COIT12207 *Internet Applications*
Term 2 - 2026

Profile information current as at 12/11/2026 10:34 am

All details in this unit profile for COIT12207 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
Internet applications are interactive services that are used to perform tasks over the Internet. In this unit, you will learn how to develop dynamic mobile-friendly web applications using emerging technologies. Client-side and server-side scripting languages are introduced. You will use a commonly used set of open source technologies to develop database-driven internet applications. Web application architectures and the related frameworks are covered. You will also learn how to secure your applications using a number of security strategies such as authentication and session control.

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 COIT11237 Database Design & Implementation, COIT11222 Programming Fundamentals and COIS12036 Human-Computer Interaction or Prerequisite COIT12167 Database Use and Design, COIT11222 Programming Fundamentals and COIS12036 Human-Computer Interaction Anti-requisite COIT13224 Internet Application Development 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 - 2026
- Brisbane
- Melbourne
- Online
- 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. Social Innovation Questionnaire (Practical and Written Assessment)
Weighting: 20%
2. Website Development (Practical and Written Assessment)
Weighting: 30%
3. Web Application Development (Practical and Written Assessment)
Weighting: 50%

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
- Academic Progression Policy and Procedure
- Student Refund and Credit Balance Policy and Procedure
- 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 Unit coordinator's reflection

Feedback
Promote authentic learning and reduce the impact of GenAI use

Recommendation
Add oral presentation and/or live demo in the assignments.

Unit Learning Outcomes

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

1. Describe and explore Web application architectures and client-server communication methods
2. Investigate, evaluate and use modern development tools and frameworks
3. Develop mobile-friendly websites to support social innovation
4. Apply authentication and other security techniques to secure Internet applications
5. Develop and test database-driven Internet applications using a set of open source technologies.

The Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is adopted by organisations, governments and individuals in many countries and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles. ACS members can use the tool MySFIA to build a skills profile.

This unit contributes to the following workplace skills as defined by SFIA 9 (the SFIA code is included)

- Software Design (SWDN)
- Programming/Software Development (PROG)
- System Integration and Build (SINT)
- User Experience Design (HCEV)
- Content Design and Authoring (INCA)
- Content Publishing (ICPM)
- Information Security (SCTY)
- Functional Testing (TEST)

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level • Introductory Level • Intermediate Level • Graduate Level ◦ Professional Level ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Practical and Written Assessment - 20%	•		•		
2 - Practical and Written Assessment - 30%		•	•	•	•
3 - Practical and Written Assessment - 50%	•	•		•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•		•		•
2 - Problem Solving		•	•	•	•
3 - Critical Thinking			•	•	•
4 - Information Literacy	•		•	•	
5 - Team Work					
6 - Information Technology Competence	•	•	•	•	•
7 - Cross Cultural Competence					
8 - Ethical practice				•	•
9 - Social Innovation			•		
10 - First Nations Knowledges					

Textbooks and Resources

Textbooks

COIT12207

Supplementary

PHP and MySQL Web Development
Edition: 5th edn (2016)
Authors: Welling, L & Thomson, L
Pearson
Upper Saddle River , NJ , USA
ISBN: 9780321833891
Binding: Paperback
If you have issues accessing the eBook at the Library, both paper and eBook can be purchased at the CQUni Bookshop here: http://bookshop.cqu.edu.au (search on the Unit code)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Bootstrap
- Notepad++
- XAMPP and PHP
- Visual Studio Code (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

Lily Li Unit Coordinator
l.li@cqu.edu.au

Schedule

Week 1 - 13 Jul 2026

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Internet Applications • Web application architecture • Front-end and back-end programming • HTML5 web form & form validation • Social innovation topic identification	CQU resources	Complete hands-on projects Identify a social innovation topic for Assignment 1

Week 2 - 20 Jul 2026

Module/Topic	Chapter	Events and Submissions/Topic
JavaScript fundamentals • JavaScript objects, classes and functions • JavaScript HTML DOM • Get values from a form • Design a questionnaire for the social innovation topic identified	CQU resources	Complete hands-on projects Work on Assignment 1

Week 3 - 27 Jul 2026

Module/Topic	Chapter	Events and Submissions/Topic
Bootstrap - front-end framework • Bootstrap web project • Webpage with Bootstrap styles • Overview Bootstrap styles	CQU and online resources	Work on Assignment 1 and submit at the end of week Complete hands-on projects Social Innovation Questionnaire Due: Week 3 Friday (31 July 2026) 11:59 pm AEST

Week 4 - 03 Aug 2026

Module/Topic	Chapter	Events and Submissions/Topic
Styling contents • Create a navigation menu and a footer • Create responsive tables • Create a 'Contact Us' form • Introduction to jQuery	Online resources	Complete hands-on projects Read Assignment 2 requirements

Week 5 - 10 Aug 2026

Module/Topic	Chapter	Events and Submissions/Topic
Grid System • Cards and the Grid System • Create a product details page with collapsible buttons • Embed a video	Online resources	Complete hands-on projects Work on Assignment 2

Week 6 - 17 Aug 2026

Module/Topic	Chapter	Events and Submissions/Topic
More JavaScript Components • Create a carousel • Create a modal dialog • Create tooltips • Project wrap up	Online resources	Complete hands-on projects Work on Assignment 2

Vacation Week - 24 Aug 2026

Module/Topic	Chapter	Events and Submissions/Topic

Week 7 - 31 Aug 2026

Module/Topic	Chapter	Events and Submissions/Topic
Server-side Scripting • Install and Configure XAMPP • Create and run a basic PHP document • Work with PHP functions		Work on Assignment 2 and submit at the end of week Complete hands-on projects Website Development Due: Week 7 Friday (4 Sept 2026) 11:59 pm AEST

Week 8 - 07 Sep 2026

Module/Topic	Chapter	Events and Submissions/Topic
PHP programming • PHP form handling • PHP advanced • PHP OOP	Online resources	Complete hands-on projects Read Assignment 3 requirements

Week 9 - 14 Sep 2026

Module/Topic	Chapter	Events and Submissions/Topic
Work with MySQL database • Work with arrays • Create users and database in MySQL • Create a PHP project that queries and searches a database	Online resources	Complete hands-on projects Work on Assignment 3

Week 10 - 21 Sep 2026

Module/Topic	Chapter	Events and Submissions/Topic
Work with MySQL database (cont.) • Dynamically populate a combo box • Display a list of records in PHP • Add/Edit/Delete a record in PHP	Online resources	Complete hands-on projects Work on Assignment 3

Week 11 - 28 Sep 2026

Module/Topic	Chapter	Events and Submissions/Topic
Security and authentication • Given a vulnerable site, identify some vulnerabilities and secure the site against them • Add authentication to a PHP site Reflective writing	Online resources CQU resources	Complete hands-on projects Work on Assignment 3

Week 12 - 05 Oct 2026

Module/Topic	Chapter	Events and Submissions/Topic
Advanced topics • Add Session Control to your site • Unit wrap up	Online resources	Complete hands-on projects Work on Assignment 3

Exam Week - 12 Oct 2026

Module/Topic	Chapter	Events and Submissions/Topic
		Web Application Development Due: Exam Week Wednesday (14 Oct 2026) 11:59 pm AEST

Vacation/Exam Week - 19 Oct 2026

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Unit Coordinator: Dr Lily Li
Email: l.li@cqu.edu.au
Phone: 07 3023 4253

Assessment Tasks

1 Practical and Written Assessment

Assessment Title
Social Innovation Questionnaire

Task Description
For this assignment, you are required to design and develop an online survey form centred on a social innovation project. You will start by researching different social innovation topics—such as climate change or global inflation—and then choose one issue to investigate more deeply. Based on your selected topic, you will develop appropriate survey questions and build the survey form using HTML5 and JavaScript. Detailed instructions and requirements can be found on the unit website.
Important notes:

1. Students are eligible for an automatic 72-hour extension for this assignment.
2. Re-attempts are not allowed.

AI ASSESSMENT SCALE - AI PLANNING
You may use AI for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.

Assessment Due Date
Week 3 Friday (31 July 2026) 11:59 pm AEST

Return Date to Students
Week 5 Friday (14 Aug 2026)

Weighting
20%

Assessment Criteria
The assignment will be assessed by the following criteria:

- Page structure
- Library references
- Form elements and validation
- JavaScript functions
- Site pages
- Responsiveness
- Custom CSS style

Detailed marking criteria are provided on the unit website.
This assignment is worth 20% of the overall unit marks.

Referencing Style
Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Describe and explore Web application architectures and client-server communication methods
- Develop mobile-friendly websites to support social innovation

2 Practical and Written Assessment

Assessment Title
Website Development

Task Description
In this assignment, you are required to design and develop a website for a small business using Bootstrap 5 and jQuery. The website will showcase a list of products along with detailed information for advertising and sales purposes. It should include a search bar to help users find specific items and a feature that allows users to register their interest in particular products. Full assignment details are available on the unit website.
Important notes:

1. Students are eligible for an automatic 72-hour extension for this assignment.
2. Re-attempts are not allowed.

AI ASSESSMENT SCALE - AI COLLABORATION
You may use AI to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any AI-generated content you use.

Assessment Due Date
Week 7 Friday (4 Sept 2026) 11:59 pm AEST

Return Date to Students
Week 9 Friday (18 Sept 2026)

Weighting
30%

Assessment Criteria
The assignment will be assessed by the following criteria:

- Page structure
- Library references
- Bootstrap elements
- jQuery
- Quality of site pages
- Responsiveness
- CSS style

Detailed marking criteria are provided on the unit website.
This assignment is worth 30% of the overall unit marks.

Referencing Style
Harvard (author-date)

Submission
Online

Learning Outcomes Assessed
- Investigate, evaluate and use modern development tools and frameworks
- Develop mobile-friendly websites to support social innovation
- Apply authentication and other security techniques to secure Internet applications
- Develop and test database-driven Internet applications using a set of open source technologies.

3 Practical and Written Assessment

Assessment Title
Web Application Development

Task Description
This assignment consists of two parts: a web application development project (Part 1) and an oral presentation (Part 2), as outlined below.
Part 1:
You are required to develop a web application for a local small business. The application should enable the business owner to display a list of product items, as well as add, edit, and delete them. To protect system data, the application must include authentication for authorised users. The development will use Bootstrap, PHP and MySQL technologies.
Part 2:
Deliver an oral presentation to demonstrate your project's design, development and testing. You are also required to reflect on your learning experience in this unit. The presentation will be scheduled during the Week 12 tutorial session. Detailed assignment requirements are available on the unit website.
Important notes:
1. Students are eligible for an automatic 72-hour extension for this assignment.
2. Re-attempts are not allowed.

AI ASSESSMENT SCALE - AI COLLABORATION
You may use Al to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any Al-generated content you use.

Assessment Due Date
Exam Week Wednesday (14 Oct 2026) 11:59 pm AEST
Submit a zipped project file and a PPT file to Moodle.

Return Date to Students
Assignment results will be available on certification day of Term 2.

Weighting
50%

Minimum mark or grade
40%

Assessment Criteria
The assignment criteria:
- Authentication and Session Control
- Query and display data
- Update records in the database
- Delete data from the database
- Add records to the database
- Secure code
- Presentation
- Reflection

Detailed marking criteria are provided on the unit website.
This assignment is worth 50% of the overall unit marks. You need to achieve at least 40% of the assignment marks to pass the assignment.

Referencing Style
Harvard (author-date)

Submission
Online

Learning Outcomes Assessed
- Describe and explore Web application architectures and client-server communication methods
- Investigate, evaluate and use modern development tools and frameworks
- Apply authentication and other security techniques to secure Internet applications
- Develop and test database-driven Internet applications using a set of open source technologies.

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