

Fall 2015  
**Design of Portable Multimedia Devices**

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448460  
Fall 2015  
09/07/2015  
Kyoung Shin Park  
Multimedia Engineering  
Dankook University

## Course Information

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- Course
  - Design of Portable Multimedia Devices (448460)
  - Fall 2015, 3 credits, 3 hours
  - Course hour & room: Monday 9-14 (2nd Science Hall #313-1)
- Instructor
  - Kyoung Shin Park
  - kpark@dankook.ac.kr
  - 010-8636-1960 (mobile)
  - The Third Science Hall, Room 417
  - Office hour: Tuesday 1:00-2:00
- Prerequisites
  - OOP

2

## Purpose

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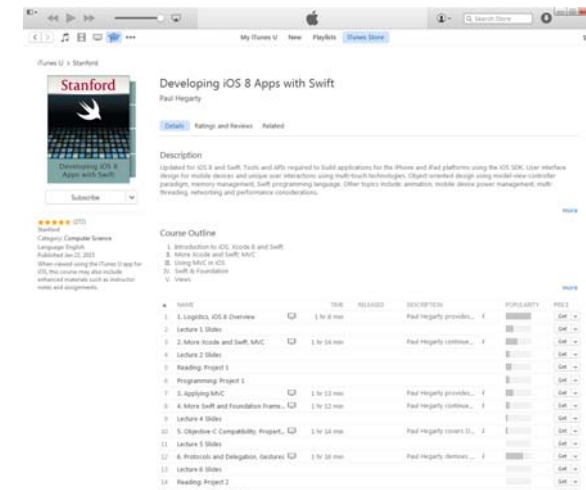
- This course will provide an introduction to user interface design and programming techniques for portable multimedia devices.
- In this course, students will form project groups to design and develop a simple iOS application.

3

## Text Book

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- iTunesU > Stanford University > Developing iOS 8 Apps with Swift (Winter 2015)



## Text Book

- [https://developer.apple.com/library/prerelease/ios/documentation/Swift/Conceptual/Swift\\_Programming\\_Language/TheBasics.html](https://developer.apple.com/library/prerelease/ios/documentation/Swift/Conceptual/Swift_Programming_Language/TheBasics.html)



## Evaluation

- Attendance : 20%
- Individual Assignment: 40%
  - Individual class assignment
  - Presentation
- Term Project: 40%
  - Survey & brainstorming & storyboarding
  - Midterm progress report & presentation
  - Final report & presentation
- **Class Participation & Attitude: extra 10 %**

## Topics

- Overview of iOS, MVC
- Swift
- Foundation and Memory Management
- Protocols and Views
- Image View, Web View, Scroll View
- Core Data and Table Views
- Modal Views, Text Inputs
- Multithreading
- Networking
- Media (audio, video, iPod)

## Schedule

- 09/07 : Course Overview & Survey  
Introduction to Term Project
- 09/14 : Getting Started  
Individual assignment (reading summary report)
- 09/21 : Objective-C & Foundation Framework  
Individual assignment (app survey presentation)
- 10/05 : Views & Application & Navigation  
HW1(Term project app modification)
- 10/12 : Controllers  
HW2(Term project brainstorming)

## Schedule

- 10/19 : Image View, Web View, Scroll View  
HW3 (Term project storyboarding)
- 10/26 : Table View & Core Data  
HW4 (Term project tech support)
- 11/02 : Media(audio, video)  
HW5 (Term project UI design)
- 11/09 : Individual assignment (Midterm Presentation)
- 11/16 : Term Project Presentation
- 11/23 : Term Project Presentation
- 11/30 : Term Project Presentation
- 12/07 : Term Project Presentation

9

## Schedule

- 12/14 : Term Project Presentation
- 12/15 : HW6 (Term project final design document)

10

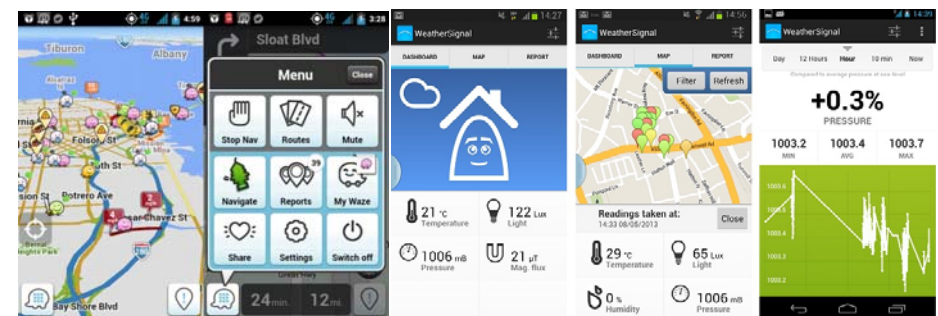
## Individual Assignment

- Reading summary report
  - 1-page report
- iPad/iPhone application survey
  - 5~10 min presentation & discussion
  - 3~5 page (single-space, 10-point font) report
- Paper presentation on iPad/iPhone related works
  - 15~20 min presentation & discussion
  - 5~10-page (single-space, 10-point font) report

11

## Term Project

- Topic: Crowdsourced Application, e.g. Waze, WeatherSignal



12

## Term Project

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- Topic: Quantified Self movement (or Lifelogging)  
Application, e.g. Nike+ FuelBand, Fitbit



## Term Project

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- Students are encouraged to work on a project related to your own area of interest
  - Idea brainstorming
  - Related work survey
  - Term project critique & group members evaluation
  - Extra Credit 10% - paper reading & presentation
- Projects can be done as groups of two or three.
- Also, the project report should indicate to which portions of the project each member contributed.
- You group project blog will also help monitor your steady progress across the semester.
- Also, the final project report should indicate to which portions of the project each member contributed.

14

## Term Project

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- iPhone/iPad application modification
- Application brainstorming & storyboarding
- Application technology support & UI design
  - 10~15 min presentation & discussion
  - 5~10-page (single-space, 10-point font) report
- Final design document
  - 20 min presentation & demonstration
  - 10-page (single-space, 10-point font) report

15

## Term Project Groups

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- 1 group-
- 2 group-
- 3 group-
- 4 group-

16

## Survey

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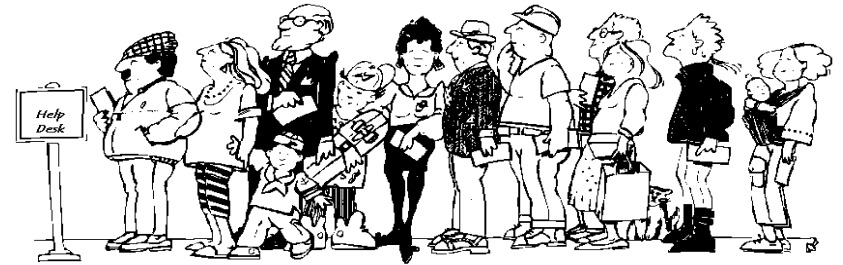
- Have you worked with Object Oriented Programming?
- Have you developed applications for Mac OS X?
- Have you installed the iOS SDK and done iOS app development?
- Have you submitted applications to the App Store?

17

## Announcement

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- Class blog:  
<http://dis.dankook.ac.kr/lectures/pmd15/>



18