

## MODULE DESCRIPTOR

### Module Title

Mobile App Development

Reference	CM3110	Version	3
Created	June 2022	SCQF Level	SCQF 9
Approved	August 2017	SCQF Points	15
Amended	July 2022	ECTS Points	7.5

### Aims of Module

To enable the students to develop well designed and accessible mobile applications making use of appropriate design tools and methods.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Describe how mobile devices can work with fixed network computers in implementing various types of application.
- 2 Select and make effective use of software tools to implement, simulate and test applications for mobile phones and other resource constrained computing devices.
- 3 Design and develop effective mobile computing applications based on a considered choice of system architecture and integrating appropriate software tools and technologies.

### Indicative Module Content

Mobile app development, paper prototyping, mobile design, data persistence, UI metaphors, web services, JSON/XML, mobile accessibility and evaluation.

### Module Delivery

Key concepts are introduced and illustrated through briefings which precede each lab session. In the lab sessions the students will learn practical aspects of mobile programming using a modern integrated development environment.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

*If a major/minor model is used and box is ticked, % weightings below are indicative only.*

**Component 1**

Type: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3

Description: A coursework normally typically consisting of designing, development and testing of a mobile application.

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

The calculation of the overall grade for this module is based on 100% weighing of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	The student needs to achieve an A in C1
<b>B</b>	The student needs to achieve a B in C1
<b>C</b>	The student needs to achieve a C in C1
<b>D</b>	The student needs to achieve a D in C1
<b>E</b>	The student needs to achieve an E in C1
<b>F</b>	The student needs to achieve an F in C1
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 Wallace Jackson, Android Apps for Absolute Beginners, Apress, Berkeley, CA 2017
- 2 Sp?th, Peter ; Friesen, Jeff Learn Java for Android Development: Migrating Java SE Programming Skills to Mobile Development. Springer 2020
- 3 PHILLIPS, B. and STEWART, C., 2017. Android Programming: The Big Nerd Ranch Guide. Big Nerd Ranch Guides.
- 4 Ted Hagos, Learn Android Studio 3. Efficient Android App Development. Apress, Berkeley, CA. 2018