Introduction to Mobile

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CS329e
Fall 2016
Mobile Computing

- Computers increasingly prevalent in daily life
  - Constant access to information and entertainment
  - Different types of user interfaces and displays
  - Restrictions on power usage and performance

- Mobile development requires:
  - Specific mobile programming languages
  - Database information
  - Device information
  - Novel ideas that provide customers value
Class Expectations

✦ Lab and project-based work
  ✦ No exams
  ✦ Weekly assignments to build practical skills
  ✦ Final team project to show-case understanding
✦ Engaged and helpful attitude
  ✦ Ask and answer questions on Piazza: https://piazza.com/utexas/fall2016/cs329e/home
  ✦ Academic honesty required
  ✦ Positive teamwork and interactions
✦ Ability to read syllabus and schedule on your own!
Class Format

- Lecture days provide overview of material and in-class examples
- Lab days allow students to work through tutorials and do hands-on development
- Attendance for both days are mandatory!
  - In-class quizzes using iClicker 2
  - Lab check-in via iClicker
- Final project: building a complete app
  - Team-based
  - On-going reports and testable products
Topics Covered

- iOS development framework
- Swift language
- Related programming paradigms
- Data input
- Mobile interfaces
- Common iOS frameworks
- Project development cycles and practices
Working in iOS

✤ Requires ready access to Macs!

✤ Some Macs in GDC 5.710A

✤ Room is used by grad students and researchers

✤ Permission for access is required (talk to me after class)

✤ Use Xcode (Apple’s free IDE) version 7 and Swift 2

✤ Xcode 8 and Swift 3 come out later this year but students are not required to switch mid-class
Xcode 7.3.1 Download


or

Xcode Setup

- Find Xcode after install in Applications folder
- Launch Xcode and keep in dock
- Right click -> Options -> Keep in Dock
Playgrounds

- New option in Xcode
  - File -> New -> Playground
- Interactive environment that allows developers to write Swift interactively and see results immediately
- Allows for experimentation
Xcode and Playgrounds Demo