

# Mobile Application Development

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Produced  
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# Background & Overview

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# Outline

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



# My Background \*

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- ❑ David Drohan BSc., MSc.
- ❑ Lecturing Software Development since 1995
- ❑ Currently delivering Mobile & Web Development Modules on 3<sup>rd</sup> year, 4<sup>th</sup> year and MSc Programmes
- ❑ Contact me at
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  - @daithid73 (twitter)
  - 051 302683 (office)



# Module Description

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- ❑ “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 (The Plan anyway!)

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- ❑ Week 01 : App Design & Introduction to Android
- ❑ Week 02 : Android Anatomy & Android UX
- ❑ Week 03 : UI Design Part 1
- ❑ Week 04 : UI Design Part 2
- ❑ Week 05 : Android Persistence, Multithreading, Networking & JSON
- ❑ Week 06 : Formative Project Demos
- ❑ Week 07 : Google Play Services Part 1 – Google+ Sign In
- ❑ Week 08 : Google Play Services Part 2 – Location Services
- ❑ Week 09 : Google Play Services Part 3 – Google Maps
- ❑ Week 10 : Android Future Trends
- ❑ Week 12 : Summative Project Demos



# Assessment

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- ❑ 100% Continuous Assessment
  - 1 Individual Project – Due week 13 (XY<sup>th</sup> April)
    - ◆ Demos Week 6/12 (X<sup>th</sup> & Y<sup>th</sup> April)
  - Project Ideas **MUST** be unique **AND** all your own original work (mostly!)
  - 1<sup>st</sup> come 1<sup>st</sup> served approach to Project Titles



# Labs Overview \*

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## □ We'll Cover

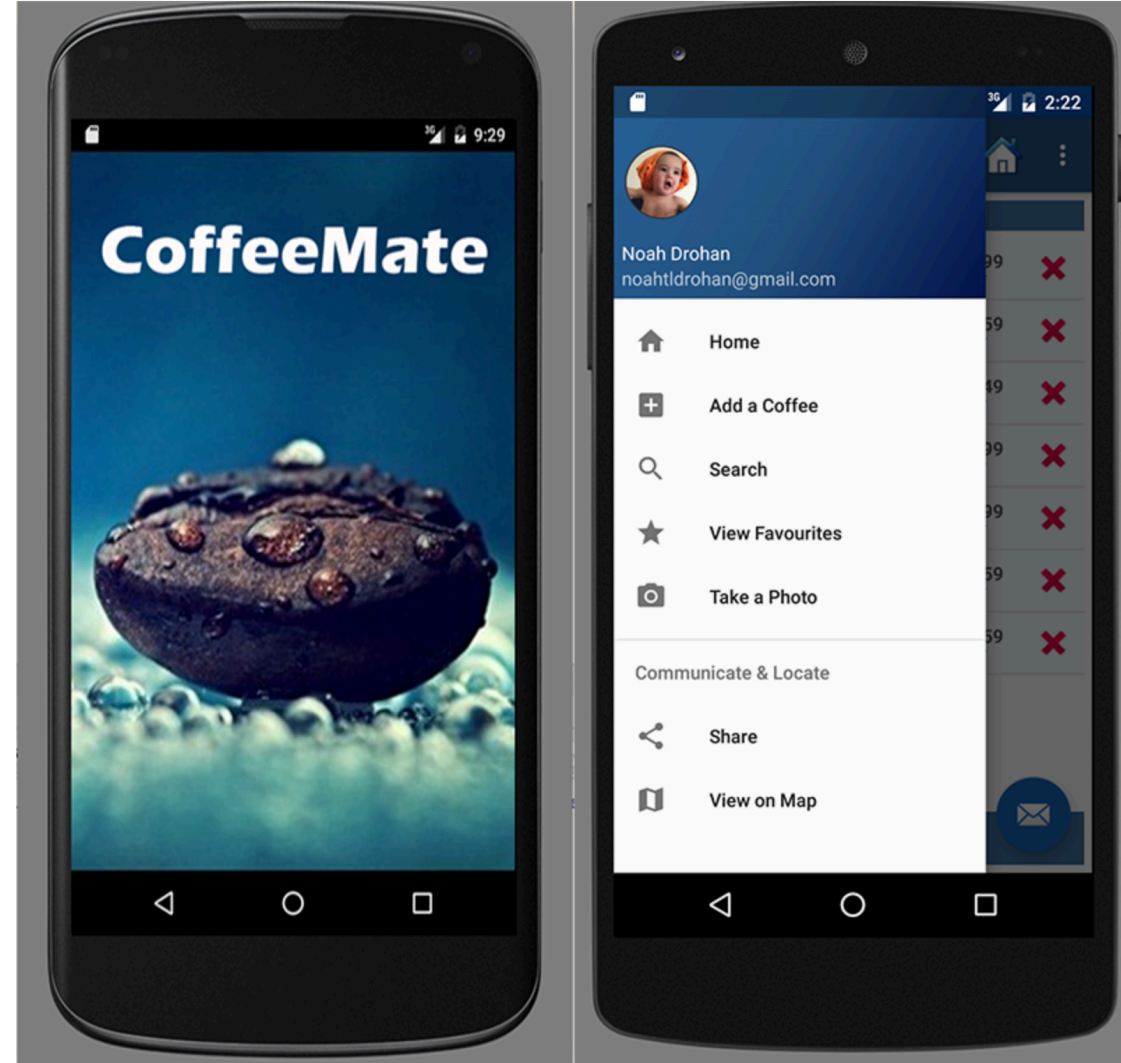
- Setting Up/Using Android Studio
- The classic “Hello World” (in an Android App)
- A “CoffeeMate” Case Study (next slides)
  - we'll develop a number of different versions to demonstrate the use of some of the most common and useful features of an Android App.
- Some Theory & Concepts along the way...





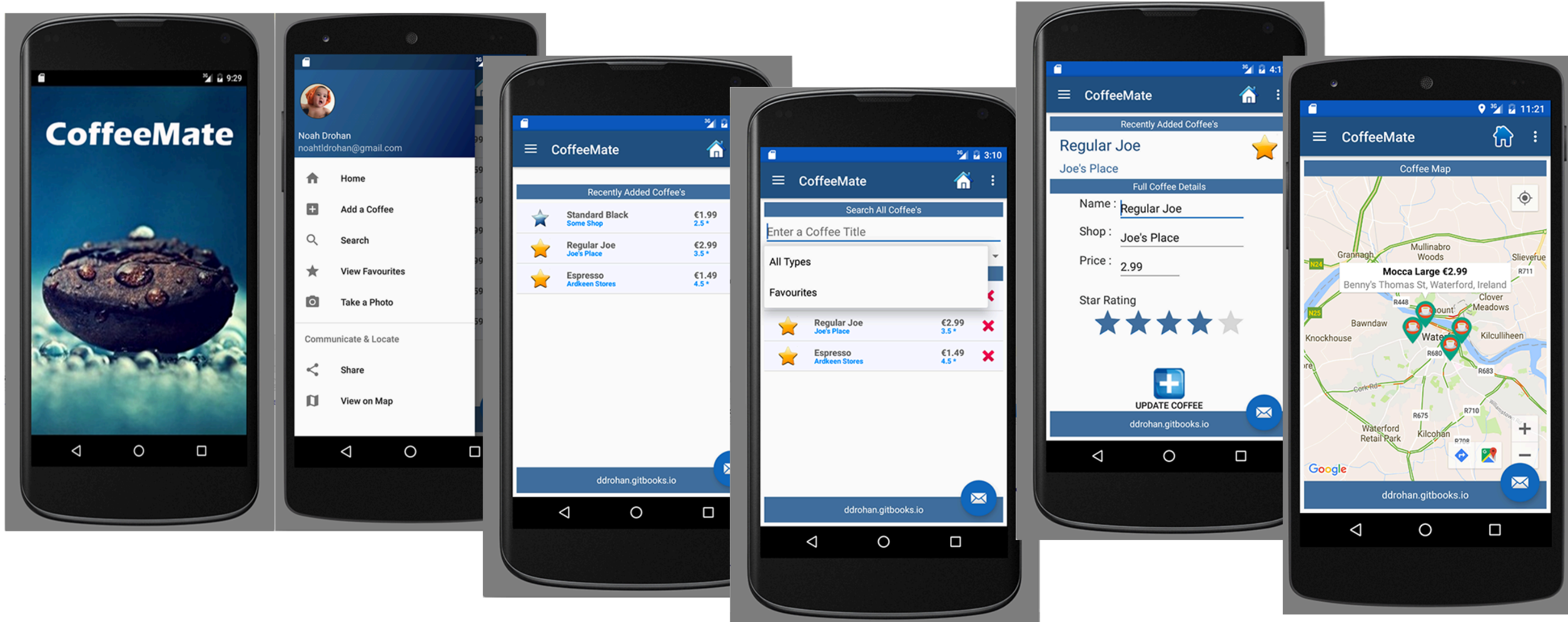
# CASE STUDY

- ❑ **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 we'll end up with this...



# Resources

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[ddrohan.github.io](https://ddrohan.github.io)

[ddrohan.gitbooks.io](https://ddrohan.gitbooks.io)

[moodle.wit.ie](https://moodle.wit.ie)



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# Questions?