Fall 2016

Design of Portable Multimedia Devices

448460
Fall 2016
09/06/2016
Kyoung Shin Park
Dankook University

Course Information

- ❑ Course
  - Design of Portable Multimedia Devices (448460)
  - Fall 2016, 3 credits, 3 hours
  - Course hour & room: Tuesday 2-7 (2nd Science Hall #313-1)
- ❑ Instructor
  - Kyoung Shin Park
  - kpark@dankook.ac.kr
  - 010-8636-1960 (mobile)
  - Office hour: by appointment
- ❑ Prerequisites
  - OOP

Purpose

- ❑ 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.

Text Book

- ❑ 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

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

- 09/06 : Course Overview & Survey
  Introduction to Term Project
- 09/13 : Getting Started
  Individual assignment (reading summary report)
- 09/20 : Swift
  Individual assignment (app survey presentation)
- 09/27 : Swift
  HW1(Term project app modification)
- 10/04 : Views & Application & Navigation
  HW2(Term project brainstorming)

Schedule

- 10/11 : Controllers
    - HW3 (Term project storyboarding)
- 10/18 : Image View, Web View, Scroll View
    - HW4 (Term project tech support)
- 10/25 : Table View & Core Data
    - HW5 (Term project UI design)
- 11/01 : Individual assignment (Midterm Presentation)
- 11/08 : Multi-Touch & Gesture
- 11/15 : UIControl
- 11/22 : Term Project Presentation
- 11/29 : Term Project Presentation

Schedule

- 12/06 : Term Project Presentation
- 12/13 : HW6 (Term project final design document)

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

Term Project

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

Term Project

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

Term Project

- Topic: LBS AR 3D Web (단국대학교 천안캠퍼스 중심으로)

Term Project

- 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.

Term Project

- 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

Term Project Groups

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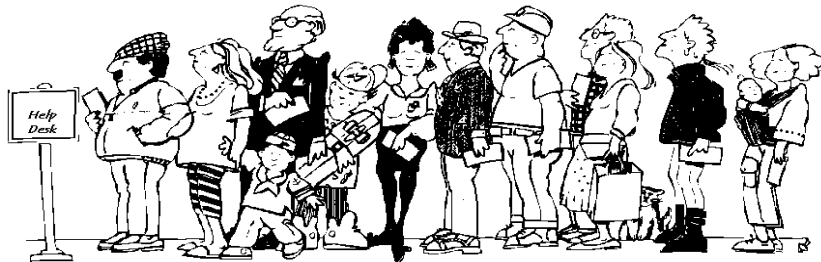- 2 group-
- 3 group-
- 4 group-

Survey

- 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?

Announcement

- Class blog:
  http://dis.dankook.ac.kr/lectures/pmd16/