



MMST12017 Game Design

Term 1 - 2024

Profile information current as at 14/05/2024 08:41 am

All details in this unit profile for MMST12017 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

Digital games, also referred to as video games, computer games, console games, online games or mobile games, exist in a variety of formats, platforms and genres. This unit provides an introduction to the theories, principles and methods of game design. It analyses the essential elements of games that designers work with to create the all-important player experience. Activities such as conceptualising, designing, prototyping and evaluating games are explored.

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 or MMST11002 Web Design

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 1 - 2024

- Brisbane
- Bundaberg
- Cairns
- Mackay
- Online
- Rockhampton

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 Assessment**

Weighting: 30%

2. **Practical Assessment**

Weighting: 25%

3. **Practical Assessment**

Weighting: 45%

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 Student feedback

Feedback

The unit resources and assessment will be reviewed to ensure the curriculum is up-to-date, whilst delivering a balanced workload that continues to engage students and deliver solid learning outcomes.

Recommendation

Student performance and engagement will be monitored during the next iteration of this unit, and student feedback will be sought to provide evidence for the approach.

Unit Learning Outcomes

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

1. Explain theories, principles and methods of game design
2. Conceptualise a game and communicate ideas through design documentation
3. Competently use software tools for creating games and game assets
4. Create a prototype for a game, applying theories, principles and methods of game design
5. Evaluate a game in terms of theories and principles of game design

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 Assessment - 30%	•			•	•
2 - Practical Assessment - 25%	•	•	•		
3 - Practical Assessment - 45%	•	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•
3 - Critical Thinking	•	•	•	•	•

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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

[illegible]

Textbooks and Resources

Textbooks

MMST12017

Prescribed

Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Fourth Edition

Third Edition (2018)

Authors: Tracy Fullerton

CRC Press

Boca Raton , Florida , United States

ISBN: 9781138098770

Binding: Website Link

MMST12017

Supplementary

The Art of Game Design: A Book of Lenses

Third Edition (2020)

Authors: Jesse Schell

CRC Press

Boca Raton , Florida , United States

ISBN: 9781138632059

Binding: eBook

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microsoft Powerpoint
- Microsoft Word
- Piskel (free from <http://www.piskelapp.com>)
- Adobe Creative Cloud Suite (student pricing available from <http://www.adobe.com/au/creativecloud/buy/students.html>)
- Unity Personal Edition Long Term Support (LTS) Release 2022.3.14f1 64 bit+ (available from <https://unity.com/releases/editor/qa/lts-releases>) or install via the Unity Hub)

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Jim Picton Unit Coordinator

j.picton@cqu.edu.au

Schedule

Week 1 - 04 Mar 2024

Module/Topic

Chapter

Events and Submissions/Topic

An introduction to games

Hunicke, R, LeBlanc, M & Zubek, R 2004, *MDA: A Formal Approach to Game Design and Game Research*, viewed 6 February 2024, <http://www.cs.northwestern.edu/~hunicke/MDA.pdf>
Kramer, W 2000, *What is a Game?*, viewed 6 February 2024, <https://web.archive.org/web/20220727155051/http://www.thegamesjournal.com/articles/WhatIsaGame.shtml>
Maroney, K. 2001, *My Entire Waking Life*, viewed 6 February 2024, <https://web.archive.org/web/20221208215052/http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml>

Week 2 - 11 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
The role of the game designer	Fullerton, T 2014, <i>Chapter 1: The Role of the Game Designer</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	

Week 3 - 18 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
The structure of games	Fullerton, T 2014, <i>Chapter 2: Structure of Games</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	

Week 4 - 25 Mar 2024

Module/Topic	Chapter	Events and Submissions/Topic
Conceptualising a game	Fullerton, T 2014, <i>Chapter 6: Conceptualisation</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	Game Concept Document (GCD) & Game Design Journal (Weeks 1-4) Due: Week 4 Friday (29 Mar 2024) 11:45 pm AEST

Week 5 - 01 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
Prototyping a game	Fullerton, T 2014, <i>Chapter 7: Prototyping</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	

Vacation Week - 08 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
Mid-term break (no classes)		

Week 6 - 15 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
Formal game elements	Fullerton, T 2014, <i>Chapter 3: Working with Formal Elements</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	

Week 7 - 22 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
Dramatic game elements	Fullerton, T 2014, <i>Chapter 4: Working with Dramatic Elements</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	Playable Paper Prototype Game, Playtest Video & Game Design Journal (Weeks 5-7) Due: Week 7 Friday (26 Apr 2024) 11:45 pm AEST

Week 8 - 29 Apr 2024

Module/Topic	Chapter	Events and Submissions/Topic
System dynamics	Fullerton, T 2014, <i>Chapter 5: Working with System Dynamics</i> , in <i>Game Design Workshop</i> , CRC Press, 2014.	

Week 9 - 06 May 2024

Module/Topic	Chapter	Events and Submissions/Topic
Communicating your designs	Fullerton, T 2014, <i>Chapter 14: Communicating your Designs</i> , in Game Design Workshop, CRC Press, 2014.	
Week 10 - 13 May 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Digital prototyping	Fullerton, T 2014, <i>Chapter 8: Digital Prototyping</i> , in Game Design Workshop, CRC Press, 2014.	
Week 11 - 20 May 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Publishing a game	Fullerton, T 2014, <i>Chapter 15: Understanding the New Game Industry</i> , pp. 470-474, in Game Design Workshop, CRC Press, 2014.	
Week 12 - 27 May 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Review Week	Please complete the 'Have your Say' student feedback survey which has been emailed to your CQU student email account.	Unity Digital Prototype Game, Playtest Video & Game Design Journal (Weeks 8-11) Due: Week 12 Friday (31 May 2024) 11:45 pm AEST
Review/Exam Week - 03 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 10 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Game Concept Document (GCD) & Game Design Journal (Weeks 1-4)

Assessment Type

Practical Assessment

Task Description

Using a provided Game Concept Document (GCD) template, you will create a FEASIBLE, CLEAR, and CONCISE proposal for a modest 2D game design project that addresses the theme 'Gamechanger'. This theme challenges you to design a game that addresses a contemporary social issue. The United Nations website has a list of '17 Sustainable Development Goals' (link - <https://sdgs.un.org/goals>) which will help you generate ideas. Additionally, you will start your ongoing Game Design Journal (Blog) by responding to the specified blog topics/tasks for weeks 1-4.

TASK 1: GAME CONCEPT DOCUMENT (GCD)

You will be provided an editable GCD template to develop your game's concept. The following sections make up the document's structure:

- *Core statement*; your 'Elevator Pitch' - sell your idea!
- *Background*; Why are you making this game? How is it different to other games in the market? How does it address the core thematic element?
- *Game Narrative*; Set the scene and provide the backstory. Describe the protagonist, the gameworld and objectives and how these drive the gameplay.
- *Target Audience*; A brief overview explaining WHO you are designing the game for (will link to an Audience Persona document in the Appendix).

- *Mechanics, Dynamics & Aesthetics (MDA)*; How will your game design elements work together to deliver a good player experience and meet the expectations of the 3 aesthetic constraints?
- *Key Features*; A feature list which explains what happens in your game world, when, why and how?
- *Game Assets*; List the main game assets you will need to develop for the paper prototype game (Assignment 2) and digital prototype game (Assignment 3). This is your best guess, and is designed to get you into the habit of forecasting which is a key project management skill.
- *Appendix*: This will include a supplied and completed Audience Persona template, and any other supporting information you would like to provide.

Your GCD is the basis for this term's game design projects and will lead to creation of a paper prototype (Assignment 2), then a digital prototype (Assignment 3). Future assignments will be made simpler by a well-planned GCD.

Considerations for this task

The title of the 2024 offering of MMST12017 is 'Gamechanger' with the core thematic element requiring your game to address a contemporary social or sustainable development issue. For all MMST12017 submissions, you **MUST** consider the core thematic element as a design restriction during the game design process. Failure to meaningfully incorporate the theme into your submission will result in a 30% penalty for the GCD task. The genre and type of game project you choose to work on are entirely optional, but your proposal **MUST** effectively engage with the core thematic element, and be feasible within the given timeframe. The best game ideas are often small, have an engaging story, and use simple game mechanics.

Your game concept must include substantial visual elements that lend themselves to physics interactions. Specifically, you will not design a purely quiz or text-based game. However, you may use such mechanics in your game. Although your final digital game is not due until Week 12, it is important to acknowledge all constraints in the early stages of the game design process.

Your game concept must show understanding of both formal and dramatic game elements, with particular emphasis on the following three core dramatic elements:

1. **Narrative.** Game as drama (strong backstory that sets the scene and creates interest)
2. **Challenge.** Game as obstacle course (include escalated challenges)
3. **Discovery.** Game as uncharted territory (make the player feel like an explorer)

Narrative and challenge are more important than discovery, but all three must be factored into your design. How you do this is up to you!

It is important that you do NOT ZIP your GCD document as it must pass through the Turn-it-in software on the unit website.

TASK 2: GAME DESIGN JOURNAL (BLOG) WEEKS 1-4

Respond to weekly critical reflection tasks on time using the provided on the unit website with the supplied Moodle blogging tool. Your responses may be written or recorded in video/audio format. I will read and respond to student blogs each week, so do not leave this task until the last minute! Unless you have an approved extension, blog posts submitted after the Assignment 1 due date will NOT be graded.

A note about designing computer games

Because this is most likely your first experience with game design, you will discover that there is a lot to learn in a short period of time. It is critical that your game concept be realistic and achievable; after all, you are not creating the next Call of Duty or Mario Brothers! Traditionally, students are encouraged to design and develop a simple 2D game, such as a platformer, dungeon crawler, or racing game. However, if you have prior experience or are looking for a challenge, you are welcome to design and develop a simple 3D game (check with the Unit Coordinator - Jim Picton - first).

A note about Artificial Intelligence (AI) tools and MMST12017 Assessment Tasks

You are welcome to use Artificial Intelligence (AI) tools such as ChatGPT to help you generate ideas for your game. Although a range of ideation strategies are presented in the courseware for this unit, AI will become part of your life post-graduation so you are encouraged to experiment with it. However, you **MUST** use AI ethically and inline with the 'Supplementary Notes' for the assessment task (below). We will discuss this further when term is underway. If you are unsure at any stage, please ask.

Assessment Due Date

Week 4 Friday (29 Mar 2024) 11:45 pm AEST

Return Date to Students

Assignment 1 will be marked and returned two weeks after submission.

Weighting

30%

Assessment Criteria

Deliverables:

1. *Game Concept Document (GCD)*. An editable GCD template will be supplied for this task. Once complete, you will upload this document as an UNZIPPED Microsoft Word-format document through the Assignment 1 submission page on the unit website.
2. *Game Design Journal (Weeks 1-4)*. Complete journal (blog) entries addressing designated topics/tasks on a weekly basis.

Allocation of marks:

- Game Concept Document (GCD) = 24 marks
- Game Design Journal (Weeks 1-4) = 6 marks
- Total = 30 marks (30% of your overall score for MMST12017)

Supplementary notes:

- Your submission MUST meet the constraints of the task.
- It is important that you do NOT Zip your GCD when submitting it via the unit website.
- The GCD and ideas within it will be assessed against for feasibility, clarity and quality.
- The underpinning game concept is sufficiently ambitious i.e. not too simplistic but reflects an outcome that is realistic and achievable.
- Evidence of extra effort with respect to innovation, creativity and production value may result in higher marks.
- The game design ideas within your GCD MUST be original. You cannot use someone else's Intellectual Property (IP) within your work e.g. Monopoly, Star Wars or fan-related concepts.
- You may use Artificial Intelligence (AI) engines such as ChatGPT as part of your ideation workflow, however you MUST explain how it was used in the context of your design (document this in your blog or as an Appendix to your GCD).
- You must NOT use AI to generate your written work, including your blog posts, but may use it to check the quality of your writing.
- Failure to meaningfully address the core thematic element will result in a -30% penalty against the final mark for this assignment.
- Unless you have an approved extension, Game design Journal (blog) entries made after the Assignment 1 due date will NOT be marked.
- Overdue submissions will receive a -5% per day penalty.

Please refer to the unit website for the GCD template, detailed assignment criteria, along with previous student exemplars and supporting materials.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Create a prototype for a game, applying theories, principles and methods of game design
- Evaluate a game in terms of theories and principles of game design

Graduate Attributes

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

2 Playable Paper Prototype Game, Playtest Video & Game Design Journal (Weeks

5-7)

Assessment Type

Practical Assessment

Task Description

Assignment 2 requires you to develop a **playable** paper prototype game addressing the theme, and based on the Game Concept Document (GCD) you developed for Assignment 1. You will also create a short playtest video of no longer than 5 minutes, showing the important parts of your paper prototype gameplay. Finally, you will continue working on your Game Design Journal (Blog) for weeks 5-7. In combination, these three tasks allow you to demonstrate that you can apply your understanding of the theoretical game design concepts covered in the unit textbook and broader course material, and will set you up for success in Assignment 3.

TASK 1: PLAYABLE PAPER PROTOTYPE GAME

Paper prototyping is used extensively within the game industry and it allows game designers to rapidly develop, playtest and iterate simplified versions of game mechanics, dynamics and aesthetics to improve the overall player experience. Once complete, your paper prototype game will become the blueprint for the final game design task, the creation of a simple digital game prototype (Assignment 3). Present your game thoughtfully and include all assets required for gameplay. You may choose to do this as a Word document, PDF file or as folders contained within a ZIP file.

Considerations for this task

The title of the 2024 offering of MMST12017 is 'Gamechanger' with the core thematic element requiring your game to address a contemporary social or sustainable development issue. Failure to meaningfully incorporate the theme into your submission, or failing to include a playtest video to support your prototype, will result in a 30% penalty for this assignment.

Q&A1: What does 'playable' mean?

The term 'playable' means exactly that! Consider Assignment 2 to be a 'boardgame' version, or paper-based approximation, of your underpinning game design concept. You will use it to test the core aspects of your game concept and ensure that it will be enjoyable to play and makes good use of game design principles. Your submission **MUST** include all game objects required for game play, with the exception of common items such as dice and counters.

Q&A2: But aren't boardgames and digital games different?

Designing a boardgame that will eventually become a digital game can be difficult and time-consuming. Some aspects of the gameplay will not translate across mediums, but don't let this deter you. You are attempting to create a simplified version of your game concept in order to test your core game mechanics, dynamics, and aesthetics by developing a playable paper version of your game. Because the game is playable, you can put it in the hands of your target audience and get 'real' player feedback to help you build a stronger and more enjoyable game. Here are some common examples to highlight differences between board and digital games:

- **Game Style/Genre.** Regardless of whether you are hoping to create a dungeon crawler; shooter; racing game; adventure game; platformer, or simple arcade game for your Assignment 3 digital submission, each of these game types can be replicated as a boardgame. The easiest way to do this is to visualise the gameworld from a top-down perspective. If you are struggling for inspiration, browse some of the game concepts on platforms such as [Kickstarter](#).
- **Movement.** Controlling player movement in boardgames is generally done through dice-rolls, turns or some form of 'spinner'. In a digital version of the game, the player will (generally) use the keyboard to move the player around and use the game engine physics settings to influence gameplay.
- **Combat / Interactions.** Boardgames have simple systems in place for line-of-sight and combat between players and enemies. This may include listing abilities and scores for various 'classes' of character in your rules and using dice rolls or turns to decide the outcome of interactions. Digitally, combat is controlled by player movement and scripts attached to the player and enemy game objects.
- **Replayability.** Each time a game is played it must play differently in order to keep the player engaged. Simple methods to achieve this in a boardgame include using moveable markers on gameboard tiles to indicate collectable 'pick-ups' (health, power-ups, weapons, hazards etc); using a modular tile system which can be setup differently for each game; using an 'Event' card system which forces players to draw a card(s) from specific piles when they begin a new turn / move into a room / or land on a specific gameboard tile. In the digital version, these events can be controlled by creating spawning points for game objects or even have dynamically generated maps. You can use whichever system you choose, but you **WILL** implement one (or more) systems to ensure your boardgame plays differently and offers a dynamic play experience.

Q&A3: Am I allowed to create a quiz or text-based game?

- No. You may not create a purely quiz or text-based game, although you may use such mechanics in your game. Your game prototype must include substantial visual elements that will lend themselves to physics interactions when transformed into a digital game for Assignment 3. Although your final digital game is not due until Week 12, it is important to acknowledge all constraints in the early stages of the game design process.

TASK 2: PLAYTEST VIDEO

To showcase the important parts of your paper prototype gameplay you will create a short video (maximum 5 minutes). Do NOT ZIP your playtest video, simply upload it into the unit website through the Assignment 2 submission page.

TASK 3: GAME DESIGN JOURNAL (BLOG) WEEKS 5-7

Respond to weekly critical reflection tasks on time using the provided Moodle blogging tool. Your responses may be written or recorded in video/audio format. I will read and respond to student blogs each week, so do not leave this task until the last minute! Unless you have an approved extension, blog posts submitted after the Assignment 2 due date will NOT be graded.

Assessment Due Date

Week 7 Friday (26 Apr 2024) 11:45 pm AEST

Return Date to Students

Assignment 2 will be marked and returned two weeks after submission.

Weighting

25%

Assessment Criteria

Deliverables:

1. *Playable paper prototype game.* PLAYABLE game based on the Assignment 1 GCD and complete with all rules, procedures and game objects required to physically play your game. Present your game prototype thoughtfully. Either scan your paper components into a Word/PDF document, or include all of the associated digital files in a ZIP file for submission.
2. *Playtest Video.* To showcase the important parts of your paper prototype gameplay you WILL create a short video (maximum 5 minutes). Do NOT ZIP the video, simply upload it into the unit website through the Assignment 2 submission page.
3. *Game Design Journal (Weeks 5-7).* Complete journal (blog) entries addressing designated topics / tasks on a weekly basis.

Allocation of marks:

- Playable paper prototype game = 15.5 marks
- Playtest Video = 5 marks
- Game Design Journal (Weeks 5-7) = 4.5 marks
- Total = 25 marks (25% of your overall score)

Supplementary notes:

- Your submission MUST meet the constraints of the task.
- Present your playable game and the supporting assets thoughtfully. You may choose to present this in a Word/PDF document for ease of viewing. If you prefer to upload your contents in neatly arranged folders/sub-folders you are STRONGLY encouraged to ZIP your game assets together.
- You MUST upload your playtest video into the unit website through the Assignment 2 submission page.
- The paper prototype game MUST be playable. Ensure that you supply ALL rules, procedures and game objects required to play the game (aside from common elements such as dice or counters).
- You MUST consider player engagement and replayability e.g. creating a system introduce randomness, account for pick-ups, collectables, hazards etc into your game such as 'Event' cards, moveable markers or a modular game board.
- Visual assets that you create for your game MUST be original.
- You may include open source, Creative Commons or Artificial Intelligence (AI) media assets as part of your paper-based prototype (with the exception of the protagonist / player character which you must create), so long as these are appropriately credited in a supporting 'Readme' text file that will be uploaded with your submission (if you are unsure ASK);
- You must NOT use AI to generate your written work, including your blog posts, but may use it to check the quality

- of your writing.
- You cannot use someone else's Intellectual Property (IP) within your work e.g. Monopoly, Star Wars or fan-related concepts.
- Evidence of extra effort with respect to innovation, creativity and production value of game objects may result in higher marks.
- Failure to meaningfully address the core thematic element will result in a -30% penalty against the final mark for this assignment.
- Failure to supply a playtest video will result in a -30% penalty against the final mark for this assignment.
- Unless you have an approved extension, Game design Journal (blog) entries made after the Assignment 2 due date will NOT be marked.
- Overdue submissions will receive a -5% per day penalty.

Please refer to the unit website for more detailed assignment criteria and supporting resources.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Conceptualise a game and communicate ideas through design documentation
- Competently use software tools for creating games and game assets

Graduate Attributes

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

3 Unity Digital Prototype Game, Playtest Video & Game Design Journal (Weeks 8-11)

Assessment Type

Practical Assessment

Task Description

In Assignment 3 you will transform your ideas from your GCD (Assignment 1) and paper prototype game (Assignment 2) into a functional and enjoyable Unity digital prototype game in WebGL format. Additionally, you will create a playtest video (as a screen recording), and complete your journal entries for weeks 8-11. Successfully completing these tasks demonstrates your ability to apply what you have learned in lectures, tutorials, and previous assignments.

The Unity Game Engine

Throughout the term you will develop skills and knowledge of the Unity game engine which is an industry-standard platform for game development, but is also great for rapid prototyping of game designs. We will cover the basics of Unity through a number of tutorial sessions, but you are encouraged to be proactive and spend additional time exploring tutorials and resources to improve your knowledge. To get you underway, you will work through a number of [Unity Learn](#) tutorials and will be introduced to a simple framework known as the [Unity Playground](#) which can help you plan and create a range of common 2D game interactions. Although we won't be covering Unity straight away, as we have a number of game design building blocks to cover first, you will be introduced to the Unity Playground in the first weeks of the course, so you can get some ideas to help you plan some of the game mechanics for Assignment 1 and 2. If you have existing knowledge of Unity and are confident in your abilities, you are welcome to explore other frameworks such as Unity Visual Scripting or the Unity 2D/3D Game Kits.

TASK 1: UNITY DIGITAL PROTOTYPE GAME

Your digital prototype game will meet the following criteria:

- clear alignment to your original Game Concept Document (GCD) you developed for Assignment 1 AND the paper prototype game you developed for Assignment 2;

- includes at least one complete and functional game 'level' (scene) executed to an appropriate standard;
- demonstrates meaningful application of game design theories and knowledge;
- provides an enjoyable and engaging player experience;
- demonstrates basic competence with the Unity game engine; management and use of Unity game objects (determined by reviewing Unity source files), and basic application of physics components;
- includes, as a minimum, custom visual & sound art assets for the protagonist, and visuals for the game background (using tools such as Photoshop, Audition & Piskel);
- supporting game objects i.e. anything other than the protagonist and background assets can be developed in other tools, or imported from free sources so long as the constraints imposed in the 'Supplementary Notes' section are followed (refer below);
- completed digital prototype game is thoughtfully delivered, displays evidence of playtesting and iteration, and quality control (i.e., is bug free with no unexpected behaviours);
- game will be published in WebGL format so that it can be played online;
- ALL source files are provided for assessment (Unity, Photoshop, Illustrator, Piskel etc), and
- satisfies ALL of the assessment constraints.

Considerations for this task

The title of the 2024 offering of MMST12017 is 'Gamechanger' with the core thematic element requiring your game to address a contemporary social or sustainable development issue. Failure to meaningfully incorporate the theme into your submission, or failing to include a playtest video to support your digital prototype, will result in a 30% penalty for this assignment.

TASK 2: PLAYTEST VIDEO

To showcase the important parts of your digital prototype gameplay you WILL create a short video (maximum 5 minutes) and upload it into the unit website through the Assignment 3 submission page.

TASK 3: GAME DESIGN JOURNAL (BLOG) WEEKS 8-11

Respond to weekly critical reflection tasks on time using the provided Moodle blogging tool. Your responses may be written or recorded in video/audio format. I will read and respond to student blogs each week, so do not leave this task until the last minute! Unless you have an approved extension, blog posts submitted after the Assignment 3 due date will NOT be graded.

Assessment Due Date

Week 12 Friday (31 May 2024) 11:45 pm AEST

Return Date to Students

Assignment 3 will be marked and returned two weeks after submission.

Weighting

45%

Assessment Criteria

Deliverables:

1. *Unity Digital Prototype Game*. A functional and playable Unity digital prototype game which satisfies the Assignment 3 constraints. You must provide a published version of your game, along with your Unity and media source files.
2. *Playtest Video*. To showcase the important parts of your digital prototype gameplay you WILL create a short video (maximum 5 minutes) and upload it into the unit website through the Assignment 2 submission page.
3. *Game Design Journal (Weeks 8-11)*. Complete journal entries addressing designated topics/tasks on a weekly basis.

Allocation of marks:

- Unity Digital Prototype Game = 34 marks
- Playtest Video = 5 marks
- Game Design Journal (Weeks 8-11) = 6 marks
- Total = 45 marks (45% of your overall score)

Supplementary Notes:

- Your submission MUST meet the constraints of the task.
- Your digital prototype game MUST be functional and complete.
- You MUST submit a ZIP file containing a published version of your Unity game in WebGL or executable format. Be sure to include a 'readme' file with instructions if required.
- You MUST submit a ZIP file containing all of your game source files (i.e. Unity project, code, artwork).
- You MUST upload your playtest video into the unit website (i.e. Moodle) through the Assignment 3 submission page.
- Visual assets that you create for your game MUST be original.
- You may use Artificial Intelligence (AI) engines such as ChatGPT, Dall-E as part of your ideation and media workflow (supporting assets only), however you MUST explain how it was used in the context of your design (document this in your blog or as a 'Readme' file that will be included with your game project files).
- You MUST credit any third party assets that have been used in your project. Failure to do so constitutes plagiarism and may result in failure or administrative action in accordance with university policy (if in doubt, ASK beforehand)
- You must NOT use AI to generate your written work, including your blog posts, but may use it to check the quality of your writing.
- You cannot use someone else's Intellectual Property (IP) within your work e.g. Monopoly, Star Wars or fan-related concepts.
- Evidence of extra effort with respect to innovation, creativity and production value of game objects may result in higher marks.
- Failure to meaningfully address the core thematic element will result in a -30% penalty against the final mark for this assignment.
- Failure to supply a playtest video will result in a -30% penalty against the final mark for this assignment.
- Unless you have an approved extension, Game design Journal (blog) entries made after the Assignment 3 due date will NOT be marked.
- Overdue submissions will receive a -5% per day penalty.

Please refer to the unit website for more detailed assignment criteria, along with previous student examples.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Explain theories, principles and methods of game design
- Conceptualise a game and communicate ideas through design documentation
- Competently use software tools for creating games and game assets
- Create a prototype for a game, applying theories, principles and methods of game design
- Evaluate a game in terms of theories and principles of game design

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- 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