

# iPhoneApplication Development

2/04/11

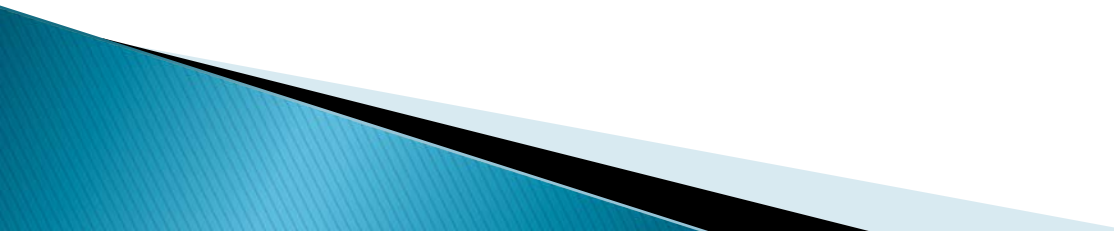
# Introduction

- ▶ iPhone development class
- ▶ Developed 5+ iPhone app

# Resources

- ▶ iPhone developer account
  - <http://developer.apple.com>
  - Full developer \$99 per year
  - University/Education
  - Enterprise
- ▶ /developer/application

# iPhone App 101

- ▶ Xcode
  - ▶ Interface builder
  - ▶ Objective-C
  - ▶ Instruments
- 

# iPhone App 101 ...

- ▶ New Project
  - Pick a application type
  - Groups
    - Class
    - Resources
    - Frameworks
  - Targets
  - SCM
  - Others

# iPhone App 101 ...

- ▶ Build & Run
  - Targets
  - Simulator vs Devices
  - iPhonevsiPad
  - Debug vs release
- ▶ What are in these files
  - Hello\_WorldAppDelegate
  - MainView.xib
  - delegate

# iPhone OS Technology Overview

- ▶ Core OS
  - OS X Kernel
  - Mach 3.0, BSD
  - Socket
  - Security
  - Power Management
  - Keychain
  - Certificates
  - File System
  - Bonjour

# iPhone OS Technology Overview ...

- ▶ Core Service
  - Collections
  - Address book
  - Networking
  - File Access
  - SQLite/Core Data
  - Core Location
  - Threading
  - Preferences
  - URL utilities

# iPhone OS Technology Overview ...

## ▶ Media

- Core Audio
- Audio Mixing
- Audio Recording
- Video Playback
- JPG, PNG, TIFF etc
- Quartz (2D)
- Core Animation
- OpenGL ES

# iPhone OS Technology Overview ...

- ▶ Cocoa Touch (UIKit, Foundation)
  - Multi-Touch Events
  - Multi-Touch Controls
  - Accelerometer
  - View Hierarchy
  - Localization
  - Alerts
  - Web Views
  - People Picker
  - Image Picker
  - UIControllers
  - Push Notification
  - In App e-mail
  - In App Purchase
  - Map Kit
  - Peer to peer support