

CSC 472 / 372 Mobile Application Development for Android



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Mobile Application Development for Android

- Autumn Quarter AY 2015 – 2016
- Classroom section:
 - Tuesday 5:45 -- 9:00 pm
 - Loop Campus
- On-Line Learning:
 - <http://d2l.depaul.edu/>
- Course Home Page
 - <http://venus.cs.depaul.edu/csc472/>

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Instructor

- Prof. Xiaoping Jia
- Office: Room 843, CDM Building
 - Tel: (312) 362-6251
 - Fax: (312) 362-6116
- Office Hours:
 - Tuesday: 4:00 - 5:30pm
- E-mail: xjia@cdm.depaul.edu
- Home Page: <http://venus.cs.depaul.edu/xjia>

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Prerequisites

- Data Structures I & II
 - CSC301 or CSC383 or CSC393 or CSC403
- **And** Computer Systems I & II
 - CSC374 or CSC407
- Implies proficiency in object-oriented programming in Java or C++

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Textbooks

- No required textbook.
- Lecture notes and sample code will be provided in D2L.
- Various on-line resources and tutorials may also be helpful.
- Official Android API, SDK references
 - *Android Development website*
SDK, Guides, Sample Code,
<http://developer.android.com/>

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Tentative Topics

- Introduction to Android platform
- Overview of Android architecture
- Introduction to Android Studio and SDK
- Building user interfaces (UI), widgets, layouts, activities, and intents
- Popups
- Tabbed views
- List views and adapters
- Fragments & tablets
- Touch events and gestures
- Multi-threads
- Two-dimensional graphics and animation
- Motion sensors, accelerometers and gyroscope
- Location-aware applications

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Grading – Weekly On-Line Quizzes



- 15% - Weekly on-line quizzes in D2L
 - Must be completed *before 5:00pm* the following Tuesday
 - Review of answers in D2L available the day after each quiz closes.
 - Weight distribution:
 - Weeks 1-5: 33%
 - Weeks 6-10: 67%

Grading – Programming Assignments



- 60% - Programming Assignments
 - Weekly individual assignments
 - Assignments will be posted before Tuesday lectures and usually due on 11:59pm of the following Tuesday.
 - There will be a 6-hour grace period, during which the late penalty will be waived.
 - Start early and finish early!
 - All submissions are through Dropbox in D2L.
 - Weight distribution:
 - Assignments 1-2: 20%
 - Assignments 3-6: 80%

Grading – Final Project



- 25% - Final Project (week 11, November 24, 2015)
 - You have 4 weeks to develop an app of your own
 - Individual or small team project
 - Project proposal (10%, due week 7, October 27, 2015)
 - Instructor approval is **required!**
 - Deliverable (60%)
 - in-class or via video conference
 - include a short demo video
 - Documentations (20%)
 - **No late submission will be accepted for the final project**

Grading – Late Policy



- Late policy for programming assignments
 - 10% penalty for up to 7 days. Additional 10% for each week thereafter.
 - One free pass for an one-week extension.
 - You may only use the free pass on one assignment during the entire quarter. Use it wisely.
 - The free extension pass does not apply to the final project.
 - The last day to submit programming assignments for partial credit is November 17, 2015 (week 10)

Mailing List



- You *must* subscribe to the course mailing list. Do it *as soon as possible*.
<https://groups.google.com/d/forum/csc-372-472-autumn2015>
- I will reply to messages I receive to the course mailing list.
- The mailing list is archived.
- If you do not wish to receive messages, you may unsubscribe, or subscribe to a digest.

Why Are We Here?



- To build Android applications
- It's also about *Software Engineering*, as well as object oriented architecture and design

We Are Going To ...

- Learn a new SDK
- Learn a new IDE
- Learn GUI and event driven development
- Create custom applications

Android Developer Site

- You will live out of this site:
<https://developer.android.com/>
- A boat load of information
- Videos, lectures, example code, blogs, downloads, manuals, and more
- It is sooooo big, you can easily get lost in it.
- It's our main resource

What's Next?

- Let's learn a little history about mobile computing and Android
- Let's build our first Android app!

