IS 413 Syllabus

Spring 2013

Instructor Information

Instructor	Email	Office Location & Hour
Benjamin Houdeshell	houdesh1@umbc.edu	Please see me during class to arrange

General Information

Description

IS 413 continues to evolve to reflect modern technology. Initially a study of Java Swing, IS 413 now features the use of two prominent platforms for building User Interfaces. The original IS 413 platform, Java Swing, was developed by Sun Microsystems and contains an extensive toolkit for building graphical user interfaces using the Java programming language. The second platform you will use is the Android Software Development Kit. Android was developed by Google and is one of the most prominent platforms currently available for building mobile applications. As is the case with Swing, Android features an extensive set of tools for building graphical user interfaces using Java. Hands-on experience with both platforms is a key aspect of IS 413.

Expectations and Goals

This course is intended to introduce IS students to basic GUI computer programming techniques using the Java programming language. The course assumes that you have prior programming experience so that writing computer programs is not new for you. The course has technical (Java homework and projects using Swing and Android), academic (quizzes), and communication (collaborating, writing, and presenting) components. Note: You will be required to write code in this class every week. The prerequisite is IS247 or CMSC 202.

Course Materials

Required Materials

We will use freely available materials from the Internet as our online textbooks. Our two primary sources are:

• The Java Tutorials   -   http://download.oracle.com/javase/tutorial/index.html

• Android Training - http://developer.android.com/training/index.html

Optional Materials

Use of your own computer is **highly recommended**.   The following free software is required if you use your own computer.

- Java Platform, Standard Edition 6, JDK (Java Development Kit)
    - http://www.oracle.com/technetwork/java/javase/downloads/index.html
- Android SDK
    - http://developer.android.com/sdk/index.html
- Eclipse Classic or Eclipse IDE for Java Developers
    - http://www.eclipse.org/downloads/

Course Schedule

Week	Topic	HW
1/30	Intro to Swing, Swing Containers	Take Home Quiz #0, Three classes cmd line and GUI
2/6	JComponents	Nested Panels
2/13	Interfaces and Event Listeners, JMenu	Celsius/Fahrenheit panel with Event Listener
2/20	Model View Controller. Mouse Events	MVC Prime Number
2/27	Getting Started w/Android	Building your First App, Project Abstract due
3/6	Android Layouts	Linear Layout
3/13	Creating A Simple UI	Simple UI Example
3/20	Spring Break	
3/27	Widget Event Handling	Hello/Goodbye Event Handling Exercise
4/3	Buttons and Clickable Widgets	Image Buttons and TextView , Project Progress Report due
4/10	Intents	Using a class name to start an Activity using Intents
4/17	Intents II/Fragments	Continuation of the discussion on Android Intents. Android Fragments.
4/24	Fragments	Using Android Fragments on Intents
5/1	Projects/Special Topics	Project Presentations
5/8	Projects/Final Topics	Project Presentations

Quiz Schedule

Date	Subject
2/20	Quiz 1 covering weeks 1 – 3 (10 pts)
3/13	Quiz 2 covering weeks 4 -6 (10 pts)
4/10	Quiz 3 covering weeks 7-10 (10 pts)
5/8	Quiz 4 cumulative, emphasis on week 11-14 material (10 pts)

Additional Information

Grading and Evaluation Criteria
- 40% of the grade is based 4 quizzes. Each quiz is worth 10 points each. The quizzes are cumulative in scope with an emphasis on new material. The quizzes are multiple choice, short answer, and short programming questions. You may use the class web textbook web sites and the class notes. No other sites or applications are allowed to be open on your computer during a quiz.

- 40% of the grade is based on the weekly homework, take-home, and in-class exercises. You may work with a partner on some homework assignments as directed in class.
- 20% of the grade is based on a final programming project. You will work with a partner on this project. Details will be given in class.

Use of Computers and Smart Phones during Class

Please do not use computers, cell phones, iPhones, Android Devices, BlackBerry devices, or any other electronics *during the lecture period* of class. If you must use one of these devices, please step outside to do so. Students who use these devices during lecture will be given an initial warning. *After the initial warning, a 1 point penalty, per occurrence, will be applied against your final grade.*

Statement Recommended for UMBC Course Syllabi by student support services

UMBC is committed to eliminating obstacles that disadvantage students based on disability. Student Support Services (SSS) is the UMBC department designated to receive and maintain confidential files of disability-related documentation, certify eligibility for services, determine reasonable accommodations, develop with each student plans for the provision of such accommodations, and serve as a liaison between faculty members and students regarding disability-related issues. If you have a disability and want to request accommodations, contact SSS in the Math/Psych Bldg., room 213 or at 410-455-2459. SSS will require you to provide appropriate documentation of disability. If you require accommodations for this class, make an appointment to meet with me to discuss your SSS-approved accommodations.

Attendance and Participation

Regular and punctual attendance is expected of all students. In the case of absence due to emergency (illness, death in the family, accident), or religious holiday, it is the student's responsibility to confer with the instructor about the absence and missed course work. Many years of experience has shown that if you attend class regularly, you will get a better grade.

Late Policy

All assignments are to be handed in by the due date. Assignments will not be accepted after the due date, for any reason unless prior arrangements (sickness, personal emergency etc.) have been made. Partial credit will be given if an assignment is not complete. Please make sure you hand in your weekly homework on time. Weekly homework will only be accepted on the due date unless there is an unavoidable situation such as emergency (illness, death in the family, accident), or religious holiday.

Make-up Exams

No make-up exams except through arrangement with the instructor and the UMBC IFSM department *prior to the exam date*. Approval for a make-up exam must be obtained in advance unless there is an avoidable situation as described in the Late Policy.

Office Hours

Please see me during the class break to arrange a time to meet.