Introducing Xcode 4

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What Is Xcode 4?

- Improved workflow
- Interface Builder inside
- Editor Assistant
- LLVM Compiler
- Fix-it
- Version Editor
- New Debugger

What We'll Cover

- Workspaces
- Navigation
- Editing
- Organizer
- Version Editor
- Debugging
- Schemes

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Demo

What's where in the workspace window

What Did We Just See?

Workspace

- Represents your workflow
- Loose collection of references
  - Projects
  - Folders
  - Any other kind of file (PDFs, etc.)
- Contains schemes
  - Launch schemes
  - Distribution schemes

Workspace

- Projects can be shared between workspaces
- Every workspace has its own index, build folder

Workspaces

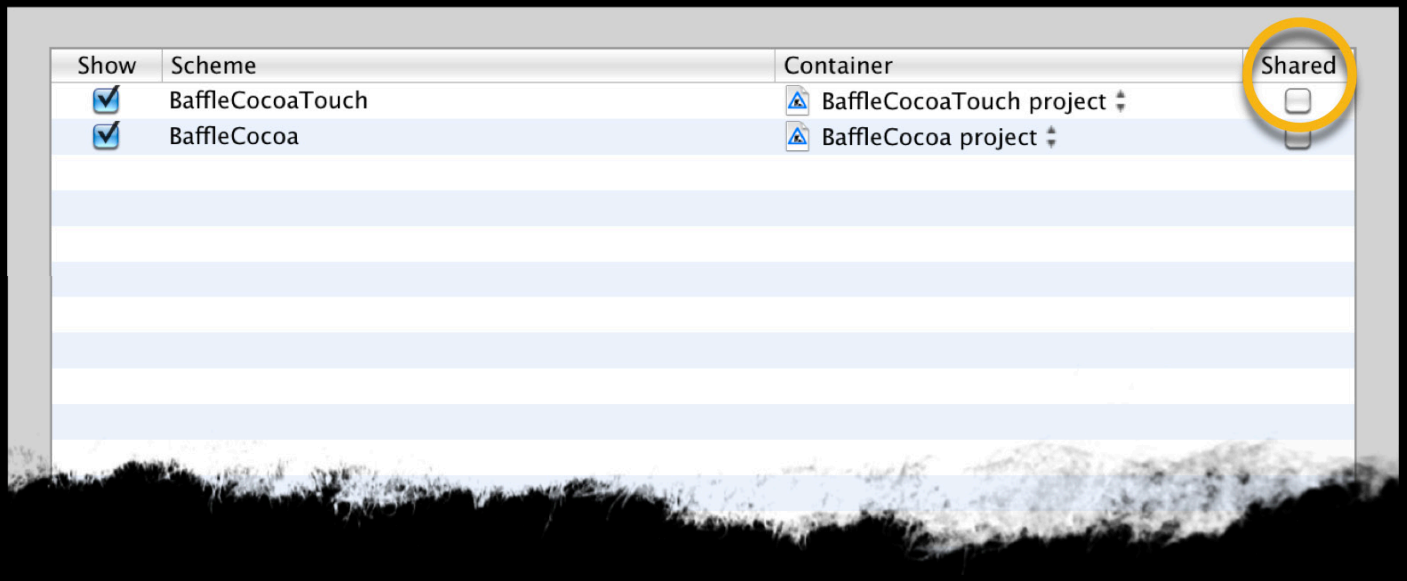
What they contain

- References
- Schemes
- Breakpoints
- Window layout

Workspaces

Information sharing

- Each piece of information can be private or shared
- User decides, based on their desired workflow



Workspaces

Sharing model

- Can share workspaces through SCM, email, etc.

Workspaces

Sharing model

- Can share workspaces through SCM, email, etc.
- Other workspaces might be temporary and not shared

Workspaces

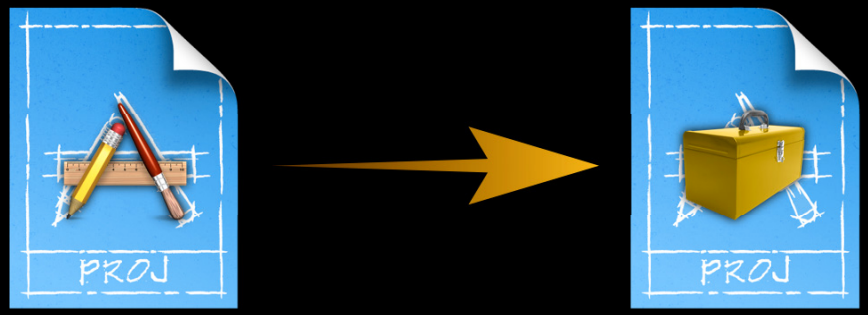
Work across all projects in the workspace

- Symbol lo n search
- Documen tation search
- Find and re ce

Workspaces

Coordinated builds

- Custom build actions in schemes
  - Arbitrary dependencies
  - Custom scripts
- Implicit dependencies
  - Projects don’t need to know about each other



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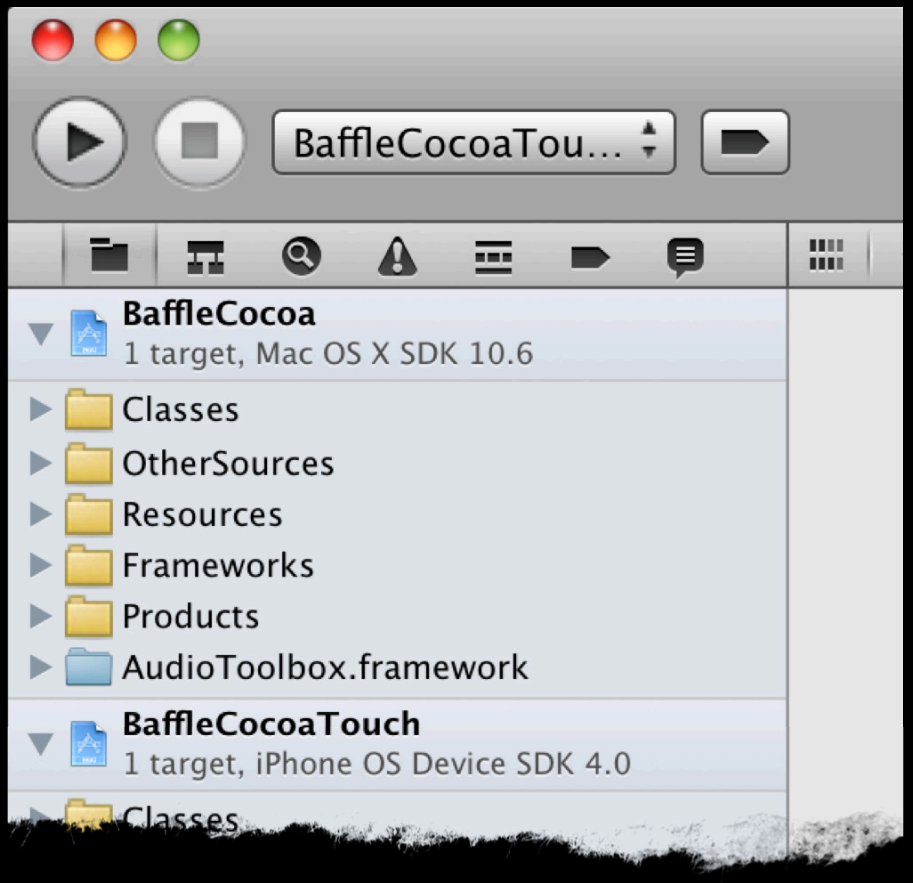
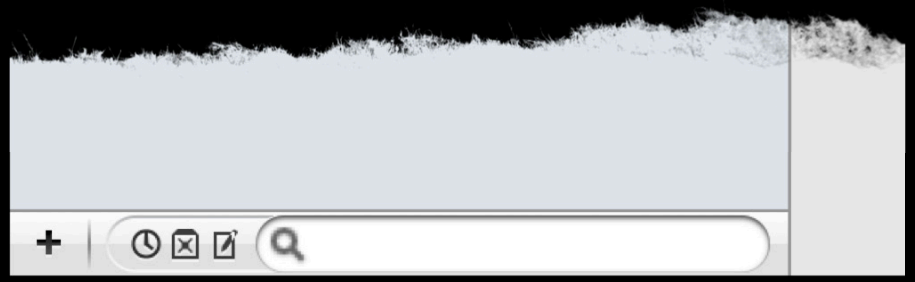
Navigating

Structure navigation



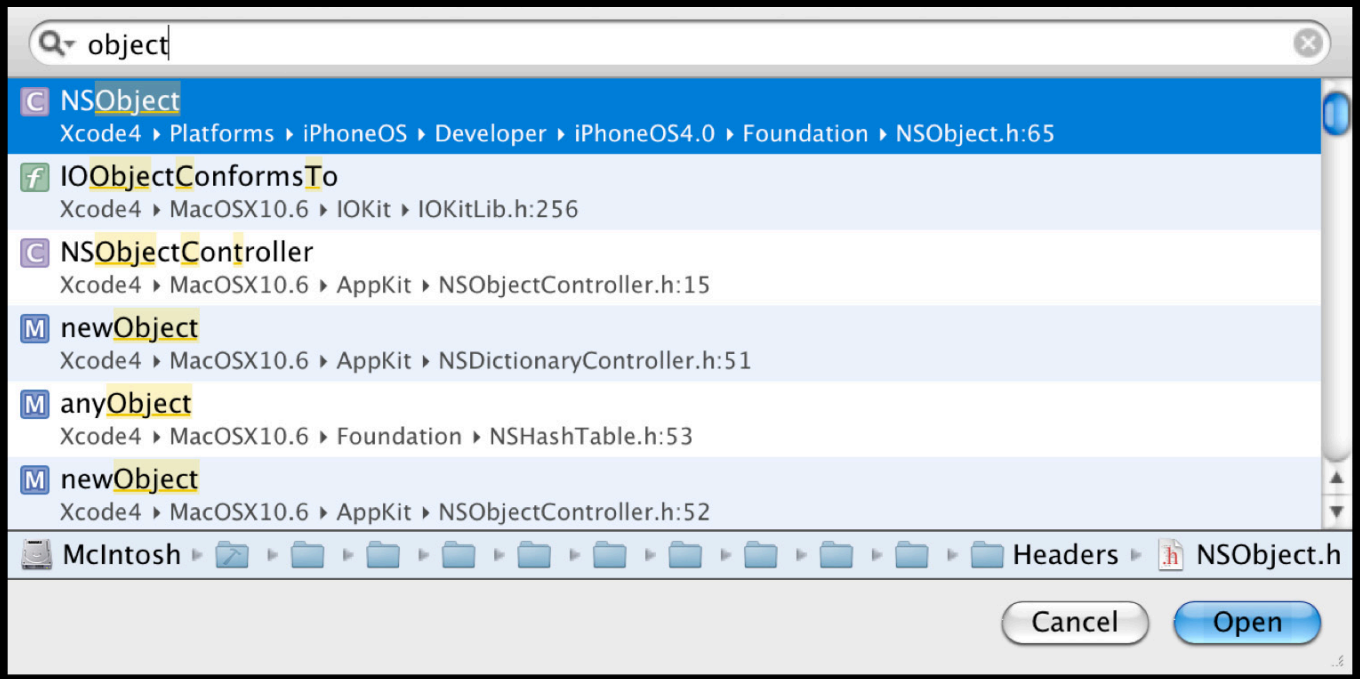
Navigating

Filtering



Navigating

Open quickly



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Editing

- Xcode automatically shows related content
- Three types of editing behavior

Standard

Assistant

Version

Editing

- New ways to work with files
  - Source Code
  - Interface Builder (.nib and .xib)
  - Data Model
  - Hex
  - Preview

Editing

- New ways to work with editors
  - Jump Bar
  - Assistant Editor Support
  - Inspector
  - Library

Demo

Editing and searching

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Demo

Organizer, Version Editor and Debugging

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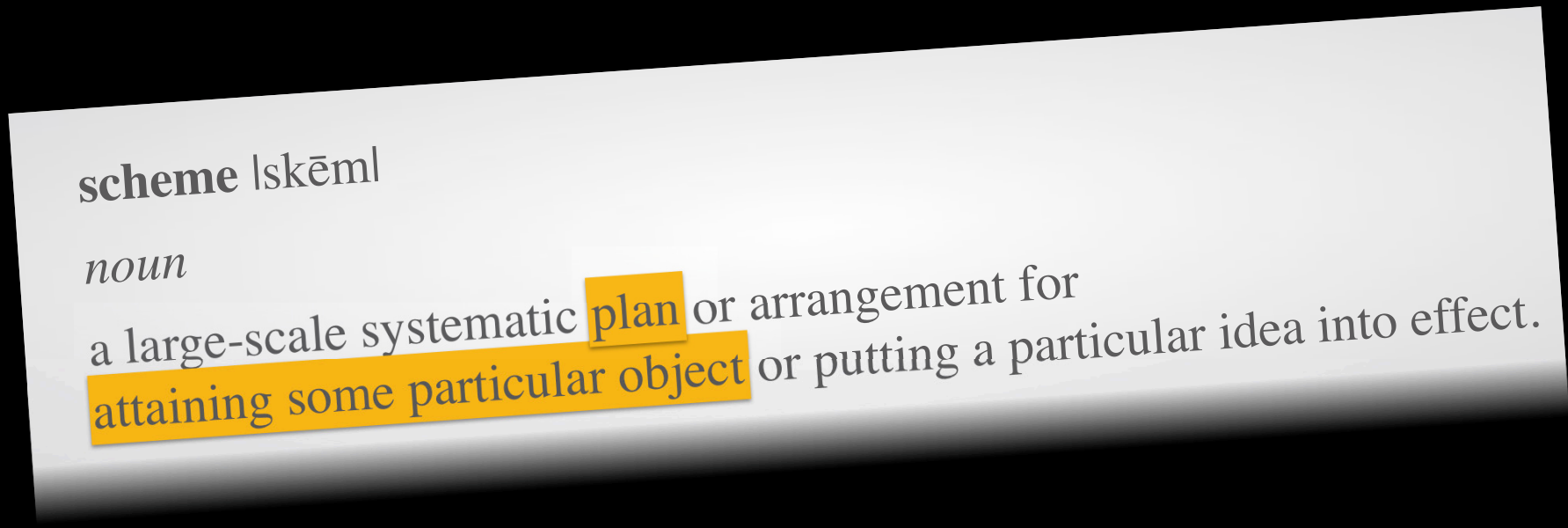
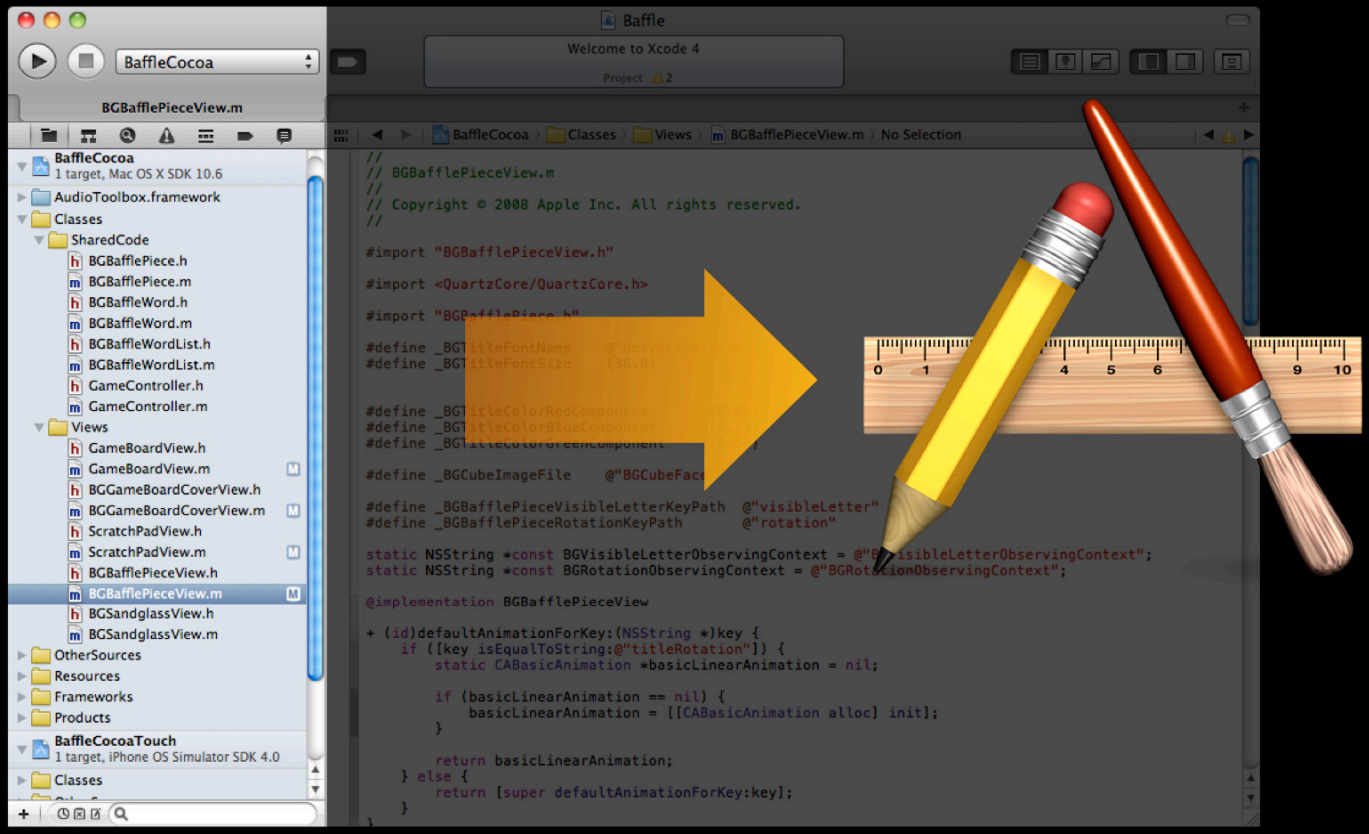
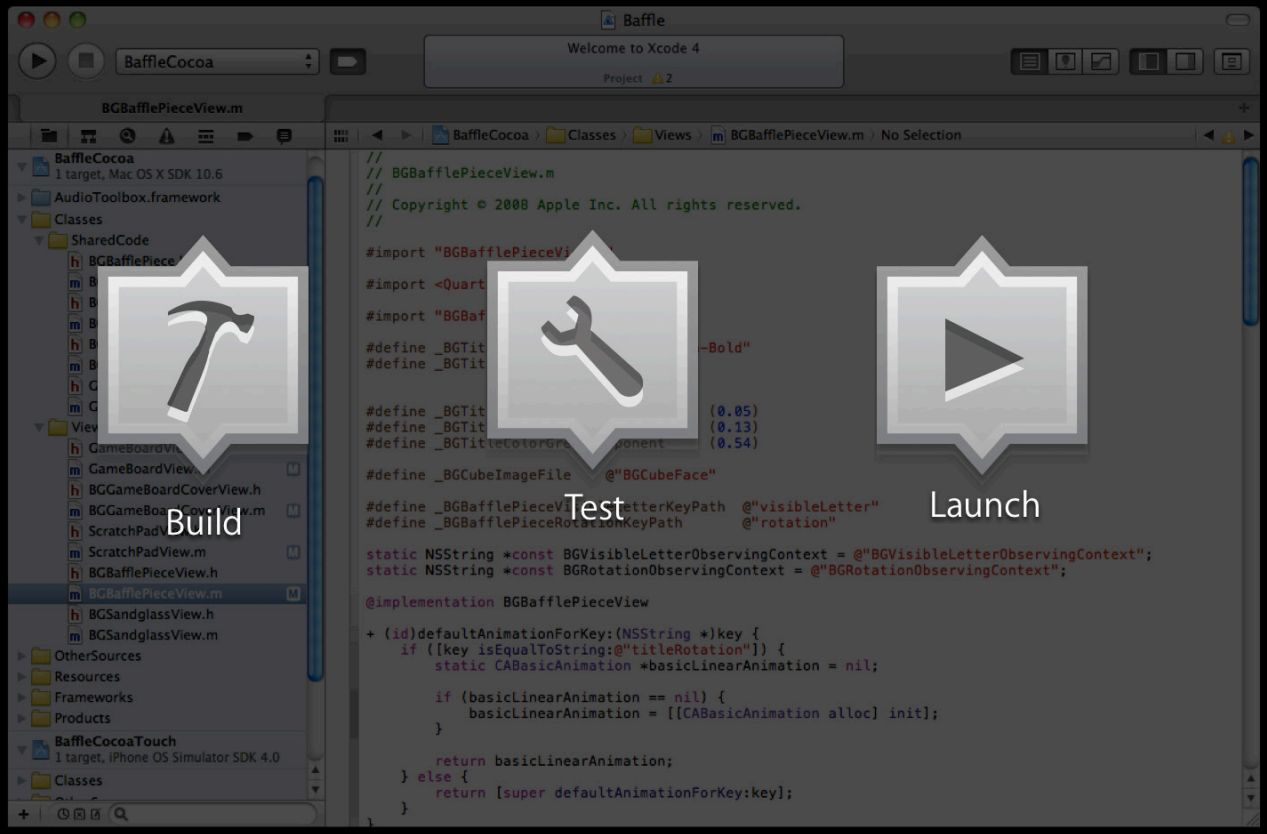

scheme |skēm|
noun
a large-scale systematic plan or arrangement for
attaining some particular object or putting a particular idea into effect.

Scheme


Baffle
Welcome to Xcode 4
BaffleCocoa
BGBafflePieceView.m
BaffleCocoa
1 target, Mac OS X SDK 10.6
AudioToolbox.framework
Classes
SharedCode
BGBafflePiece.h
BGBafflePiece.m
BGBaffleWord.h
BGBaffleWord.m
BGBaffleWordList.h
BGBaffleWordList.m
GameController.h
GameController.m
Views
GameBoardView.h
GameBoardView.m
BGGameBoardCoverView.h
BGGameBoardCoverView.m
ScratchPadView.h
ScratchPadView.m
BGBafflePieceView.h
BGBafflePieceView.m
BGSandglassView.h
BGSandglassView.m
OtherSources
Resources
Frameworks
Products
BaffleCocoaTouch
1 target, iPhone OS Simulator SDK 4.0
Classes
BaffleCocoa › Classes › Views › BGBafflePieceView.m › No Selection
// BGBafflePieceView.m
// Copyright © 2008 Apple Inc. All rights reserved.
#import "BGBafflePieceView.h"
#import <QuartzCore/QuartzCore.h>
#define _BGCubeImageFile @"BGCubeFace
#define _BGBafflePieceVisibleLetterKeyPath @"visibleLetter"
#define _BGBafflePieceRotationKeyPath @"rotation"
static NSString *const BGRotationObservingContext = @"BGRotationObservingContext";
@implementation BGBafflePieceView
+ (id)defaultAnimationForKey:(NSString *)key {
if ([key isEqualToString:@"titleRotation"]) {
static CABasicAnimation *basicLinearAnimation = nil;
if (basicLinearAnimation == nil) {
basicLinearAnimation = [[CABasicAnimation alloc] init];
}
return basicLinearAnimation;
} else {
return [super defaultAnimationForKey:key];
}

Three Phases of a Scheme



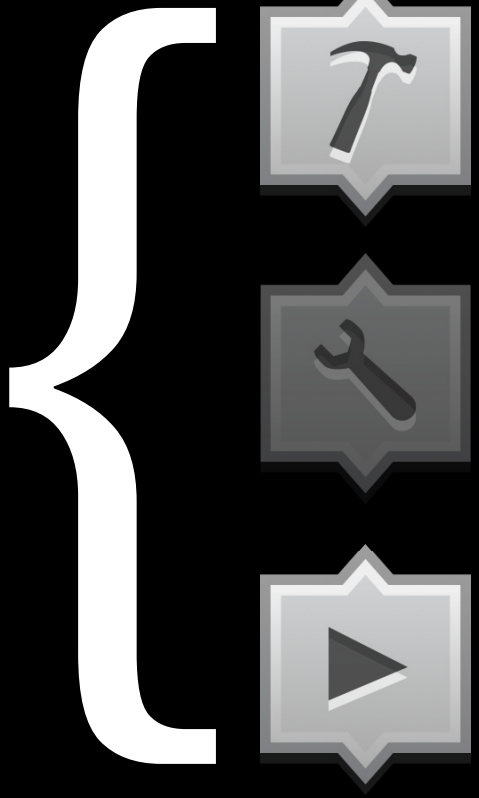
Feature Development

App and library
Debug configuration

MyNewUnitTests target

Launch MyApp in the Debugger

Bug Fixing



App and library
Debug configuration

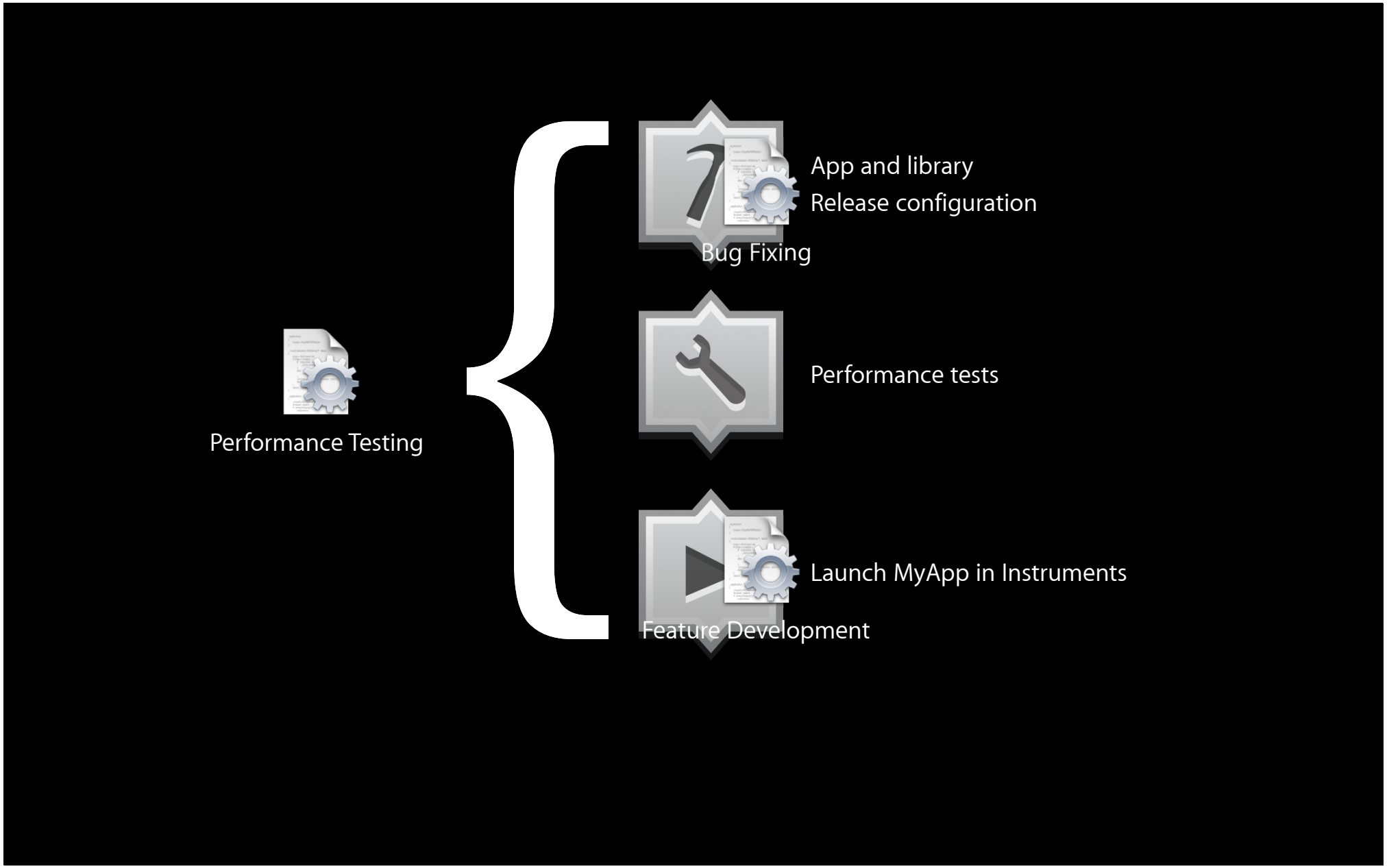
Launch MyApp in Debugger
Diagnostics (MallocStackLogging, etc.)

Performance Testing

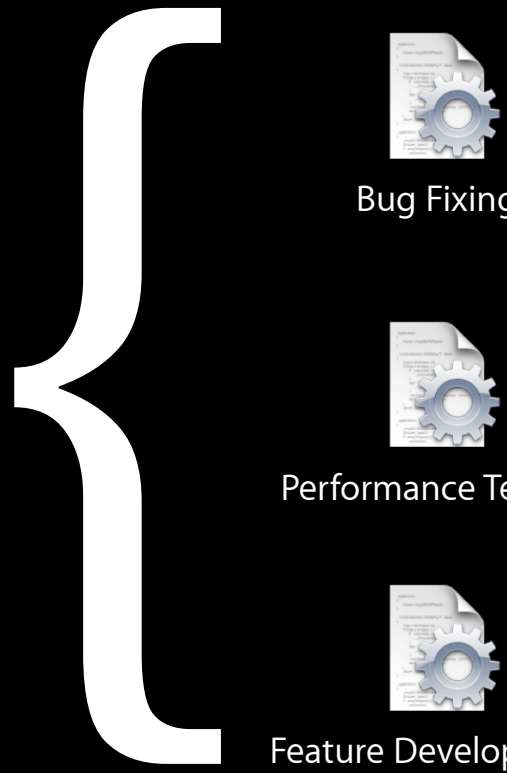
App and library
Release configuration

Performance tests

Launch MyApp in Instruments


Performance Testing
App and library
Release configuration
Bug Fixing
Performance tests
Launch MyApp in Instruments
Feature Development

Launch Schemes

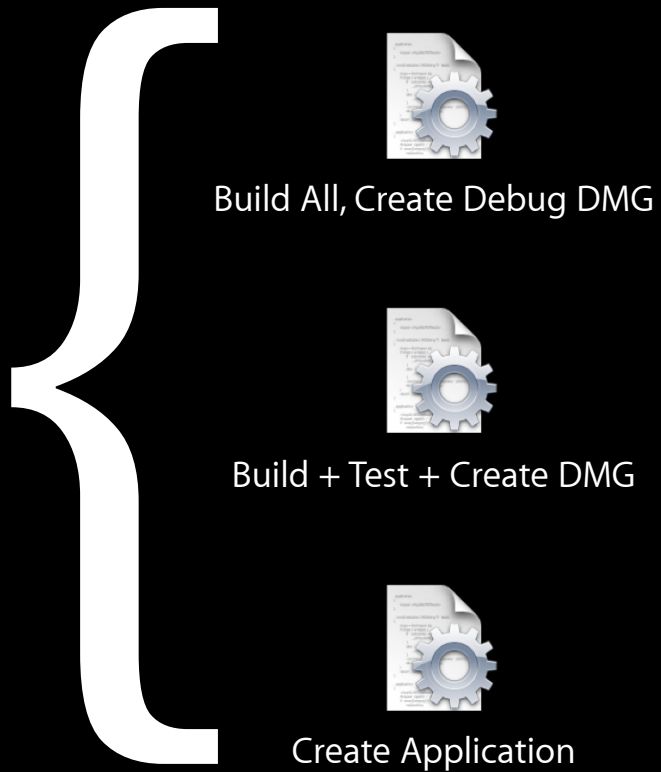


Bug Fixing

Performance Testing

Feature Development

Distribution Schemes



Build All, Create Debug DMG

Build + Test + Create DMG

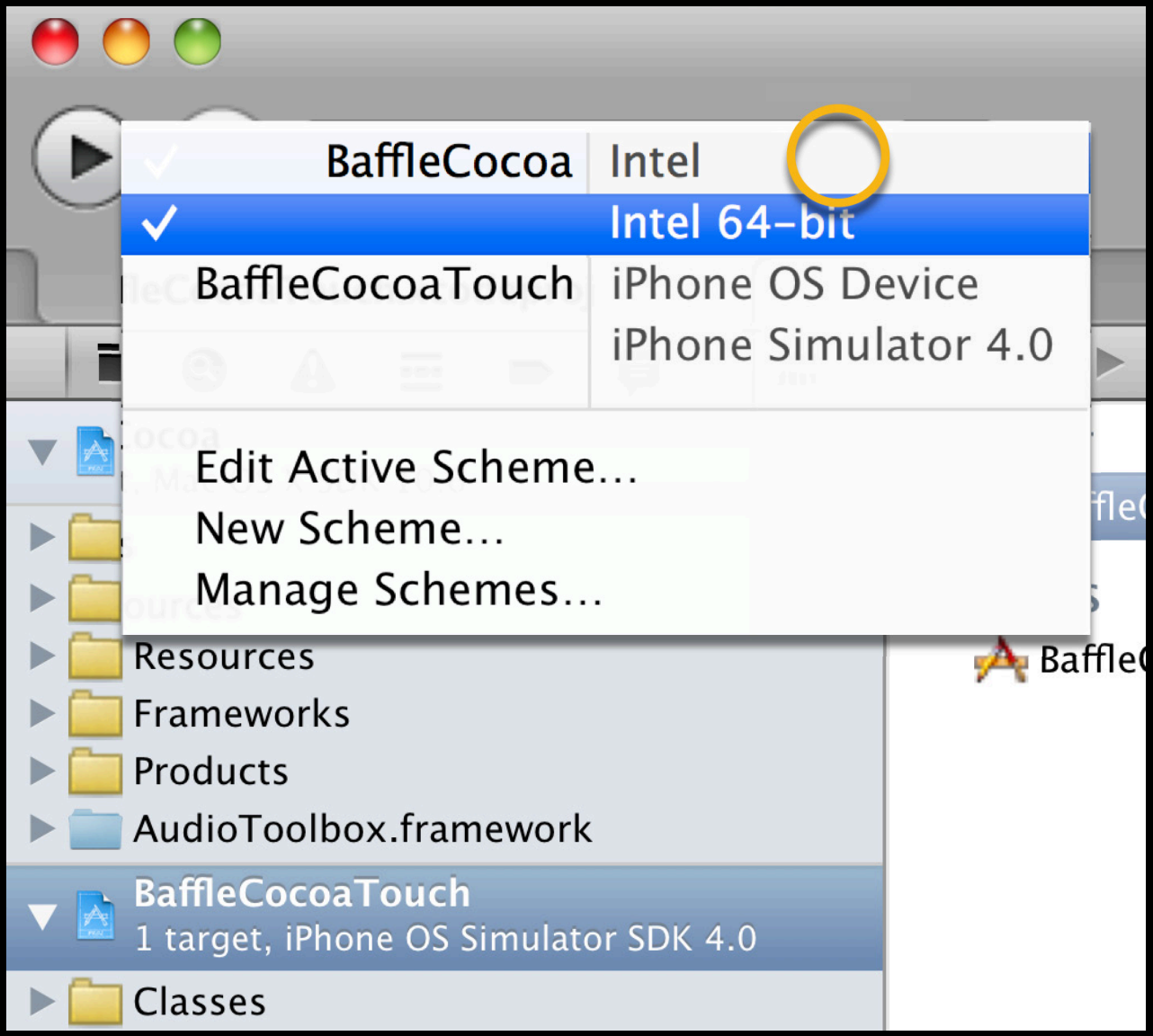
Create Application

Build + Test + Create DMG

App and library
Release configuration

All unit tests

Archive MyApp to .dmg


BaffleCocoa
Intel
Intel 64-bit
BaffleCocoaTouch
iPhone OS Device
iPhone Simulator 4.0
Edit Active Scheme…
New Scheme…
Manage Schemes…
Resources
Frameworks
Products
AudioToolbox.framework
BaffleCocoaTouch
1 target, iPhone OS Simulator SDK 4.0
Classes

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Schemes

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More Information

Michael Jurewitz
Developer Tools Evangelist
jurewitz@apple.com

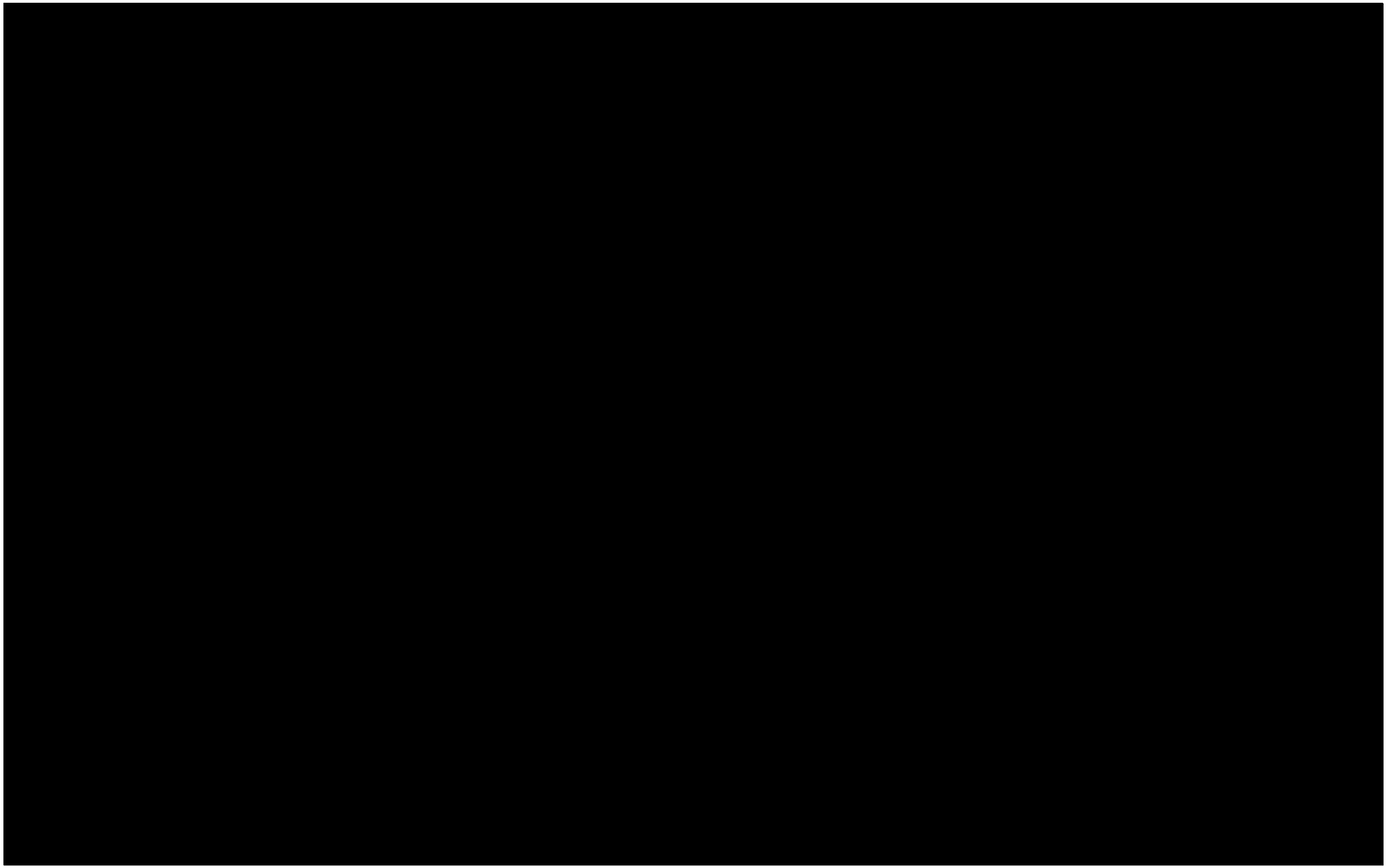
Documentation
Mac OS X Human Interface Guidelines
http://developer.apple.com/ue

Apple Developer Forums
http://devforums.apple.com

Related Sessions

Developing Your App with Xcode 4	Mission Wed 4:30PM
Building and Distributing Your App with Xcode 4	Pacific Heights Thu 3:15PM
Using Interface Builder in Xcode 4	Pacific Heights Thu 4:30PM

Labs

Xcode 4 Lab	Developer Tools Lab A Thu 11:30AM
Xcode 4 Lab	Developer Tools Lab B Fri 9:00AM

WWDC10