

iOS Development with Swift

Audience iOS Development with Swift Course

The course iOS Development with Swift is intended for developers who want to use the Swift programming language to develop apps for the iPhone and the iPad.

Prerequisites Course iOS Development with Swift

Some knowledge of programming in Objective C or Swift is required to participate in the course iOS Development with Swift.

Realization Training iOS Development with Swift

The theory is treated on the basis of presentation slides. Demos are used to explain the theory. There is ample opportunity to practice and theory and exercises are interspersed. The course uses the latest version of iOS SDK, XCode and Interface Builder.

Certification iOS Development with Swift

Participants receive an official certificate iOS Development with Swift after successful completion of the course.

Duration: 5 days

Price: € 2999

[Open Schedule](#)



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Content Course iOS Development with Swift

In the course iOS development with Swift participants learn to use the programming language Swift for the development of apps for the iPhone and iPad. In the development of iOS apps the XCode Development Environment is used and the many possibilities of this IDE are discussed.

Apps Intro

The iOS Development with Swift course kicks off with a discussion of the iOS Architecture, the anatomy of iOS devices, and the iOS SDK. The Templates, Projects, Workspaces and Interface Builder of the XCode IDE are discussed as well.

App Architecture

Next after an overview of the essentials of the Swift programming language, attention is paid to the Model View Controller architecture of iOS apps. The linking of User Interface elements with code via IBOutlets and IBActions is then covered as well.

UIControls and Views

Views and controls are the visual building blocks of the user interface of an iOS App. Various controls such as buttons, switches, tables, date pickers and maps are treated. Views such as Collection, Navigation and Tab Bar Views are also discussed.

Multitasking

In addition multitasking in iOS apps is also part of the course program. Here Background Apps Refresh, State Restoration, the Grand Central Dispatch (GCD) and Concurrency are covered.

Data Access

File System data access with Core Data and database access with SQLite is an important part of the course. The course also discusses how to deal with XML and JSON data that come in via HTTP networking and web service access.

Storyboards

Participants will learn how to use storyboards for UI design and explore drawing techniques and animation. Debugging iPhone and iPad apps is also treated.

Advanced Topics

The course iOS development with Swift ends by paying attention to deployment issues and localization of apps.

Modules Course iOS Development with Swift

Module 1 : Apps Intro	Module 2 : Swift Overview	Module 3 : App Architecture
XCode IDE Creating projects Templates, Projects, and Workspaces Creating a New Project LLVM and LLDB Debug Gauges Asset Management XCTest Testing Framework Anatomy of an iOS Device iOS Architecture Available SDKs Version Compatibility	Constants Variables Data Types Collection Types Functions Closures Classes and Structures Automatic Reference Counting (ARC) Optionals Protocols Generics Objective-C Interoperability	MVC architecture Model View Controller IBOutlets IBActions Subclassing Delegation Root View Controller Navigation Controller Controlling Stack Navigation Controller Communication
Module 4 : UIControls	Module 5 : Views	Module 6 : Multitasking
Interface Builder Basic Interaction Buttons and Text Fields Sliders and Segments Switches Action sheets and Alerts Scrolling Image scrolling Zooming images Data Picker	The View Hierarchy View behavior Containers and Controls Dynamic applications Collection views Grids Text and Web Views Navigation View Tab Bars Alert Views and Action Sheets	Application States Background Execution Background App Refresh State Restoration Concurrency Grand Central Dispatch (GCD) Serial and Concurrent Queues Main Dispatch Queue Completion Blocks Operation Queues
Module 7 : Advanced Controls	Module 8 : Persistence	Module 9 : RSS and JSON
Pickers Tables Customizing Tables Delegates DataSources Table View Styles Custom Cells Tab Bars Using MapKit Display Maps Navigate Locations	Storing user preferences NSFileManager and NSFileHandle Pathnames in Swift Directories and Files Reading and Writing from a File Key-Value Data Using SQLite Directly Overview of Core Data Managed Objects Persistent Store Coordinator Retrieving and Modifying Data	Reachability Synchronous Downloads Asynchronous Downloads Handling Timeouts Sending HTTP GET Requests Sending HTTP POST Requests Using RSS Using JSON Parsing JSON Parsing XML AirDrop
Module 10 : Layouts and Storyboards	Module 11 : Drawing and Animations	Module 12 : Advanced Topics
Auto layout View Autosizing Handling screen size Handle rotation Size classes Split view controllers Controlling Rotation Behavior What are Storyboards? Adding Scenes Segues Transitions Using in a Tab Bar Application	The Responder Chain Touch Notification Methods Respond to notifications Enabling Multitouch on the View Gesture Recognizers Core Graphics and Quartz 2D Lines, Paths, and Shapes Core Animation Blocks Transformations SpriteKit and SceneKit Physics Engine Adding Effects	Targeting Multiple Devices iPhone vs. iPad Universal Apps Detecting Device Capabilities Supporting Multiple iOS Versions App Framework Support Implementing Handoff Localization and Resources Running on a Physical Device Development Certificates Assigning Devices Creating an App ID