Mobile Application Development 2

Produced by

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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

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- @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

❑ <u>Week 06</u> : 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. ☺

❑ <u>Week 12/13</u> : Assignment 2 + Summative Project Demos

Assessment *

❏ 100% Continuous Assessment Module

- 2 Individual Assignments – Due weeks 6 & 13
- Demos Week 12/13 (TBC)
- Project Ideas <u>MUST</u> be unique <u>AND</u> 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
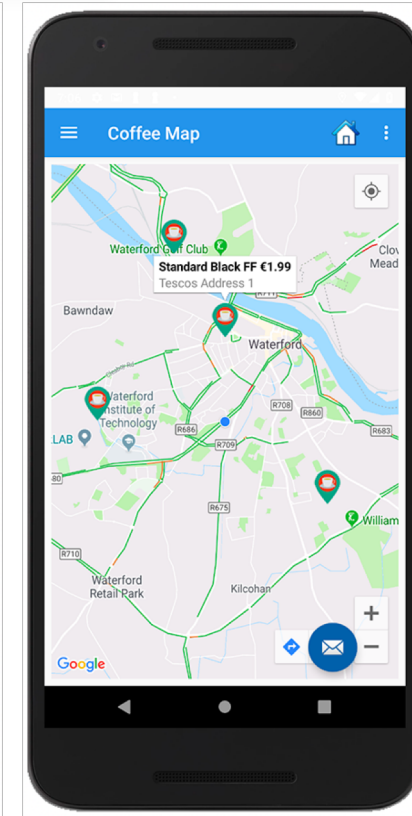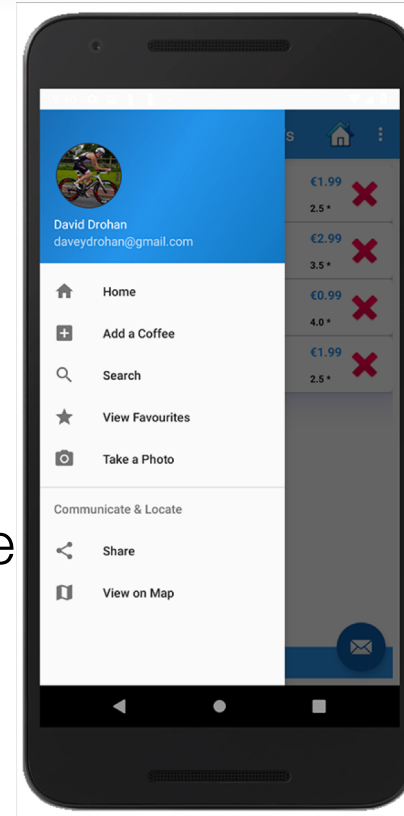- You've developed Android Apps already

❑ 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…

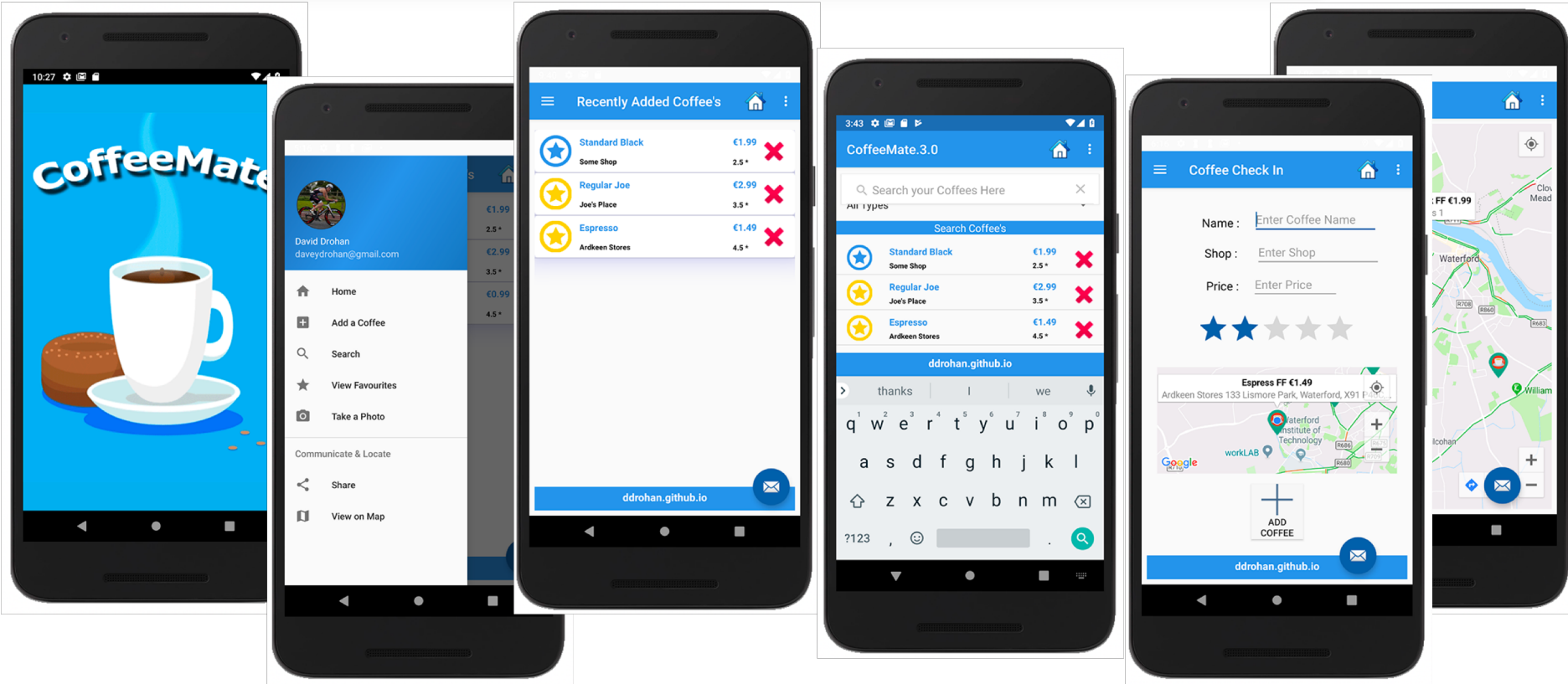# CASE STUDY

❑ *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 Single / Multiple Coffees

- 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?