Mobile Application Development

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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Module Description *

❑ "The aim of this module is to enable the understanding and critical evaluation of mobile app (application) development using native platform technologies, their software frameworks, design patterns and programming tools. The module will draw parallels between competing platforms while also highlighting where they differ."

❑ We'll be focusing on Android and refer to iOS when/where ever applicable

Structure (Suggested Plan ☺)

❑ Week 01 : App Design & Introduction to Android

❑ Week 02 : Android Anatomy & (Android UX - Supplementary)

❑ Week 03 : UI Design Part 1

❑ Week 04 : UI Design Part 2

❑ Week 05 : Android Persistence, Multithreading, Networking & JSON

❑ 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 & Database

❑ Week 10/11 : Firebase Authentication, Storage, Hosting etc. etc. ☺

❑ **<u>Week 12/13</u> : Summative Project Demos**

Assessment *

❏ **100%** Continuous Assessment Module

- 1 Individual Project – Due week 13/14 (TBC [in] April)
  - ◆ 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

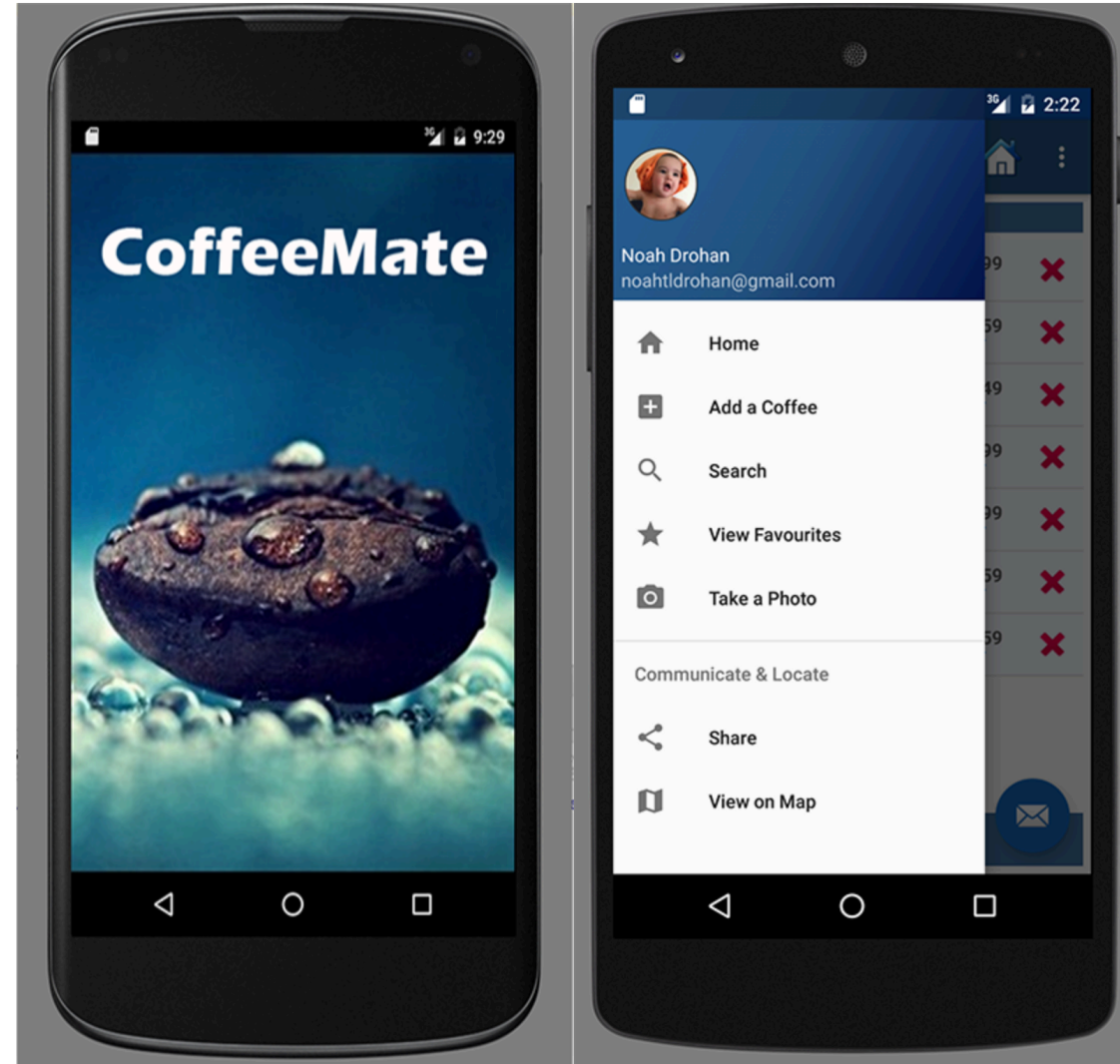We'll talk about the project in more detail later on

Labs Overview *

❑ You'll Cover

- ■ Setting Up/Using Android Studio

- ■ The classic "Hello World" (in an Android App)

- ■ 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…
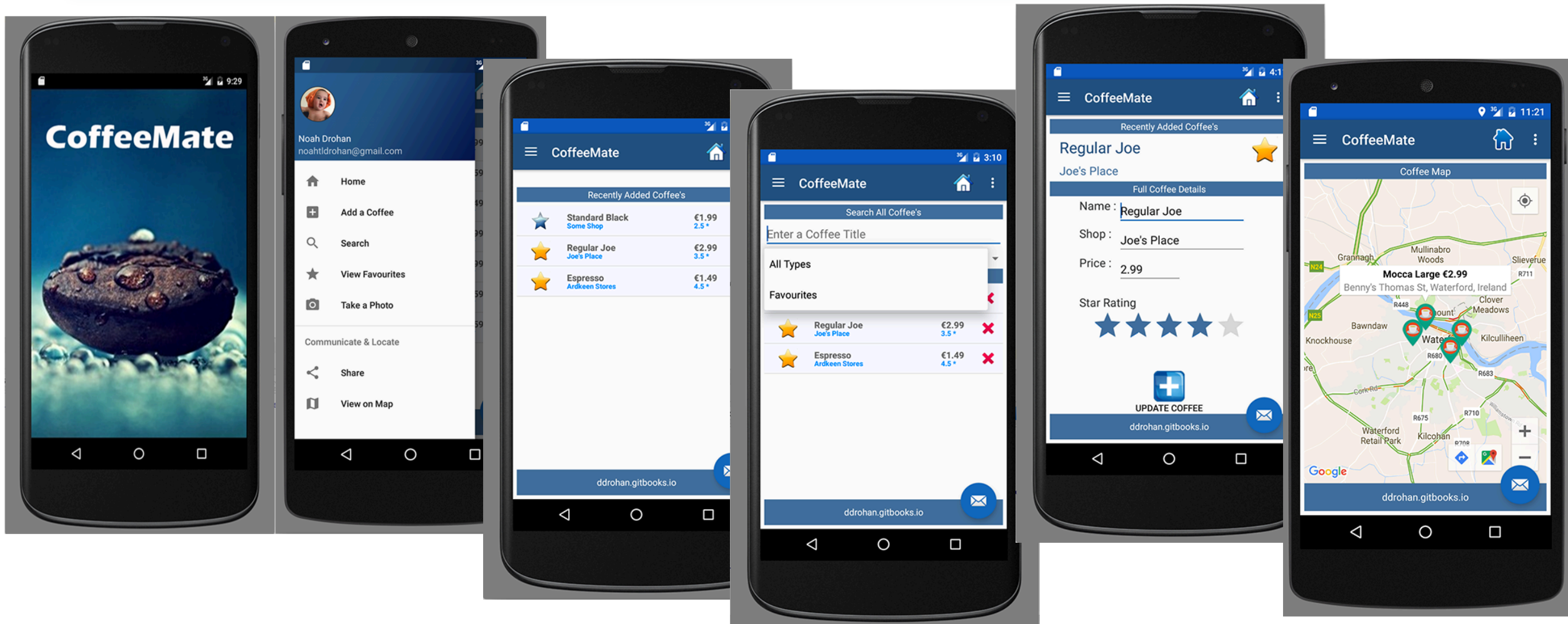
CASE STUDY

❑ ***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?