Appendix E: Unit Tests

Below is a table of the unit tests included within this project.

The unit tests are associated with an appropriate requirement to allow for traceability, and the tests aim to check that the code works for any associated requirements. Not all requirements have associated tests, and vice versa - this is because some requirements cannot be explicitly unit tested, and some tests do not link up directly to a requirement, but are still needed to ensure the code functions as intended.

There is a criticality measure against each test, for both acceptance and unit tests - this is to represent how important the test is to the overall function of the code. Criticality is on a scale - high criticality means that if that test fails, the project will not function at all; low criticality means that if the test fails, the project will still mostly function as intended.

ID	Test Name	Purpose	Criticality	Class	Req ID	Result
1.01	testDescription	Verifies clue description is returned correctly	Medium	Clue	5.1.2	passed
1.02	testEquality	Verifies clues can be compared correctly for equality	Medium	Clue	5.2.1	passed
1.03	testName	Verifies clue name is returned correctly	High	Clue	5.1.2	passed
1.04	testTileCoordinates	Verifies clue has the correct coordinate for the map	High	Clue	5.1.1	passed
1.05	testPersonality	Verifies the NPC personality is returned correctly	Medium	NPC	3.1.5	passed
1.06	testGetName	Verifies NPC name is returned correctly	Low	NPC	3.1.2	passed
1.07	doesPlayerMove	Verifies the player move function works correctly	High	Player	2.1.4	passed
1.08	testPlayerPersonality	Verifies the player personality is set and get correctly	Medium	Player	2.1.1	passed
1.09	testPlayerName	Verifies the player name is returned correctly	Low	Player	-	passed
1.10	testAddTransition	Verifies transitions between rooms can be added	High	Room	4.1.1	passed
1.11	testGetTransition	Verifies transitions between rooms can be performed	High	Room	4.1.1	passed
1.12	testMatRotation	Verifies direction of room transition is correctly returned	Medium	Room	-	passed

| 1.13 | testTrigger | Verifies function to check if a tile is a trigger to perform an action | High | Room | - | passed |
| 1.14 | testWalkable | Verifies that a tile returns the correct property for walkability | Low | Room | - | passed |