Northeastern University
College of Engineering

Info: 6350: Smartphones based Web Development
Spring 2022

INSTRUCTOR: Ashish
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Office Hours: After class or by appointment

Class Timing: 6:30 - 9:30 PM Thursday

TA's: To be announced.

TA Hours: Hours and locations are TBA. we would be having TA hours 2 hours, generally in the open area outside class.

Course Description: In this course, we will learn how to make iOS applications. There is no previous experience of app development required. We will start with basics and will start with making apps in simulator. We would learn Swift programming language, and learn how to use pods (Libraries). We will use Google cloud based infrastructure and create API's/ Database, and apps (MVC). We would also learn how to create AI models and use ML Models on cloud as well as on device. We would create apps for Augmented reality using ARKit. We would learn how to publish these apps on the App store.

Prerequisite: You would require a Macbook. There are some Cloud based solutions which will create a Virtual Mac OS on cloud, theoretically you can use those solutions.

Grading: TA's would be grading all the assignments and tracking attendance.

Assignments: 50% (One assignment every week)

Mid Term: 20% (Two Midterms Take home)

Final Project 30%

Academic Honesty: The Northeastern University academic integrity policy applies to your work in this course. All students are expected to adhere to this policy. For more information on academic integrity policy, please visit website: http://www.northeastern.edu/osccr/academicintegrity/index.html

Attendance policy: The Information Systems Department has a strict class attendance policy. Students who miss two or more Classes will automatically receive one letter grade lower in their final grade.

Course Schedule:

Date	Topic
Week 1	Getting Started and Simple app and walk through of building an app and deployment on Simulator.
Week 2	Create a simple Board Game + introduction of Swift
Week 3	Intro to Playground andSwift programming Language
Week 4	Auto Layout and Designing apps
Week 5	Using Pods in apps and using REST API's. Create a Weather App
Week 6	Using local storage, Create a Stock Ticker app.
Week 7	Introduction to Firebase and Creating an app to login
Week 8	Mid Term + Google cloud functions + Cloud based Database
Week 9	Create a twitter application
Week 10	Twitter application
Week 11	Google/Azure ML modules, learning ML Kit.
Week 12	Git Hub Integration + ARKit for Augmented reality.

Week 13	Android + Flutter + anything else.
Week 14	Final Project