

iPhone™ Programming



Introduction

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Legal Info

- iPhone is a trademark of Apple Inc.
- Servin is a trademark of Servin Corporation



Welcome

- Welcome!
- Thank you!
- My promise to you
- Course Description
- Course Prerequisites



Today's Objectives

- Learn what you'll need
- Explore iPhone SDK
- Write Hello World
- Assign Lab Exercise



What you'll need

- Mac or Macbook (Intel-Based)
- Membership in ADC
 - Apple Developer Connection
 - Membership is free
- iPhone SDK
 - Software Developers Kit
 - Membership is free



iPhone SDK

- Xcode
- Interface Builder
- iPhone Simulator
- Organizer
- Instruments
- Documentation



Start-up Xcode

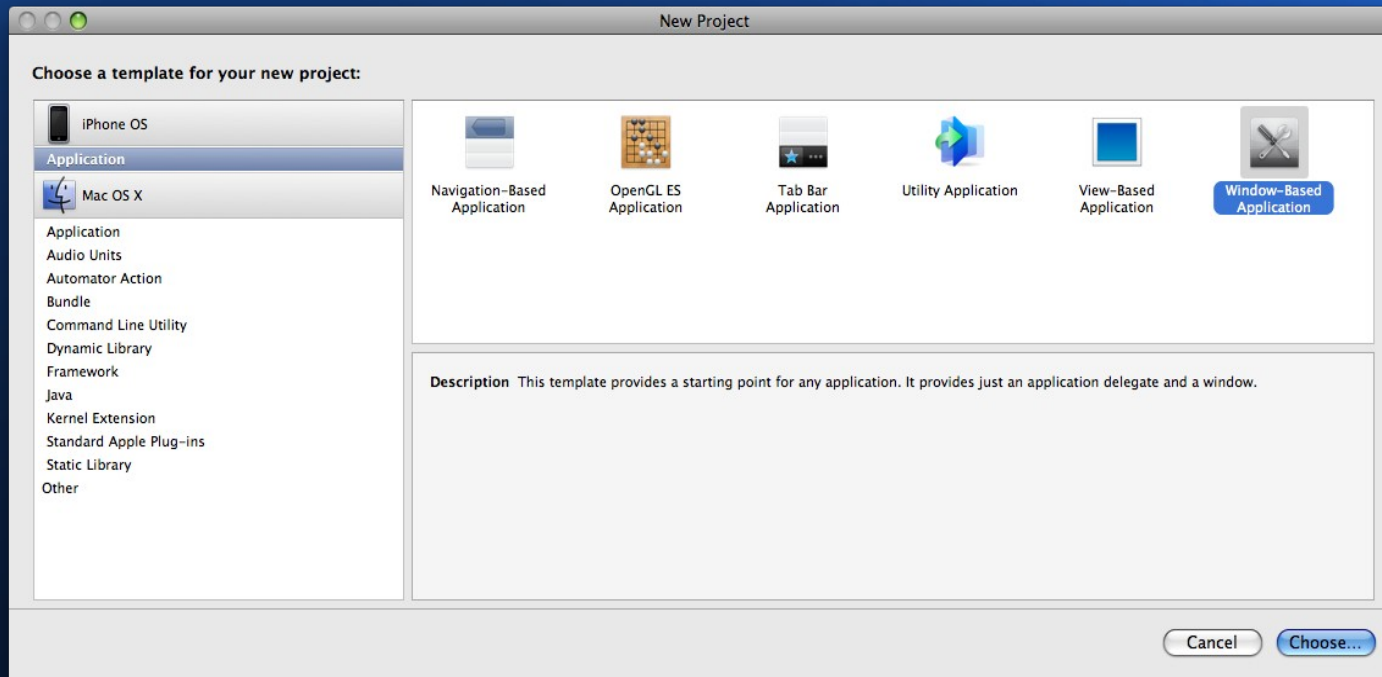
- /Developer/Applications/Xcode



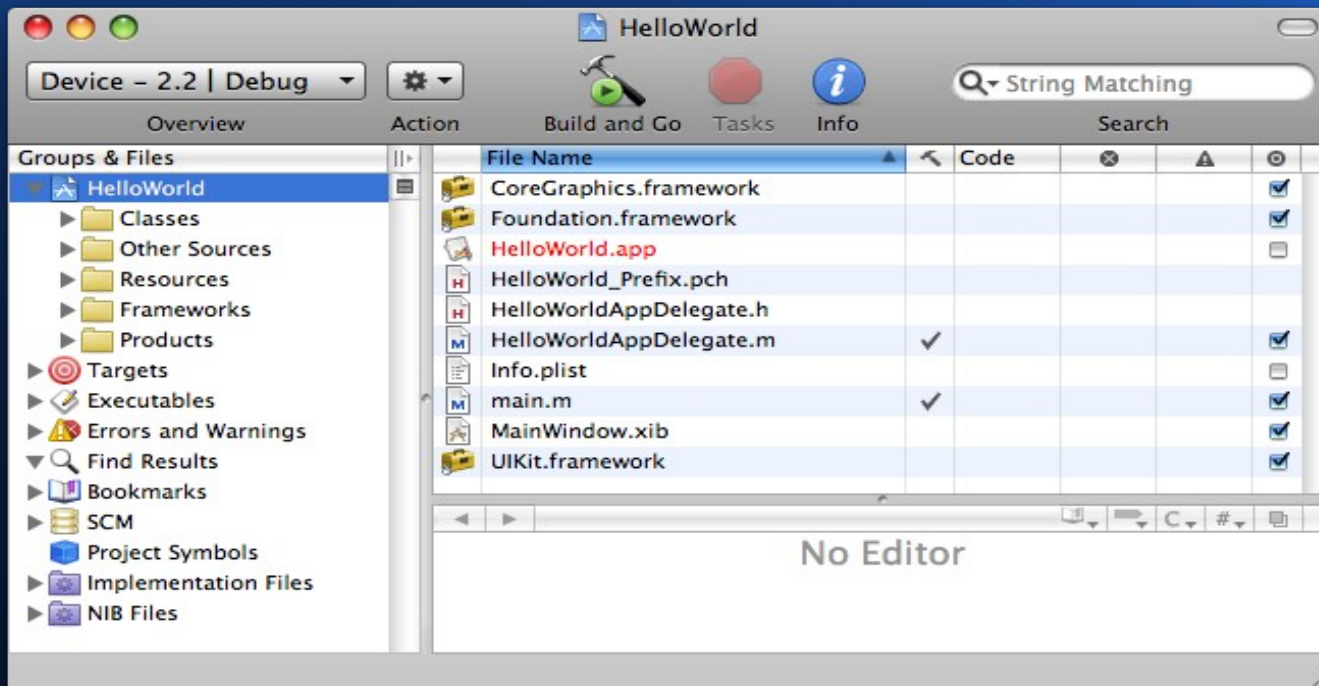
Xcode – Startup View



Xcode – New Project



Xcode – Active Project

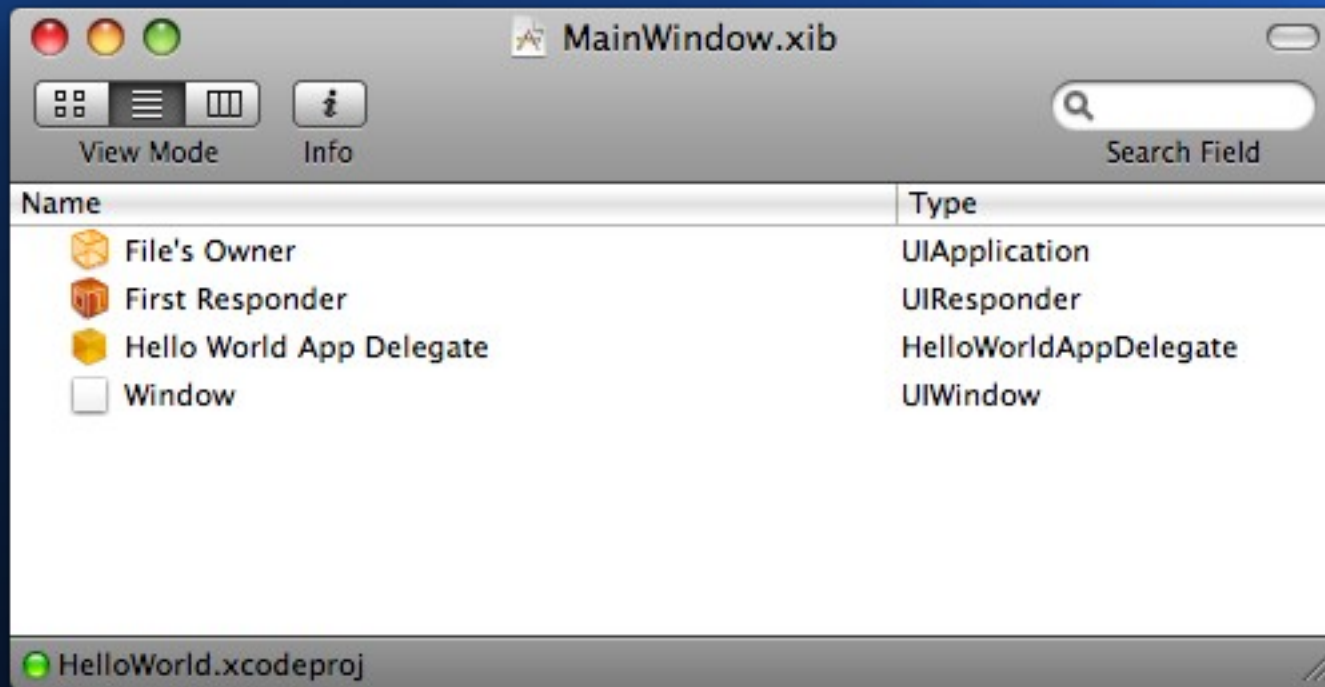


Xcode – Key Files

- HelloWorldAppDelegate.h
- HelloWorldAppDelegate.m
- main.m
- MainWindow.xib



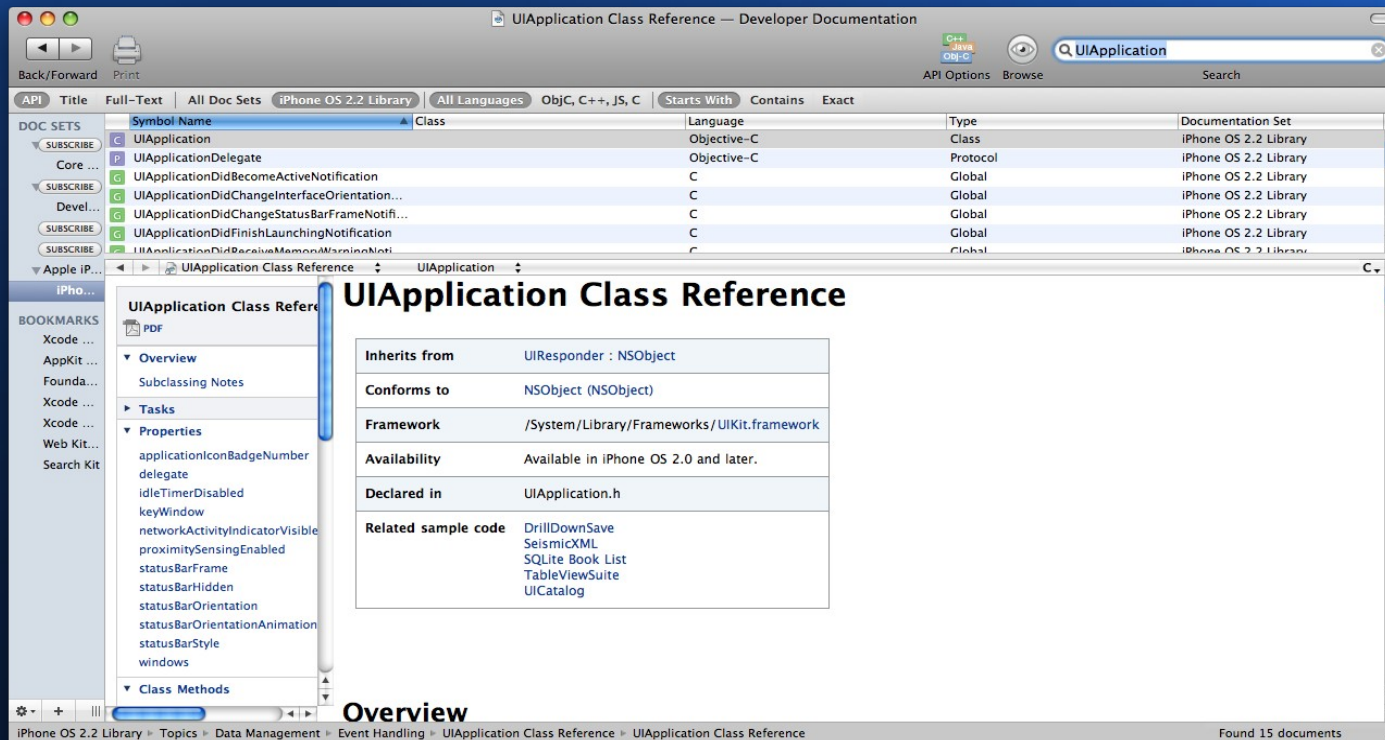
Interface Builder - MainWindow



Interface Builder - Window



Xcode – Help > Documentation



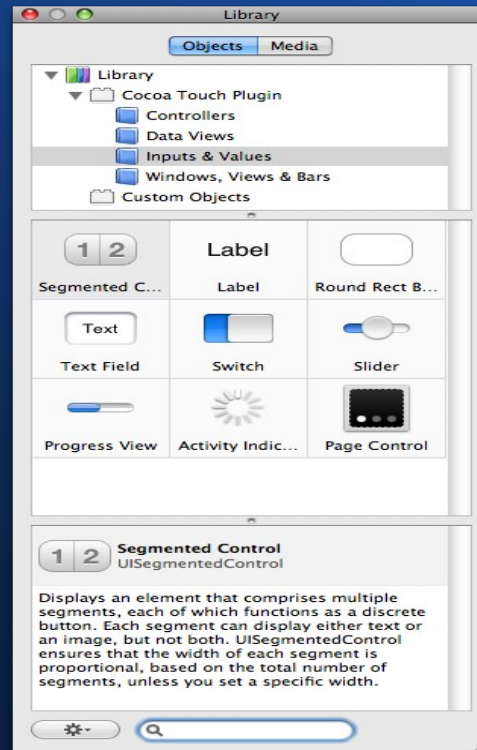
The screenshot shows the Xcode documentation window for the UIApplication class. The window title is "UIApplication Class Reference — Developer Documentation". The search bar at the top right contains "UIApplication". The main content area displays the "UIApplication Class Reference" with an "Overview" section. The overview table lists the following details:

Inherits from	UIResponder : NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/UIKit.framework
Availability	Available in iPhone OS 2.0 and later.
Declared in	UIApplication.h
Related sample code	DrillDownSave SeismicXML SQLite Book List TableViewSuite UICatalog

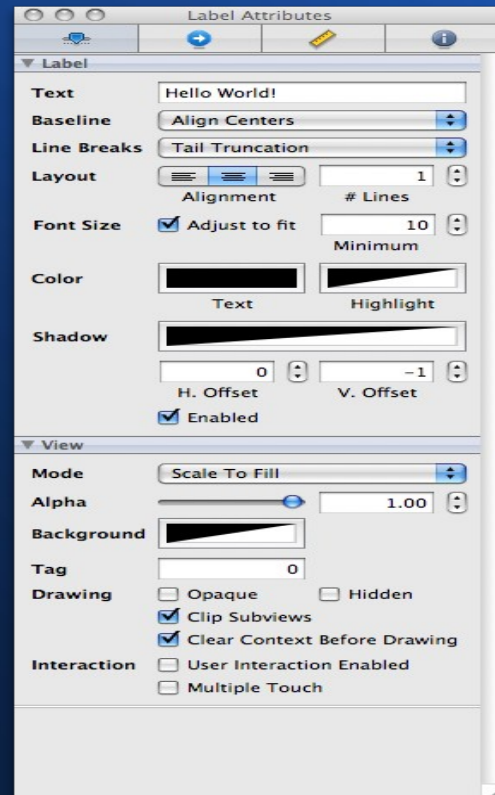
The left sidebar shows a navigation pane with "Overview" selected under "Properties". The bottom status bar indicates "Found 15 documents".



Interface Builder - Tools > Library



Tools > Inspector

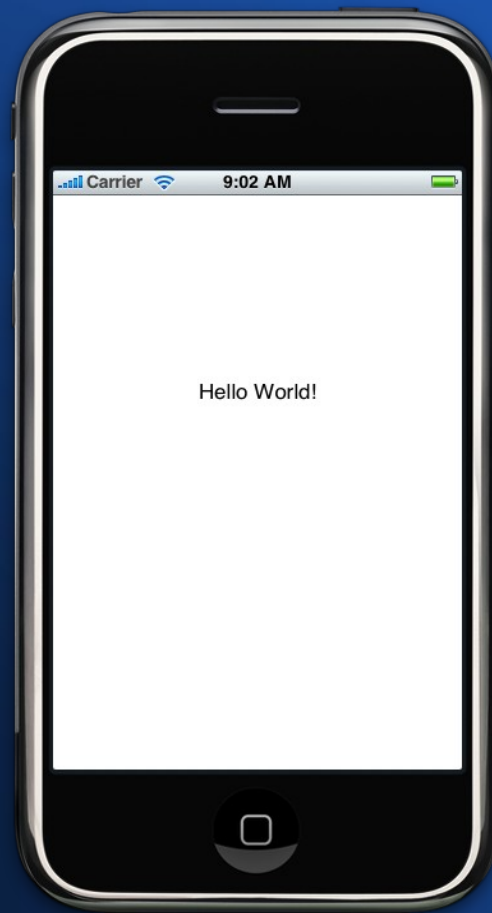


Build Your App

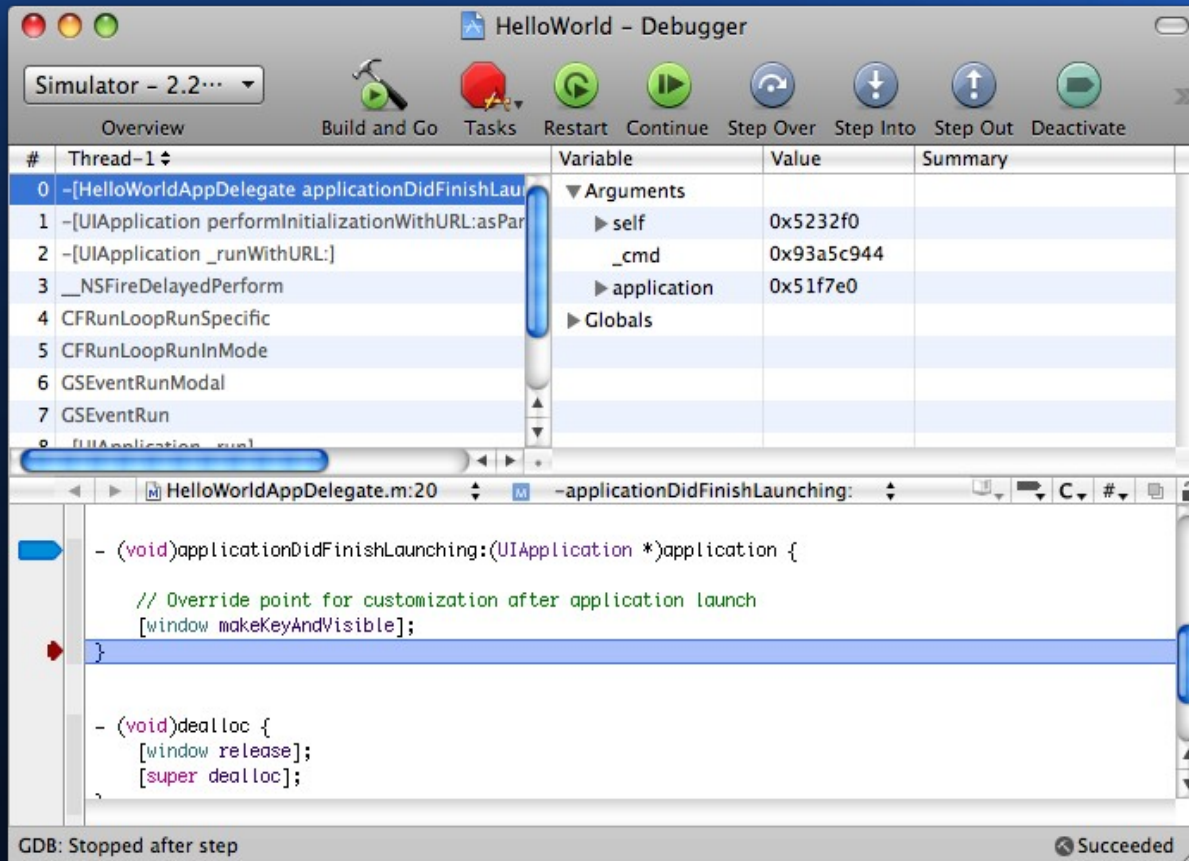
- Build and Go
- Builds
- Installs on iPhone Simulator
- Starts Running



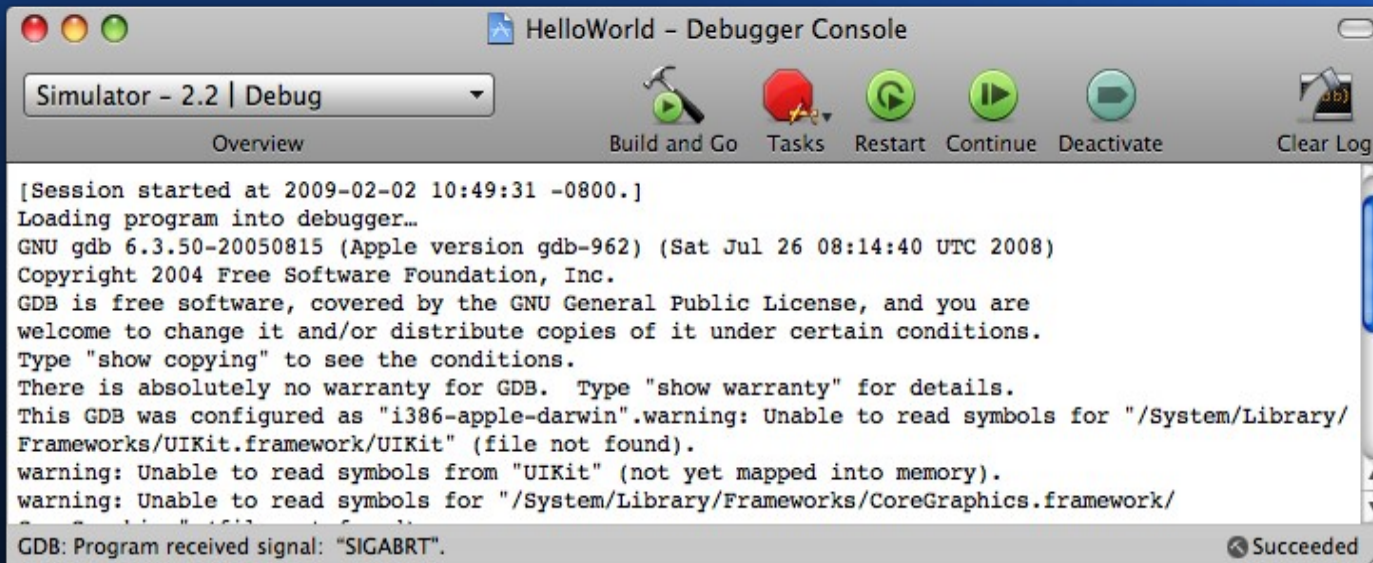
iPhone Simulator



Xcode Debugger



Xcode: Run > Console



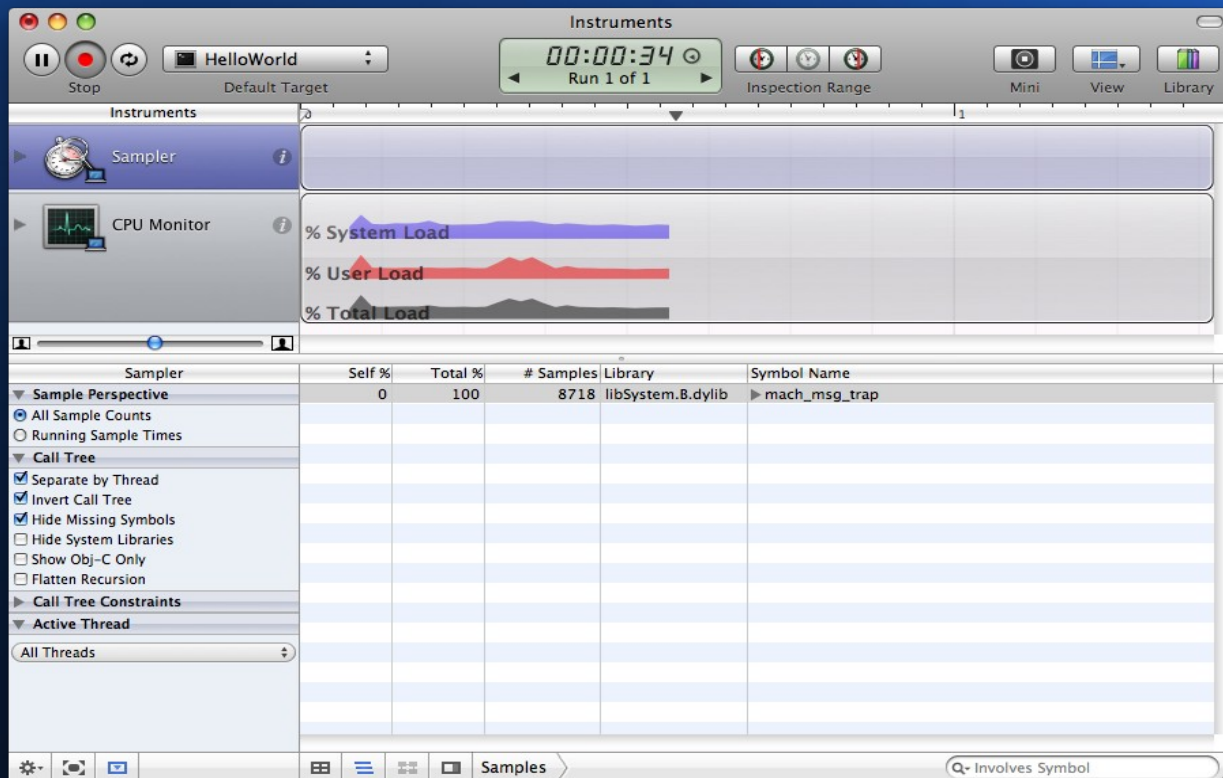
The screenshot shows the Xcode Debugger Console window titled "HelloWorld - Debugger Console". The window has a title bar with standard macOS window controls (red, yellow, green buttons) and a close button. Below the title bar is a dropdown menu set to "Simulator - 2.2 | Debug". To the right of the dropdown are several control buttons: "Build and Go" (a hammer icon), "Tasks" (a red octagon icon), "Restart" (a green circular arrow icon), "Continue" (a green play button icon), "Deactivate" (a blue play button icon), and "Clear Log" (a trash can icon). Below these buttons is a tab labeled "Overview". The main area of the window is a text field containing the following text:

```
[Session started at 2009-02-02 10:49:31 -0800.]
Loading program into debugger..
GNU gdb 6.3.50-20050815 (Apple version gdb-962) (Sat Jul 26 08:14:40 UTC 2008)
Copyright 2004 Free Software Foundation, Inc.
GDB is free software, covered by the GNU General Public License, and you are
welcome to change it and/or distribute copies of it under certain conditions.
Type "show copying" to see the conditions.
There is absolutely no warranty for GDB.  Type "show warranty" for details.
This GDB was configured as "i386-apple-darwin".warning: Unable to read symbols for "/System/Library/
Frameworks/UIKit.framework/UIKit" (file not found).
warning: Unable to read symbols from "UIKit" (not yet mapped into memory).
warning: Unable to read symbols for "/System/Library/Frameworks/CoreGraphics.framework/
CoreGraphics" (file not found).
GDB: Program received signal: "SIGABRT".
```

In the bottom right corner of the console window, there is a small icon of a document with a checkmark and the text "Succeeded".



Instruments



iPhone Developer Program

- Yearly Individual/Business Membership
- Enterprise Membership Option
- Required to test on real device
- Required to release on iTunes
- Xcode: Tools > Organizer



Summary

- iPhone SDK
- Xcode
- Interface Builder
- iPhone Simulator
- Debugger
- Instruments



Lab Exercise

- Develop Window-Based iPhone App
- Yellow Background
- Label
“Hello
iPhone
Programming”



Lab Solution

- Xcode: File > New Project
- Xcode: Window-Based Project
- Interface Builder:
 - Set background color of window
 - Drag Label onto window
 - Change text of label
- Xcode: Build and Go

