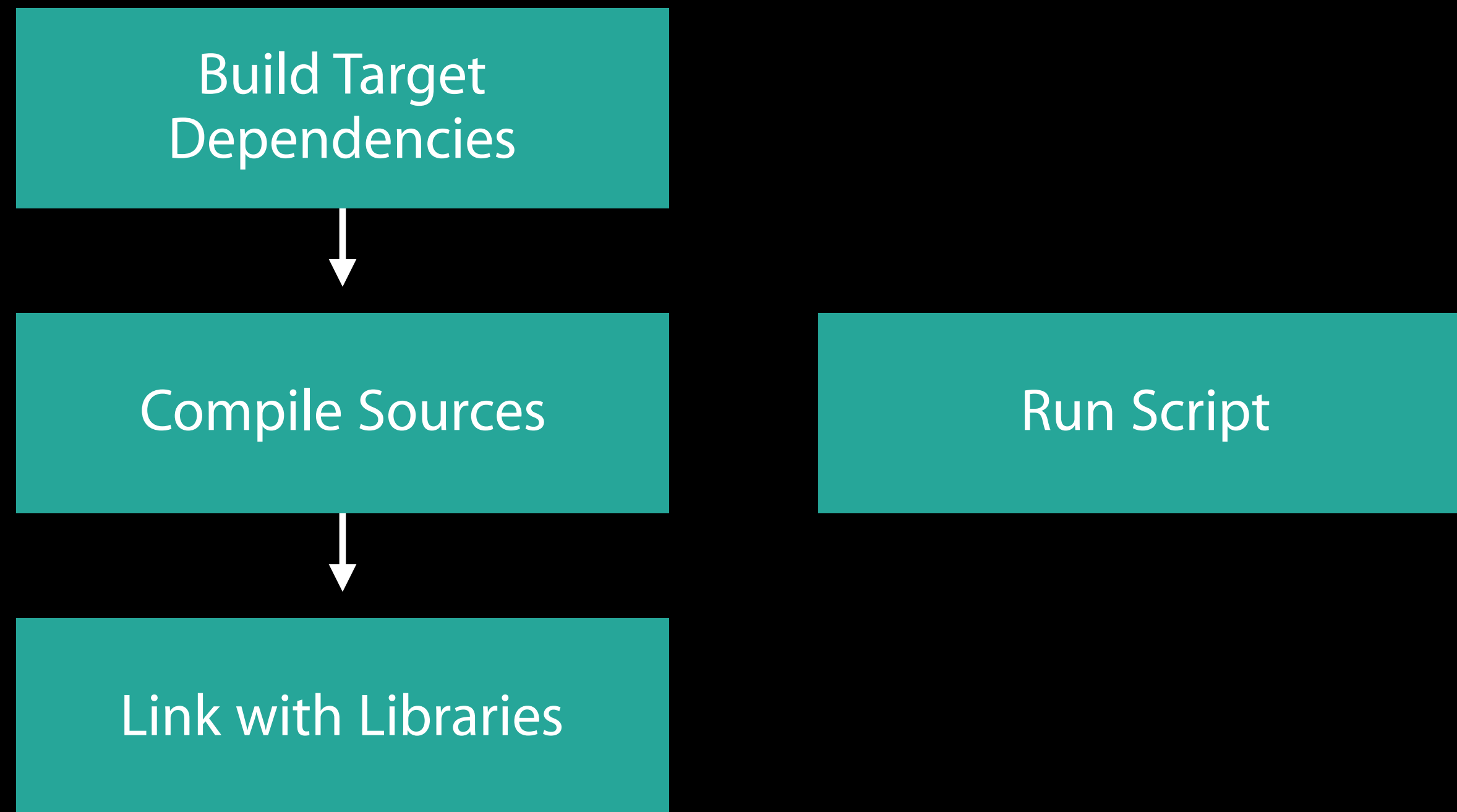
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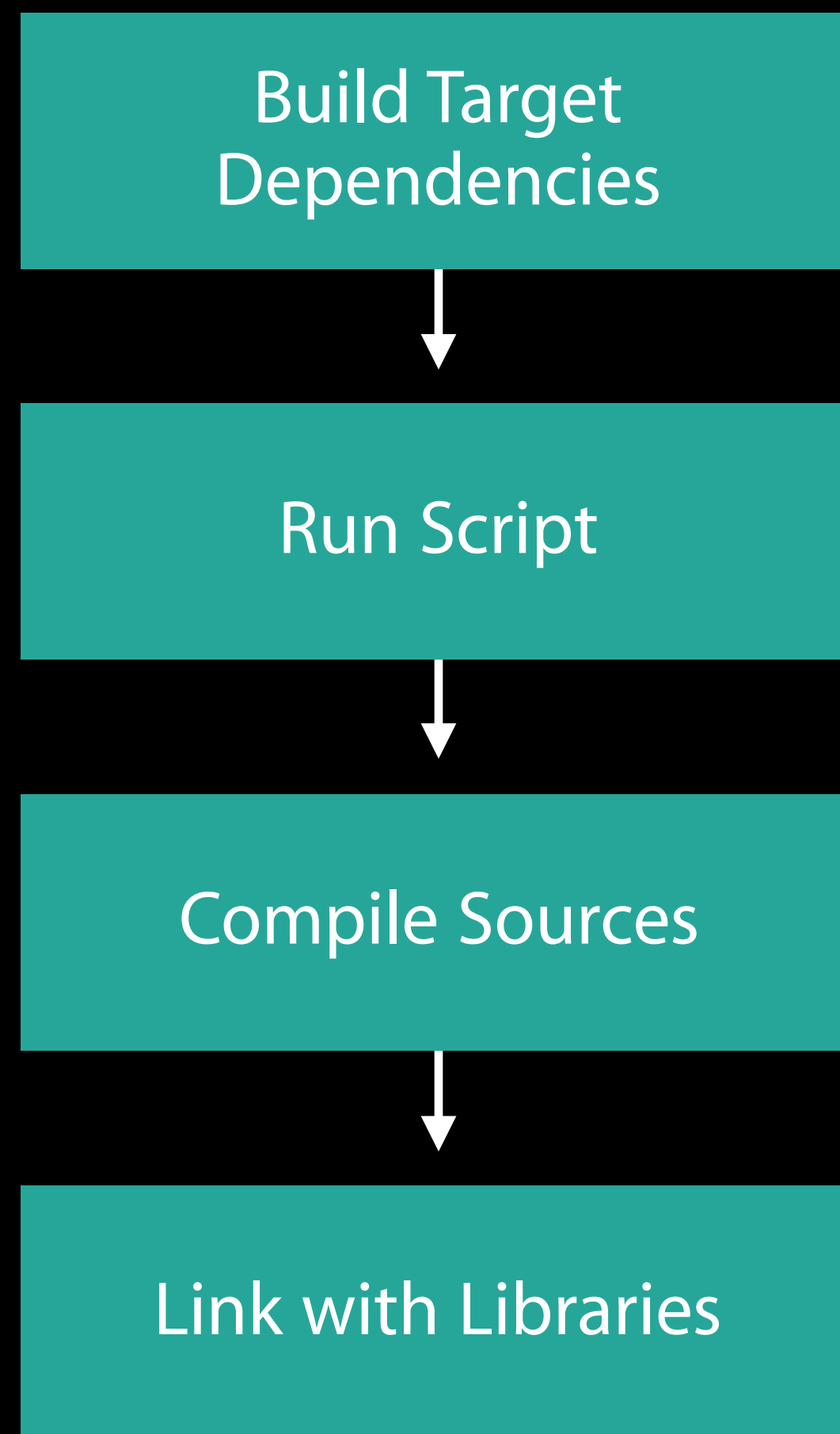
Target Build Phases



Target Build Phases



Target Build Phases





- Quakenator
 - Quakenator
 - QuakenatorTests
 - QuakenatorUITests
 - Products

▼ Identity

Display Name

Bundle Identifier

Version

Build

▼ Signing

No accounts found
Add a developer account to sign your app.

[Add Account...](#)

▼ Deployment Info

Deployment Target

Devices

Main Interface

Device Orientation Portrait
 Upside Down
 Landscape Left
 Landscape Right

Status Bar Style

Hide status bar

Quakenator

- ▶ Quakenator
- ▶ QuakenatorTests
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Hide status bar

Qua...ator > iPhone SE Quakenator: Ready | Today at 5:44 PM

Quakenator

Quakenator QuakenatorTests QuakenatorUITests Products

General Capabilities Resource Tags Info Build Settings Build Phases Build Rules

▼ Identity

Display Name Quakenator

Bundle Identifier com.najlaandrick.Quakenator

Version 1.0

Build 1

▼ Signing

No accounts found
Add a developer account to sign your app.

Add Account...

▼ Deployment Info

Deployment Target 10.0

Devices Universal

Main Interface Main

Device Orientation Portrait
 Upside Down
 Landscape Left
 Landscape Right

Status Bar Style Default

Hide status bar

+ Filter



- Quakenator
 - Quakenator
 - QuakenatorTests
 - QuakenatorUITests
 - Products

Project

- Quakenator

Targets

- ✓ Quakenator
- QuakenatorTests
- QuakenatorUITests

Add Target...

Capabilities Resource Tags Info Build Settings Build Phases Build Rules

Display Name

Bundle Identifier

Version

Build

▼ Signing

No accounts found
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▼ Deployment Info

Deployment Target

Devices

Main Interface

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Status Bar Style

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- Quakenator
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Status Bar Style

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- Quakenator
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Quakenator

General Capabilities Resource Tags Info Build Settings Build Phases Build Rules

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Deployment Target

Devices

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Status Bar Style

Hide status bar

Core Configuration Concepts

Projects

Targets

Build Settings

Capabilities

Workspaces



Core Configuration Concepts

Projects

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Build Settings



Build Settings



Architectures = armv7,arm64

Optimization Level = Fastest, Smallest [-Os]

Product Name = My Great App

Treat Warnings as Errors = No

Qua...ator > iPhone SE Quakenator: Ready | Today at 5:45 PM

Quakenator

Quakenator QuakenatorTests QuakenatorUITests Products

General Capabilities Resource Tags Info Build Settings Build Phases Build Rules

Basic Customized All Combined Levels

Deployment

Setting	Quakenator
Installation Directory	/Applications
Strip Linked Product	Yes
Targeted Device Family	1,2

Linking

Setting	Quakenator
Runpath Search Paths	@executable_path/Frameworks

Packaging

Setting	Quakenator
Info.plist File	Quakenator/Info.plist
Product Bundle Identifier	com.najlaandrick.Quakenator
Product Name	Quakenator

Asset Catalog Compiler - Options

Setting	Quakenator
Asset Catalog App Icon Set Name	AppIcon

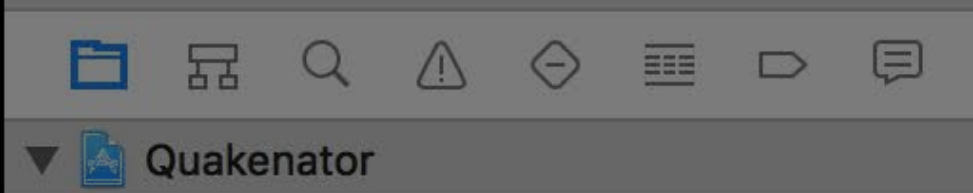
Swift Compiler - Version

Setting	Quakenator
Use Legacy Swift Language Version	No

User-Defined

Setting	Quakenator
---------	------------

+ Filter



- Quakenator
 - Quakenator
 - QuakenatorTests
 - QuakenatorUITests
 - Products

Basic Customized All **Combined** Levels +

▼ Deployment

Setting	Quakenator
Installation Directory	/Applications
Strip Linked Product	Yes
Targeted Device Family	1,2

▼ Linking

Setting	Quakenator
Runpath Search Paths	@executable_path/Frameworks

▼ Packaging

Setting	Quakenator
Info.plist File	Quakenator/Info.plist
Product Bundle Identifier	com.najlaandrick.Quakenator
Product Name	Quakenator

▼ Asset Catalog Compiler - Options

Setting	Quakenator
Asset Catalog App Icon Set Name	AppIcon

▼ Swift Compiler - Version

Setting	Quakenator
Use Legacy Swift Language Version	No

▼ User-Defined

Setting	Quakenator
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- Quakenator
 - Quakenator
 - QuakenatorTests
 - QuakenatorUITests
 - Products

Basic Customized All **Combined** Levels +

Deployment

Setting	Quakenator
Installation Directory	/Applications
Strip Linked Product	Yes
Targeted Device Family	1,2

Linking

Setting	Quakenator
Runpath Search Paths	@executable_path/Frameworks

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Setting	Quakenator
Info.plist File	Quakenator/Info.plist
Product Bundle Identifier	com.najlaandrick.Quakenator
Product Name	Quakenator

Asset Catalog Compiler - Options

Setting	Quakenator
Asset Catalog App Icon Set Name	AppIcon

Swift Compiler - Version

Setting	Quakenator
Use Legacy Swift Language Version	No

User-Defined

Setting	Quakenator
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Build Configurations

Debug



Release



Build Configurations

Debug



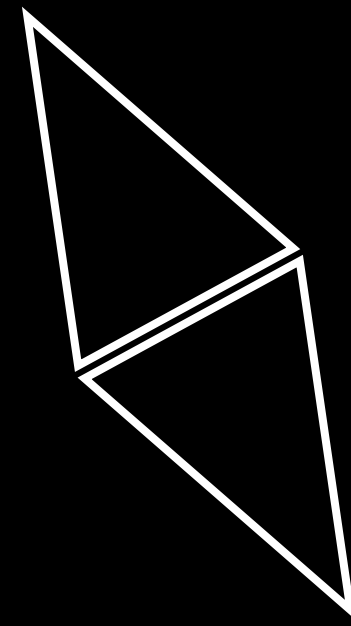
Optimization Level = None [-O0]

Release

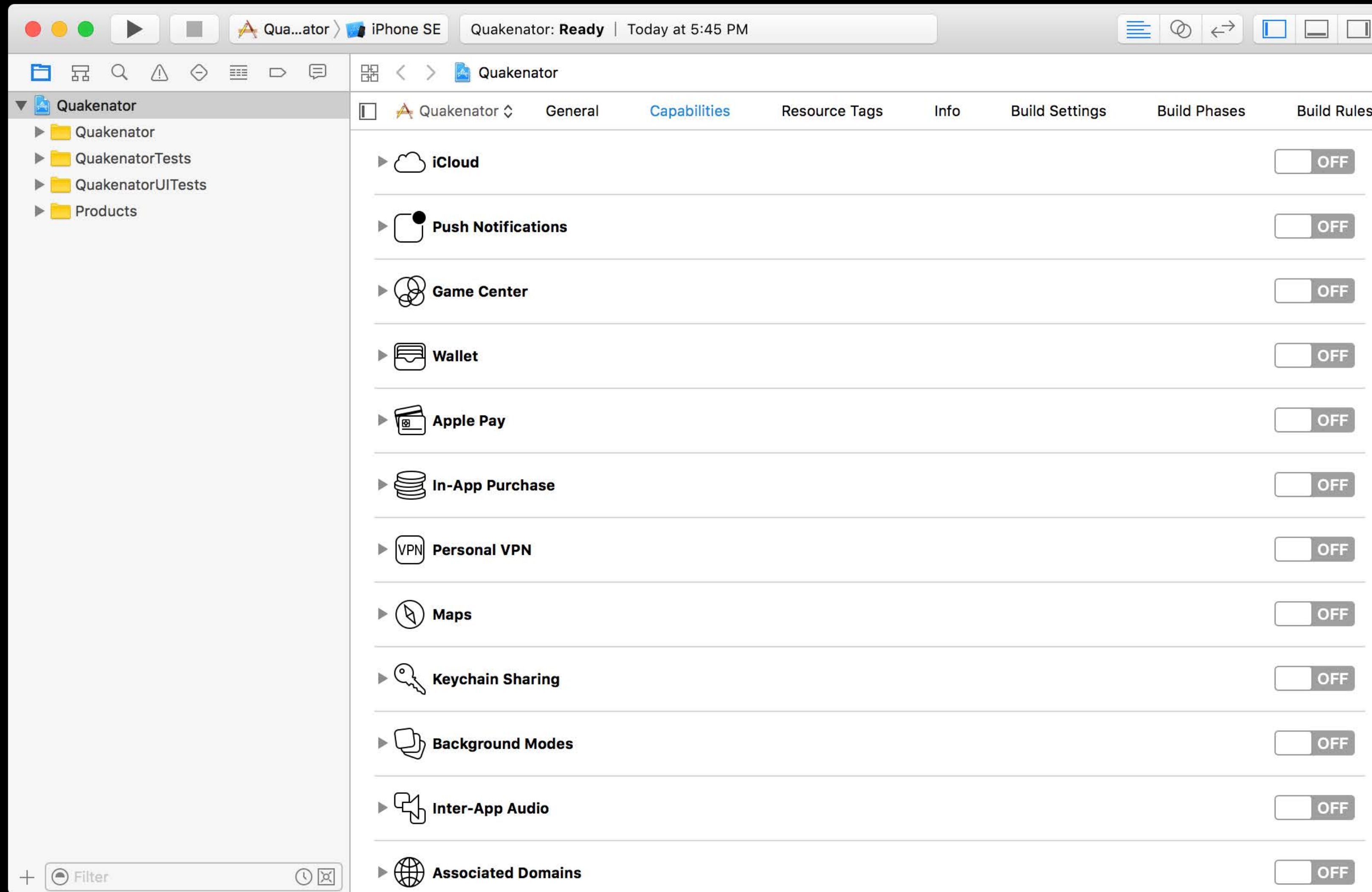


Optimization Level = Fastest, Smallest [-Os]

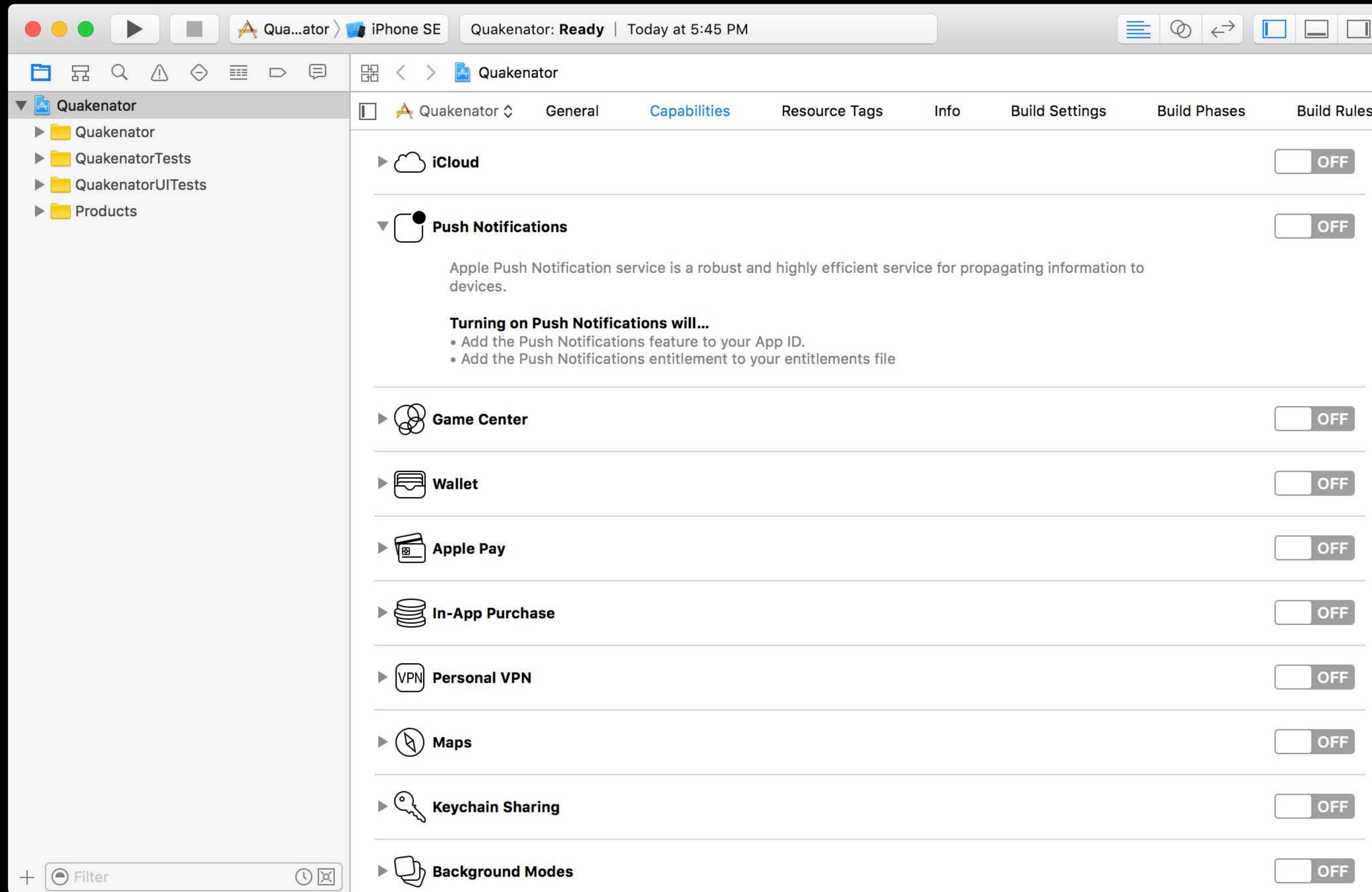
Capabilities



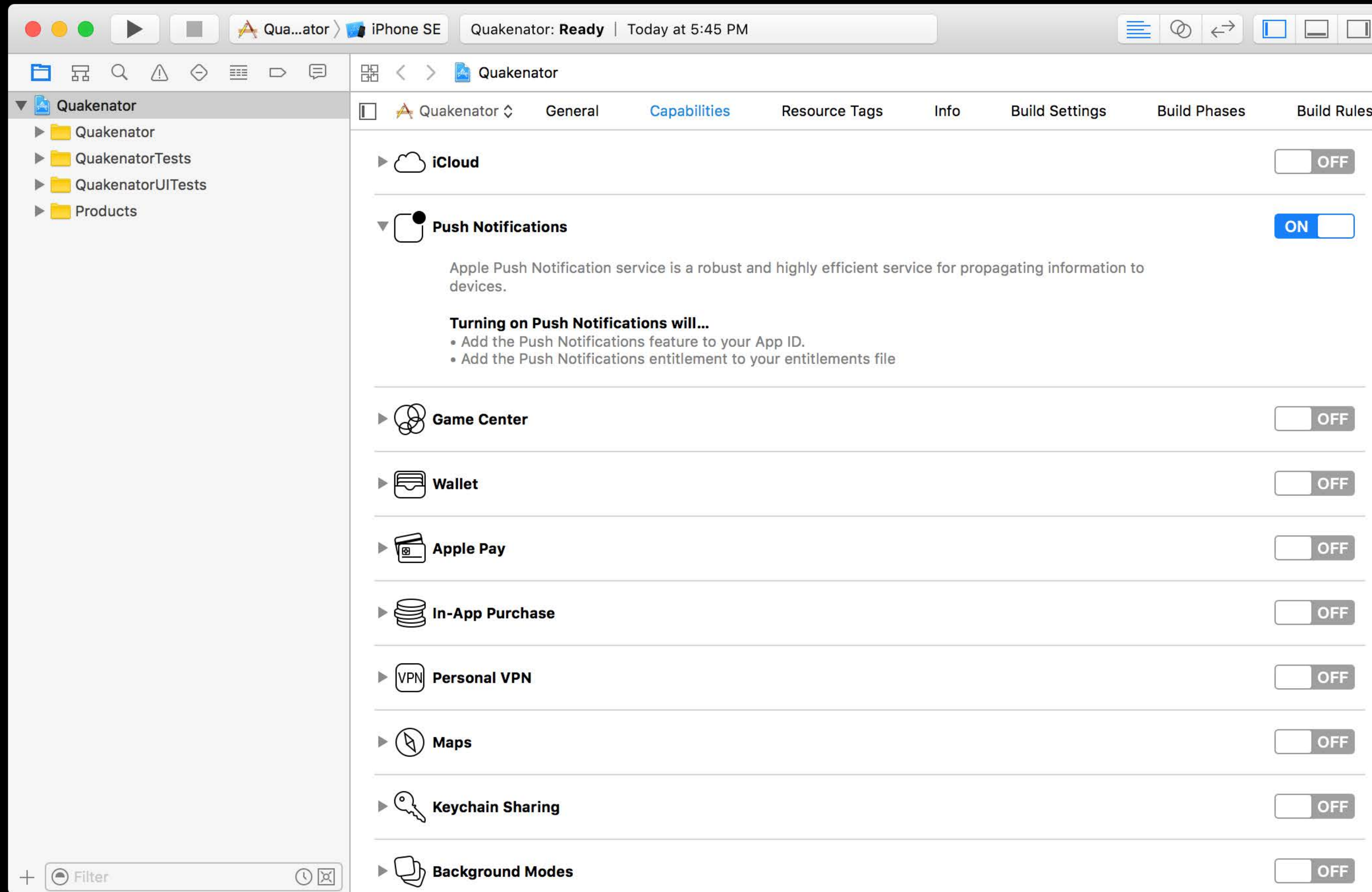
Capabilities



Capabilities



Capabilities



Core Configuration Concepts

Projects

Targets

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Workspaces



Core Configuration Concepts

Projects

Targets

Build Settings

Capabilities

Workspaces



Workspaces



App1

Workspaces



App2



App1



Framework

Workspaces



App2

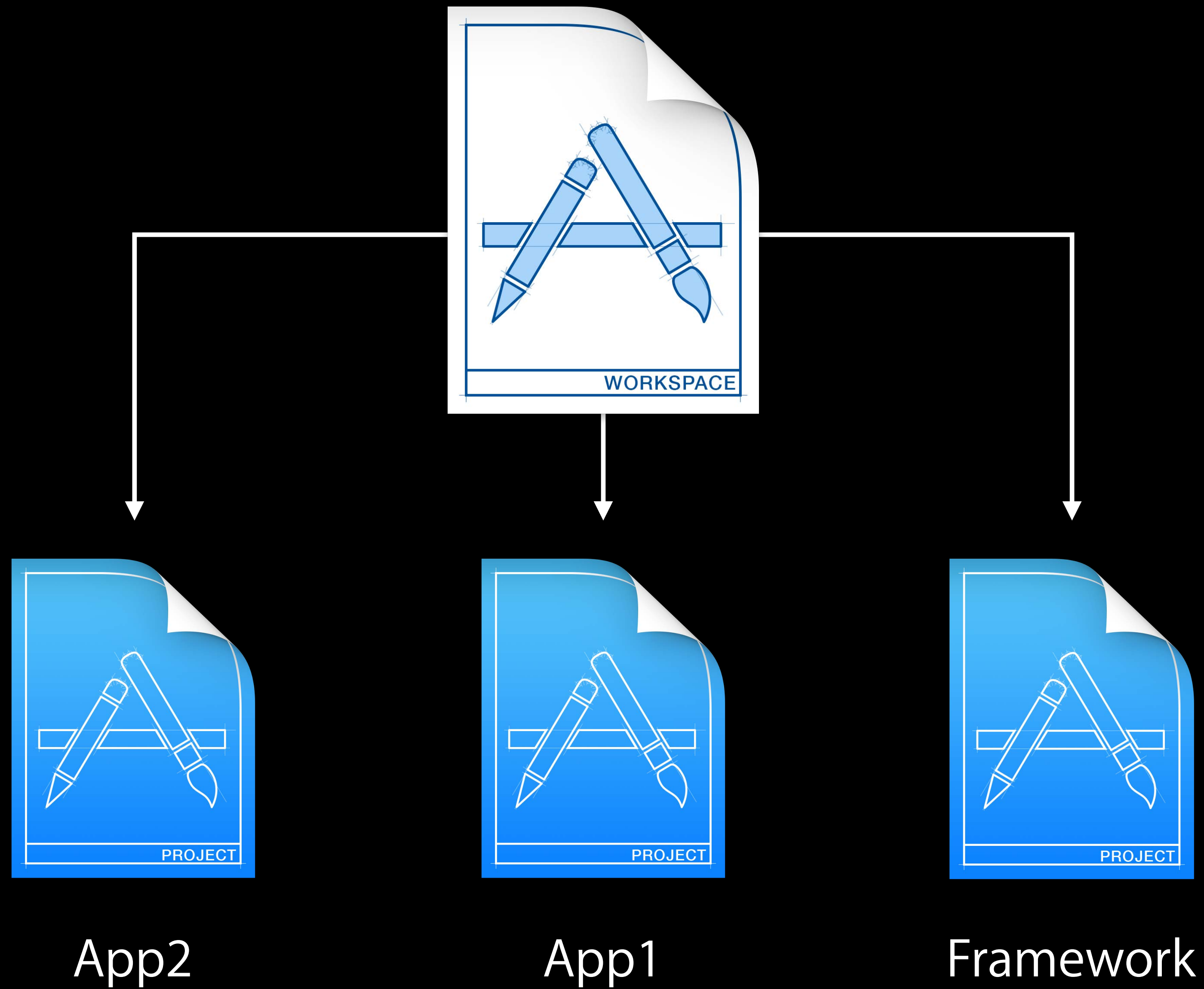


App1



Framework

Workspaces





Summary

We learned how to:

- Create and Run
- Test and Debug
- Review and Commit
- Configure

More Information

<https://developer.apple.com/wwdc16/413>

Related Sessions

What's New in Xcode App Signing	Nob Hill	Tuesday 9:00AM
Advanced Testing and Continuous Integration	Pacific Heights	Wednesday 3:00PM
Visual Debugging with Xcode	Presidio	Wednesday 4:00 PM
Thread Sanitizer and Static Analysis	Mission	Thursday 10:00AM
Using and Extending the Xcode Source Editor	Pacific Heights	Thursday 5:00PM
Debugging Tips and Tricks	Pacific Heights	Friday 1:40PM
Using Time Profiler in Instruments	Nob Hill	Friday 3:00PM

Labs

Interface Builder and Auto Layout Lab

Developer Tools Lab B

Thursday 3:00PM

Interface Builder and Auto Layout Lab

Developer Tools Lab C

Friday 9:00AM

Xcode Open Hours

Developer Tools Lab B

Friday 9:00AM

Xcode Open Hours

Developer Tools Lab B

Friday 12:00PM

Xcode Open Hours

Developer Tools Lab B

Friday 3:00PM



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