

Fruto Academy Swift Development Course Syllabus

Course Overview:

Welcome to the Fruto Academy Swift Development Course! This comprehensive program will provide you with the skills and knowledge needed to become a proficient Swift developer. Throughout this course, you'll learn the fundamentals of Swift programming, iOS app development, and building mobile applications.

Course Duration: 12 weeks

Week 1-2: Introduction to Swift Programming

- Understanding programming concepts and paradigms
- Introduction to the Swift programming language
- Setting up Swift environment and Xcode

Week 3-4: Swift Basics

- Variables, data types, and basic operators
- Control structures: conditionals and loops
- Functions and closures
- Handling exceptions and errors

Week 5-6: Object-Oriented Programming (OOP) in Swift

- OOP principles: encapsulation, inheritance, and polymorphism
- Creating and using classes and objects
- Designing and implementing class hierarchies

Week 7-8: Interface Builder and UI Design

- Introduction to Interface Builder and Auto Layout
- Designing user interfaces using storyboards
- Adding and customizing UI elements

Week 9-10: Model-View-Controller (MVC) Architecture

- Understanding MVC design pattern in iOS
- Building model classes for data representation
- Connecting views and controllers with data

Week 11: iOS App Development

- Introduction to iOS app development
- Building navigation and user interactions
- Integrating user interface and logic

Week 12: Final Project and App Deployment

- Applying Swift skills to a real-world project
- Deploying iOS applications to the App Store

- Final project: Develop and deploy a complete mobile application for iOS

Assessment and Certification:

- Weekly coding assignments: 40%
- Midterm project (Swift app development): 20%
- Final project: 30%
- Participation and quizzes: 10%

Recommended Resources:

- "Swift Programming: The Big Nerd Ranch Guide" by Matthew Mathias and John Gallagher
- "iOS Programming: The Big Nerd Ranch Guide" by Christian Keur and Aaron Hillegass
- Online tutorials and documentation for Swift and iOS development

Note: This syllabus is subject to adjustment based on instructor discretion and the evolving landscape of Swift development.

For inquiries, contact us at info@frutoacademy.com or visit www.frutoacademy.com.