iOS App Development
CIS 399

Time & Place:
Jun 24 - August 14, Summer 2013
9:00 AM - 9:50 AM, Monday - Friday
Deschutes Hall, Room 200

Text Book:
We will be working from the documentation available in Apple’s Developer Library:

Additional Resources:
News RSS Feed: feed://www.cs.uoregon.edu/classes/13U/cis399iphoneipad/news.xml
Additional resources can be found listed on the course website:
http://www.cs.uoregon.edu/classes/13U/cis399iphoneipad/links.html

Instructor:
Charles Augustine
hyllus@cs.uoregon.edu

Office Hours:
Held in Deschutes Hall, Room 200 by appointment.

Course Objectives:
Learn to use Xcode:
- Code editor
- Interface Builder
- Developer documentation
- Version control (git)
- Debugger
- Project management
Course Description:
An introduction to developing apps for iOS. An exploration of Apple's developer tools (Xcode, etc) and Objective-C, with the primary goal of developing an understanding of the SDK: the application life cycle, view controllers, views, data persistence, etc.

Evaluation:
The grade received for the class will be based on project work, a midterm exam, and some homework assignments. Homework will be assigned during the first few weeks of class to reinforce core concepts and prepare for the midterm. A midterm exam will test that students have understood core concepts necessary for iOS development. After the midterm, each student will be expected to write a functional iOS application meeting a minimum set of criteria. In addition, to ensure that continuous progress is being made progress will also be evaluated at various assigned project milestones as the class progresses towards the final project deliverable.

Students will pick their own project, with guidance to ensure it is of reasonable scope and allows for the exploration of the various topics to be discussed.

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<tr>
<th>Homework Assignments</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>20%</td>
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<tr>
<td>Project Milestones</td>
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<td>Final Project</td>
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<td>Class Participation</td>
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### Tentative Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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| 1    | 6/14 - 6/28 | Syllabus/Project Overview, Version Control, Xcode, Objective-C, Memory Management  
**No Class Friday** |
| 2    | 7/1 - 7/5  | SDK Overview, Application Life Cycle, Threads / Concurrency, Design Patterns, Application Life Cycle [Part 2] |
| 3    | 7/8 - 7/12 | View Controllers, Standard View Components, Interface Builder, IBOutlets and IBActions, NIB Loading, Storyboards, Interface Builder vs. Code |
| 4    | 7/15 - 7/19| UIScrollView and UITableViewCell, Responding to the Keyboard, Custom Views, View Life Cycle, Gesture Handling, iPhone vs. iPad |
| 5    | 7/22 - 7/26| Core Data, KVO, Custom NSManagedObject Classes, Integrating Data, User Defaults and Keychain |
| 6    | 7/29 - 8/2 | Debugging, Performance Profiling, Testing, Xcode Tips & Tricks |
| 7    | 8/5 - 8/9  | Universal Apps, CoreGraphics (Quartz 2D), Additional Topics of Interest |
| 8    | 8/12 - 8/14| Additional Topics of Interest  
**No Class Thursday or Friday** |