

Unit Outline

COMP2008 Mobile Application Development Semester 2, 2018

Unit study package code:	COMP2008										
Mode of study:	Internal										
Tuition pattern summary:	<p>Note: For any specific variations to this tuition pattern and for precise information refer to the Learning Activities section.</p> <p>Lecture: 1 x 2 Hours Weekly Computer Laboratory: 1 x 2 Hours Weekly</p> <p>This unit does not have a fieldwork component.</p>										
Credit Value:	25.0										
Pre-requisite units:	<p>ISAD1000 (v.0) Introduction to Software Engineering or any previous version AND COMP1002 (v.0) Data Structures and Algorithms or any previous version</p>										
Co-requisite units:	Nil										
Anti-requisite units:	Nil										
Result type:	Grade/Mark										
Approved incidental fees:	Information about approved incidental fees can be obtained from our website. Visit fees.curtin.edu.au/incidental_fees.cfm for details.										
Unit coordinator:	<table><tr><td>Title:</td><td>Dr</td></tr><tr><td>Name:</td><td>David Cooper</td></tr><tr><td>Phone:</td><td>08 9266 5212</td></tr><tr><td>Email:</td><td>David.Cooper@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 343</td></tr></table>	Title:	Dr	Name:	David Cooper	Phone:	08 9266 5212	Email:	David.Cooper@curtin.edu.au	Location:	Building: 314 - Room: 343
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Teaching Staff:	<table><tr><td>Name:</td><td>David Cooper</td></tr><tr><td>Phone:</td><td>08 9266 5212</td></tr><tr><td>Email:</td><td>David.Cooper@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 343</td></tr></table>	Name:	David Cooper	Phone:	08 9266 5212	Email:	David.Cooper@curtin.edu.au	Location:	Building: 314 - Room: 343		
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Administrative contact:	<table><tr><td>Name:</td><td>David Cooper</td></tr><tr><td>Phone:</td><td>08 9266 5212</td></tr><tr><td>Email:</td><td>David.Cooper@curtin.edu.au</td></tr><tr><td>Location:</td><td>Building: 314 - Room: 343</td></tr></table>	Name:	David Cooper	Phone:	08 9266 5212	Email:	David.Cooper@curtin.edu.au	Location:	Building: 314 - Room: 343		
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Learning Management System:	Blackboard (lms.curtin.edu.au)										

Acknowledgement of Country

We respectfully acknowledge the Indigenous Elders, custodians, their descendants and kin of this land past and present. The [Centre for Aboriginal Studies](#) aspires to contribute to positive social change for Indigenous Australians through higher education and research.

Syllabus

Software development principles and practices applied to the design, implementation and testing of mobile applications. Topics include: mobile user interface design, structural design based on standard mobile development frameworks and APIs, integration with online services, evaluation of security and power consumption issues, and testing practices.










Introduction

Welcome to Mobile Application Development (MAD).










Unit Learning Outcomes

All graduates of Curtin University achieve a set of nine Graduate Attributes during their course of study. These inform an employer that, through your studies, you have acquired discipline knowledge and a range of other skills and attributes which employers would value in a professional setting. Each unit in your course addresses the Graduate Attributes through a clearly identified set of learning outcomes. They form a vital part in the process referred to as assurance of learning. The learning outcomes notify you of what you are expected to know, understand or be able to do in order to be successful in this unit. Each assessment for this unit is carefully designed to test your knowledge of one or more of the unit learning outcomes. On successfully completing all of the assessments you will have achieved all of these learning outcomes.

Your course has been designed so that on graduating you will have achieved all of Curtin's Graduate Attributes through the assurance of learning processes in each unit.

On successful completion of this unit students can:		Graduate Attributes addressed
1	Comprehend and articulate mobile platform architectures and capabilities	 
2	Design, implement and test mobile applications	  
3	Identify and implement solutions to security, usability and energy-consumption issues in mobile application	 
4	Integrate mobile applications with online services	 

Curtin's Graduate Attributes

	Apply discipline knowledge		Thinking skills (use analytical skills to solve problems)		Information skills (confidence to investigate new ideas)
	Communication skills		Technology skills		Learning how to learn (apply principles learnt to new situations) (confidence to tackle unfamiliar problems)
	International perspective (value the perspectives of others)		Cultural understanding (value the perspectives of others)		Professional Skills (work independently and as a team) (plan own work)
Find out more about Curtin's Graduate attributes at the Office of Teaching & Learning website: ctl.curtin.edu.au					

Learning Activities

On a weekly basis, you are expected to:

- Attend the lecture (2 hours) (preferred) or watch the iLecture. (Note that, due to the potential for technical issues, we cannot guarantee up-to-date iLecture availability.)
- Attend and participate in a practical session (2 hours).
- Complete the practical work, outside of class if necessary.
- Read the relevant sections of the text book, or other material, as advised by the lecturer (in your own time).

Learning Resources

Online resources

- Online Android developer guides
(<https://developer.android.com/guide/>)
- Phillips, Stewart and Marsicano, "Android Programming: The Big Nerd Ranch Guide", 3rd edition, 2017, Big Nerd Ranch LLC.
(<https://www.bignerdranch.com/books/android-programming/>)
(ISBN/ISSN: 978-0134706054)

Assessment

Assessment schedule

	Task	Value %	Date Due	Unit Learning Outcome(s) Assessed	Late Assessments Accepted?*	Assessment Extensions Considered?*
1	Test	25%	Week: 8 (teaching week 7) Day: Thursday 20 September Time: 15:00	1,2	No	Yes
2	Assignment	25%	Week: 12 (teaching week 10) Day: Thursday 18 October Time: 23:59:59	2,3,4	Yes	Yes
3	Examination	50%	Week: Examination period Day: TBA Time: TBA	1,2,3,4	No	Yes

*Please refer to the Late Assessment and the Assessment Extension sections below for specific details and conditions.

Detailed information on assessment tasks

1. The mid-semester test will be closed book, and cover material presented in the preceding lectures and practical worksheets, as advised by the lecturer.
2. The assignment will involve the design and implementation of a mobile application, in accordance with practices covered in the preceding lectures and practical exercises.

The unit coordinator may require you to provide an oral justification of, or to answer questions about, any piece of written work submitted in this unit. Your response(s) may be referred to as evidence in an Academic Misconduct inquiry. In addition, your assignment submission may be analysed by Turnitin and/or other systems to detect plagiarism and/or collusion

3. The final exam will be closed book, and will cover material from all lectures and practical worksheets.

Pass requirements

To pass the unit, you must achieve a Final Mark of 50% or greater, AND an Examination mark of 45% or greater.

Fair assessment through moderation

Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that students work is evaluated consistently by assessors. Minimum standards for the moderation of assessments are described in the Assessment and Student Progression Manual, available from policies.curtin.edu.au/findapolicy/

Late assessment

Where the submission of a late assessment is permitted, late penalties will be consistently applied in this unit.

Where a late assessment **is** permitted for an assessment item or the entirety of the unit (refer to the Assessment Schedule table in this Unit Outline) and the student does not have an approved assessment extension:

1. For assessment items submitted within the first 24 hours after the due date/time, students will be penalised by a deduction of 5% of the total marks allocated for the assessment task;
2. For each additional 24 hour period commenced an additional penalty of 10% of the total marks allocated for the assessment item will be deducted; and
3. Assessment items submitted more than 168 hours late (7 calendar days) will receive a mark of zero.

Where late assessment **is NOT** permitted for an assessment item or the entirety of the unit (refer to the Assessment Schedule table in this Unit Outline) and the student does not have an approved assessment extension:

1. All assessment items submitted after the due date/time will receive a mark of zero.

Assessment extension

Where an application for an assessment extension **is** permitted for an assessment item(s) within this unit (refer to the Assessment Schedule table in this Unit Outline):

1. A student unable to complete an assessment item by/on the due date/time due to exceptional circumstances beyond the student's control, must apply for an assessment extension using the Assessment Extension Application Form (available from the Forms page at students.curtin.edu.au/administration/) as prescribed by the Academic Registrar.
2. The student will be expected to lodge the form with supporting documentation to the school representative nominated below.
3. Failure to submit this application in a timely manner, may impact upon the assessment process. For applications that are declined this may have significant ramifications on the possible marks awarded.
4. An application may be accepted up to five working days after the due date/time of the assessment item where the student is able to provide a verifiable explanation as to why he or she was not able to submit the application prior to the assessment due date/time.

Where an application for an assessment extension **is NOT** permitted for an assessment item(s) within this unit (refer to the Assessment Schedule table in this Unit Outline):

1. All assessment items submitted after the due date/time will be subject to late penalties or receive a mark of zero depending on the unit permitting late assessment submissions.

Exemptions and Exemption Criteria

In addressing genuine exceptional circumstances that prevent a student from sitting the mid-semester test or submitting an attempt for the assignment, the Unit Coordinator will generally apply an *exemption* rather than an extension. In this case, the student will not have to undertake the relevant assessment, and their mark for it will instead be the same as their Examination mark (as a percentage).

Extensions/exemptions will not be permitted on the basis of:

- Any events reasonably within a student's control.
- Data loss that could have been avoided with appropriate backing up.
- Short periods of illness (or other minor unexpected events) that could reasonably be mitigated against with appropriate planning.

Further Assessment Criteria

The Board of Examiners may consider granting a further assessment for a student who marginally fails this unit, where the student:

- Has not failed more than two units in the current semester;
- Has a Semester Weighted Average (SWA) of at least 50%;
- Has a final mark for this unit of at least 45%;
- Has an examination mark for this unit of at least 40%; and
- Meets all the other conditions listed in the "Further Assessment" section of the Assessment and Student Progression Manual.

Deferred assessments

If your results show that you have been granted a deferred assessment you should immediately check OASIS for details.

Deferred examinations/tests will be held from 11/02/2019 to 14/02/2019 . Notification to students will be made after the Board of Examiners' meeting via the Official Communications Channel (OCC) in OASIS.

Further assessment

Further assessments, if granted by the Board of Examiners, will be held between 11/02/2019 and 14/02/2019 . Notification to students will be made after the Board of Examiners meeting via the Official Communications Channel in OASIS.

It is the responsibility of the student to be available to complete the requirements of a further assessment. If your results show that you have been granted a further assessment you should immediately check OASIS for details.

Reasonable adjustments for students with disabilities/health circumstances likely to impact on studies

A [Curtin Access Plan](#) (CAP) is a document that outlines the type and level of support required by a student with a disability or health condition to have equitable access to their studies at Curtin. This support can include alternative exam or test arrangements, study materials in accessible formats, access to Curtin's facilities and services or other support as discussed with an advisor from [Disability Services](#) (disability.curtin.edu.au). [Documentation](#) is required from your treating Health Professional to confirm your health circumstances.

If you think you may be eligible for a CAP, please contact [Disability Services](#). If you already have a CAP please provide it to the Unit Coordinator **at the beginning of each study period**.

Referencing style

The referencing style for this unit is Chicago.

More information can be found on this style from the Library web site:
<http://libguides.library.curtin.edu.au/referencing>.

Privacy

As part of a learning or assessment activity, or class participation, your image or voice may be recorded or transmitted by equipment and systems operated by Curtin University. Transmission may be to other venues on campus or to others both in Australia and overseas.

Your image or voice may also be recorded by students on personal equipment for individual or group study or assessment purposes. Such recordings may not be reproduced or uploaded to a publically accessible web environment. If you wish to make such recordings for study purposes as a courtesy you should always seek the permission of those who are impacted by the recording.

Recording of classes or course materials may not be exchanged or distributed for commercial purposes, for compensation, or for any other purpose other than personal study for the enrolled students in the unit. Breach of this may subject a student to disciplinary action under Statute No 10 – Student Disciplinary Statute.

If you wish to discuss this please talk to your Unit Coordinator.

Copyright

The course material for this unit is provided to you for your own research and study only. It is subject to copyright. It is a copyright infringement to make this material available on third party websites.

Academic Integrity (including plagiarism and cheating)

Any conduct by a student that is dishonest or unfair in connection with any academic work is considered to be academic misconduct. Plagiarism and cheating are serious offences that will be investigated and may result in penalties such as reduced or zero grades, annulled units or even termination from the course. Assessments under investigation will not be given a mark until the matter is concluded. This may result in the unit grade being withheld or a grade of Fail Incomplete (F-IN) until a decision has been made by the Student Disciplinary Panel. This may impact on enrolment in further units/study periods.

Plagiarism occurs when work or property of another person is presented as one's own, without appropriate acknowledgement or referencing. Submitting work which has been produced by someone else (e.g. allowing or contracting another person to do the work for which you claim authorship) is also plagiarism. Submitted work is subjected to a plagiarism detection process, which may include the use of text matching systems or interviews with students to determine authorship.

Cheating includes (but is not limited to) asking or paying someone to complete an assessment task for you or any use of unauthorised materials or assistance during an examination or test.

From Semester 1, 2016, all incoming coursework students are required to complete Curtin's Academic Integrity Program (AIP). If a student does not pass the program by the end of their first study period of enrolment at Curtin, their marks will be withheld until they pass. More information about the AIP can be found at:

<https://academicintegrity.curtin.edu.au/students/AIP.cfm>

Refer to the Academic Integrity tab in Blackboard or academicintegrity.curtin.edu.au for more information, including student guidelines for avoiding plagiarism.

Information and Communications Technology (ICT) Expectations

Curtin students are expected to have reliable internet access in order to connect to OASIS email and learning systems such as Blackboard and Library Services.

You may also require a computer or mobile device for preparing and submitting your work.

If you wish to complete the practical work and the assignment on your own computer, you will need Android Studio (and associated utilities). This can be obtained free of charge, but you will need to ensure that your computer meets the recommended system requirements, as outlined at <https://developer.android.com/studio/>.

For general ICT assistance, in the first instance please contact OASIS Student Support:

oasisapps.curtin.edu.au/help/general/support.cfm

For specific assistance with any of the items listed below, please contact The Learning Centre:

life.curtin.edu.au/learning-support/learning_centre.htm

- Using Blackboard, the I Drive and Back-Up files
- Introduction to PowerPoint, Word and Excel

Additional information

Enrolment

It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print an Enrolment Advice.

Student Rights and Responsibilities

It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to their rights and responsibilities as a student. These include:

- the Student Charter
- Values and Signature Behaviours
- the University's policy and statements on plagiarism and academic integrity
- copyright principles and responsibilities
- the University's policies on appropriate use of software and computer facilities

Information on all of the above is available through the University's "Student Rights and Responsibilities" website at: students.curtin.edu.au/rights.

Student Equity

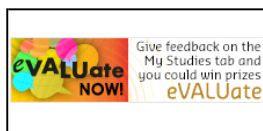
There are a number of factors that might disadvantage some students from participating in their studies or assessments to the best of their ability, under standard conditions. These factors may include a disability or medical condition (e.g. mental illness, chronic illness, physical or sensory disability, learning disability), significant family responsibilities, pregnancy, religious practices, living in a remote location or another reason. If you believe you may be unfairly disadvantaged on these or other grounds please contact Student Equity at eesj@curtin.edu.au or go to http://eesj.curtin.edu.au/student_equity/index.cfm for more information

You can also contact Counselling and Disability services: <http://www.disability.curtin.edu.au> or the Multi-faith services: http://life.curtin.edu.au/health-and-wellbeing/about_multifaith_services.htm for further information.

It is important to note that the staff of the university may not be able to meet your needs if they are not informed of your individual circumstances so please get in touch with the appropriate service if you require assistance. For general wellbeing concerns or advice please contact Curtin's Student Wellbeing Advisory Service at: http://life.curtin.edu.au/health-and-wellbeing/student_wellbeing_service.htm

Recent unit changes

Students are encouraged to provide unit feedback through **eVALUate**, Curtin's online student feedback system. For more information about **eVALUate**, please refer to evaluate.curtin.edu.au/info/.



To view previous student feedback about this unit, search for the Unit Summary Report at https://evaluate.curtin.edu.au/student/unit_search.cfm. See <https://evaluate.curtin.edu.au/info/dates.cfm> to find out when you can **eVALUate** this unit.

Recent changes to this unit include:

This unit is running for the first time this semester.

Program calendar

Calendar Week	Teaching Week	Begin Date	Lecture	Practical	Assessment
1	1	30 Jul	Introduction	—	
2	2	6 Aug	Mobile UIs (1)	Getting Started	
3	3	13 Aug	Mobile UIs (2)	Mobile UIs (1)	
4	4	20 Aug	Events	Mobile UIs (2)	
5	—	27 Aug	Tuition Free Week		
6	5	3 Sep	Local Data	Events	
7	6	10 Sep	Remote Data	Local Data	
8	7	17 Sep	—	Catch Up	Mid-Semester Test
9	—	24 Sep	Tuition Free Week		
10	8	1 Oct	Web Development (1)	Remote Data	
11	9	8 Oct	Web Development (2)	Web Development (1)	
12	10	15 Oct	Frameworks	Web Development (2)	Assignment
13	11	22 Oct	Extra	Frameworks	
14	12	29 Oct	Revision	Extra	
15	—	5 Nov	Study Week		
16	—	12 Nov	Examinations		
17	—	19 Nov	Examinations		