# Project Assessment

# Produce a 2D Game in a Small Team

## Criteria

### Unit code and name

ICTGAM420 | Produce interactive games

### Qualification/Course code and name

ICT40120 | Certificate IV in Information Technology

## Student details

### Student number

### Student name

## Assessment declaration

*Note: If you are an online student, you will be required to complete this declaration on the TAFE NSW online learning platform when you upload your assessment.*

This assessment is my original work and has not been:

* plagiarised or copied from any source without providing due acknowledgement.
* written for me by any other person except where such collaboration has been authorised by the Teacher/Assessor concerned.

### Student signature and date

Version: 20220826

Date created: 26 August 2022

© 2022 TAFE NSW  
RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/items/d36df03f-9651-4d43-8c9d-a299699e8585/0/?attachment.uuid=fed43101-626e-4112-8bc8-3d5534d1194d)

The content in this document is copyright © TAFE NSW 2022 and should not be reproduced without the permission of TAFE NSW. Information contained in this document is correct at the time of printing: 22 November 2024. For current information please refer to our website or your Teacher/Assessor as appropriate.

## Assessment instructions

Table – 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge and performance in creating a basic 2D project in a small group. |
| **Assessment event number** | 1 of 3 |
| **Instructions for this assessment** | This is a project-based assessment that assesses your knowledge and performance of the unit.  This assessment is in five Tasks:   * Task 1: Establishing your studio * Task 2: Filling out the GDD * Task 3: Identify technical specifications * Task 4: Identify available resources * Task 5: Scheduling tasks and planning your prototype * Task 6: Produce your beta prototype * Task 7: Playtesting and feedback * Task 8: Obtain sign-off from assessor and complete project * Task 9: Final sign-off and submission   And is supported by:   * Assessment feedback (not included here)   **Note**: This assessment may contain links to external resources. If a link does not work, copy and paste the URL directly into your browser. |
| **Submission instructions** | On completion of this assessment, you are required to submit it to your Teacher/Assessor for marking. Where possible, submission and upload of all required assessment files should be via the TAFE NSW online learning platform.  It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment you must answer all the questions correctly.  If a resit is required to achieve a satisfactory result it will be conducted at an agreed time after a suitable revision period. |
| **What do I need to provide?** | * TAFE NSW student account username and password. If you do not know your username and password, contact your campus or service centre on 131601. * Computer or other device with word processing software and internet access. * Writing materials, if required. |
| **What the Teacher/Assessor will provide** | A GDD template |
| **Due date**  **Time allowed**  **Delivery location** | 29th of September  7 Weeks in class  TAFE NSW campus/ TAFE Digital Campus/ TAFE NSW Moodle/ a location determined by your Teacher/Assessor |
| **Assessment feedback, review or appeals** | In accordance with the TAFE NSW policy *Manage Assessment Appeals,* all students have the right to appeal an assessment decision in relation to how the assessment was conducted and the outcome of the assessment. Appeals must be lodged within **14 working days** of the formal notification of the result of the assessment.  If you would like to request a review of your results or if you have any concerns about your results, contact your Teacher/Assessor or Head Teacher. If they are unavailable, contact the Student Administration Officer.  Contact your Head Teacher/Assessor for the assessment appeals procedures at your college/campus. |

## Project Outline

You’ve been tasked with creating a single stage for your studio’s upcoming 2D project. The genre is of your choice as long as it takes place in a 2D environment and allows for movement within that 2D space.

Your stage must include:

* Some form of player movement in a 2D space. (Sara)
* At least one additional ability (jumping, dashing etc.) (Sara)
* Polished and appropriately themed 2D characters, objects, and environments. (Jules)
* A win condition (something that indicates your player has beaten your game.) (Rick)
* A lose condition (something that will cause your player to fail and need to try again.) (Rick)
* At least one form of static hazard (stationary e.g. spikes, pit etc.) (Rick)
* At least one form of dynamic hazard (requires movement e.g. enemy, projectiles etc.) (Rick)
* A main menu that allows the player to either start or exit the game.(Lukebru)
* A satisfactory duration (a casual playthrough should last more than 40 seconds.

Once a minimum viable product (MVP) is completed including these requirements, you’re free to add as much as you’d like to your game.

## Task 1: Establishing your studio

1.1: List the members of your group, including the roles that they’ll play in the creation of your game (artist or programmer.)

|  |
| --- |
| Sara - Programmer  Rick - Programmer  Jules - Artist  Luke - Programmer  Tyrese - Artsist |

1.2: Provide a name for your game studio.

|  |
| --- |
| RockFire Games |

## Task 2: Filling out the Game Design Document

Fill out the Game Design Document (GDD) template and include it in your submission. The GDD must go over:

* An Elevator pitch.
* Your chosen genre/s (Beat them up) (Platformer backup)
* The player’s movement and abilities. (Fan)
* The static and dynamic hazard/s. (Rick)
* Any influences from other creator’s work.
* A story synopsis. (Group)

**Task 3:** **Identify technical specifications**

3.1: Create a list of the assets that will be required for your game. For each, specify with your team which format they’ll use before being integrated into the game.

|  |
| --- |
| Player model  Tile map with hazard layer integrated  Enemies  Background assets  Projectiles |

3.2: Specify the naming conventions that will be used in order to properly sort and organize your files and specify where they’ll be saved.

|  |
| --- |
| We will use folders that describe exactly what is being kept in them, and the files will be saved in their described folders |

**Task 4:** **Identify available resources**

4.1: Create a list of the potential hardware and software that could be used to produce your game.

Game-engines:

|  |
| --- |
| Unity  GameMaker  Unreal Engine (If we wanted to make it 3D do 3D) |

Art software:

|  |
| --- |
| Aesprite  Photoshop (If we wanted to make it look smoother and cleaner)  Krita (Same as Photoshop) |

Hardware:

|  |
| --- |
| Computer  Consoles  Controllers |

4.2: Discuss amongst your team to determine what software and hardware will be used. Why have you chosen these options?

|  |
| --- |
| Computer: It’s readily available as most people have computers  Unity: It’s the one we’re learning, it also does 2D  Aesprite: Pixel art is simpler |

4.3: Describe some of the limitations and constraints present in the software and hardware you have chosen:

|  |
| --- |
| Unity: Time consuming, not as powerful or as good as Unreal.  Aseprite: Only does sprite art. |

## Task 5: Scheduling tasks and planning your prototype

5.1: Avoid risk of time mismanagement by producing a schedule; listing the series of milestones that will be met throughout the course of production, as well as the estimated dates of completion.

Make sure to plan for the development of a **beta prototype** to be used for playtesting.

|  |  |
| --- | --- |
| Production Element | Expected time of completion |
| Protype level (basic level) | Week 5 in class or before |
| Basic movement (2d movement where w is jump) (Sara) | Week 6 in class or before |
| Win lose cons (Rick) | Week 6 in class or before |
| Basic menu (Luke) | Weel 7 |
| Basic story board (group project) | Week 6 |
| Basic concept art | Week 6-7 |
| Finish Game | Week 9-10 |

5.2: Determine the strategies that will be put into place to monitor the progress of each team member to remain in line with the schedule:

|  |
| --- |
| Good communication, making sure everyone’s on track and having certain deadlines for certain things. Every Friday checking with the group |

## Task 6: Produce your beta prototype

Begin the production of your beta prototype. Ensure that you:

* Abide by your schedule.
* Name all created files in line with previously established organisational procedure.
* Save all digital assets in their required formats and store them accordingly.
* Utilise your chosen game engine and implement all requirements for your project (game play, visuals, sound etc.)
* Utilise the software tools required for the production of your game.
* Achieve gameplay functionality with your own custom code.
* Import and assemble all required gameplay assets in accordance with established specifications.
* Ensure that all created gameplay elements abide by the creative and technical requirements.
* Test gameplay sequences throughout production to ensure they meet the previously specified requirements.

## Task 7: Playtesting and feedback

Create a beta prototype that includes the basic functionality of your game. Conduct playtesting trials with **at least two people** to ensure your game functions correctly, is cohesive to navigate and is user-friendly. Evaluate the feedback from these players and note any necessary amendments to your game that are required,

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Name of tester | Issues detected | Solution |
| 22/11 | Oscar | The use of a capsule collider made platforming less consistent and more difficult to achieve. | Swap the capsule collider with a Box collider with similar dimensions. |
| 22/11 | Elliot | There were a few issues with collision, some enemies move too fast, and some platforms kill you out of nowhere. | Tweak hitboxes and lower enemy speed. |

## Task 8: Obtain sign-off from assessor and complete project

Showcase your beta prototype to your assessor to confirm their endorsement by having them sign-off below. Once received, utilise the feedback provided from your play testers to complete your project.

|  |
| --- |
| Rampaging T-Rex |

## Task 9: Final sign-off and submission

Perform final checks to confirm the project abides by all requirements.

Showcase your finished build to your teacher for confirmation and obtain their final sign-off.

|  |
| --- |
|  |

***All students*** are required to submit this assessment document (filled out collaboratively amongst your team members.)

***Only one*** member per team must produce a zipped folder containing your finished project. Ensure that you’ve included:

* The project files (Assets/Packages/Project Settings.)
* A functioning final build.
* Your GDD.
* This assessment document.

## Observation checklist

The observation checklist will be used by you to mark the student’s performance in the previous event type/s. Use this checklist to understand what skills the student is required to demonstrate in this section of the assessment. This checklist outlines the assessment criteria you will be marking the student on. All the criteria must be met. The student’s demonstration will be used as part of the overall evidence requirements of the unit.

ICTGAM420 | Produce interactive games

| Task # | Task/Activity performed  The student: | S | U/S | S | U/S | Assessor comments (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Create an interactive game using an industry standard game-engine software and development tools. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |
| 2 | Follow applicable industry standards and organisational guidelines. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |
| 3 | Apply a variety of strategies in game trialling and testing. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |
| 4 | Implement game development and production strategies. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |
| 5 | Maintain the integrity of design brief and game design document. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |
| 6 | Save final product and obtain sign-off from required personnel. |  |  |  |  | *Date of observation:*  *Assessors are to record their observations in enough detail to demonstrate their judgement of the students’ performance against the criteria.* |

## Assessment feedback

*NOTE: This section must have the Teacher/Assessor and student signature to complete the feedback. If you are submitting through the TAFE NSW online learning platform, your Teacher/Assessor will give you feedback via the platform.*

### Assessment outcome

Satisfactory

Unsatisfactory

**Assessor feedback**

Has the assessment declaration for this assessment event been signed and dated by the student?

Are you assured that the evidence presented for assessment is the student’s own work?

Was reasonable adjustment in place for this assessment event?

*If yes, ensure it is detailed on the assessment document.*

*Comments*:

### Assessor name, signature and date

### Student acknowledgement of assessment outcome

*Would you like to make any comments about this assessment?*

### Student name, signature and date