**AT01 Production Diary**

**1.1.1 Depth First Search Algorithm Research**

**Algorithm Summary**

A Depth First Search Algorithm is a type of pathfinding algorithm that uses the backtracking principle. It discovers the best path by moving forward if possible and backtracking if necessary to hopefully find the quickest route.

**DFS Terminology Definitions**

**Pathfinding:**

Pathfinding is when the computer tries to find the quickest path from point A to point B.

**Tree:**

A tree is a group of linked nodes that form the path that can be traversed through.

**Parent:**

A parent object is and object which has other objects inside of it, a parent object can influence the values of the object inside of it, such as position, size, and other parameters and special values.

**Child:**

A child object is an object inside of a parent object, the child object inherits certain values from the parent object.

**1.1.3 AI Behaviour Chart**

**A diagram of a process

Description automatically generated**

**1.1.4 AI Design Reflection**

**1.2.1 Planned HCI Device Integration Summary**

the HCI devices will include a keyboard and mouse. The required interactions are W, A, S, D for directional controls and the mouse needs to be able to click on North, South, East, West arrows for directional controls.

**1.2.2 C# Event System Summary**

**1.2.2 Unity GUI Library Review**

**1.2.3 UI Widget Example Overviews**

**1.2.4 UI Widget Paper Prototype**

*Insert the paper prototypes for the required UI widget here.*

**2.1.1/2.2.2 Testing Log**

*Please add rows as required.*

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case Description | Expected Results | Actual Results | Success? |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**3.1 Final Checks**

|  |  |
| --- | --- |
| **Final Checks** | **Confirmed** |
| * AI pathfinding (using the DFS algorithm) has been successfully integrated |  |
| * Game over conditions have been successfully implemented |  |
| * Appropriately compatible with Google Chrome web browser |  |
| * Appropriately compatible with Mozilla Firefox web browser |  |
| * Appropriately compatible with Windows |  |
| * UI widget responds to relevant keyboard inputs |  |
| * UI widget responds to relevant mouse inputs |  |
| * UI widget responds to relevant controller inputs |  |
| * UI set to scale with a full HD resolution (1920x1080) |  |

**3.1 AI Evaluation**

**3.2 Required Amendments**

**3.3 Final Client Sign-Off**

*Insert a screenshot of your email communications with the client, providing evidence of their endorsement to finish the production of the project.*