
CSE 4/60827: Ubiquitous Computing

Ipod Touch/Iphone Development
Tutorial

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Tutorial Summary

- **Apple Admin. Issues**

- **The iPhone SDK**

- Xcode – The apple iPhone SDK
 - Interface Builder – Component for Rapid Prototyping
 - iPhone Simulator(Instruments and shark, for code performance related measurements)

- **Sample App:**

- Hello world Touch based application
 - Porting applications to actual iphone/ipod Touch
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Apple Admin Issues

- First things first:

- Register on apple.iphone developer website:

<http://developer.apple.com/iphone/>

- Use your school e-mail to register, you will receive invitation to join our class developer Team

- Lab Setup:

- 4 apple intel based MAC minis (Need MAC OS X 10.5.X and higher to run the SDK)
 - Iphone 3.0 SDK installed on all of them
 - Ipod touches using OS 3.0 and OS 2.21
 - Ready for development
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The Iphone SDK

■ **XCode: Apple Iphone IDE**

(/Developer/Applications/Xcode.app)

- ❑ Allows rapid building of applications for the iPod Touch/Iphone
 - ❑ Objective C – Based on Smalltalk, extends C to be fully object oriented
 - ❑ Cocoa Touch - Framework of libraries, APIs and runtimes that form development layer for all MAC OS X, implemented in objective C; tuned for touch based Apps
 - ❑ iPhone Simulator – simulates touch interface/ iphone
 - ❑ Interface Builder – Allows rapid prototyping of application interface by adding on GUI widgets
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Sample App Tutorials:

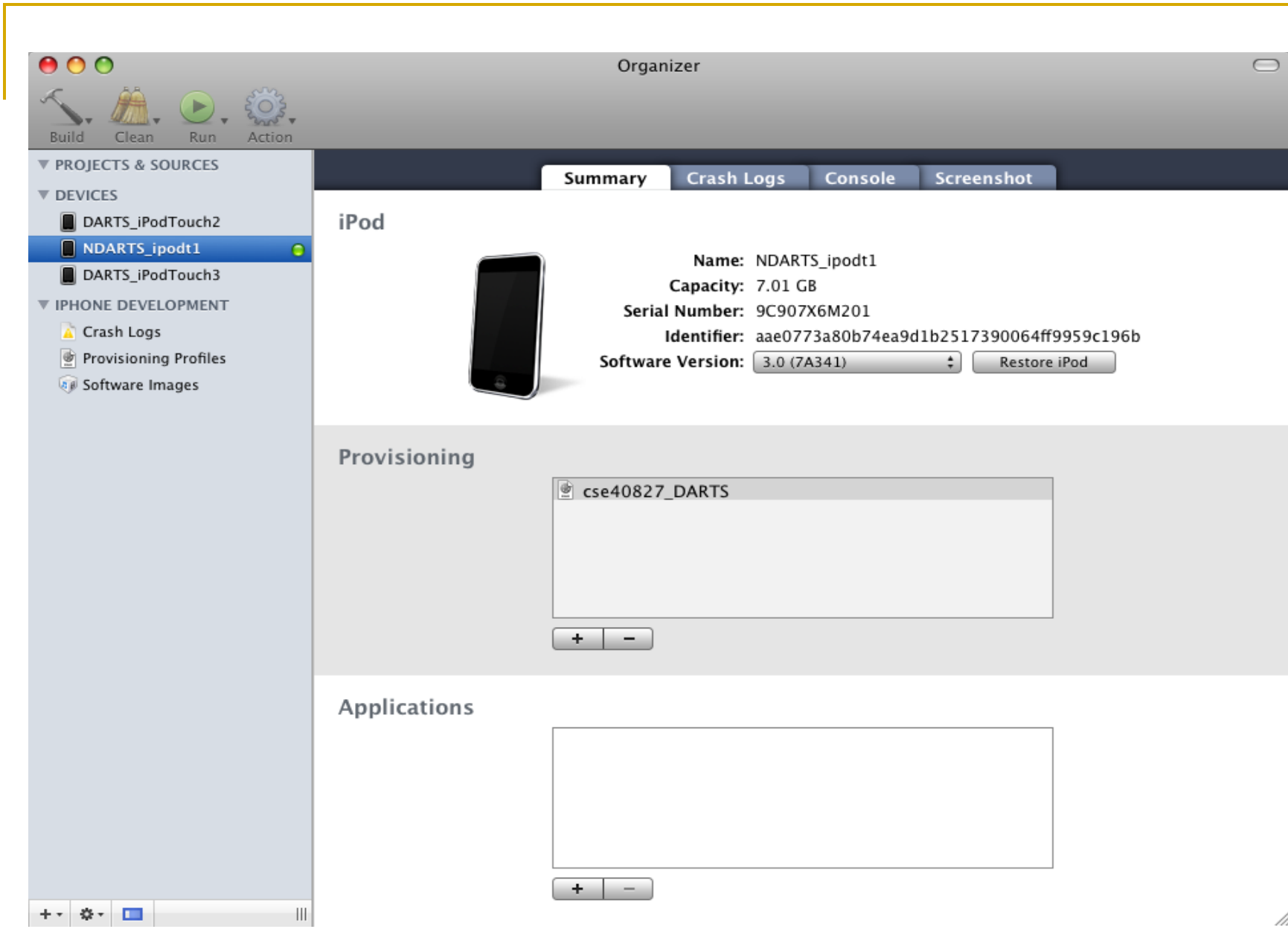
- Touch Based hello World application:
 - <http://www.youtube.com/watch?v=OEKtjEXx3BY>

 - Tab Bar with Web View on each Page
 - <http://www.youtube.com/watch?v=O6NUhngTASk>
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Porting to actual iPhone

(All instructions on Apple iPhone Dev Center)

- Step 1: Upon registration, request for Development Certificate using KeyChain in apple utilities.
 - Step 2: upload generated file using developer site to request us for a development certificate
 - Step3: You will be added to provisioning profile. For the meantime, Use existing one already installed on the MAC mini
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Organizer

Build Clean Run Action

PROJECTS & SOURCES

DEVICES

- DARTS_iPodTouch2
- NDARTS_ipodt1
- DARTS_iPodTouch3


IPHONE DEVELOPMENT

- Crash Logs
- Provisioning Profiles
- Software Images

Profile Name

Name	Expiration Date
cse40827_DARTS	12/2/09 4:54 PM

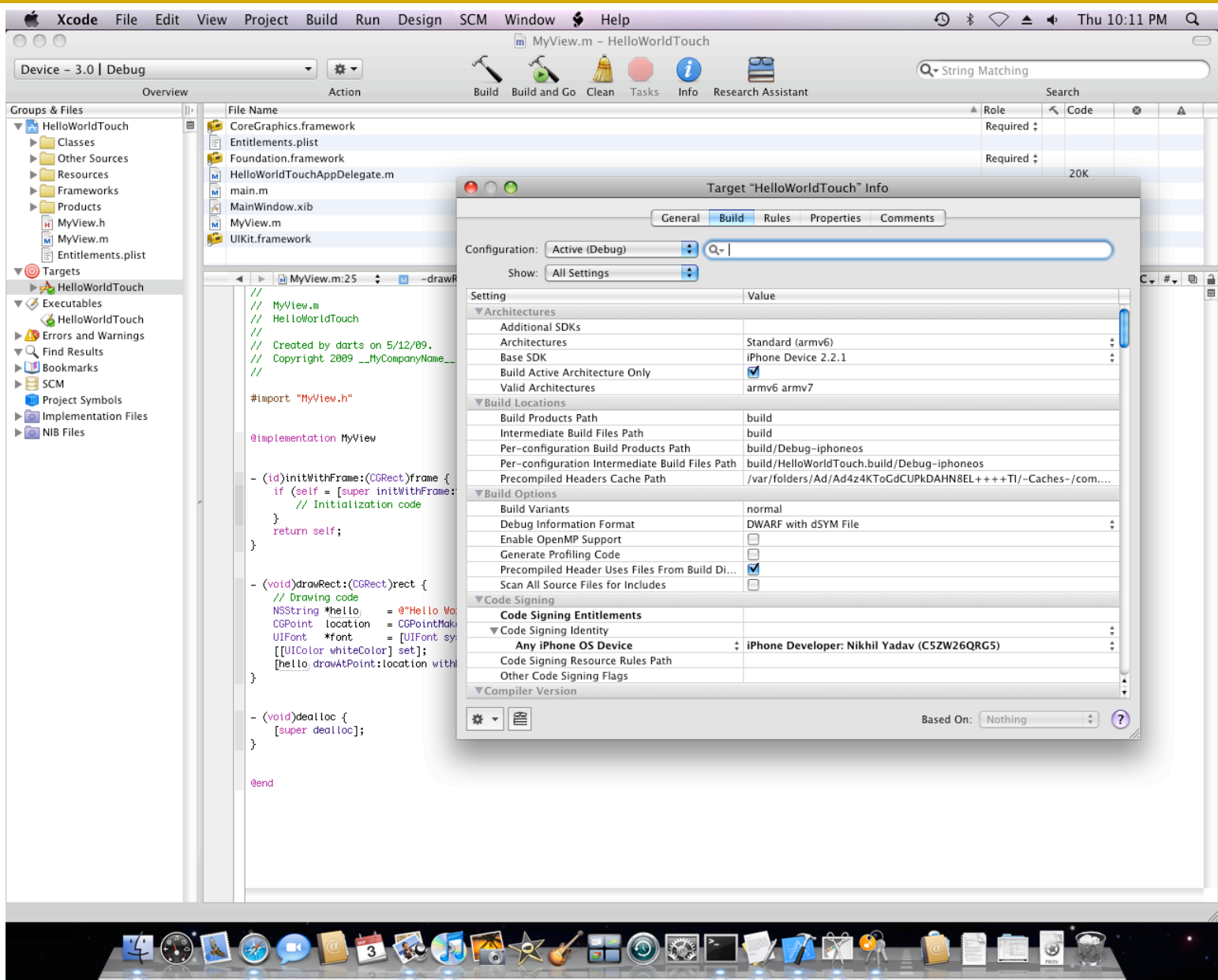
Provisioning Profile

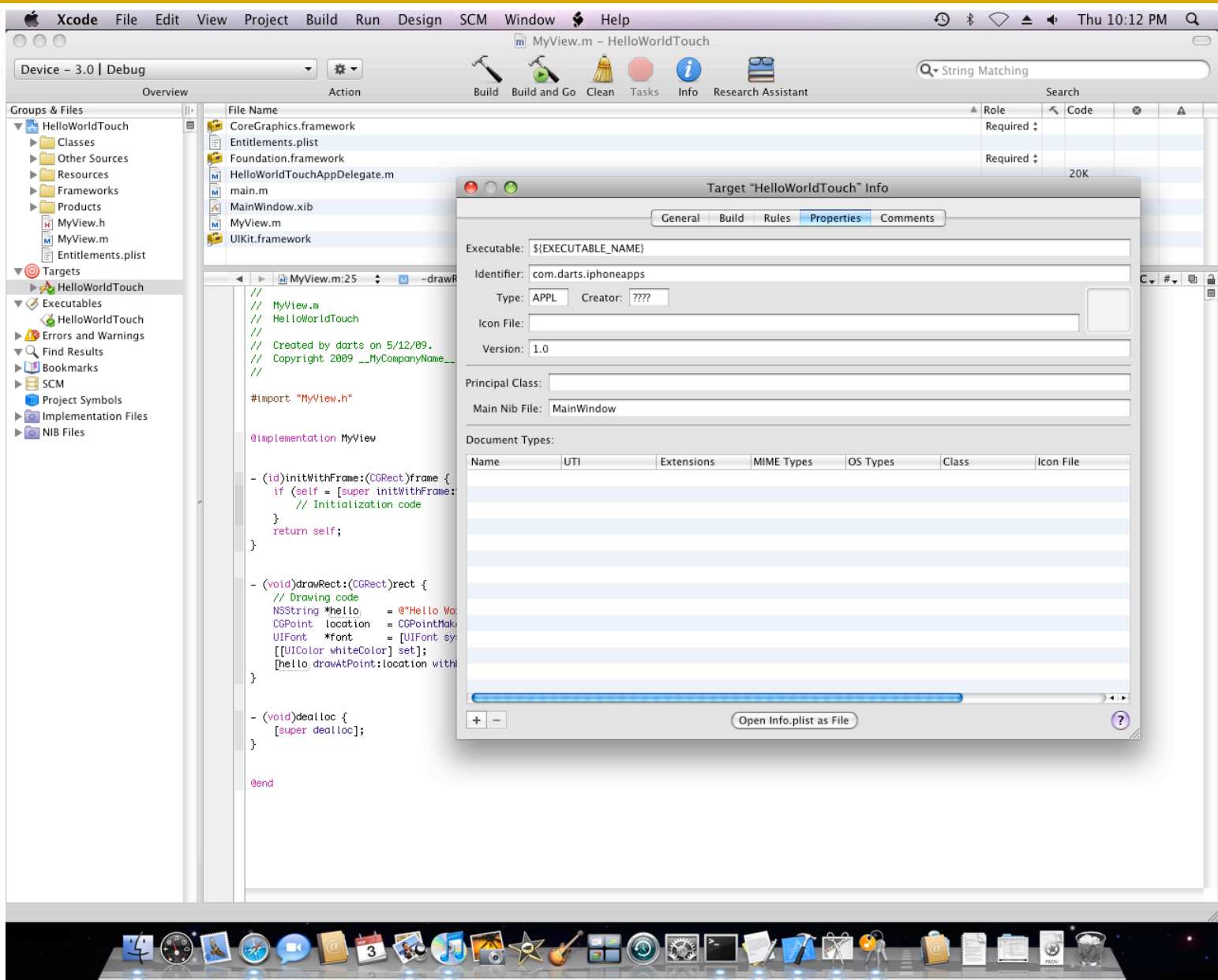


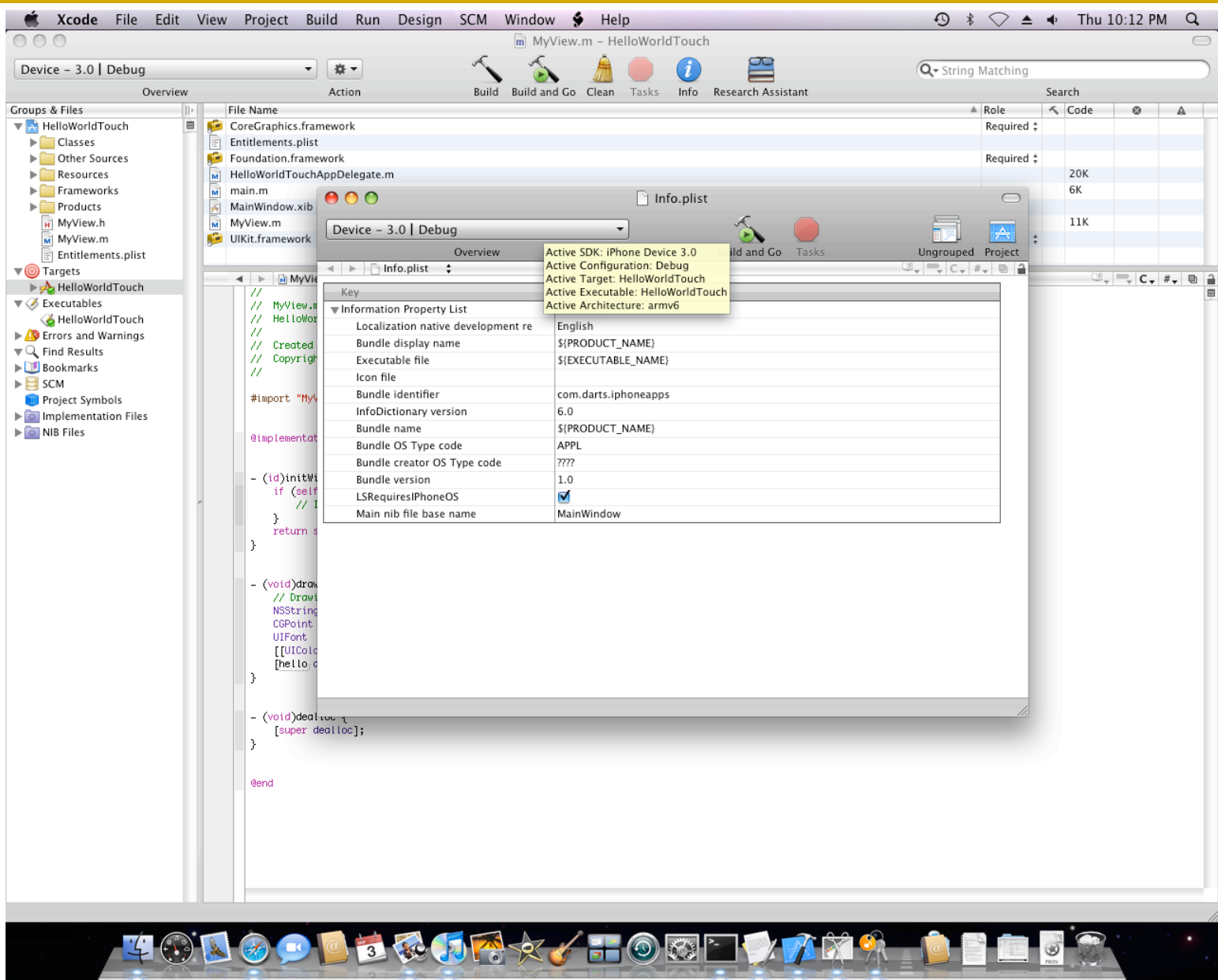
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Creation Date: Sep 3, 2009 5:54 PM
Expiration Date: Dec 2, 2009 4:54 PM
Profile Identifier: F352E168-E2E5-421B-9C62-82A047749FF5
App Identifier: JCFJ783HPG.com.darts.iphoneapps

Included Devices

Device Name	Installed
DARTS_iPodTouch2	Installed
DARTS_iPodTouch3	
NDARTS_ipodt1	Installed
7 other devices	







Resources for Development:

- Apple iPhone Dev Center Online
 - Development Books in the Lab
 - Office hours 😊
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Thank you

■ Questions?
