BOARD INFINITY

COURSE 2 OF 3 · END-TO-END IOS DEVELOPMENT MASTERY SPECIALIZATION

Building iOS Applications with UIKit and SwiftUI

Full course syllabus - every module, video lesson, reading and assignment, from UIKit view hierarchies to SwiftUI state and Apple services.

Board Infinity
Instructor · Offered on Coursera

3	21	10	1 week
Modules	Video lessons	Assignments	At 10 hours a week

INSIDE THE COURSE

01	UIKit Fundamentals	4 hours to complete
02	SwiftUI for iOS Applications	3 hours to complete
03	Working with Apple Services	3 hours to complete

Enroll on Coursera

https://www.coursera.org/learn/building-ios-applications-with-uikit-and-swiftui

01 ABOUT THE COURSE

From UIKit foundations to Apple services.

Building iOS Applications with UIKit and SwiftUI teaches you to build dynamic iOS apps with both of Apple's UI frameworks. Across three modules you learn UIKit fundamentals - view hierarchies, layouts and navigation controllers - move on to SwiftUI's declarative syntax and state management, and integrate Apple services like CoreLocation and notifications.

Everything is delivered through short video lectures, readings and graded assignments - 21 videos, 7 readings and 10 assignments in all. It's an intermediate course and the second in the specialization, so familiarity with Swift basics helps.

WHO IT'S FOR

iOS developers
Adding UIKit or SwiftUI to the framework they already know.

Swift learners
Moving from Swift basics to complete app interfaces.

Mobile developers
Building responsive, user-friendly iOS apps.

Specialization learners
Continuing the End-to-End iOS Development Mastery path.

WHAT YOU'LL LEARN

01 **Build with UIKit** Module 1
Set up UIKit apps, build interfaces with storyboards and Auto Layout, and work with table and collection views

02 **Design responsive SwiftUI interfaces** Module 2
Apply SwiftUI stacks, lists, forms and adaptive layouts to build responsive, user-friendly apps

03 **Manage navigation and state** Modules 1-2
Implement navigation and state management in both UIKit and SwiftUI environments

04 **Integrate Apple services** Module 3
Integrate CoreLocation, local and push notifications, and custom alerts to enhance app functionality

02 SYLLABUS

Three modules, two UI frameworks.

1 week to complete at 10 hours a week. Flexible schedule - learn at your own pace.

01 UIKit Fundamentals

Introduction to UIKit, UI components and layouts, navigation and segues

4 hours
9 videos

BY THE END OF THIS MODULE YOU CAN

- ✓ Set up your first UIKit app and understand view hierarchies
- ✓ Build screens with storyboards, XIBs, buttons, labels and text fields
- ✓ Lay out interfaces with Auto Layout, table views and collection views
- ✓ Navigate with modals and segues, and pass data between view controllers

CONTENTS: 9 videos (43 min) · 3 readings (90 min) · 4 assignments (105 min) · 1 plugin (5 min)

TOPICS: Introduction to UIKit · UI Components and Layouts · Navigation and Segues · Quick Course Check-In (plugin)

You'll leave with: a working command of UIKit - view hierarchies, layouts, table views and navigation between view controllers.

02 SwiftUI for iOS Applications

Responsive interfaces, navigation and state management

3 hours
6 videos

BY THE END OF THIS MODULE YOU CAN

- ✓ Compose layouts with HStack, VStack and ZStack
- ✓ Create lists and forms, and build adaptive layouts
- ✓ Navigate between screens with NavigationView and NavigationLinks
- ✓ Manage state with @State, @Binding, @EnvironmentObject and @ObservedObject

CONTENTS: 6 videos (32 min) · 2 readings (60 min) · 3 assignments (90 min)

TOPICS: Designing Responsive Interfaces · Navigation and State Management in SwiftUI

You'll leave with: responsive SwiftUI interfaces with clean navigation and state that flows correctly through your app.

03

Working with Apple Services

CoreLocation, permissions, notifications and alerts

3 hours

6 videos

BY THE END OF THIS MODULE YOU CAN

- ✓ Access the user's location and reverse-geocode it with CoreLocation
- ✓ Handle permissions for location and other services
- ✓ Create local notifications and handle push notifications
- ✓ Build custom alerts and action sheets

CONTENTS 6 videos (39 min) · 2 readings (60 min) · 3 assignments (90 min)

TOPICS Integrating CoreLocation | Notifications and Alerts

You'll leave with: apps that use Apple services - location, permissions, notifications and alerts - to do more for their users.

03 TOOLS & SKILLS

The themes that run through the course.

UIKit Framework

Apple's established UI framework - view hierarchies, storyboards, Auto Layout and view controllers.
In this course: Module 1 builds UIKit apps from setup to navigation.

SwiftUI Framework

The declarative framework for stacks, lists, forms and adaptive layouts.
In this course: Module 2 covers responsive interfaces and navigation.

Navigation & state management Architecture

Navigation controllers, segues, NavigationLinks and SwiftUI property wrappers.
In this course: Covered in both frameworks across Modules 1 and 2.

Apple services Integration

CoreLocation, permissions, notifications and alerts.
In this course: Module 3 integrates them into your apps.

SKILLS YOU LEAVE WITH

UIKit

- View hierarchies
- Storyboards & XIBs
- Auto Layout & constraints
- Table & collection views

SwiftUI

- Stacks & adaptive layouts
- Lists & forms
- NavigationView & NavigationLinks
- State & property wrappers

Apple services

- CoreLocation & geocoding
- Permissions handling
- Local & push notifications
- Alerts & action sheets

04 CERTIFICATE & CAREER

Finish with a shareable certificate.

Add it to LinkedIn
Add this credential to your LinkedIn profile, resume, or CV.

Share it anywhere
Share it on social media and in your performance review.

Earned, not attended
Awarded on completion of the graded assignments in all three modules.

Course 2 of 3
Part of the End-to-End iOS Development Mastery Specialization from Board Infinity.

ROLES THESE SKILLS SUPPORT

iOS Developer · UIKit Developer · SwiftUI Developer · Mobile App Developer · Mobile UI Developer · Mobile Integration Developer

Board Infinity
Instructor · Offered on Coursera

Intermediate level · Taught in English · 7 languages available · Flexible schedule

Ready to build apps in both frameworks?

Enrollment, lessons, grading and the certificate all happen on Coursera.

Enroll on Coursera

Course page: coursera.org/learn/building-ios-applications-with-uikit-and-swiftui

Want a coach alongside the course?

Board Infinity 1:1 coaching is a separate, optional Board Infinity offering - it is not part of the Coursera course.
Details: https://www.boardinfinity.com/career-coaching/

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