

Hands-on course , 5  
day(s)  
Ref : ONE

### Pre-requisites

The students should know an  
object-oriented language (ex.  
Java, C++, Objective-C).

### Next sessions

# Application Development iPhone/iPad

## OBJECTIVES

*This training will allow students to develop iPhone and iPad applications using Xcode and the Simulator on Mac OS X. They will learn how to register to Apple development program, to develop and to publish their applications.*

- [1\) Introducing Apple iOS development framework](#)
- [2\) Introducing Objective-C](#)
- [3\) The development environment - Xcode](#)
- [4\) Designing an iOS application](#)

- [5\) iOS development](#)
- [6\) Managing persistent data](#)
- [7\) Advanced features](#)

## 1) Introducing Apple iOS development framework

- Terminal types.
- Apple development framework.
- Options to develop as an Apple.

## 2) Introducing Objective-C

- Basic syntax and control structures.
- Using classes. inheritance.
- Protocols. Frameworks.
- Managing memory in Objective-C.
- Registering as an Apple developer
- Developer programs.
- Managing provisioning : developer, certificates, devices and appid

## 3) The development environment - Xcode

- Installing Apple SDK.
- Development methods. Using projects.
- Designing your application using Xcode.
- Managing the plist.
- Using the Simulator.
- Debugging and profiling your applications.

### Workshop

*Creating a simple application. Debug.*

## 4) Designing an iOS application

- Managing an application development.
- Choosing your application features.
- Choosing the design pattern.
- Creating a storyboard.
- Tests and profiling.
- Publish your application on the Apple Store.

## 5) iOS development

- Managing View Controllers.
- Using simple objects : label, button, webviews, etc.
- Managing transitions using storyboards and segues.
- Using frames, delegate and datasource. Using tableviews.
- Launching your application.

### Workshop

*Several exercises for transitions, using buttons and various classes from the UIKit.*

## 6) Managing persistent data

- Storage features on iOS.
- User Preferences and plists.
- Using JSON.
- Using XML.
- Introducing Core Data

### Workshop

*Projects implementing user preferences, JSON and XML.*

## 7) Advanced features

- Synchronous and asynchronous calls.
- Contacts and gestures.
- Localizing your application.
- Animations.
- Introduction to Multi-threading.