Table A - Manual Tests

| Test No. | Test Description | Expected Outcome | Actual Outcome | Success? | Testing Type | Comments | Associated Requirement(s) |
|-------------|--|--|--|----------|--------------------------------------|----------|------------------------------|
| 1 | Click on "New Murder" | Game begins, launches title sequence | Game begins, launches title sequences | Yes | Blackbox, Acceptance | | 2, 2a |
| 2 | Click on "Quit" | Game Quits | Game Quits | Yes | Blackbox | | |
| 3 | Click on "Tutorial" | Tutorial panel displays over the main menu | Tutorial panel displays over the main menu | Yes | Blackbox, Acceptance | | 2, 2a, 3, 3a |
| 4 | Click back whilst in the Tutorial Screen | Tutorial panel closes, game returns to main menu | Tutorial panel closes, game returns to main menu | Yes | Blackbox | | |
| 5 | Player chooses a detective | Game loads the game with the player as the chosen detective | Game loads the game with the player as the chosen detective | Yes | Blackbox, Acceptance | | 4, 4a |
| 6 | Press left arrow key | Detective moves left on the screen | Detective moves left on the screen | Yes | Blackbox | | |
| 7 | Press right arrow key | Detective moves right on the screen | Detective moves right on the screen | Yes | Blackbox | | |
| 8 | Player clicks on chalk outline clue - check that it is added to the Inventory. Check that the Victim is added to encountered characters. | A description and image of the clue appears on the screen. Clue is added to the Inventory.Victim is added to encountered characters. | A description and image of the clue appears on the screen. Clue is added to the Inventory.Victim is added to encountered characters. | Yes | Blackbox, Whitebox, Acceptance | | 6 |
| 9 | Player tries to leave first screen boundary without collecting the "Chalk outline" | The player is obstructed and cannot leave the screen boundary. | The player is obstructed and cannot leave the screen boundary. The user is prompted to click the chalk outline | Yes | Blackbox, Acceptance | | 6a |
| 10 | Player tries to leave first screen after collecting | The screen changes to the lobby. | The screen changes to the lobby. | Yes | Blackbox, Acceptance | | 5, 5c, 6a |

| | "Chalk outline" | | | | | |
|----|---|---|--|-----|-------------------------------------|------------------|
| 11 | Player clicks on a character for first time - check that interactions happen and Character is added to the Encountered Characters list. | The speech options open, with the character giving a brief description of themselves. Character is added to the encountered Characters list in the Inventory. | The speech options open, with the character giving a brief description of themselves. Character is added to the Encountered Character list in Inventory. | Yes | Blackbox, Acceptance | 8a, 8b, 9a, 9c |
| 12 | Player opens notebook before collecting a clue | The notebook shows an undiscovered clue. | The notebook shows an undiscovered clue. | Yes | Blackbox, Acceptance | 6, 6c, 7, 7a, 17 |
| 13 | Player opens notebook after collecting a clue. Check notebook buttons now contains the discovered clue. | The notebook shows the collected clue in a space which previously had an undiscovered clue. | The notebook shows the collected clue in a space which previously had an undiscovered clue. | Yes | Blackbox, Acceptance WhiteBox | 6, 6c, 7, 7a |
| 14 | Player clicks on a discovered clue in the notebook | A description of the clue appears in the notebook along with an image of the clue and its name. | A description of the clue appears in the notebook along with an image of the clue and its name. | Yes | Blackbox, Acceptance | 6c, 7, 7a |
| 15 | Player opens notebook before talking to a character for the first time | The character is not in the notebook | The character is not in the notebook | Yes | Blackbox, Acceptance | 7, 7a |
| 16 | Player opens notebook after talking to a character for the first time | The character is in the notebook | The character is in the notebook | Yes | Blackbox, Acceptance | 7, 7a |
| 17 | Player clicks on a discovered character in the notebook | A description of the character appears in the notebook along with an image of the clue and its name. | A description of the character appears in the notebook along with an image of the clue and its name. | Yes | Blackbox, Acceptance | 7, 7a |
| 18 | Player presses "Next | The clue cycles to the next | The clue cycles to the next | Yes | Blackbox, | 8, 8b, 9, 9a |

| | | T | 1 | | | |
|----|--|--|--|-----|---------------------------------------|----------------------|
| | Clue" whilst interacting with character | one, displayed between "Next Clue" | one, displayed between "Next Clue" and "Prev Clue" | | Acceptance | |
| 19 | Player presses "Prev Clue" whilst interacting with character | The clue cycles to the previous one, displayed between "Next Clue" and "Prev Clue" | The clue cycles to the previous one, displayed between "Next Clue" and "Prev Clue" | Yes | Blackbox, Acceptance | 8, 8b, 9, 9a |
| 20 | Player questions using one of their detective's personality traits - Check correct responses from text files | The question relating to the trait is asked and an appropriate response is given | The question relating to the trait is asked and an appropriate response is given | Yes | Blackbox, Acceptance , Whitebox | 8, 8b, 9, 9a, 9c, 9d |
| 21 | Player leaves a screen boundary other than the first screen, kitchen or recording studio | The screen changes to that of the correct room according to the map | The screen changes to that of the correct room according to the map | Yes | Blackbox, Acceptance | 5, 5c |
| 22 | Player clicks on the door to the recording studio whilst in the bar. | The screen changes to the recording studio | The screen changes to the recording studio | Yes | Blackbox, Acceptance | 5, 5c |
| 23 | Player clicks on the exit door whilst in the recording studio | The screen changes to the bar. | The screen changes to the bar | Yes | Blackbox, Acceptance | 5, 5c |
| 24 | Player attempts to walk out of the screen boundary whilst in the recording studio | The player is obstructed and can't leave the room | The player is obstructed and can't leave the room | Yes | Blackbox, Acceptance | 5, 5c |
| 25 | Player clicks on the door to the kitchen whilst in the cafe. | The screen changes to the kitchen | The screen changes to the kitchen | Yes | Blackbox, Acceptance | 5, 5c |
| 26 | Player tries to walk out of the left hand side of the screen whilst in the kitchen | The player is obstructed by a wet floor sign and can't leave the room | The player is obstructed by a wet floor sign and can't leave the room | Yes | Blackbox, Acceptance | 5, 5c |

| 27 | Player tries to walk out of the right hand side of the screen whilst in the kitchen | The screen changes to the cafe | The screen changes to the cafe | Yes | Blackbox, Acceptance | 5, 5c |
|----|---|---|---|-----|-------------------------|------------------------|
| 28 | Player clicks on the pause icon | The game pauses and the pause overlay appears. Also the background is dimmed. | The game pauses and the pause overlay appears. Also the background is dimmed. | Yes | Blackbox, Acceptance | 15, 15a, 16, 16a, 16b |
| 29 | The player clicks the "Resume" button whilst the game is paused | The game is unpaused and the pause overlay is removed. The background brightness reverts to its original state. | The game is unpaused and the pause overlay is removed. The background brightness reverts to its original state. | Yes | Blackbox, Acceptance | 15, 15a, 16, 16a, 16b |
| 30 | The player clicks on an undiscovered character in the notebook | Nothing happens. Button cannot be pressed. | Nothing happens, button cannot be pressed. | Yes | Blackbox, Acceptance | 7, 7a |
| 31 | The player clicks on a discovered character in the notebook | The character's name description and picture appears in the notebook | The character's name description and picture appears in the notebook | Yes | Blackbox, Acceptance | 7, 7a |
| 32 | The player clicks on the map icon | The map overlay appears, the game is paused and the background is dimmed | The map overlay appears, the game is paused and the background is dimmed | Yes | Blackbox, Acceptance | 5, 5a, 5c |
| 33 | The player clicks on a room button in the map overlay | The screen changes to the background of the room corresponding to the button | The screen changes to the background of the room corresponding to the button | Yes | Blackbox, Acceptance | 5, 5a, 5c |
| 34 | Player questions using one of their clues | The question relating to the clue is asked and an appropriate response is given | The question relating to the clue is asked and an appropriate response is given | Yes | Blackbox, Acceptance | 8, 8b, 9, 9a, 9c, 9d |
| 35 | Player accuses the murderer with the murder weapon and motive clue | The murderer responds by admitting to the murder and the end-game sequence begins | The murderer responds by admitting to the murder and the end-game sequence begins | Yes | Blackbox, Acceptance | 10, 10a, 10b, 12a, 12b |

| 36 | Player accuses the murderer without the murder weapon and/or motive clue. | The murderer rejects the claim and the speech overlay is closed. | The murderer rejects the claim and the speech overlay is closed. | Yes | Blackbox, Acceptance | 10, 10a, 10b, 12, 12b |
|----|--|---|---|-----|-------------------------|--------------------------|
| 37 | The player attempts to talk to a character straight after accusing them unsuccessfully | Nothing happens | Nothing happens | Yes | Blackbox, Acceptance | 10b, 11, 11a, 12, 12b |
| 38 | The player attempts to talk to a character after accusing them and then finding another clue | The speech options open | The speech options open | Yes | Blackbox, Acceptance | 9, 10b, 11, 11a, 12, 12b |
| 39 | The player clicks on a clue - check it is added to the inventory. | An overlay opens with the clue's description, picture and name and the clue is removed from the environment, The clue is added to the CollectedClueNames in Inventory. | An overlay opens with the clue's description, picture and name and the clue is removed from the environment. The clue is added to the CollectedClueNames in Inventory. | Yes | Blackbox, Acceptance | 6, 6a, 6c |
| 40 | The player finishes a game and begins a new game which they also finish | The player's inventory is cleared, clues are randomly selected and distributed and the murderer and victim are randomly chosen at the start of the new game and are different in some way during the second playthrough | The player's inventory is cleared, clues are randomly selected and distributed and the murderer and victim are randomly chosen at the start of the new game and are different in some way during the second playthrough | Yes | Blackbox, Acceptance | 1, 1a, 17, 18, 19 |

Table B - Unit Testing

Many of the Unit test Scripts contain a setup method which is run before each of the individual tests is run itself. This has been ommitted from the following table as it is not a test itself but aids the simplicity of the other tests.

| Script | Test | <u>Description</u> | Requirement | Pass/Fail | <u>Comments</u> |
|-----------|--------------------------|--|-------------|-----------|--|
| StoryTest | CharacterInfoErrorTest | Tests that the characterInfo cannot be obtained for a null character name | | Pass | |
| | TestStoryCreation | Tests that the story object is not null after the setup has taken place | | Pass | |
| | WeatherInitTest | Tests that the weather has been initialised correctly | | Pass | |
| | GetTraitStringTest | Tests that traits can be loaded for all possible values without throwing an error but does throw an error for an invalid index | 4 | Pass | |
| | GetDetectiveTest | Tests that the detective is not null | | Pass | |
| | CharactersLoadedTest | Tests that all the characters in the game have been loaded into the story component | | Pass | Parameters would need to be extended if more characters were allowed into the game |
| | VictimLoadedTest | Make sure a victim has been assigned for this instance of the game | | Pass | |
| | MurdererLoadedTest | Make sure a murderer has been assigned for this instance of the game | | Pass | |
| | GetRandomAliveCharact er | Test that this method does not return a null object | | Pass | |
| | IntroLoadingTest | Tests that the intros are loaded correctly without throwing an error | | Pass | Parameters would need to be changed if more intro's are added |
| | Intro1LoadingTest | Tests if the very first intro can be loaded | | Pass | |

| | CharacterInRoomTest | Tests that there can't be a character in a bad room index | | Pass | |
|--------------------|----------------------|--|----|------|--|
| BarTest | SoundTest | Checks the sounds play for all buttons in the bar | | Pass | |
| CharacterTests | InitTest | Makes sure the characters parameters are initialised correctly | | Pass | |
| | NotVictimAndMurderer | Tests that the selected character cannot be both the murderer and also the victim | | Pass | |
| | SpriteTest | Tests that the sprite is not null for the character | | Pass | |
| ClueTests | DisplaysClueInfoTest | Tests that the information of the clue is displayed correctly | 6 | Pass | |
| | InitTest | Tests the parameters of the clue have been instantiated correctly | | Pass | |
| | NotWeaponAndMotive | Makes sure the clue cannot be both Motive and also the murder weapon | | Pass | This could be subject to requirements change in the future |
| DetectiveTests | AddVisitedRoomTest | Tests the adding of a visited room to the players list of visited rooms | | Pass | |
| | WalkInTest | Tests the various methods of the players "walk in" to a new scene for exceptions | | Pass | |
| GameOverTests | GameOverTest | Tests if the GameOver function operates as should and doesn't throw an exception | 12 | Pass | |
| HUDControllerTests | DisplayTextTest | Tests if the text is displayed on the screen when called without throwing an exception | | Pass | |
| | HidePanelTest | Tests that the HUD panel is hidden correctly | | Pass | |
| | ShowPanelTest | Tests that the HUD panel is shown correctly | | Pass | |
| ImportSpeechTests | ActualStartTest | Tests that the Start method calls without throwing | | Pass | |

| | 1 | T | T | | T |
|-----------------------|--------------------------|--|------|------|---|
| | | an exception | | | |
| | NextLineTest | Tests the function to get the next line of speech | | Pass | |
| | SetBranchTest | Ensures an empty branch can't be set | | Pass | |
| InventoryTests | CollectedClueTest | Tests that a clue can be added to the inventory without erroring and a clue cannot be added twice | 6, 7 | Pass | |
| | EncounterTest | Tests the adding of a character to the encountered characters after speaking with them (or picking up the chalk outline) | 8, 9 | Pass | |
| MapControllerTests | LoadSceneTest | Tests for each possible room that the method does not throw an error | | Pass | |
| | UpdateMapButtonsTest | Tests that this method does not throw an error | | Pass | |
| RoomControllerTests | RoomControllerTest | Tests that the player can progress past the edge of the screen to the next scene | 5 | Pass | |
| SceneTransitionsTests | OnMouseDownTest | Tests that the Scenetransition reacts correctly to the mouse down event | | Pass | |
| | ReturnToMainMenuTest | Tests that the program returns to the main menu after this method is called | | Pass | |
| | StartSceneTransitionTest | For each scene index in the game test the scene can switch to it | | Pass | |
| SpeechHandler | AccuseTest | Tests that the accuse test does not throw an error | 10 | Pass | |
| | turnOffSpeechUITest | Tests that the speech UI can be turned off without throwing an exception | | Pass | |
| | turnOnSpeechUITest | Tests that the speech UI can be turned on without throwing an error | | Pass | |