

CS329E – Elements of Mobile Computing

Class Intro

Teaching Staff

- Mike Scott

- Lecturer

- UT since 2000

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office hours Monday and Wednesday, 3 - 5 pm, 3rd
floor GDC lab

TA: Yajie Niu

lab hours, Tues and Thursday, 2:30 – 4:30 pm, GDC
3rd floor lab

The Course

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



Mobile Computing is ...



Mobile Computing is ...

Click a course number to see a list of classes.

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

Why Android?

- Course for CS majors first offered in Spring 2012 (developed during 2011)
- Language
- Development Platforms
- Fees

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

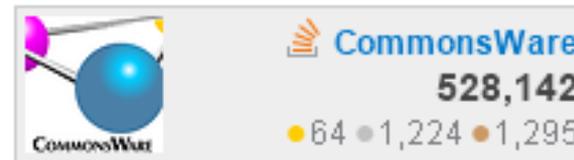
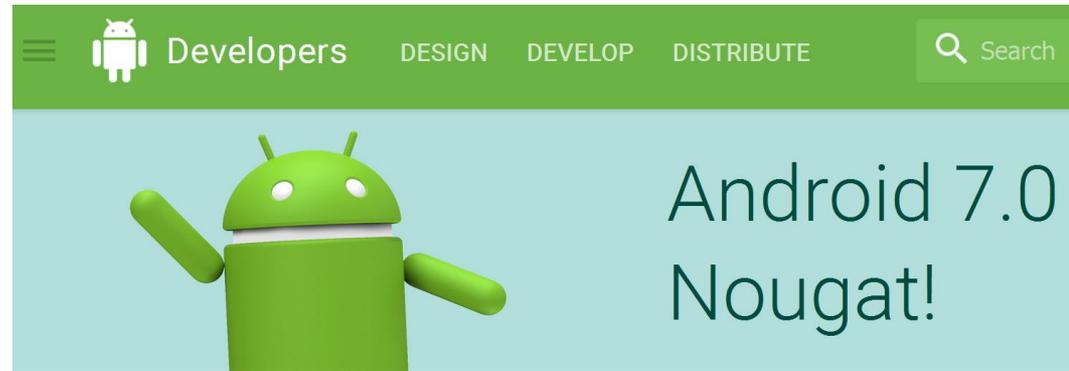
- Tutorials
 - step by step guide to creating a small application
 - tic - tac - toe
- Individual assignments
 - mostly written
- Project
 - design and implement an app and **hopefully** publish it on Google Play
 - broken into various milestones
- Point break down on syllabus

Posters and Demos

- In class poster days 7/16
- In class presentation and 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
- Course requires mastering lots of details.



Class Materials

- Syllabus, Schedule, and Resource Page
 - www.cs.utexas.edu/~scottm/cs371m
- Assignments, tutorials, grades on Canvas
- 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



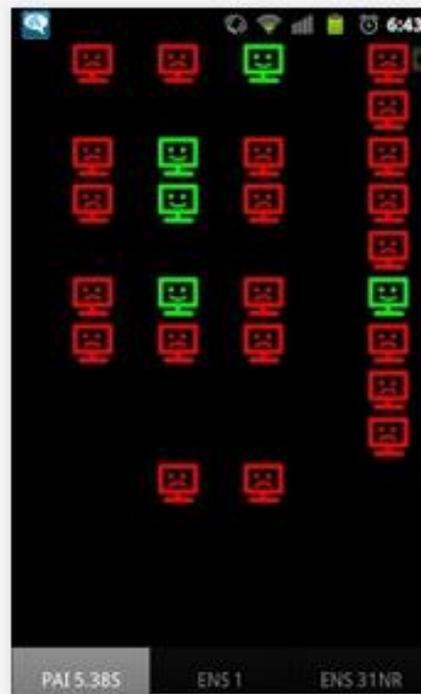
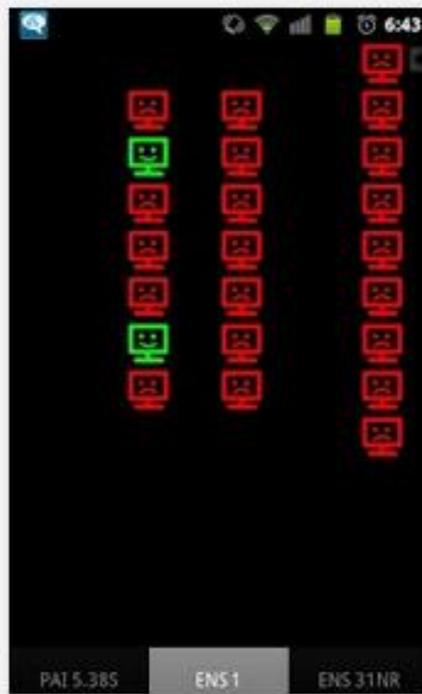
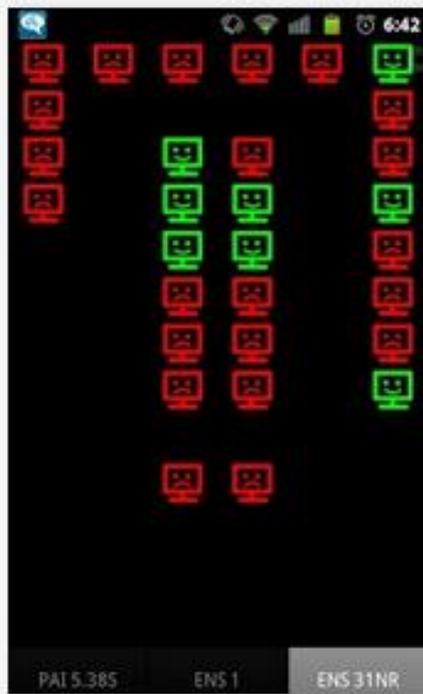
UTCS Labmap

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

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+ Add to Wishlist

★★★★★ (14)





MoonStocks

Wooden Computers - December 15, 2012

Arcade & Action

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★★★★★ (1)



Description

You are a stock-trading robot whose autonomy depends on maintaining a high rate of return 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

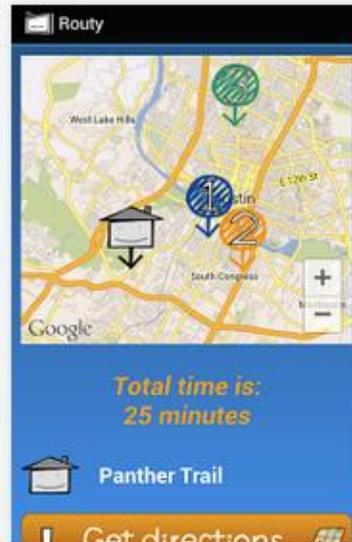
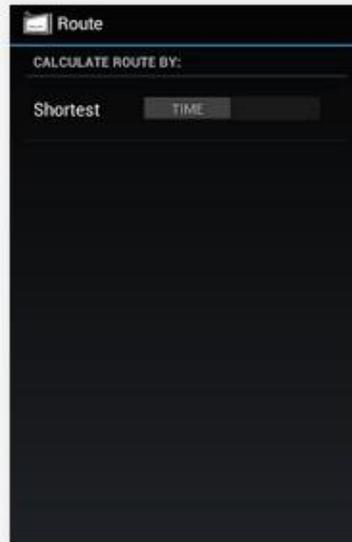
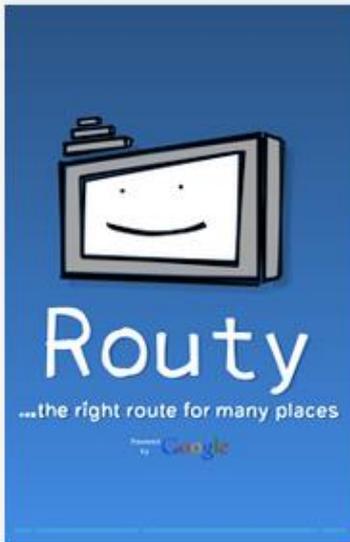
TWENTYTWOTEN - May 24, 2013

Travel & Local

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Know Your Bible

Team KYB - December 11, 2013

Trivia

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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
- Stuporman