Assessment Coversheet
AT02 Video Game Project

Qualification details			
Training Package Code and Title:	**ICT - Information and Communications Technology (Release 7.0)**		
Qualification National Code and Title:	ICT40120 Certificate IV in Information Technology (Gaming Development)	**State code:**	BFF9
Training Package Code and Title:	**CUA - Creative Arts and Culture Training Package (Release 5.1)**		
Qualification National Code and Title:	CUA41220 Certificate IV in Screen and Media (Animation, Gaming, and Visual Effects)	**State code:**	BGS2

Assessment Title	**AT03 Video Game Project**		
Unit National Code & Title	ICTGAM420 Produce interactive games (Release 1)		
Date Due	**Session 18**	**Date Received**	

Student Name		**Student ID**	
Student Declaration	I declare that the evidence submitted is my own work: ……		

Assessor Name				
Assessment Decision	☐ Satisfactory		☐ Not Yet Satisfactory	
Assessor Signature			**Date**	
Is student eligible for reassessment (Re-sit)?	☐ No	☐ Yes	**Reassessment Date:**	

Feedback to student
Via Blackboard (LMS) – Please check [Grade] section.
Feedback from student
Via Blackboard (LMS) – Please use [Comment] section during submission.

Student signature		**Date**	

Assessment Instructions

TO THE ASSESSOR

Type of Assessment	*Project*
Duration of Assessment	*9 sessions (session 9 – session 18)*
Location of Assessment	*In classroom (computer lab), at home*
Conditions	*Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.* *This includes access to:* • *project briefs* • *applicable organisational documentation* • *game-production assets* • *technical specifications* • *game production testing and trialling tools* • *industry standard game-engine software and development tools* • *required industry-standard hardware, software and peripheral devices* *Learners are required to complete the required tasks and submit the required evidence electronically via Blackboard.*
Elements and Criteria	As detailed in the assessment plan. You are required to make sure that all students meet the elements, performance criteria and foundation skill items as outlined in the provided checklist.

TO THE STUDENT

Purpose of Assessment	You are required to show you can: *ICTGAM420 Produce interactive games* • Identify game requirements and component assets • Identify, evaluate and select game-engine software and tools • Create a game-play sequence and prototype using game-engine software • Evaluate and reiterate game prototype • Transform prototype into a final proof-of-concept prototype You are required to meet the elements, performance criteria and foundation skill items as outlined.
Allowable Materials	Blackboard (Topic by topic) will include the following: Weekly Readings, Class notes, and Weekly Activities. Internet resources must be recorded as references for the assessment.
Required Resources	*Computer with:* • *Internet Access* • *Word processing software* • *Access to Learning Management System (LMS)* • *Version control software (Git and SourceTree)* • *Game-engine software (Unity)*
Reasonable Adjustment	In some circumstances, adjustments to assessments may be made for you. If you require support for literacy and numeracy issues; support for hearing, sight or mobility issues; change to assessment times/venues; use of special or adaptive technology; considerations relating to age, gender and cultural beliefs; format of assessment materials; or presence of a scribe you need to inform your lecturer.
Assessment Submission	*All activities must be attempted.* *Use of research tools and peers in formulating answers are acceptable – but work submitted must be your own work and must not be plagiarised.* *Final files and documentation are to be uploaded to the appropriate area in the Blackboard course created for this unit.* *If you are marked as NYS (Not Yet Satisfactory) on your first attempt, you will be provided with another opportunity to re-attempt the assessment.*
Project contents	This project consists of the following tasks: • Conduct pre-production processes • Create a game prototype • Peer review beta prototype • Conduct user trials for the beta prototype • Produce an executable gold-master build

Production Documentation Guidance\Requirements:

Throughout the assessment task you are required to research, gather ideas, document examples, evaluate techniques, gather inspiration, up-skill, experiment with game development techniques, plan production strategies, reflect on your performance, and undertake professional conversations.

Production documentation should include (but is not limited to) a game design document, project management software specifically created for monitoring game production projects (such as Hack n Plan), and a version control repository (such as GitHub). Your production documentation should feature research findings, design and development notes, textual explanations and reviews, written records of conversations, production tasks and timelines, visual references (such as images and videos), links, and other types of media.

There is an expectation that all visual content is supplemented by supporting written documentation to provide a clear overview of intent.

Your final production documentation must clearly show that you have evidence to support the outlined requirements for each part included in this assessment. All production documentation needs to contain evidence for all assessment requirements to be considered complete.

Scenario:

Recently you finished your digital media studies at TAFE and you have just been hired to work as a game developer at Immersive Studios, a local digital media studio. As it is your first job working as a game developer, the studio manager has identified a range of small internal projects that you could potentially work on as a way of demonstrating your expertise and skills. Your previous role as a designer required you to make a Game Design Document (GDD) you are to use this GDD as a basis for your games design.

Criteria:

Screen and Media:

You will need to select the active internal project as detailed in the 'AT02 Active Projects' folder on BlackBoard (Introduction to game design > Assessment > AT02 Active Projects). This project provides a game brief detailing all the creative and technical requirements and specifications for the game being created.

Video Game Development:

You will need to have a completed GDD and build your game design brief off that GDD. You and any team members will have a meeting with the studio manager to discuss the scope of the project. Based off this meeting you are to document your own design brief.

You are to email this design brief to your lecturer for signoff.

At the steps that require you to verbally consult and gain verbal feedback, your lecturer will play the role of the **studio manager** who is supervising your work for Immersive Studios. You will need to provide the studio manager with remote access to your project repository.

Part 1 – Conduct pre-production processes

1.

Screen and Media:

As specified in the criteria section of this assessment, you will need to select the project outlined within the 'AT02 Active Projects' folder on BlackBoard. Once you have selected a project, download the associated game brief and any other provided production documentation. The game brief will need to be included in your assessment submission as a supplement to your production diary, so that the project you are working on can be identified.

Video Game Development:
As specified in the criteria section of this assessment you will have to document your design brief based off the completed GDD. Include a copy of the GDD, the design brief and a screenshot of the email to the studio manager showing sign off.

2. After reading through the game brief and other production documentation you have been provided, consider the industry standards and organisational guidelines that need to be followed throughout production. In your production diary outline the guidelines for version control and project management that will be followed throughout the production of the game.

a) Describe how version control (such as Git) and other relevant software (such as GitHub or SourceTree) will be used to maintain the integrity of the project files during production. Here you must include a link to a software repository you have created for storing the project files throughout production.

b) Describe how agile project management software (such as Hack 'n' Plan) will be used to monitor and maintain the progress of production for the project.

3. It is important to create a production and testing schedule for the development of the game so that you can track production progress and prioritise the work accordingly. Use relevant project management software (such as Hack 'n' Plan) to organise and maintain a schedule for production throughout the development cycle of the game.

a) To build an effective schedule you will need to ensure that you have identified all of the required technical specifications for the game, as well as the game assets that need to be sourced and produced. For each of the tasks or tests being generated and managed through project management software, ensure you include all of the required details as according to the creative and production requirements of the project.

b) Your schedule will need to outline the development sequence for the construction of a beta prototype of your selected game project. Use relevant features and tools provided by project management software in order to create and plan iterative phases of production (sprints) for the entire production cycle.

4. With the different types of assets required for the game identified and a list of game assets defined, you will need to consider the standards and procedures for implementing

asset files in a game engine. Meet with the studio manager to evaluate various file formats for different asset types, and discuss potential issues that may be encountered when integrating the asset files into a game engine.

5. After determining the required game assets and the specifications for their file formats, you may now begin to generate original assets or source and select existing ones. Third party assets are allowed to be used but must have their original sources documented in your production diary. All assets must be stored in an appropriate version control repository so they are ready for production.

6. To ensure that production runs smoothly it is important to ensure you have considered how you will maintain the progress of production against the planned progress outlined in the schedule. In your production diary describe at least two (2) strategies that you will use throughout production to actively monitor the actual production progress against the planned production progress.

7. The final piece of pre-production information that needs to be defined is the game-engine software that will be used to construct the game. There are many commercial game-engines available to choose from, with each having different strengths and weaknesses. As such it is important to research and consider the tools and features provided by different game-engines to determine which engine is most suitable for the game you will be developing. In your production diary evaluate at least two (2) different game-engines available for commercial use, describing their strengths and weaknesses as well as some of the unique tools and features they provide.

8. Once you have assessed the strengths and weaknesses of at least two different game-engines, it is important to consider how suitable they will be in the implementation of your selected game project. Meet with the studio manager to assess your research findings, and evaluate which game-engine will be most suitable to your selected game concept and the corresponding gameplay requirements. Select the most suitable game-engine software for production based on the outcomes of the discussion.

Part 2 – Create a game prototype

1. Now you will need to use your selected game-engine software to create a prototype of your selected game concept. Load your selected game engine software using the appropriate processes, create a project with a suitable configuration for development of your game, and then use the tools and features provided by the game-engine software to implement the required gameplay and sound for your selected game project as according to the specifications of the game brief.

2. You will need to write custom code in order to integrate at least one (1) of the unique gameplay mechanics outlined in the game brief of your selected game.

a) The custom script files you write will need to be named appropriately according to the nature of your selected unique gameplay functionality (e.g. a C# script for a UI mini-map would be called something like '*MiniMap.cs*').

b) Each custom script you write will need to include a code comment at the top of the script detailing your name and the date that the script was last updated.

3. As you import and assemble the assets and gameplay for the game, it is important to ensure you are completing production tasks efficiently by following a logical sequence. Import and assemble the required assets and gameplay for your game in a logical sequence as according to creative and technical requirements of the game brief, to ensure that issues encountered in production are minimized.

   a) As various gameplay elements are implemented, test and check them against the creative and technical requirements of the project to ensure all specifications have been met.

   b) If any changes to the GDD are made throughout production, ensure they are also documented.

4. Once you are satisfied with the state of game prototype you will need to export it from the game engine to create a build of the game that can run on the desired platform(s). Using your selected game-engine, follow the appropriate processes for compiling an executable version of the game. Save the build of the game prototype in an independent directory ensuring that all required files have been included, before archiving the build directory to a zipped file and storing it via your version control repository.

Part 3 – Peer review prototype

1. Next you will need to have your game prototype peer reviewed in order to ensure that the creative, technical, and production requirements of your selected game project have been met. Demonstrate your game prototype as a presentation for the studio manager by testing and running the gameplay sequences. In discussion with the studio manager confirm that your game prototype fulfils the required creative, technical, and production specifications.

2. It is also important to consider the user-experience that the game prototype provides players. In discussion with the studio manager evaluate your game prototype to determine how you have achieved a creative product that is user-friendly and provides an engaging experience for players.

3. As a result of your peer review you may need to apply some amendments to your game prototype. In discussion with the studio manager identify a range of potential changes to the prototype, and agree on the changes you need to integrate. Document the agreed upon changes within your production diary.

   a) You must integrate the required changes into the prototype as agreed on with the studio manager. You will need to create a new build for the amended game prototype, which must be named clearly and stored separately from the original prototype build using your version control repository.

Part 4 – Conduct user trials

1. Assist in conducting the testing processes required for trialling the game prototype with a group of target users. You will need to organise a small **testing group of at least three (3) users** who will test the prototype by playing through it, with as little developer assistance or interference as possible. You will need to use industry language and appropriate listening and questioning techniques to obtain feedback from each tester, and document or record the feedback appropriately so that it can be reviewed and evaluated to identify issues and improvements. It is important that you ensure that the location, date, time, and necessary resources required for the user trials have all been pre-arranged so that your testes can be appropriately prepared.

   a) You may decide to record user feedback using a feedback form or survey, or an audio or video recording. These records will need to supplement the production diary.

2. The feedback received through user trials can be used to identify the strengths and weaknesses of your game as according to the interpretations of the target audience. Review the range of feedback that you recorded throughout the user trials of the prototype, and document an evaluation of the feedback in the production diary. In your evaluation consider the feedback from users against the design and implementation of the concept in order to identify issues and potential improvements. You should also consider how successfully the requirements of the concept have been fulfilled and how engaging the user experience is. Identify at least two (2) potential improvements that could be integrated into the game prototype in response to the feedback received from user trials, and describe them in your production diary.

3. After you have evaluated the outcomes of the user trials and identified the strengths and weaknesses of the game, you must define the final amendments that will be integrated into the gold-master version of the game prototype. Meet with the studio manager to discuss your evaluation of the user trials, agree on the final amendments that need to be integrated into the game prototype, and confirm the endorsement of the studio manager to develop the prototype into a complete gold-master version of the game. Document the agreed upon amendments in your production diary.

Part 5 – Produce a gold master build

1. At this stage you should be ready to finalise the production of the project by completing the gold-master version of the game. Integrate the final required amendments to the game as previously discussed with the studio manager, and ensure that all elements of the game have also been integrated as required by the creative and technical specifications of the project.

2. Before you create a final build for the complete gold-master version of the game, it is critical that you conduct a review as well as other appropriate quality assurance processes in order to confirm that the game sequences conform to the intended design.

   a) As you review the game you need to ensure that the navigational sequences conform to the intended design by confirming that all UI elements, menus, and scene transitions function as required.

3. Once you are satisfied with the final state of the complete gold-master version of your game, you are ready to generate the final build of the game and prepare it for

distribution. Using your selected game engine export the required final executable build(s) of the game following the processes suitable for the required platform(s), and store the build(s) according to organisational procedures.

a) An independent directory should be created to store all of the files relevant to the final build of the game, with the name of the directory clearly indicating the gold-master state of the game.

b) A copy of the directory containing the final executable build of the game will need to be compressed (zipped) and stored in your version control repository.

c) The final versions of all game-engine project files also need to be appropriately stored in your version control repository.

4. After finalising the gold-master version of the game and appropriately storing it according to organisational procedures, meet with the studio manager to obtain their final sign-off on the completion of production for the project.