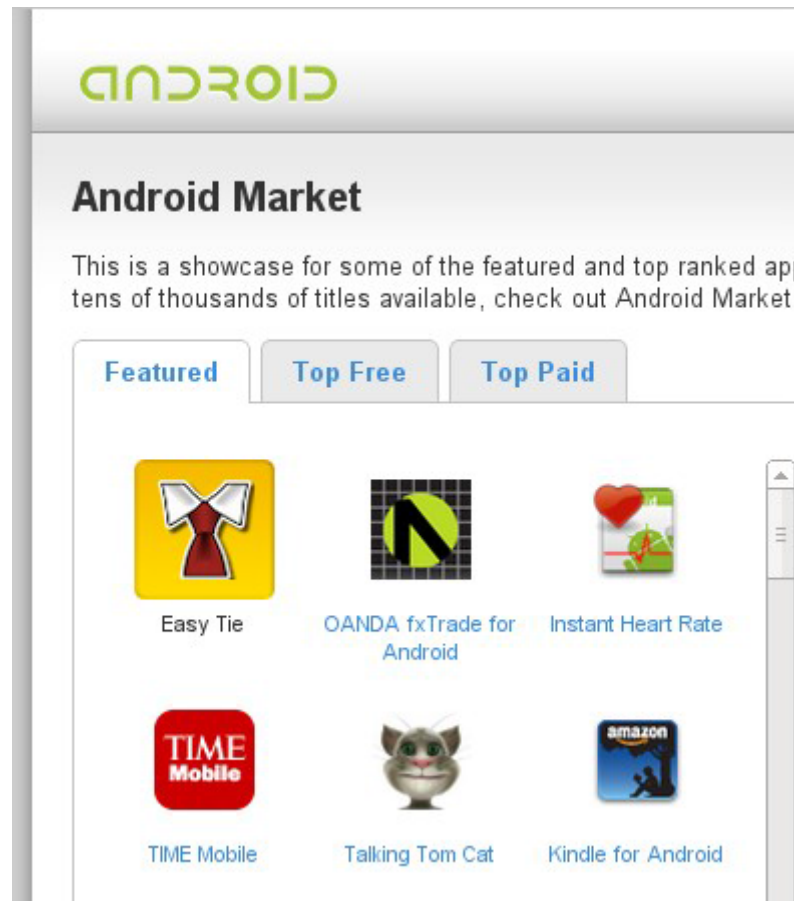


COMP3011J  
Mobile Computing

Recommendations for  
Selecting Your Project

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# 1 000 000+ Apps and growing...



- Competition is very tough...
- Hard to come up with something original
- If you have, you probably did not search well enough... :-)
- But remember its okay to be inspired and come up with original take

# Application Lifespan

- 38% survive the first day on user handsets
- 5-10% survive a month
- Why?
  - Out of space
  - Users do not need the functionality/bored
  - Do not want to pay

# What are the options?

- Look around, see the apps you like, think of ways to make them better.
- Think of your own life and what app would make it better
- Don't plagiarise, get 'inspired!'
  - more on this later...

# What type of app to develop?

- Think of an app people would use daily
  - “Goldrush” will eventually end...
  - Whats App just got bought for 16 Billion dollars (Wechat competitor)
  - Many competitors but it won.
- Do not attempt to create a 'swiss army knife' that does everything
  - People will get confused about your app and its purpose and won't use it (Google Wave, anyone?)
  - Also, when compass wants SD Card permissions & Internet access, or Barcode reader wants to read and write your contact details, this IS suspicious – and you want your user to trust you!

# What type of app to develop? Cont'd

- Concentrate on a small, specific task for your app, and do it well (better than others)
- When you succeed, listen to your users, ignore competition – your users will tell you what they want to see in your app
- Look at the hardware – see what is available to you, use it to your advantage: GPS, accelerometer, Internet, SMS, Telephony, Multimedia...

# What type of app to develop? Cont'd

- Concentrate on your local niche markets, thus minimizing competition => limits potential audience, too
- Decide how the app interacts with the user
  - Is it a widget they will use all the time
  - Is it a “standard” app they control by turning on
  - Is it an app that runs itself and contacts the user

# Being 'Inspired'...

- DO NOT copy things 1-to-1, do not call them similar names. This is 'derivative works', not 'inspiration'. These will be eventually taken down by Google when it receives a DMCA takedown notice from copyright holders.
- Yes, even if you don't copy any code!
- Weeks/months of your work will be wasted:
- Example: flappy clones being removed from Android Market recently...



# On Reusing Code

- Reuse code by all means if source code license allows.
- Quick recap on open source licenses:
  - Approved List available on [Opensource.org](https://opensource.org/licenses/)
  - Most widely used:
    - GPL v2, GPL v3 / Affero/ LGPL
    - Apache / BSD / MIT / Mozilla
- Read licensing terms carefully. Be afraid of 'Beer Ware'-type licenses, they might be legally binding, no matter how ridiculous.

# GPL v2/v3, LGPL vs BSD

- GPL: you cannot reuse parts of GPL code in your programme without your programme also becoming GPL
  - If you distribute it (GPLv2)
  - If you distribute or deploy it (GPLv3)
- LGPL – you can link LGPL libraries without opening your code
- BSD/Apache/MIT/Mozilla: you can reuse this code without opening your code, but in some cases might need to acknowledge the original authors

*Disclaimer: IANAL & TINLA!*

# If reusing code in your app:

- Clearly indicate you use/reuse portions of someone else's code
- Clearly state your contributions in the documentation, commit log history
  - Hopefully we won't have to deal with issues when the only things that changed are programme title, icon & copyright info :-)

# Using Graphical/Design Material

- Prefer Creative Commons material (Flickr, Google Image search, others allow CC search)
- There are different types of CC licenses, familiarize yourself at [creativecommons.org](https://creativecommons.org):
- CC-BY, CC-BY-SA, CC-BY-NC, CC-BY-ND, CC-BYNC-SA
- Only CC-BY is suitable for commercial, closed source software. Attribution of author is required
- *Disclaimer: TINLA & IANAL!*

# Project

- Project is worth 50%
- The project is to create an Android app through design to a reasonable minimum viable project that could or is placed on the Google Android play store.
- You do not have to place you APP on the play store or any other app market place .
- All projects will be Individual projects and there will be no group projects.
- You project will be demonstrate to me in Week 14 . You will be graded on the app and not on your English presentation skills.
- If you do not have a laptop or phone to demonstrate the project . I will install it on a phone for you / or test it on an emulator with you on the day.

# Project Submission

- Submit electronically via Moodle:
- Archive of the source code
- 2 page Program description
- Previous to this submission I will get you to write a project outline which you must get approved by me before starting your project
- The 2 page program description is what will be graded, not your original outline so you can change it.

# Project Outline

- Two page document
  - Describing the project ( 1 page)
  - Explain your approach from Week 10 – Week 13 ( 1 page)
  - Deadline for Project outline will be Mid week Week 9.
  - You should check your submission beginning of week 10
  - If you get a 100% grade please start your project.
  - If you 0% or 50% please resubmit with the changes to the project outline I have requested.
  - Ideally everyone should be starting their project on Week 10

# Project Assessment

- Apps are going to be evaluated for:
  - Novelty (0-10)
  - Usefulness/Entertainment (0-20)
  - Functionality (0-30)
  - Design (0-30)
  - Speed (0-10)



# Resit exam

- In the unfortunate event that I do catch you cheating on your project , you will mostly likely fail the course.
- So if you are re-sit this course, there will be a re-sit exam where I will get you to answer two essay questions about creating an android application.