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COS 470 – MOBILE DEVELOPMENT

INTRODUCTION

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COS 470 MOBILE DEVELOPMENT

ABOUT THE COURSE

- Two Platforms / Three Ways
  - iOS - iPhone and iPad
  - Android - Mostly Phones
  - HTML5/CSS3/JavaScript
- Project Based (no exams)
  - One Presentation at the end
  - Lots of code!

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COS 470 MOBILE DEVELOPMENT

TO BE SUCCESSFUL

- Strong object-oriented programmer
- Ready to learn (at least one) new language
- Know...
  - Class, Instance, Superclass, Subclass
  - Method, Message
  - Instance Variable, Property

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I NEED A COMPUTER

- ▸ iOS assignments require a Macintosh with Xcode
  - ▸ The USM general lab Macs have Xcode
- ▸ Android assignments use Android Studio (cross platform)
  - ▸ Install from developer.android.com
- ▸ Hybrid assignments require a text editor and JavaScript
  - ▸ You should be able to handle this one

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I NEED HELP!

- ▸ Email = houser@maine.edu
- ▸ Thousands of tutorials, Stack Overflow, Apple & Google
  - ▸ Use them, but write your own code (don't copy and paste)
- ▸ Don't forget your classmates

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SCHEDULE

- ▸ 1 - Introduction
- ▸ 2 - iOS
- ▸ 3 - Android
- ▸ 4 - Hybrid
- ▸ 5 - Data & Server Side
- ▸ 6 - Sensors & Hardware
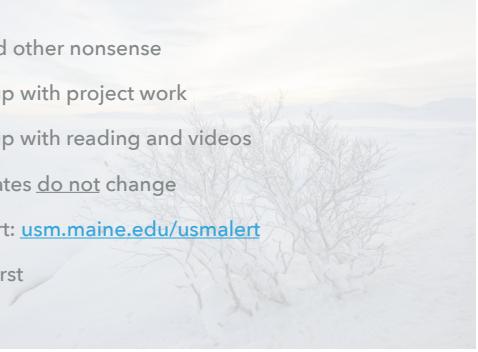- ▸ 7 - User Interface & Design

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SCHEDULE

- Wednesday's 5:35 - 8:05
  - 5:35 - 6:20
  - 6:30 - 7:10
  - 7:20 - 8:05
- Lecture, Demos, and Discussion
- Mostly demos & writing code

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SCHEDULE

- Snow and other nonsense
  - Keep up with project work
  - Keep up with reading and videos
  - Due dates do not change
- USM Alert: usm.maine.edu/usmalert
- Be safe first

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SCHEDULE

"No battle plan survives contact with the enemy"
— Helmuth von Moltke the Elder

- No Class Meeting
  - Wednesday, January 31st
  - Wednesday, February 28th
- You will still have work to do

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GRADES

Project 0	1 point
Projects 1 - 4	2 points
Project 5	4 points
Presentation	1 point

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PROJECTS

- ▸ 0 - GitHub Basics
- ▸ 1 - iOS Task List
- ▸ 2 - Android Task List
- ▸ 3 - Hybrid Task List
- ▸ 4 - Task List with Persistence (your choice of platform)
- ▸ 5 - App of your own design and presentation (your choice of platform)

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GRADES

A	13 - 14 points
B	11 - 12 points
C	8 - 10 points
D	6 - 7 points

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QUESTIONS ABOUT THE COURSE?

▸ Two Platforms / Three Ways

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  ▸ Android - Mostly Phones

  ▸ HTML5/CSS3/JavaScript

▸ Project Based (no exams)

  ▸ One Presentation at the end

  ▸ Lots of code!

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The Only Handplane You Need?

Popular Woodworking

"So many of you responded to the last episode by clicking and buying WoodRiver planes though my Woodcraft affiliate links that I was able to purchase this new Lie Nielsen…"

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USE YOUR TOOLS

▸ Don't fight the frameworks

▸ Use frameworks / libraries / components

▸ Use the features the tools provide, don't avoid them

▸ Focus on user experience

▸ "Small things matter"

▸ Clean Code matters

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PROJECT 0 – GITHUB BASICS

▸ Two Parts

1. Clone and fix mistakes

2. Fork repo and make a PR

▸ Create a GitHub account <u>first</u>

▸ Everything will be "submitted" via GitHub for the entire course.

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PROJECT 0 – GITHUB BASICS

▸ Part 1- Fixing Mistakes

1. "Accept" the assignment

2. Clone the repo to your system

3. Create a branch

4. Correct mistakes (code) & Document

5. Commit and push back to GitHub

6. Create Pull Request (PR)

7. Merge PR back into "master" branch

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PROJECT 0 – GITHUB BASICS

▸ Part 2 - Your Winter Break

1. Tell me your username (form)

2. Fork the `cos470-group` repo

3. Create a branch w/username

4. Add section with your story

5. Commit

6. Create Pull Request (PR)

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PROJECT 0 – GITHUB BASICS