

# Winapps

Unlocking Career Opportunities through World-Class Professional Tech Training



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# About Winapps Software Solutions Pvt.ltd.

Founded in 2013, Winapps provides IT solutions specially- tailored to its customers' needs, with a focus CRM Implementation, ERP implementation, web and mobile development. We bring security and integrity to the development process, efficiently blending our assets with your existing structure. We love to code; set your business process and we know how to do it right. Our approach, which combines innovation with timely delivery, is perfectly attuned to our clients' goals. Independent from the dynamism and complexity of business requirements, our vast, collective experience and comprehensive solutions library allow us to build cost- effective programming teams and set realistic budgets.





# iOS Development – Industry-Ready Syllabus

Total Duration: 24 Weeks (Approx. 6 Months)

Mode: Instructor-led + Project-based + Self-practice

**Outcome:** Students will learn **end-to-end iOS app development** using **Swift**, **Xcode**, and **Apple's frameworks**, and will be able to build and deploy production-grade iPhone/iPad

apps to the App Store.





# **Module 1: Programming with Swift**

**Duration: 3 Weeks** 

### **Learning Objectives:**

- Gain proficiency in Swift, Apple's modern programming language.
- Understand core programming concepts, data structures, and Swift syntax.
- Set up the iOS development environment using Xcode.

## **Subtopics:**

- Swift Basics: Variables, constants, data types, operators, control flow.
- Functions & Closures: Parameters, return types, higher-order functions.
- Collections & Optionals: Arrays, dictionaries, sets, optional chaining.
- Object-Oriented Swift: Classes, structs, enums, protocols, extensions.
- Memory Management: ARC, strong/weak references.
- Error Handling & Guard Statements.
- Xcode Setup: Interface overview, simulators, debugging tools.

- Write Swift programs solving real-world problems.
- Implement OOP concepts and protocol-oriented design.
- Set up Xcode and run your first "Hello iOS" app on the simulator.



# Module 2: UIKit & Interface Building

**Duration:** 4 Weeks

### **Learning Objectives:**

- Learn how to build user interfaces using UIKit and Storyboards.
- Understand Auto Layout, navigation, and common UI components.
- Build responsive apps for multiple screen sizes.

# **Subtopics:**

- **UlKit Overview:** UlView, UlViewController, UlKit components.
- Interface Builder & Storyboards: Outlets, Actions, Segues.
- Auto Layout & Constraints: Stack Views, Adaptive UI, Safe Areas.
- Navigation: UINavigationController, TabBarController, Modals.
- Common UI Elements: TableViews, CollectionViews, ScrollViews.
- User Input & Gestures: Forms, text fields, gestures, pickers.
- Localization & Accessibility.

### Practical:

- Build a multi-screen app with navigation controllers.
- Implement dynamic lists using UITableView and UICollectionView.
- Create adaptive layouts for iPhone and iPad.

# Module 3: SwiftUI & Modern UI Development





**Duration:** 4 Weeks

### **Learning Objectives:**

- Learn to build modern declarative UIs using SwiftUI.
- Handle data flow and state management in SwiftUI apps.
- Integrate UIKit and SwiftUI where necessary.

### **Subtopics:**

- SwiftUI Basics: Views, Modifiers, Layout system.
- Navigation & Lists: NavigationStack, List, TabView.
- State Management: @State, @Binding, @ObservedObject, @EnvironmentObject.
- Reusable Components: Custom views, view composition.
- Animations & Transitions: Implicit/explicit animations, matched geometry effects.
- **UIKit Interoperability:** UIViewRepresentable, UIKit bridges.
- Dark Mode & Adaptive Design.

- Build a multi-page SwiftUI app with navigation and lists.
- Implement a form with validation using @State and bindings.
- Create smooth animations and transitions between screens.



# Module 4: Data Persistence, APIs & Core iOS Frameworks

**Duration:** 5 Weeks

### **Learning Objectives:**

- Work with network APIs, local storage, and Apple frameworks.
- Implement data handling, offline support, and authentication.
- Master common frameworks like Core Data, URLSession, and Keychain.

# **Subtopics:**

- Networking: URLSession, REST APIs, JSON Parsing, Codable.
- Authentication: Token-based auth, OAuth, Keychain access.
- Local Storage: UserDefaults, FileManager, Core Data basics.
- Core Data Advanced: Relationships, predicates, migrations.
- Concurrency: GCD, async/await in Swift.
- Notifications: Push notifications, UNUserNotificationCenter.
- Apple Frameworks Overview: CoreLocation, MapKit, AVFoundation basics.

- Build a weather app that consumes a REST API.
- Store and sync data locally using Core Data.
- Implement push notifications in an app.





# Module 5: Advanced iOS Development & Deployment

**Duration: 4 Weeks** 

### **Learning Objectives:**

- Learn advanced architecture patterns and testing.
- Optimize apps for performance and follow App Store guidelines.
- Deploy apps to the App Store and use TestFlight for beta testing.

### **Subtopics:**

- App Architecture Patterns: MVC, MVVM, VIPER, Clean Architecture.
- Dependency Injection & Modularization.
- Performance Optimization: Instruments, memory leaks, FPS, profiling.
- **Testing:** Unit testing, UI testing with XCTest, mocking.
- CI/CD: Fastlane, GitHub Actions, Firebase App Distribution.
- App Store Deployment: Certificates, provisioning, signing, App Store Connect.
- Monetization & In-App Purchases (Intro).

- Refactor an existing app using MVVM.
- Implement unit and UI tests for a core module.
- Deploy an app to TestFlight and submit to the App Store.



# **Module 6: Capstone Project & Career Preparation**

**Duration:** 4 Weeks

## **Learning Objectives:**

- Apply all concepts to build a **production-grade iOS app**.
- Prepare for iOS developer job interviews and build a professional portfolio.

### **Project Ideas:**

- E-Commerce App: Product listing, cart, authentication, payment gateway.
- Social App: Feed, profiles, notifications, Core Data caching.
- News Reader App: SwiftUI + REST API + offline mode.
- Location-Based App: MapKit, geofencing, CoreLocation.
- **Fitness Tracker:** HealthKit, Core Motion integration.

# **Career Prep:**

- Resume and LinkedIn optimization for iOS developer roles.
- GitHub portfolio setup with clean, structured code.
- Mock interviews on Swift, UIKit, SwiftUI, and iOS system design.



### **Deliverables:**

- End-to-end iOS application deployed to App Store or TestFlight.
- Project presentation & documentation.
- GitHub repository with best practices and architecture.



# Summary Table

Module	Title	Duration	Focus Area
1	Programming with Swift	3 weeks	Swift fundamentals & setup
2	UIKit & Interface Building	4 weeks	UIKit, Storyboards, Auto Layout
3	SwiftUI & Modern UI	4 weeks	SwiftUI, State mgmt, animations
4	Data Persistence & APIs	5 weeks	Networking, Core Data, APIs
5	Advanced iOS & Deployment	4 weeks	Architecture, testing, App Store
6	Capstone & Career Prep	4 weeks	Real-world app + job prep



# Why Winapps?

# **Agile Methodologies**

We use Project Management tool like Slack, Trello, Freedcamp for project management and provide update to client on daily basis.

# Round the Clock availability

We work 24x7 and work as per client zone and availability.

# **Industry Experience**

Winapps possesses huge experience with different industries like education, E-commerce, banking, tourism, mortgage, real estate, insurance, medical, and health.



### **Certified Professional**

We have experts in-house as Certified Sales force Consultant. Developer, Certified Sales force Administrator, Certified Sales force Developer (PD1), Certified Sales force Developer (PD2), Certified Sales force App Builder, Certified Sales force Sales Cloud Consultant. Certified Sales force Service Cloud Consultant, Certified Sales force Community Cloud, Marketing Cloud Email Specialist, Marketing Cloud Consultant, Pardot Specialist

# **Trust and Transparency**

We have a proven track record of serving 500+ customers with security as a paramount and high touch communication. Extensive experience in end-to-end Implementations, Integrations, Support & Maintenance as Quality Service & Delivery is the primary focus.





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# Winapps

Learn. Build. Succeed. Real Skills for Real

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