

Mobile Application Development 2

Produced
by

David Drohan (ddrohan@wit.ie)

Department of Computing & Mathematics
Waterford Institute of Technology
<http://www.wit.ie>



Waterford Institute of Technology
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Background & Overview





Outline

- ☐ My Background
- ☐ Module Description
- ☐ Structure
- ☐ Assessment
- ☐ Labs & Case Study



My Background *

- ❑ David Drohan BSc., MSc.
- ❑ Lecturing Software Development since 1995
- ❑ Currently delivering Mobile & Web Development Modules on 3rd year, 4th year and MSc Programmes
- ❑ Contact details
 - ddrohan@wit.ie (email)
 - @daithid73 (twitter)
 - 051 302683 (office)



Module Description *

- ❑ Evolve a multi-screen mobile application in a networked, message driven, context aware application. Incorporate in the application two-way access to remote REST (Representational State Transfer) and Messaging services. Integrate on-device context which may include camera, location, motion, climate and other sensors to deliver a rich user experience. Incorporate 3rd party components to deliver personalized mapping, media and general information services.



Structure (Suggested Plan 😊)

- ❑ Week 01 – 02 : Intro, Android Anatomy (Recap) + Assignments Brief
- ❑ Week 03 – 04 : UI Design Part 1 - 3
- ❑ Week 05 : Android Persistence, Multithreading, Networking & JSON
- ❑ Week 06 : Assignment 1 + Summative Project Demos
- ❑ Week 06 : Google Play Services Part 1 – Google Sign In
- ❑ Week 07 : Google Play Services Part 2 – Location Services
- ❑ Week 08 : Google Play Services Part 3 – Google Maps
- ❑ Week 09 : Firebase Intro & Realtime Database
- ❑ Week 10/11 : Firebase Authentication, Storage, Hosting etc. etc. 😊
- ❑ Week 12/13 : Assignment 2 + Summative Project Demos



Assessment *

- ❑ **100%** Continuous Assessment Module
 - 2 Individual Assignments – Due weeks 6 & 13
 - Demos Week 12/13 (TBC)
 - Project Ideas **MUST** be unique **AND** all your own original work (mostly!)
 - 1st come 1st served approach to Project Titles
 - 20% per day deduction for every day late

We'll talk about the Assignments in more detail later on



Labs Overview *

□ Assumed

- You've Set Up / are using Android Studio
- You've developed Android Apps already

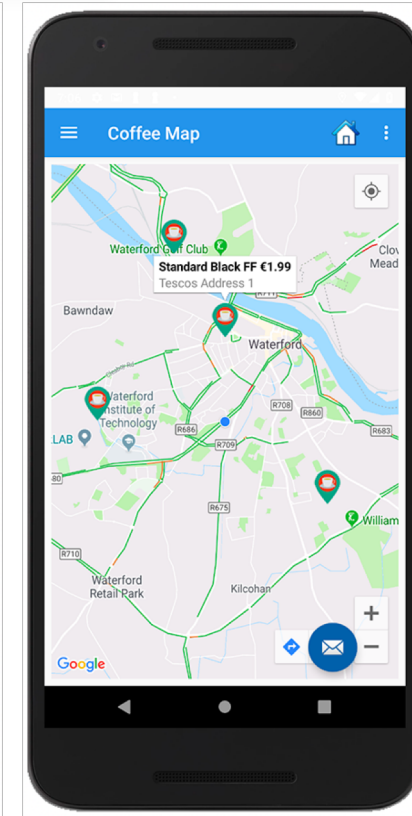
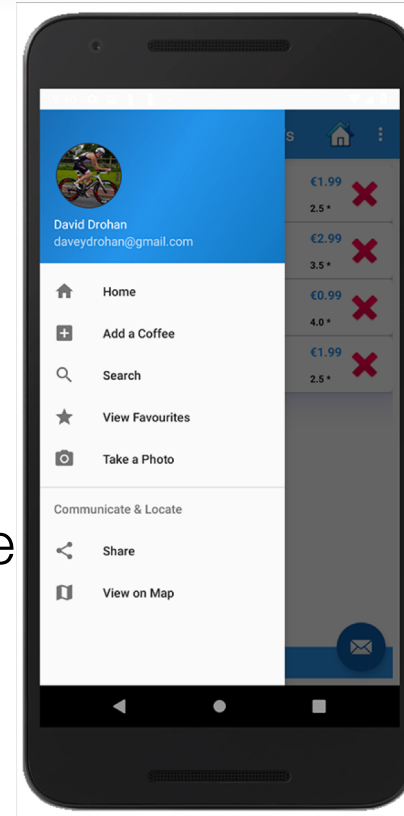
□ You'll Cover

- A “CoffeeMate” Case Study (next slides)
 - We'll develop a number of different versions to demonstrate the use of some of the most common and useful features of an Android App.
- Some Theory & Concepts along the way...

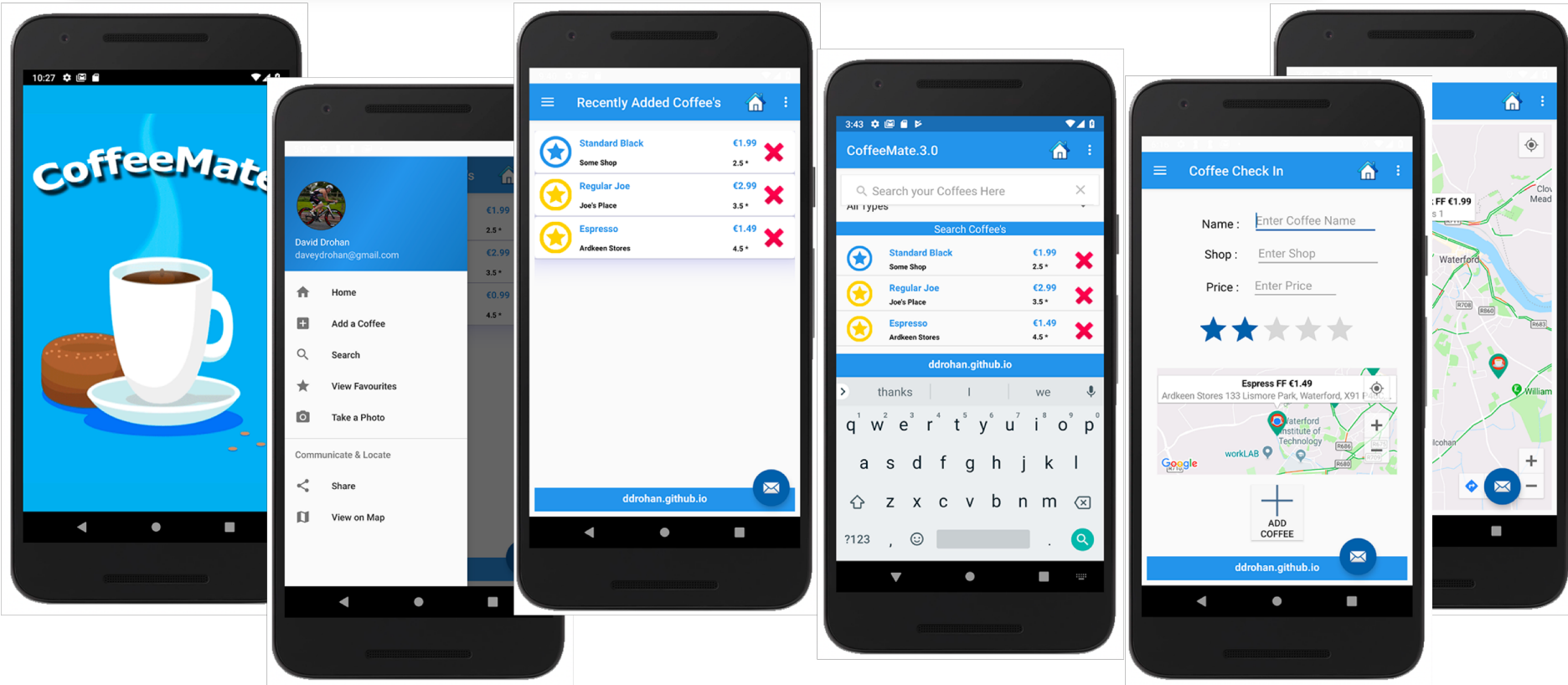


CASE STUDY

- ❑ **CoffeeMate** – an Android App to keep track of your Coffees, their details, and which ones you like the best (your favourites)
- ❑ App Features with Google Sign-In
 - List all your Coffees
 - View specific Coffee details
 - Filter Coffees by Name and Type
 - Delete a Coffee
 - List all your Favourite Coffees
 - View Coffees on a Map



Ultimately you'll end up with this... (baseline for C.A.)



Resources



ddrohan.github.io
moodle.wit.ie



Questions?