

Mobile Computing

Course Information

Dr. Abraham Campbell

University College Dublin

Abey.campbell@ucd.ie

Course Intensity

- This is a very practical course
- You should know (or be willing to learn) Java*
- You'll have to do several small assignments and one large project.
- You will have to write one essay on a mobile computing topic , list of topics will be provided.

Material Covered

(in no particular order)

- Platform Overview
- Internals, Security
- Activities, Intents, Layouts
- Resources, Storage
- Services, Content Providers
- Publishing Apps, Best Practices
- Software Licenses, Copyrights, Code Reuse
- Marketing and PR Recommendations
- Mobile Computing Design Philosophy
- Case study on Mobile games : Exergaming
- Graphics on Android
- Augmented Reality on Android

Moodle

- BDIC computer Science uses Moodle
- So for this course CS moodle is where your notes are.
- <https://csmoodle.ucd.ie>
- Log on using your UCD connect account
 - Click on COMP3011J
 - And enrolment key is
“COMP3011Jab2019”

Overall Assessment

- 40% - Continuous assessment
 - 20% - Essay on a topic in Mobile Computing
 - 20% - Assignments
- 60% - Project
 - 10% outline
 - 50% presentation

Assignments / Project Structure

- There will be 3 short Assignments on the course to help you learn android development
- You will then have time to develop a project idea and submit it to me.
- Once I have approved your project , you can start it.
- The project can be any sort of application so long as it is legal.
 - I had one student who wrote denial of service attack app and I had to explain to him that it was not an allowed program for a course

Assignment & Project Submission

- Submit electronically via Moodle:
- Archive of the source code
- Please use forum on Moodle to get help from myself and the TA's .
- Remember if you have a problem , probably someone else in the class has a similar problem.

NO Exam

- REMEMBER THERE IS NO EXAM
- The project is worth 60% so its your priority

Project

- Project is worth 60%
- 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 .
- All projects will be Individual projects and there will be no group projects.
- Projects will start at the half way point of the course and after that there will be no assignments.
- You project will be demonstrate to me in Week 15 . 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 CS 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

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)
- Detailed evaluation guidelines will be posted later

Course Schedule

- Lectures will be on Friday 15:25 , Room 102 TB4
- Demonstrator Sessions: Start week 3, on Wednesday at 8:00 in 实训楼二层5室/
Practice and Training Building 2nd floor-Room 5

Course Dates

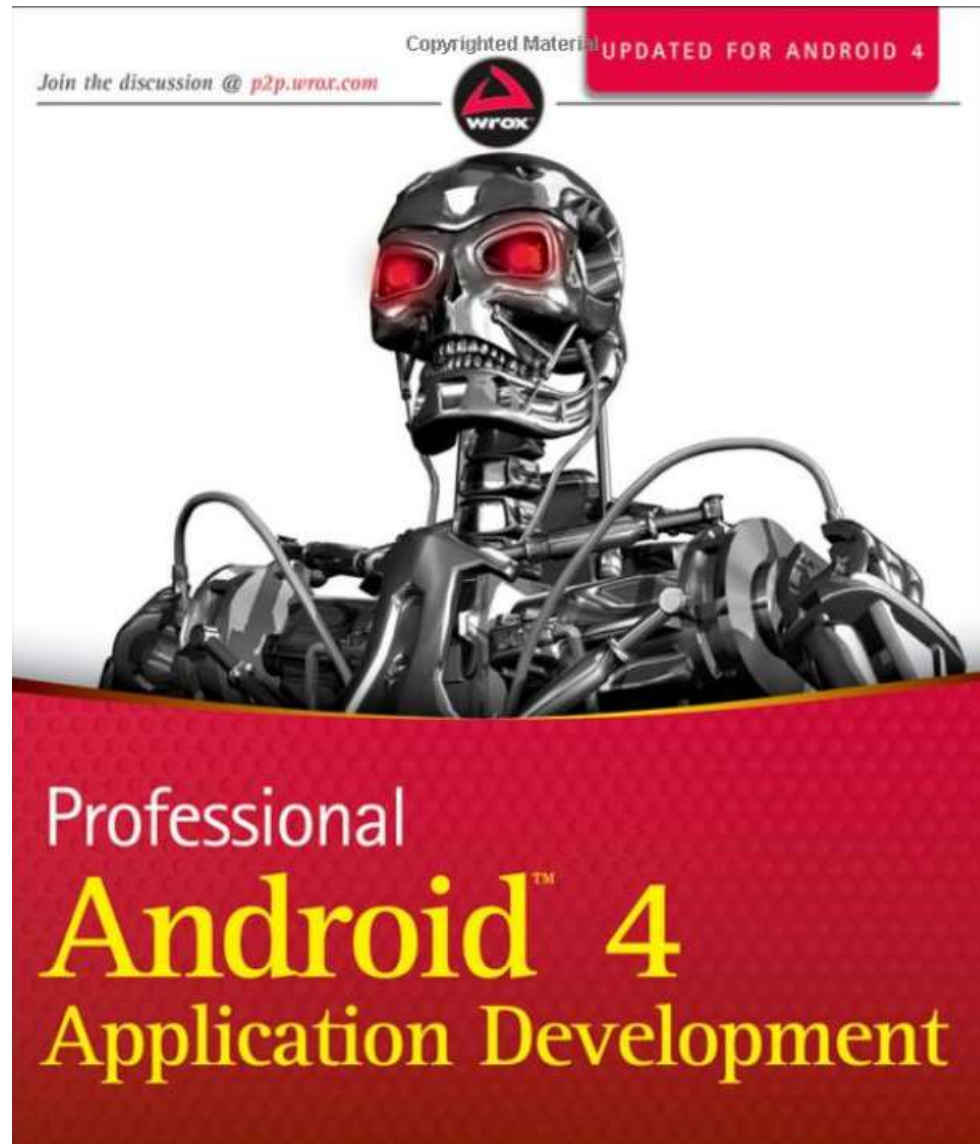
- Project Outline to be submitted by Week 6
- Projects are due by end Week 13
- Projects presentations will start on week 14
- Essay on a topic in Mobile Computing to be Submitted by December 30th
- Assignments will be due 1-2 weeks after the announcements

Communication

- All notifications will go to News Forum
- For all course-related discussions/questions, please use Discussion Forum so others can benefit from the QA as well
- TA's and myself will be available there regularly to answer your questions

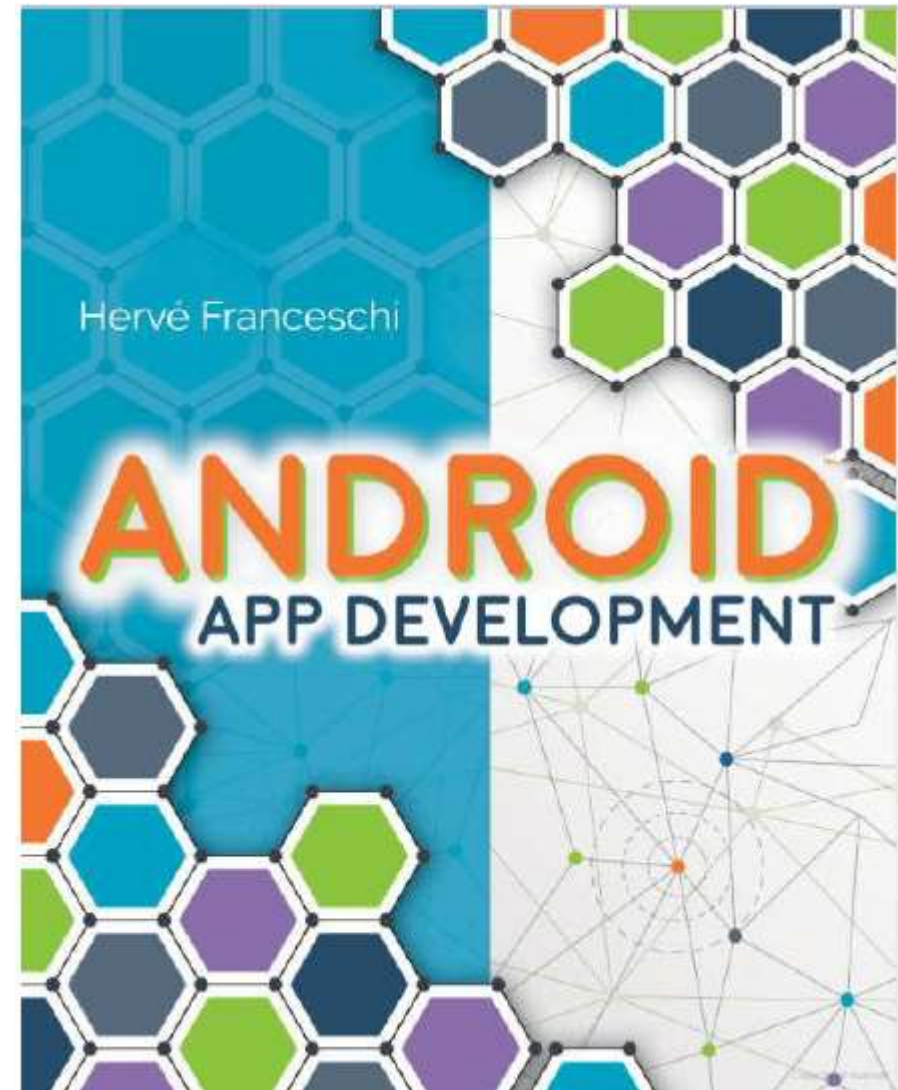
Course Material

- We'll be following “Professional Android 4 Application Development” by Reto Meier
- ISBN: 978-1-118-10227-5
- One copy in Library



Course book

- If you are coding in Android Studio Then I also recommend the following
 ANDROID APP
 development By
 Herve J. Franceschi
- Again everything can be done using notes online.



Course Material

- Feel free to look around at other books for material and useful code samples or online.
- Please post on the forum of the course to let all the students know of good Chinese sites that you find.
- <https://developer.android.google.cn/guide>
- The link above will give you everything you need to make your project

Welcome to the course

- I hope we learn a lot!
- I hope we have fun!

ANY QUESTIONS??? -> add them to the
Discussion Forum!