

# CS371M - Mobile Computing

Class Intro

# Teaching Staff

- Mike Scott

- Lecturer

- UT since 2000

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TA: Michael Nguyen

lab hours,

# The Course

- Mobile computing with focus on application development for the Android operating system
- Large, self-selected project with 3 students



# Mobile Computing is ...



# Mobile Computing is ...

Click a course number to see a list of classes.

Course Number	Title
<a href="#">C S 371M</a>	<b>MOBILE COMPUTING</b>
<a href="#">C S 378</a>	<b>MOBILE NEWS APP DESIGN</b>
<a href="#">C S 378</a>	<b>IOS MOBILE COMPUTING</b>
<a href="#">INF 385T</a>	<b>MOBILE INTERACTION DESIGN</b>
<a href="#">J 339G</a>	<b>MOBILE NEWS APP DESIGN</b>
<a href="#">J 349T</a>	<b>NEWS FOR A MOBILE AUDIENCE</b>
<a href="#">J 395</a>	<b>MOBILE NEWS APP DESIGN</b>
<a href="#">J 395</a>	<b>NEWS FOR A MOBILE AUDIENCE</b>
<a href="#">MIS 373</a>	<b>24-MOBILE APPS &amp; WEB SERVICES</b>
<a href="#">C S 356R</a>	<b>INTRO TO WIRELESS NETWORKS</b>
<a href="#">CSD 396C</a>	<b>ADVANCED AMPLIFYING SYSTEMS</b>
<a href="#">E E 360K</a>	<b>INTRO TO DIGITAL COMMUNICATNS</b>
<a href="#">E E 381K</a>	<b>11-WIRELESS COMMUNICATIONS</b>

# Clicker Question

- Have you ever written an Android App?
  - A. yes
  - B. no
- Have you ever written an iOS App?
  - A. yes
  - B. no
- Have you ever published an app on Google Play or the Apple app store?
  - A. yes
  - B. no

# NDR = No Device Required

- Android application development in Java using Android Studio
- Emulator part of development environment
  - limitations
- dev phones and tablets available for check out
- wireless access only



# Work Products

- Tutorials
  - step by step guide to creating a small application
  - tic - tac - toe
- Individual assignments
  - mostly written
- Project
  - design and implement an app and ***hopefully*** publish it on Google Play
  - broken into various milestones
    - 3 students per project
- Point break down on syllabus

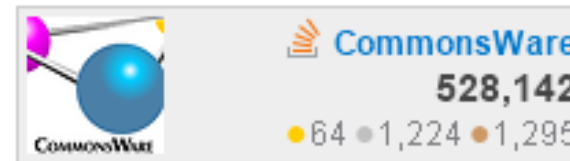
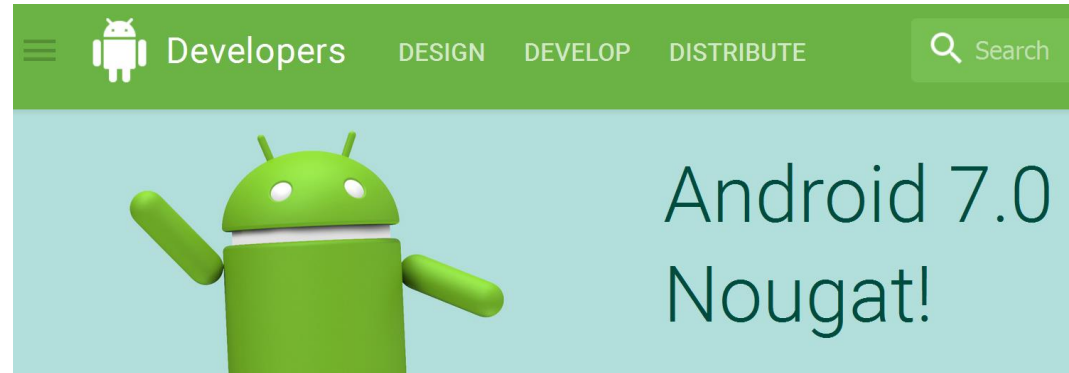


# Posters and Demos

- In class poster days 7/20 and 7/21
- Group demo last two days of class

# Resources

- Google's Android Development website
- Commonwares
  - The Busy Coder's Guide to Android Development
- StackOverflow for very specific questions
- Other tutorials??



# Class Materials

- Syllabus, Schedule, and Resource Page
  - [www.cs.utexas.edu/~scottm/cs371m](http://www.cs.utexas.edu/~scottm/cs371m)
- Assignments, tutorials, grades on Canvas
- Discussion group on Piazza
- Linux machines have development environment
  - **strongly** recommend using your own system
- Tutorial 1 - setting up dev environment on your own machine and using dev environment
  - Hello Android!!

# Course Material

- Working in a system
  - not just a stand alone application
- Heavy use of library / API
  - Primary language for Android is Java
- User Interfaces and XML
  - ever create an anonymous inner class in Java?
- Location and Sensing
- Responsiveness
- Graphics and Events
- Gestures
- data bases / SQLite



# UTCS Labmap

Aaron Stolarz, Anu Srivastava, Fionnuala Gunter - July 17, 2012

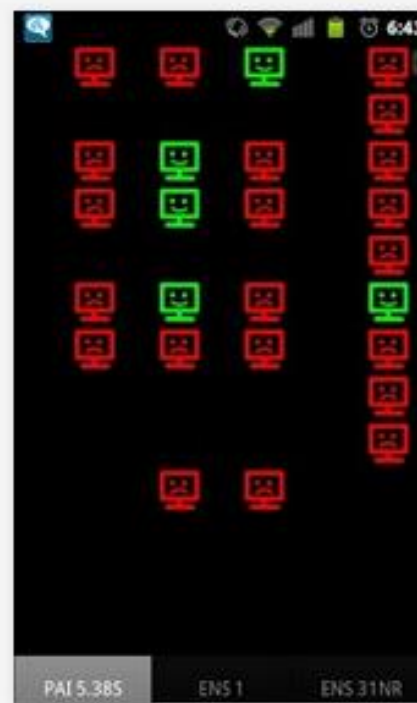
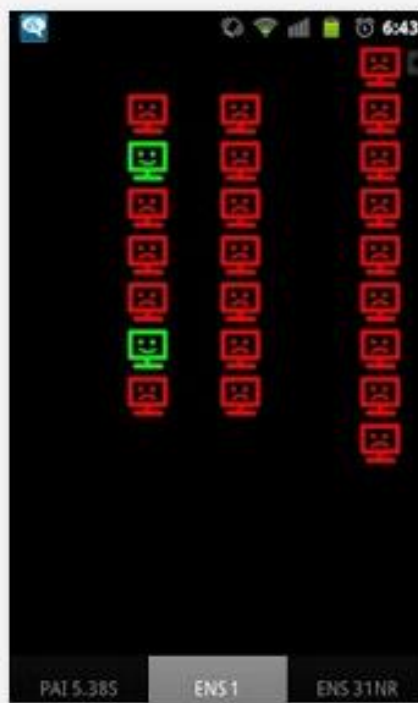
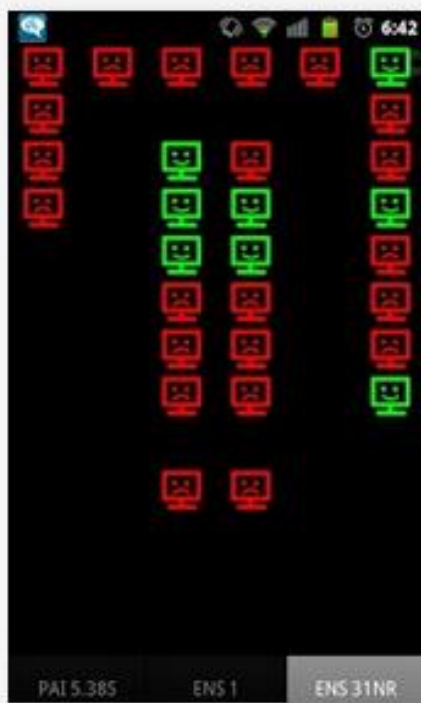
Productivity

Install



Add to Wishlist

★★★★★ (14)





# MoonStocks

Wooden Computers - December 15, 2012

Arcade & Action

Install



Add to Wishlist

★★★★★ (1)



## Description

You are a stock-trading robot whose autonomy depends on maintaining a high rate that is playing.

Features:

Entirely free to play!

Several news articles outlining the events leading up to the opening of the Lunar Market

More than ten different songs!

You are a robot!

Over 12 different buttons to press!

Sparkles.

Developed by Jeff Meyerson, Josh Stewart, and Pong Tam



# Routy

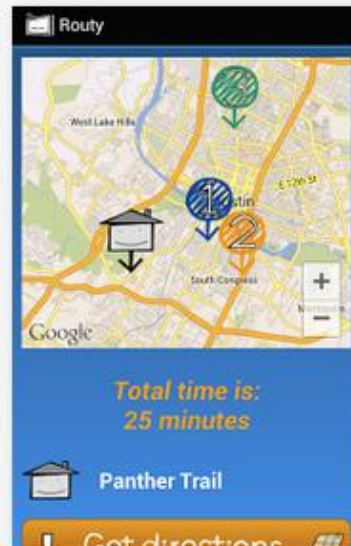
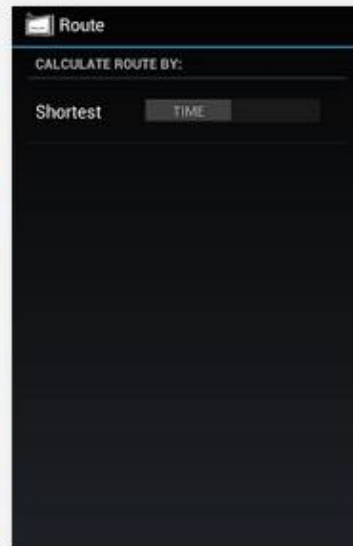
TWENTYTWOTEN - May 24, 2013

Travel & Local

Install



Add to Wishlist







# Know Your Bible


Team KYB - December 11, 2013

Trivia

Install



Add to Wishlist

 This app is compatible with your device.

★★★★☆ (86)

 +36 Recommend this on Google





Questions???

# More Past Projects

- Uncommon Books
- Trace Me
- Android Army
- Austin Recycling
- Pulsar
- Austin Art Viewer