



# DGTL12008 Mobile Application Development

## Term 2 - 2018

Profile information current as at 02/05/2024 05:01 am

All details in this unit profile for DGTL12008 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

This unit will teach you how to develop application software (apps) for mobile devices, building on your knowledge of programming, user experience design and web technologies. You will learn about key features of the mobile industry, mobile technologies, mobile devices and mobile platforms. Through a combination of theory and practice, you will learn how to develop and optimise content for mobile devices, and how to create user interfaces and navigation controls. You will design, implement, test and debug mobile applications using industry-standard software tools and cross-platform application programming interfaces (APIs).

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Prerequisite: (DGTL11006 Coding Fundamentals AND DGTL11005 Web Design) OR MMST11002 Web Design Students who have completed DGTL13002 Mobile Application Development may not enrol in this unit

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2018

- Brisbane
- Bundaberg
- Distance
- Mackay
- Noosa
- Rockhampton
- Sydney

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Written Assessment**

Weighting: 40%

#### 2. **Practical Assessment**

Weighting: 60%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Moodle unit evaluation

##### Feedback

Require more programming task in the weekly tutorials

##### Recommendation

Incorporate programming tasks into the weekly tutorials.

## Unit Learning Outcomes

### On successful completion of this unit, you will be able to:

1. explain key features of the mobile industry, mobile technologies, mobile devices and mobile platforms
2. develop and optimise content for mobile devices
3. create user interfaces and navigation controls for mobile applications
4. design, implement, test and debug mobile applications.

Not applicable

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Written Assessment - 40%	•		•	•
2 - Practical Assessment - 60%	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication	•	•		
2 - Problem Solving		•	•	•
3 - Critical Thinking	•	•	•	•
4 - Information Literacy	•	•	•	•

Graduate Attributes	Learning Outcomes			
	1	2	3	4
5 - Team Work				
6 - Information Technology Competence	•	•	•	•
7 - Cross Cultural Competence	•	•		
8 - Ethical practice	•	•		
9 - Social Innovation				
10 - Aboriginal and Torres Strait Islander Cultures				

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 40%	•	•	•	•		•	•	•		
2 - Practical Assessment - 60%	•	•	•	•		•	•	•		

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Adobe Dreamweaver CC latest version
- Microsoft Word
- Adobe XD CC latest version

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)  
For further information, see the Assessment Tasks.

## Teaching Contacts

**Regina John Luan** Unit Coordinator  
[r.johnluan@cqu.edu.au](mailto:r.johnluan@cqu.edu.au)

## Schedule

### Week 1 - 09 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Mobile Application Development : Overview, marketplace & opportunities		

### Week 2 - 16 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Mobile platforms and Operating Systems (OS)		

### Week 3 - 23 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to jQuery Mobile , HTML & CSS		

### Week 4 - 30 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
UX Design for Mobile - Design Principle and creating themes		

### Week 5 - 06 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
General design planning, prototyping and user testing		

### Vacation Week - 13 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 20 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
iQuery Mobile UI Components		Mobile application 'Design Specification Document' Due: Week 6 Friday (24 Aug 2018) 11:45 pm AEST
		<b>Mobile application 'Design Specification Document'</b> Due: Week 6 Friday (24 Aug 2018) 11:45 pm AEST

### Week 7 - 27 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
jQuery Mobile - Working with images, audio and video		

### Week 8 - 03 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
jQuery Mobile -Listening and Responding to Events		

### Week 9 - 10 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Adding functionality with JavaScript		

### Week 10 - 17 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
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## Application Programming Interfaces (API)

### Week 11 - 24 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Building Apps and Packaging		

### Week 12 - 01 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
Review		<p>Practical Assessment and report Due: Week 12 Friday (5 Oct 2018) 11:45 pm AEST</p> <p><b>Practical Assessment and report</b> Due: Week 12 Friday (5 Oct 2018) 11:45 pm AEST</p>

### Review/Exam Week - 08 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
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### Exam Week - 15 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Mobile application 'Design Specification Document'

#### Assessment Type

Written Assessment

#### Task Description

During Assignment One you will prepare a comprehensive 'Design Specification Document' for a new and exciting mobile application that you propose to develop for Assignment **Two** (2000-2500 words). Mobile application that is innovative, commercially viable and that CLEARLY satisfy an identified need in the marketplace will be viewed more favourably than others.

**Note:** The design specification that you prepare for this assignment is related to the mobile application that you will build in Assignment 2. The two assignments are related.

Further information relating to this task is available on the unit website.

#### Assessment Due Date

Week 6 Friday (24 Aug 2018) 11:45 pm AEST

#### Return Date to Students

Week 8 Friday (7 Sept 2018)

Subject to change

#### Weighting

40%

#### Assessment Criteria

Assessment Criteria	Marks
<p><b>Title page and introduction</b></p> <ul style="list-style-type: none"> <li>professionalism (content, clarity and completeness);</li> <li>all required topics are addressed in sufficient detail;</li> <li>innovative concept;</li> <li>commercially viability;</li> <li>satisfies a defined need;</li> <li>formatting and presentation, and</li> <li>written expression and style (including spelling, grammar, punctuation).</li> </ul>	6
<p><b>Platform</b></p> <ul style="list-style-type: none"> <li>professionalism (content, clarity and completeness);</li> <li>all required topics are addressed in sufficient detail;</li> <li>formatting and presentation, and</li> <li>written expression and style (including spelling, grammar, punctuation).</li> </ul>	6
<p><b>Functional requirements</b></p> <ul style="list-style-type: none"> <li>professionalism (content, clarity and completeness);</li> <li>all required topics are addressed in sufficient detail;</li> <li>formatting and presentation, and</li> <li>written expression and style (including spelling, grammar, punctuation).</li> </ul>	6
<p><b>Navigation map</b></p> <ul style="list-style-type: none"> <li>professionalism (content, clarity and completeness);</li> <li>explains the structure of the app;</li> <li>formatting and presentation, and</li> <li>written expression and style (including spelling, grammar, punctuation).</li> </ul>	4
<p><b>Design</b></p> <ul style="list-style-type: none"> <li>professionalism (content, clarity and completeness);</li> <li>detailed storyboard provided for each page;</li> <li>formatting and presentation, and</li> <li>written expression and style (including spelling, grammar, punctuation).</li> </ul>	10

<b>Timeline</b> • professionalism (content, clarity and completeness); • all milestones and associated timeframes are present and accurate (delivered as a Gantt chart or table); • formatting and presentation, and • written expression and style (including spelling, grammar, punctuation).	4
<b>Referencing</b> • correct use of in-text citations and reference list, and • adherence to the Harvard referencing style	4
<b>Total Marks</b>	40

## Referencing Style

- [Harvard \(author-date\)](#)

## Submission

Online

### Submission Instructions

Please refer to the unit web site for assignment submission instructions.

### Learning Outcomes Assessed

- explain key features of the mobile industry, mobile technologies, mobile devices and mobile platforms
- create user interfaces and navigation controls for mobile applications
- design, implement, test and debug mobile applications.

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## 2 Practical Assessment and report

### Assessment Type

Practical Assessment

### Task Description

During Assignment Two you will develop a physical prototype for a mobile application. Choose either one of the following options for your mobile application prototype:

**Option 1:** Solution-based Mobile application of your choice

or

**Option 2:** Improve an existing Mobile Application idea.

The mobile application must be implemented using HTML5, CSS and jQuery Mobile. An application programming interface (API) or Plugins can be used to support your Mobile Application structure. All content and media elements within the prototype are to be original. You are also required to produce a professionally written report to accompany your prototype. Further information relating to this task is available on the unit website.

### Assessment Due Date

Week 12 Friday (5 Oct 2018) 11:45 pm AEST

### Return Date to Students

Subject to change

### Weighting

60%

### Assessment Criteria

Assessment Criteria	Mark
Conceptualisation	10
Functionality	10
Style and media elements (all content is to be original)	10
Coding	10
Innovation	10
Professionally presented report (content, clarity and completeness)	10
<b>Total Marks</b>	<b>60</b>

**Referencing Style**

- [Harvard \(author-date\)](#)

**Submission**

Online

**Learning Outcomes Assessed**

- explain key features of the mobile industry, mobile technologies, mobile devices and mobile platforms
- develop and optimise content for mobile devices
- create user interfaces and navigation controls for mobile applications
- design, implement, test and debug mobile applications.

**Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice



## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem