



# COIT12207 *Internet Applications*

## Term 2 - 2017

Profile information current as at 17/05/2022 02:07 pm

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. This unit introduces you to emerging Internet technologies and skills. You will learn how to build dynamic mobile-friendly websites using the most recent web development framework. You will use a commonly used set of open source technologies to develop database-driven Internet applications and Web Services applications. NOTE: If you have successfully completed COIT13224 then this unit should not be taken.

#### 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, COIT11222 and COIS12036 or Prerequisite COIT12167, COIT11222 and COIS12036

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 - 2017

- Brisbane
- Cairns
- Distance
- Melbourne
- Rockhampton
- Sydney
- Townsville

#### 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. **Practical and Written Assessment**

Weighting: 30%

#### 2. **Practical and Written Assessment**

Weighting: 40%

#### 3. **Practical and Written Assessment**

Weighting: 30%

### 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 Unit evaluation

**Feedback**

Increase PHP and JSP topics.

**Recommendation**

The workloads for PHP and JSP topics should be revised.

## Unit Learning Outcomes

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

1. Identify, describe and exploit the main features of Internet applications
2. Configure and validate the development frameworks
3. Create and develop mobile-friendly dynamic website
4. Utilise enterprise-level database connections via an application server
5. Build Internet applications using a set of open source technologies.

Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is in use in over 100 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 at

<https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>

This unit contributes to the following workplace skills as defined by SFIA. The SFIA code is included:  
Program ming/Software Development (PROG),

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Practical and Written Assessment - 30%	•	•	•		
2 - Practical and Written Assessment - 40%	•	•		•	•
3 - Practical and Written Assessment - 30%		•			•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5

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 - 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 - Practical and Written Assessment - 30%	•	•		•		•				
2 - Practical and Written Assessment - 40%	•	•		•		•				
3 - Practical and Written Assessment - 30%	•	•	•	•						

## Textbooks and Resources

### Textbooks

COIT12207

#### Supplementary

##### PHP and MySQL Web Development

Edition: 5th edn (2016)

Authors: Welling, L & Thomson, L

Pearson Education

Upper Saddle River , NJ , USA

Binding: Paperback

#### Additional Textbook Information

No compulsory textbook is required for this unit. The supplementary textbook can be purchased if you wish, at the CQUni Bookshop here: <http://bookshop.cqu.edu.au>

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

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

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Bootstrap
- Java EE and NetBeans IDE
- Notepad++
- Sublime text editor
- XAMPP and PHP

## 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](mailto:l.li@cqu.edu.au)

## Schedule

### Week 1 - 10 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Bootstrap <ul style="list-style-type: none"><li>• Bootstrap web project</li><li>• Webpage with Bootstrap styles</li><li>• Overview Bootstrap styles</li></ul>		

### Week 2 - 17 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Styling contents <ul style="list-style-type: none"><li>• Navigation menu and footer</li><li>• Responsive tables</li><li>• Forms</li></ul>		

**Week 3 - 24 Jul 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Grid System <ul style="list-style-type: none"> <li>Image thumbnails and grid system</li> <li>Page with comment threads</li> <li>Embed videos</li> </ul>		

**Week 4 - 31 Jul 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Advanced JavaScript Components <ul style="list-style-type: none"> <li>Carousel</li> <li>Modal</li> <li>Wrap contents in panels and accordions</li> <li>Work on assignment 1</li> </ul>		

**Week 5 - 07 Aug 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Web applications with PHP <ul style="list-style-type: none"> <li>Install and Configure XAMPP</li> <li>Create and run a basic PHP document</li> <li>Functions and Exception handling</li> </ul>		<b>Assignment 1</b> Due: Week 5 Friday (11 Aug 2017) 5:00 pm AEST

**Vacation Week - 14 Aug 2017**

Module/Topic	Chapter	Events and Submissions/Topic

**Week 6 - 21 Aug 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Work with MySQL database <ul style="list-style-type: none"> <li>Work with arrays</li> <li>Create users and database in MySQL</li> <li>PHP project that queries and searches the database</li> </ul>		

**Week 7 - 28 Aug 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Work with MySQL database (cont.) <ul style="list-style-type: none"> <li>Dynamically populate combo box</li> <li>Display a list of records in PHP</li> <li>Add/Edit/Delete a record</li> </ul>		

**Week 8 - 04 Sep 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Security and authentication <ul style="list-style-type: none"> <li>Secure the site against vulnerabilities</li> <li>Add authentication to a PHP site</li> </ul>		

**Week 9 - 11 Sep 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Advanced topics <ul style="list-style-type: none"> <li>Add session controls</li> <li>Work on assignment 2</li> </ul>		<b>Assignment 2</b> Due: Week 9 Friday (15 Sept 2017) 5:00 pm AEST

**Week 10 - 18 Sep 2017**

Module/Topic	Chapter	Events and Submissions/Topic
JAVA Web applications <ul style="list-style-type: none"> <li>Install and configure NetBeans</li> <li>Create a JSF project</li> </ul>		

**Week 11 - 25 Sep 2017**

Module/Topic	Chapter	Events and Submissions/Topic
Working with Beans		
<ul style="list-style-type: none"> <li>• Create a Managed Bean</li> <li>• Link a Managed Bean in your project</li> </ul>		
<b>Week 12 - 02 Oct 2017</b>		
Module/Topic	Chapter	Events and Submissions/Topic
Facelets Templates		
<ul style="list-style-type: none"> <li>• Create a Facelets Template</li> <li>• Create a Template Client File</li> <li>• Work on Assignment 3</li> </ul>		<b>Assignment 3</b> Due: Week 12 Friday (6 Oct 2017) 5:00 pm AEST
<b>Review/Exam Week - 09 Oct 2017</b>		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Exam Week - 16 Oct 2017</b>		
Module/Topic	Chapter	Events and Submissions/Topic

## Term Specific Information

There is no prescribed textbook for this unit.

## Assessment Tasks

### 1 Assignment 1

#### Assessment Type

Practical and Written Assessment

#### Task Description

In this assignment, you are asked to design and build a website for a small business using Bootstrap. The website will display product list and product details. The website will provide a search bar to allow the customer to search for the items. The customer should be able to select the product and to add the selected items onto the shopping cart. Assignment details can be found from the unit website.

#### Assessment Due Date

Week 5 Friday (11 Aug 2017) 5:00 pm AEST

Submit assignment via Assessment block on Moodle

#### Return Date to Students

Week 6 Friday (25 Aug 2017)

Assignment 1 results released

#### Weighting

30%

#### Assessment Criteria

Assignment will be assessed by the following criteria:

- Page structure (10%)
- Library reference (10%)
- Bootstrap elements (40%)
- Site components (22%)
- Responsiveness (14%)
- CSS style (4%)

This assignment is worth 30% of the overall unit marks.

#### Referencing Style

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

**Submission**

Online

**Submission Instructions**

See assignment specification on unit website

**Learning Outcomes Assessed**

- Identify, describe and exploit the main features of Internet applications
- Configure and validate the development frameworks
- Create and develop mobile-friendly dynamic website

**Graduate Attributes**

- Communication
- Problem Solving
- Information Literacy
- Information Technology Competence

## 2 Assignment 2

**Assessment Type**

Practical and Written Assessment

**Task Description**

This assignment asks you to develop a property management web application for a local realtor. The application should allow the user to add, edit and delete the properties. The application should secure the system information by providing authentication to the authorized user. PHP and MySQL technologies will be used in the development. The detailed specifications are available in the unit website which can be accessed through Student Portal.

**Assessment Due Date**

Week 9 Friday (15 Sept 2017) 5:00 pm AEST

Submit assignment via Assessment block on Moodle

**Return Date to Students**

Week 11 Friday (29 Sept 2017)

Assignment 2 results released

**Weighting**

40%

**Assessment Criteria**

The assignment criteria:

- Authentication and Session Control 15%
- Query and display data 15%
- Update records in the database 15%
- Delete data from the database 15%
- Add data to the database 10%
- Secure code 10%
- Code reuse 10%
- Presentation 5%
- Screenshots show site functioning 5%

More details are available in the assignment specification. This assignment is worth 40% of the overall unit marks.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

See assignment specification

**Learning Outcomes Assessed**

- Identify, describe and exploit the main features of Internet applications
- Configure and validate the development frameworks
- Utilise enterprise-level database connections via an application server
- Build Internet applications using a set of open source technologies.



## Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Information Technology Competence

## 3 Assignment 3

### Assessment Type

Practical and Written Assessment

### Task Description

Firstly, you are asked to create a simple Rock-Paper-Scissors game for the Web. It will be for a single player playing against the computer. Java Web Technologies should be used for this application. Secondly, you are asked to write a reflection report (500-1000 words) for the Internet application technologies learnt in this unit. The detailed specifications are available in the unit website which can be accessed through Student Portal.

### Assessment Due Date

Week 12 Friday (6 Oct 2017) 5:00 pm AEST

Submit assignment via Assessment block on Moodle

### Return Date to Students

Certificate day

### Weighting

30%

### Assessment Criteria

Assignment will be assessed based on the following criteria:

- Index page 25%
- Response page 25%
- Managed Bean 30%
- Reflection report 20%

The detailed specifications are available on the unit website which can be accessed via Student Portal. This assignment is worth 30% of the overall unit marks.

### Referencing Style

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

### Submission

Online

### Submission Instructions

See assignment specification

### Learning Outcomes Assessed

- Configure and validate the development frameworks
- Build Internet applications using a set of open source technologies.

## Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

## 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