

This document will show the descriptions of our manual test cases that we designed to test the parts of the code that could not be covered by automated testing during the process of our game development. Each test case will have a testID which is used to uniquely verify each test case to our requirements in the testing document, it will also include a description of the test, the test steps, expected results, actual results, status and last date executed. For some requirements, we used user testing to get opinions on our project, to see whether or not our requirements match. The test results are from User testing, as well as from our user testing no glitches came up when they played our game.

### Test (1)

Test ID: MT\_Player

Description: To test the players character movement using the keys WASD

Test Steps:

1. Launch the game
2. Start a new game from main menu
3. Check player character is visible on screen at set spawn
4. Press W Key and check movement is going in correct direction
5. Press S Key and check movement is going in correct direction
6. Press A Key and check movement is going in correct direction
7. Press D Key and check movement is going in correct direction
8. Repeat steps 4-7 but hold down movement
9. Check movement when holding down two keys

Expected Results: Movement is correct

Actual Results: Movement works correctly when keys are pressed and held



(Photo to show that player is visible)

Status: PASS

### Test (2)

Test ID: MT\_Pause

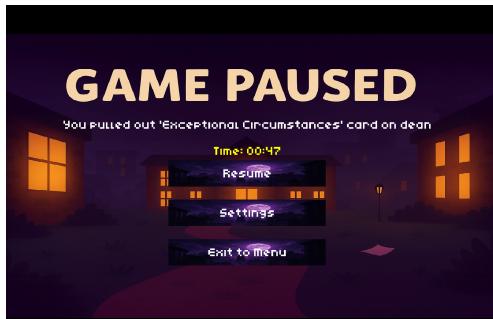
Description: To test the pause function within the game

Test Steps:

1. Launch the game
2. Start a new game from main menu
3. Press the ESC
4. Check pause screen appeared and is interactable
5. Check timer has stopped
6. Press ESC key
7. Check timer has resumed at the correct time position

Expected Results: Game pauses and time stops

Actual Results: Time freezes and game is paused



(Photo to show the pause screen)

Status: PASS

### Test (3)

Test ID: MT\_Tutorial

Description: To test the tutorial is accessible and clear to the user

Test Steps:

1. Launch the game
2. Navigate to the instructions
3. Read through the instructions
4. Check instructions cover all controls and game objectives
5. Return back to the main menu
6. Repeat steps 2-6

Expected Results: There are clear and concise instructions visible to the user

Actual Results: There are instructions which are clear and navigational from the main menu



Photo to show the pause menu

Status: PASS

### Test (4)

Test ID: MT\_Map

Description: To test that the map contains boundaries and collision

Test Steps:

1. Launch the game
2. Start a new game
3. Move player character to a edge of the map
4. Check the boundary is clear and visible
5. Attempt to navigate past the boundary
6. Repeat steps 3-5 for all edges of the map

Expected Results: the boundary is visible identifiable and stops the player character from going beyond boundary

Actual Results: Boundary is visible and blocked any movement past it



Photo to show the boundaries

Status: PASS

#### Test (5)

Test ID: MT\_Dean

Description: There is a dean entity which chases the character and has collision with the player character

Test Steps:

1. Launch the game
2. Start a new game
3. Find the dean on the map
4. Move player closer to the dean by one step
5. Observe if dean chases you
6. Repeat steps 4-5 until dean chases you
7. Let dean catch you
8. Check collision works and game ends

Expected Results: Dean chases you and correctly collides with the player character making the game end.

Actual Results: The dean is chased by the player and collides with the player causing the game to end.



(Photo showing the dean chasing the student and the game over when he catches the player)

Status: PASS

## Test (6)

Test ID: MT\_Accessibility

Description: To test that the game is readable and is easy to navigate

Test Steps:

1. Launch the game
2. Get a group of people (~5) to play the game
3. Test the readability of the screen page and assess it
4. Check if any fonts are blurry or the colours blend in too much
5. Move onto next screen
6. Repeat steps 2-4 until all screens have been assessed

Expected Results: Everything is readable and accessible

Actual Results: Everything is readable and fonts are clear and easy to understand, screen can be changed to any size fit, as well as from responses we found that “The colour scheme made it easy to distinguish different elements of the game” and that the main menu screen was also “easy to navigate”



(Photo showing arrows to doors, and when hover over button it changes colour)

Status: Pass

## Test (7)

Test ID: MT\_Score

Description: To test final score is displayed and correct

Test Steps:

1. Launch the game
2. Start a new game
3. Complete the game
4. Check final score
5. Repeat steps 2-4 but complete with a different event or achievement completed.
6. Repeat 5 until all achievements and events have been tested.
7. Compare scores and check if calculated correctly

Expected Results: Different scores appear depending on what events or achievements are achieved. And the final score is calculated correctly and appears at the end of the gameplay.

Actual Results: Scoring works appropriately and no inconsistencies occurred

**Time Elapsed: 36**  
**Score: 13550**

(Showing the score was calculated and displayed)

Status: Pass

## Test (8)

Test ID: MT\_Maze

Description: To test the maze stays constant each gameplay and is university themed

Test Steps:

1. Launch the game
2. Get a group of people (~5) to play the game
3. Start a new game
4. Take a note/screenshot of the layout of the maze
5. Go round the maze and assess the theme is consistent
6. End the game
7. Repeat steps 2-4 two more times

Expected Results: Maze layout is identical and the university theme is consistent

Actual Results: 100% found the theme relevant and “aesthetic” and that it was “Made it easy to distinguish different elements of the game”.



(Photos showing uni themed elements) as

well as it being in a university.

Status: Pass

## Test (9)

Test ID: MT\_MainMenu

Description: Test main menu navigation and interactable elements

Test Steps:

1. Launch the game
2. Navigate the main menu
3. Interact with a labeled button
4. Check the label is appropriate
5. Check the outcome from interacting is appropriate
6. Repeat steps 3-5 until all buttons are interacted with

Expected Results: all buttons are fully functioning and the main menu is easy to navigate

Actual Results: Buttons labelled appropriately and all interactable.

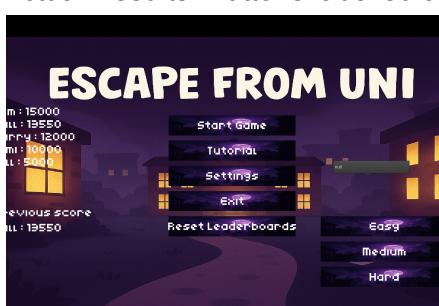


Photo showing main menu

Status: Pass

## Test (10)

Test ID: MT\_Settings

Description: To test the setting menu works appropriately and is functional

Test Steps:

1. Launch the game
2. Navigate to the settings page
3. Adjust the audio slider to a different area
4. Return to main menu
5. Launch the game and test the audio changed
6. Repeat steps 2-3
7. Check audio while in game

Expected Results: audio slider is adjustable, changes when adjusted and settings menu is visible

Actual Results: settings menu is functional and slider works appropriately



Status: Pass

## Test (11)

Test ID: MT\_Audio

Description: To test music and sound effects is audible and working

Test Steps:

1. Launch the game
2. Check background music is playing
3. Start a new game
4. Trigger an event and check sound effect
5. Repeat step 4 until all sound effects are checked

Expected Results: Background music and sound effects are audible to the user when triggered

Actual Results: Audio system works and is audible

Status: Pass

## Test (12)

Test ID: MT\_PerfomanceDisplay

Description: To test whether the fps is displayed in game and can be turned off and on

Test Steps:

1. Launch the game
2. Start a new game
3. Check that the fps is visible on the screen and accurate

4. Pause the game using the ESC key
5. Navigate to the settings and toggle of the FPS
6. Return to the game
7. Verify that fps is no longer visible

Expected Results: Fps is visible when toggled on and not visible when toggled off, and is able to turn of fps via settings menu

Actual Results: FPS works appropriately

Status: Pass

#### Test (13)

Test ID: MT\_Achievements

Description: To test that act appropriately when achieved and is displayed to the User, showing what achievements they have achieved

Test Steps:

1. Launch the game
2. Start the game
3. Complete an achievement within the game
4. Finish game
5. Check Achievements board to see if the achievement has been accomplished
6. Repeat steps 2-5 until all achievements have been achieved
7. Start the game
8. Do an already completed achievement
9. Check achievements board and check nothing has been changed

Expected Results: Achievements when completed is visible accomplished, and no duplicates achievements can be found

Actual Results: Achievements system works appropriately

Status: Pass

#### Test (14)

Test ID: MT\_Timer

Description: To test that the timer is visible in gameplay and works appropriately

Test Steps:

1. Launch the game
2. Start the game
3. Check time starts at the correct time
4. Play the game, while checking the time goes down and updates appropriately
5. Continue playing the game, until the timer reaches 0
6. Confirm that the game ends when the timer hit 0
7. Repeat steps 2-6 again

Expected Results: Timer goes down correctly, and ends when it reaches 0s

Actual Results: Timer functions correctly and does not go further than 0s

Status: Pass

#### Test (15)

Test ID: MT\_DesktopInputs

Description: To test that all input devices work appropriately within the game

Test Steps:

1. Launch the game
2. Navigate the main menu via using mouse and clicks
3. Press the start button
4. Use your keyboard keys WASD to confirm movement
5. Complete the game only using inputs

Expected Results: Input devices are compatible with the game and works appropriately

Actual Results: All input devices work appropriately

Status: Pass

#### Test (16)

Test ID: MT\_Compatibility

Description: To test the performance on average hardware and on different systems

1. Clone the game from github on a specified system and a hardware with a different spec
2. Run the game for 5 minutes
3. Check the game works accordingly
4. Repeat step 1-3 until all systems are checked and hardware

Expected Results: Gameplay runs and doesn't crash no matter the specs or system

Actual Results: Gameplay runs appropriate on all devices and systems

Status: Pass

#### Test (17)

Test ID: MT\_Event

Description: To verify there is a counter that displays correctly and updates in real time, as well as that the events and hidden events are discoverable and work as intended

Test Steps:

1. Launch the game
2. Start a new game
3. Explore the map and find a hidden event
4. Check if hidden event is triggered and works appropriately
5. Check if counter goes up
6. Repeat steps 3-5 until all hidden triggers are triggered
7. Find a positive event and check if counter goes up
8. Find a negative event and check if counter goes up
9. Start a new game, check event counter

Expected Results: Event counter updates depending on the event are triggered and are reset when a new game is played and the hidden event is discoverable and visible triggered.

Actual Results: Event counter is functional and events work appropriately

Status: Pass

#### Test (18)

Test ID: MT\_Usability

Description: To test that the game is suitable for casual audience players

Test Steps:

Get a group of people (~5) to test whether or not the game is easy to beat.

Give them instructions to play the game giving them a time limit of 30 minutes

Note any navigational errors found when playing the game and bugs.

Record times completed per run

Expected Results: A large majority of players will have been able to complete the game successfully

Actual Results: 60% found it easy 40% found it difficult, the majority of users also didn't find any aspects they didn't enjoy, only the "slow speed when you fail the exam".

However all players completed the game successfully within 30 minutes

Status: Pass