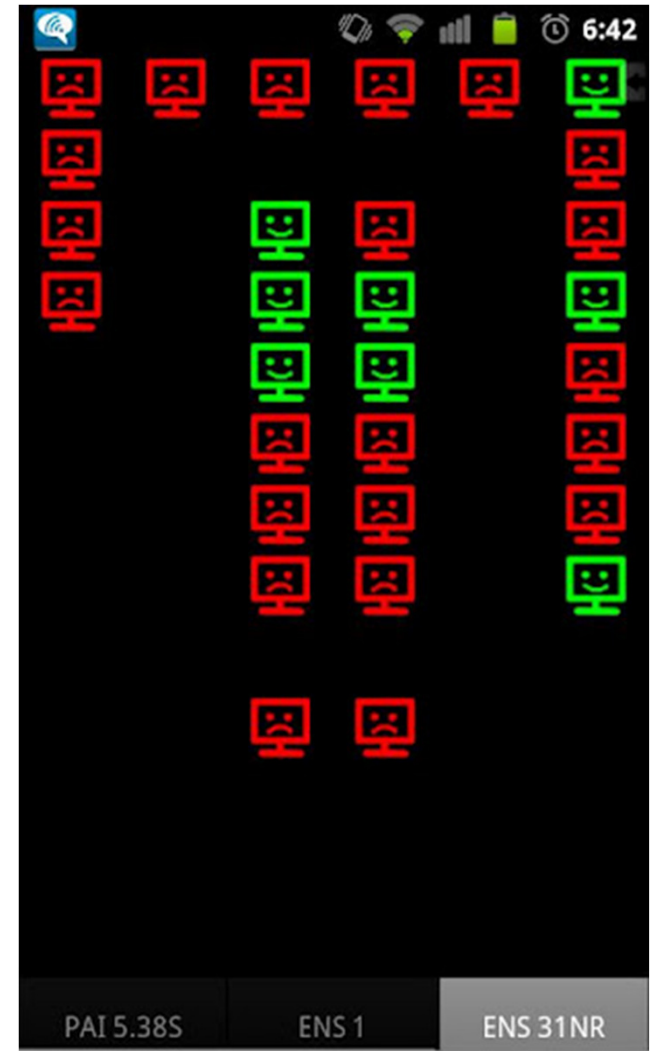


# CS378 - Mobile Computing

## App Project Overview

# App Project

- Teams of 2 or 3 students
- Develop an Android application of your choosing subject to instructor approval
- Application must run on class dev phones, API Level 15



# App Milestones

- App Proposals
  - written 10/1
  - posters 10/1, 10/3, or 10/5 depending on assigned poster session
- Teams and app choice, 10/8
- Paper prototypes, 10/15
- Alpha Release, 11/9
- Alpha Evals, 11/19 (Individual)
- How to, 11/26 (Individual)
- Beta Release, 11/30
- Web ad, 12/5
- Beta Evals, 12/7 (Individual)

# App Proposals

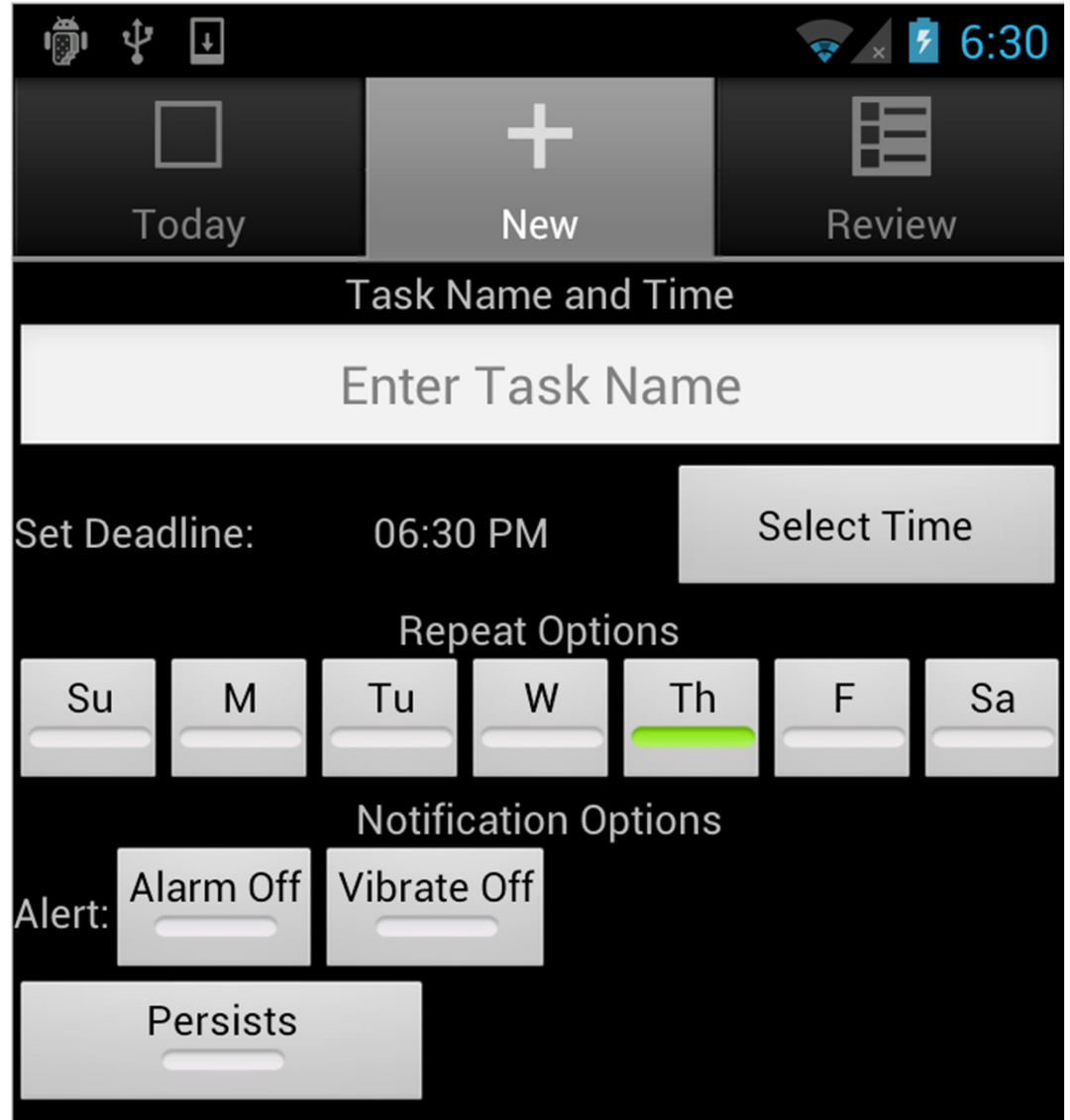
- individual assignment
- every student proposes two applications
- one service oriented, one profit oriented
- written due in class on 10/1
- posters due day of assigned session
  - 10/1, 10/3, 10/5
  - compelling reason for a given day, email me ASAP
- Posters - polished, not hand drawn

# Team and App Choice

- By 10/8 via email to Mike
- App requires instructor approval
- teams of 2 or 3 people
- solo students will be grouped together at random or assigned to a team

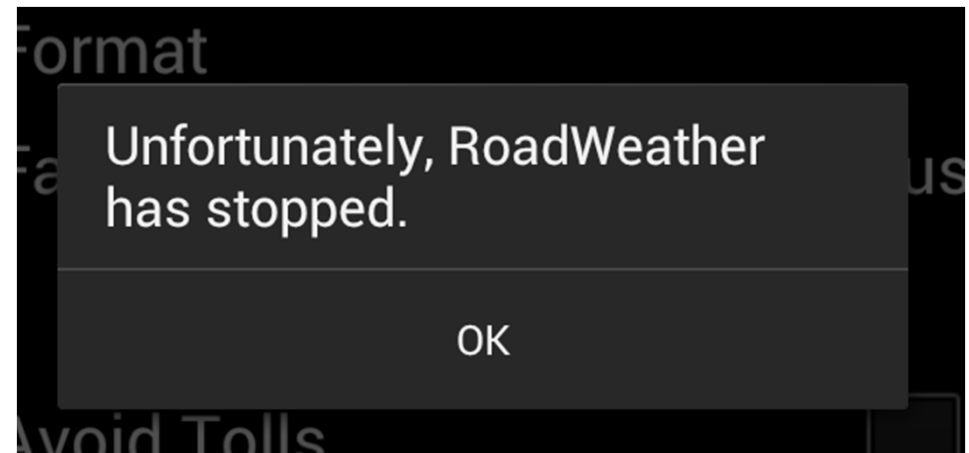
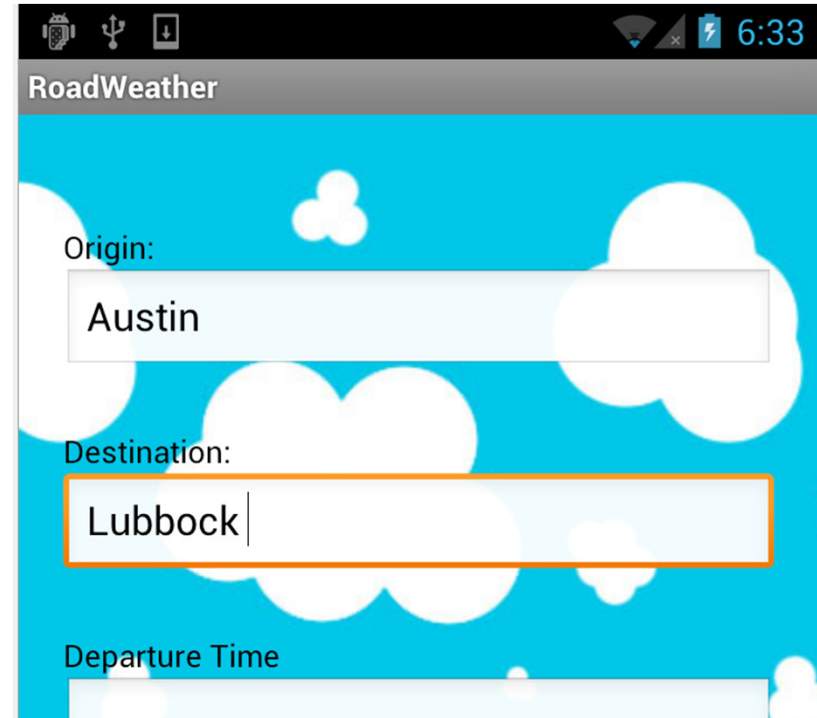
# Alpha Release

- 11/9
- Focus on Basic UI and ***Functionality***
- turn in APK and readme file



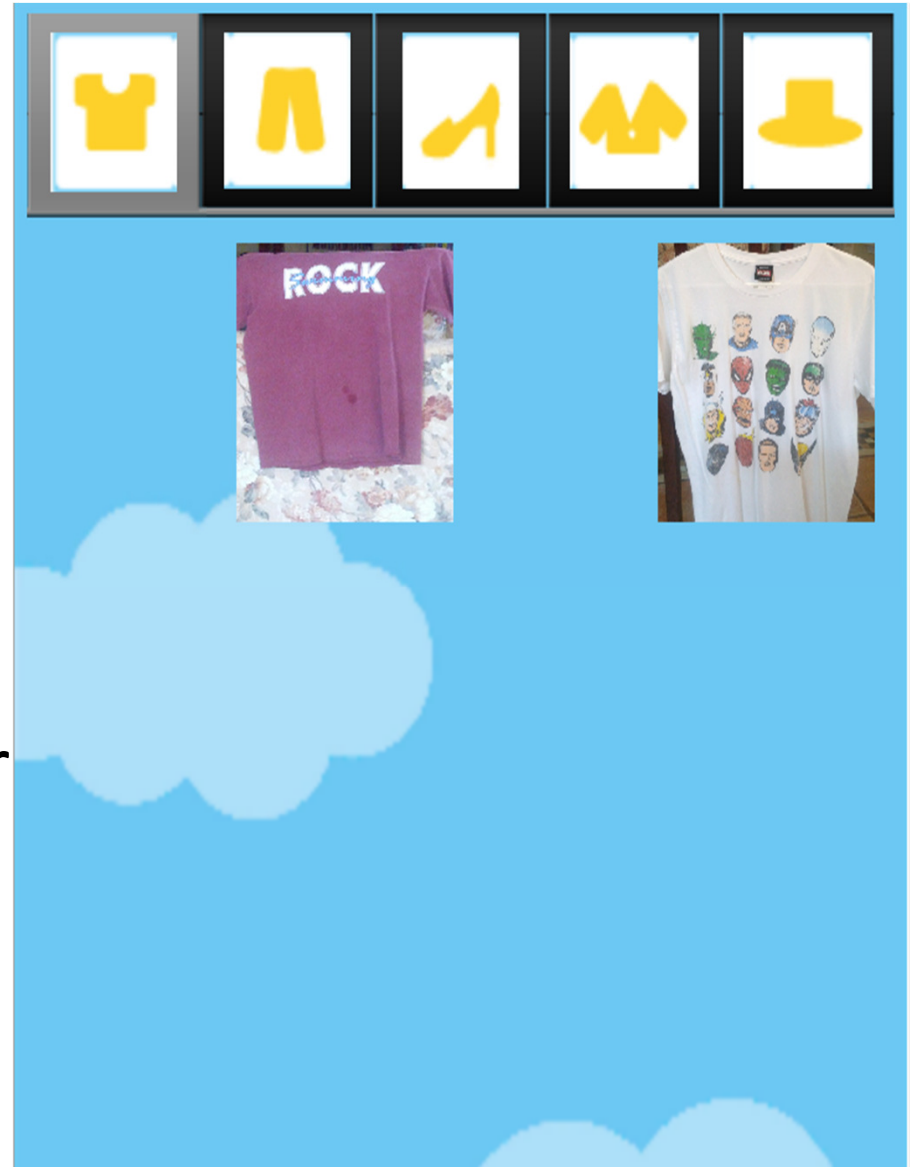
# Evals

- For alpha and Beta releases each student reviews 3 other apps
- feedback provided to team
- good, bad, ugly, suggestions, ERRORS



# Beta Release

- 11/30
- Fully Functional
- **Polished**
  - UI polished
  - icon
  - graphics if necessary
  - menu options / action bar
  - sound / feedback
  - persistence
  - responsiveness





# Web Ad 12/5

## LET'S MEET HERE

Home test

Walton Choy

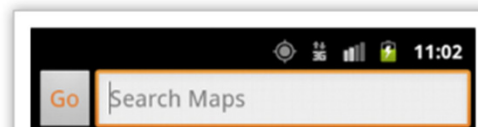
### Description

Plan an event with your friends by searching for a place and customizing event name, time, and description.

### Major Features

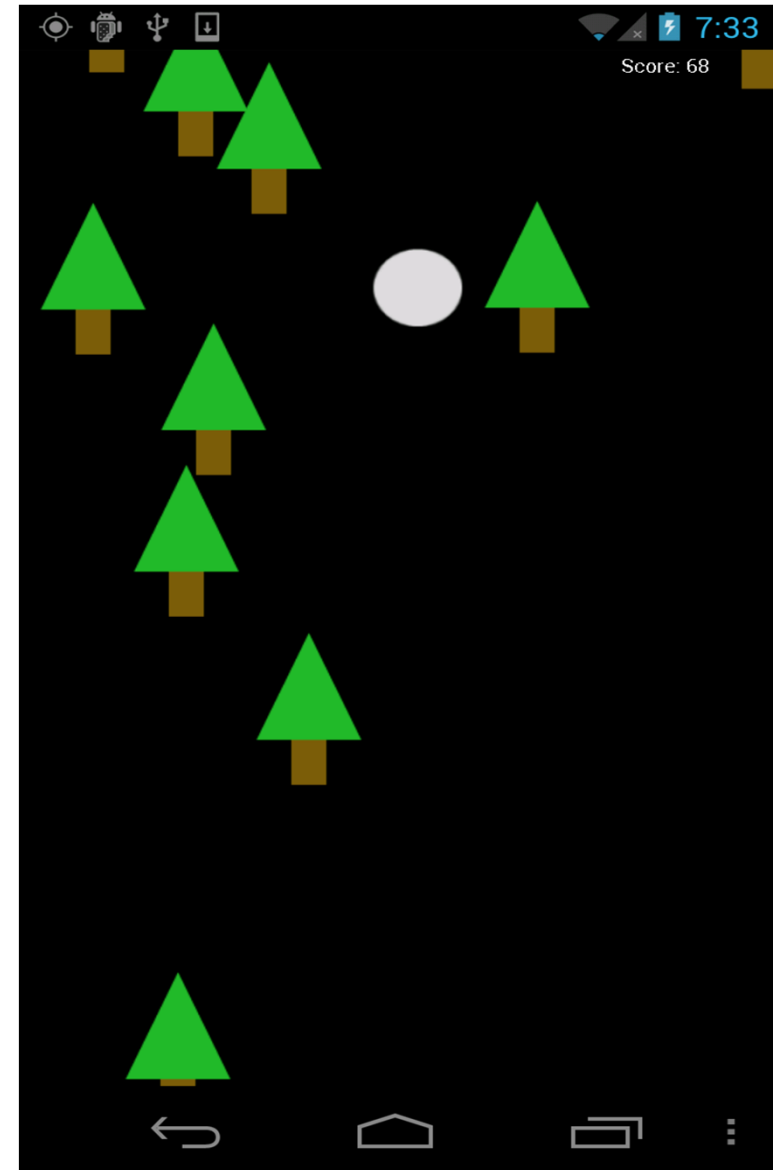
- Functional use of Google Map
- Creation of an event (name, description, time, location)
- Ability to search for nearby places (restaurants, coffee, etc.)
- Ability to physically type in address of meeting
- Ability to place pin on map to find meeting place
- Ability to send out event to multiple people (via SMS or email)

### Screenshots



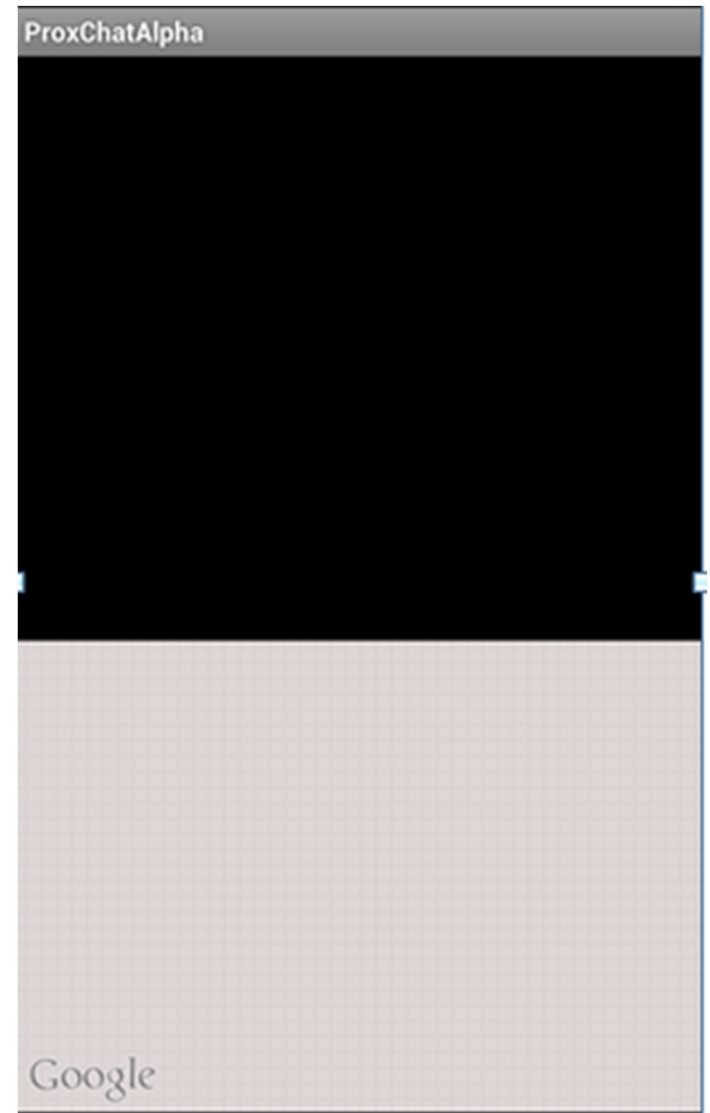
# Recommendations

- Based on my own experience (and bias)
- Pick something you are interested in
- ... but that is reasonable!
- Better to have simple idea / app that can be improved and extended
- .. than a non functioning pile of garbage



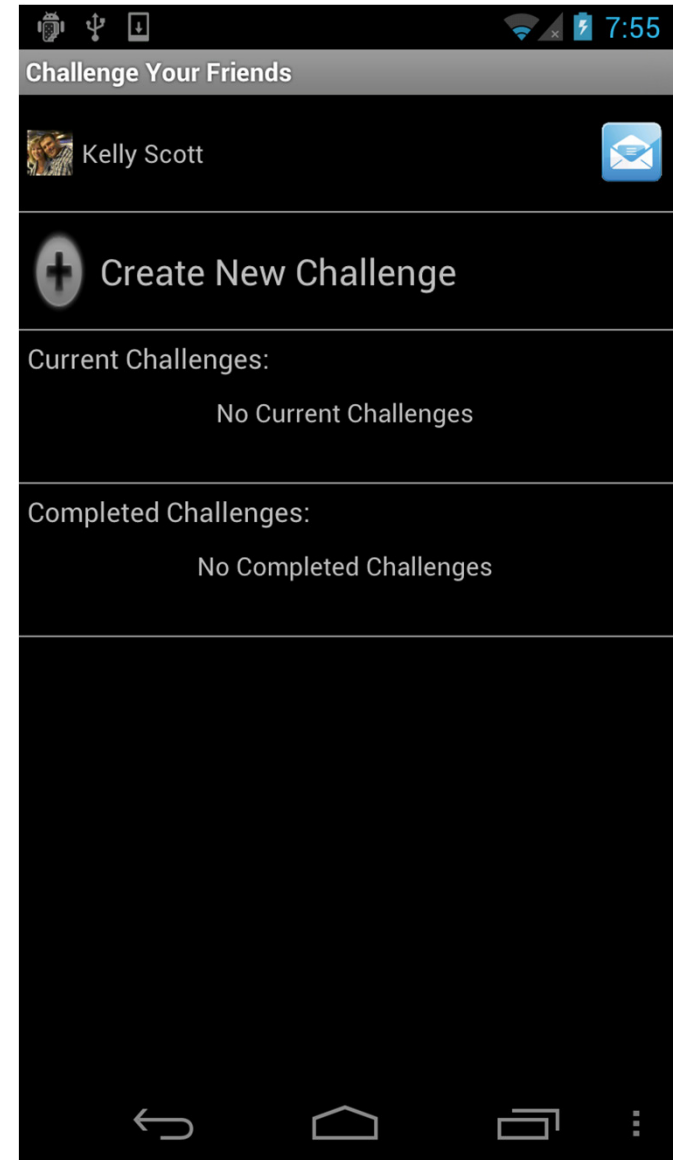
# Recommendations

- Games are okay
- Apps designed for kids are okay
- Okay to use APIs / libraries
  - but no silver bullet
  - integration is hard and time consuming
- Don't try to learn new technologies
  - if you want your own web server, but don't know how to set one up, now is NOT the time to learn



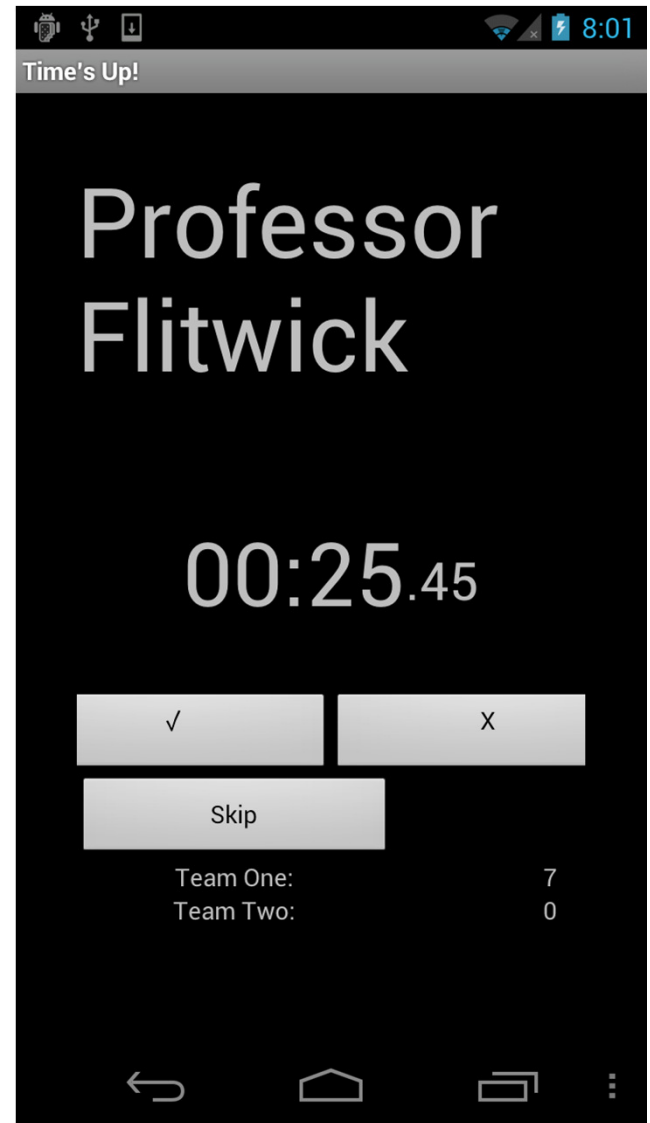
# Recommendations

- Avoid plain graphics
- Avoid social media
  - probably my bias, but kind of boring and high barriers to entry
  - sharing stuff to social media okay, but should not be focus of app
- Avoid apps with lots of initial data entry



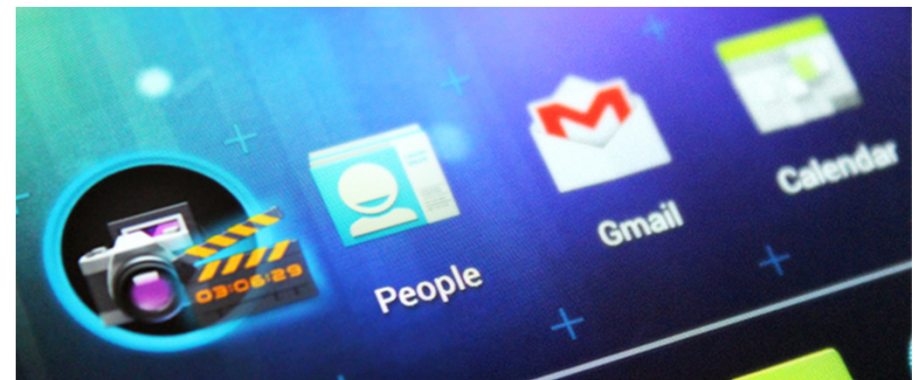
# Recommendations

- Use features of the mobile device such as:
- Location / Maps
- Sensors
- Gestures / Touch Screen
- Contacts
- Camera
- Network
- Available applications / services



# Android Design Guidelines

- Create Vision!
- Enchant Me!
- Simplify My Life!
- Make **ME** Amazing!
  - <http://developer.android.com/design/index.html>

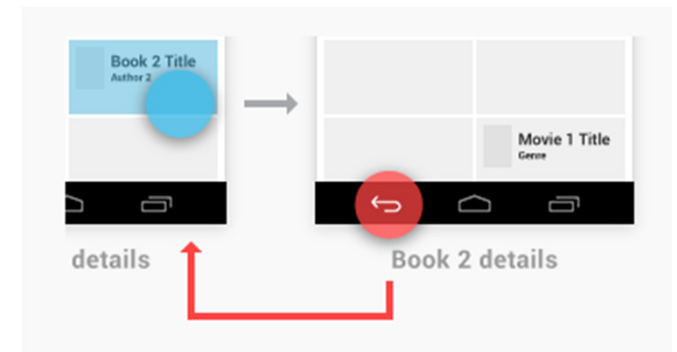


# Create Vision

- **Delight me in surprising ways**
- **Real objects are more fun than buttons and menus**
- **Let me make it mine**
- **Get to know me**

# Simplify My Life

- **Keep it brief**
- **Pictures are faster than words**
- **Decide for me but let me have the final say**
- **Only show what I need when I need it**
- **I should always know where I am**
- **Never lose my stuff**
- **If it looks the same, it should act the same**
- **Only interrupt me if it's important**



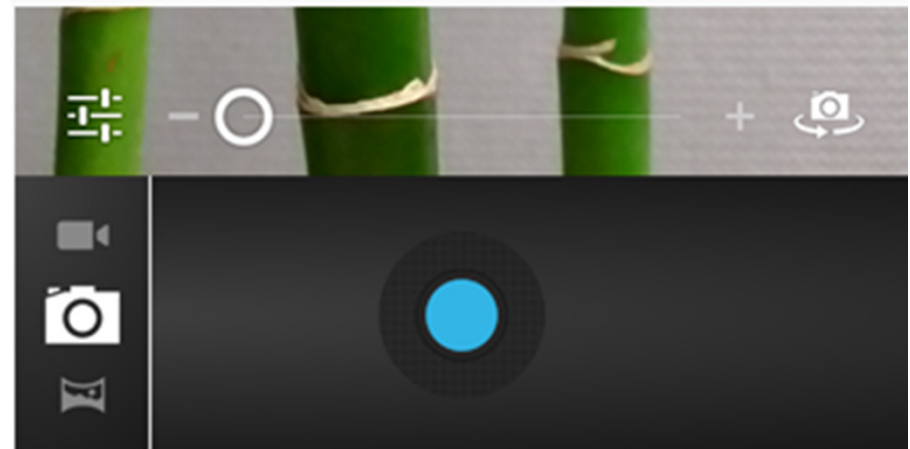


# Make Me Amazing

- **Give me tricks that work everywhere**
- **It's not my fault**
- **Sprinkle encouragement**
- **Do the heavy lifting for me**
- **Make important things fast**

## Insert SIM card

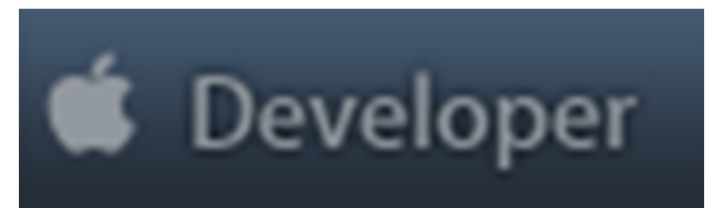
Turn off your phone, remove the battery, and carefully insert your SIM card with the gold contact side down. The cut-off corner should end up furthest away from the battery.



# Apple App Guidelines

- **The Display Is Paramount, Regardless of Its Size**
- **Device Orientation Can Change**
- **Apps Respond to Gestures, Not Clicks**
- **People Interact with One App at a Time**
- **Preferences Are Available in Settings**
- **Onscreen User Help Is Minimal**
- **Most iOS Apps Have a Single Window**

<http://tinyurl.com/3yj7b5y>



# Apple Human Interface Principles

- **Aesthetic Integrity**
- **Consistency**
- **Direct Manipulation**
- **Feedback**
- **Metaphors**
- **User Control**

# User Experience Guidelines

- **Focus on the Primary Task**
- **Elevate the Content that People Care About**
- **Think Top Down**
- **Give People a Logical Path to Follow**
- **Make Usage Easy and Obvious**
- **Use User-Centric Terminology**
- **Minimize the Effort Required for User Input**
- **Downplay File-Handling Operations**
- **Enable Collaboration and Connectedness**
- **De-emphasize Settings**

# User Experience Guidelines

- **Make Search Quick and Rewarding**
- **Entice and Inform with a Well-Written Description**
- **Be Succinct**
- **Use UI Elements Consistently**
- **Consider Adding Physicality and Realism**
- **Delight People with Stunning Graphics**

