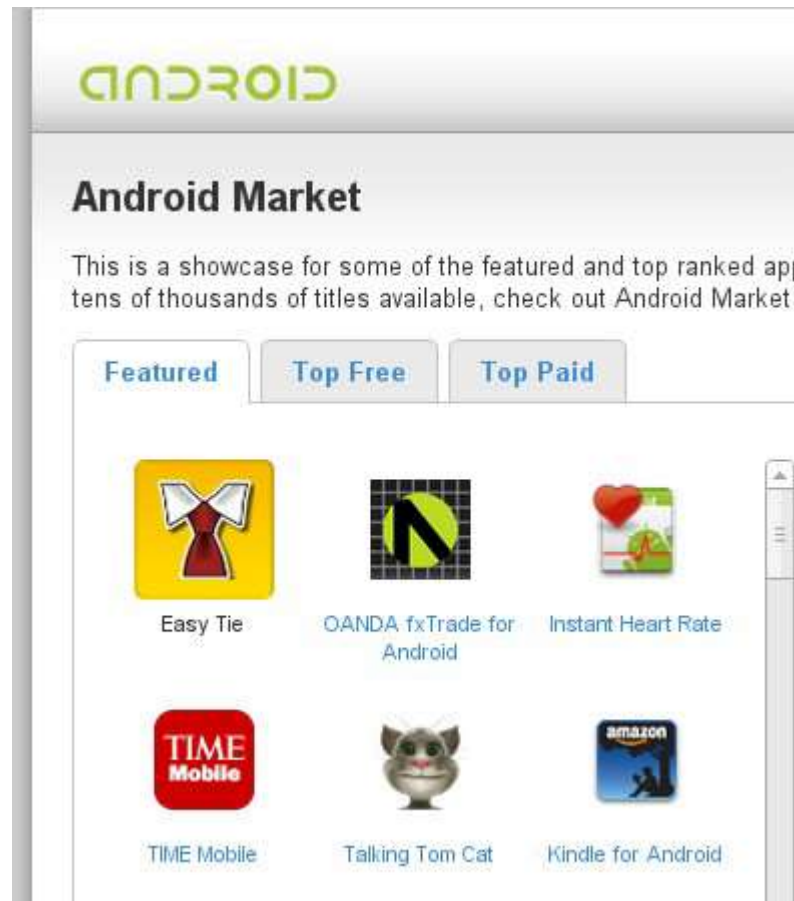


# Recommendations for Selecting Your Project

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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 40%
- 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 group projects
-

# 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 Assessment

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

# Novelty (0-10)

- This will be assessed based on the concept behind your app and in how it achieves its objectives. Therefore an app that may be very similar to previous ones on Google's Play Store could still score top marks if it achieved its objectives in novel way.



# Usefulness/Entertainment (0-20)

- These marks will be given based on how useful or entertaining it is. It's a difficult metric to judge but in general I would aim to assess it based on how much would someone use this app and if it can complete its objective in helping a user or in terms of entertainment could it be something that someone would keep playing.

# Functionality (0-30)

- These marks will assess the basic functionality of the app. Marks will be lost for crashes and any stability issues. Simple things like buttons not working or pages that become unreadable due to orientation issues will cost you marks. The assignments you have previously undertaken hopefully have given you an insight into these difficulties. So remember those insights when you are bug test your project.

# Design (0-30)

- Design will be assessed on two levels, one on the coding level and a second in terms of look and feel of the app. On the coding level, I will want to see a design that can be easily maintained both in terms of new features and localization. In terms of the look and feel, the user interface experience should fit into the android ecosystem but do not worry, I do not expect amazing graphic design here to get top marks. A usable interface with clear and understandable interface will get top marks even if the components do not look overtly professional.

## Speed (0-10)

- This grading will be based solely on the speed of the app, such as if screens take a long time to load for example.