# iOS Development (CSCI 395.97)

## **Contact Information**

InstructorAli ElSayedEmailaelsay@hunter.cuny.eduRoomOnline (via Zoom)Days & timesMonday, by appointment between 7:00 PM - 9:50 PM

### Course Objectives:

- Introduce you to the Swift Programming language
- Introduce you to various iOS frameworks
- Guide you to build your first iOS app

#### Requirements:

- A Mac laptop.
- Your Mac must run the latest version of Xcode.
- You must have root access on your Mac.
- The book: UIKit Apprentice (Second Edition) by Fahim Farook & Matthijs Hollemans URL: <u>https://www.raywenderlich.com/books/uikit-apprentice</u>

#### The Course:

This is a project-based, online asynchronous course. There will be no lectures. Instead, you will code along with the book. Your goal should be to complete about four chapters every week. The ultimate goal of this course is to build an iOS app that fulfills the **specific requirements** defined in the *Grading Details* document on Blackboard.

Additionally, you are *required* to demo your app as you make progress (a minimum of *four* demos are required). Between each demo, you should have made measurable progress.

Of course, you can always meet with me one-on-one if you need any help. To schedule a meeting, please do so on Calendly (link: <u>https://calendly.com/aelsay</u>) and join the Zoom call on time.

More information regarding demos & meetings is available in the *Grading Details* document.

Towards the end of the semester, I may schedule one to three *coding sessions* where anyone can join the Zoom call at the same time, ask questions, demo their progress and code. The coding sessions are usually announced a week in advance.

#### Grading:

- Project proposal (5%)
- Progress demo (25%)
- iOS App Project (50%)
- Final Presentation (20%)

#### Important Dates

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Labor Day	September 5
No classes	September 26 & 27
College Closed	October 10
Project Proposal due	October 12
Project due	December 2
Final presentations	December 5 & December 12
Last day to withdraw	December 14
End of semester	December 21

### Frameworks Covered:

- UIKit
- Foundation
- UserNotifications
- CoreLocation
- CoreData
- MapKit
- MessageUI
- AudioToolbox
- WebKit

#### Other Topics Covered:

- Swift language features
- Delegates & protocols
- Subclassing and extensions
- Data Persistence
- UIView animations
- Navigation controllers
- Tab Bar controllers
- Gesture recognizers
- GCD (Grand central dispatch) (synchronous vs asynchronous)
- Threads
- Networking

## Academic Dishonesty:

"Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures."

### ADA Policy:

"In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772- 4857 or (212) 650-3230."

Note: this syllabus is a guide for the course and is subject to change with advance notice. In the event of a change, an announcement will be made on Blackboard.