Black-Box Testing Evidence

All black-box tests were run on a university computer using the final .jar executable in Windows 10.

Test Group	Test Name	Test ID	Expected outcome	Result	Comments	Associated Requirement
General	The game loads from a .jar on the software lab computers.	5.1	Running the Desktop Launcher starts the game and takes you to the main menu when ran on the software lab computer computers.	PASS		P1, P2, E2
User Interface: Menu	Start button takes you to select level screen.	6.1		PASS		
	Exit button stops the game safely.	6.2		PASS		
User Interface: Select Level	Back button takes you back to the main menu.	7.1		PASS		
	Save button creates a text file containing the current game state.	7.2	Creates the save file in the directory zepr/saves/ with the current date/time as the file name. Prompts the user that a save file was created.	PASS	~~Although this button exists the functionality has not been implemented.~~	F8
	Load button gives you the option to load any of the save files.	7.3	Pressing the load button should present you with a list of all the save files.	PASS	~~Although this button exists the functionality has not been implemented.~~	F8
	Town button selects the town level.	7.4	This test passes if the text below the level buttons changes to a description of the level and the level has	PASS		F1, N4

			the town map when it is played.	PASS		
	Halifax button selects the Halifax level.	7.5	The town level must be completed. Then this test passes if the text below the level buttons changes to a description of the level and the level has the Halifax map when it is played.	PASS	Depending on the user's progress in the game this button may be greyed out. In this case the button shouldn't select this level.	F1, N4
	Courtyard button selects the courtyard level.	7.6	The Halifax level must be completed. Then this test passes if the text below the level buttons changes to a description of the level and the level has the Courtyard map when it is played.	PASS	Depending on the user's progress in the game this button may be greyed out. In this case the button shouldn't select this level.	F1, N4
	Nerdy button sets the player type to nerdy.	7.7	This test passes if the text below the player option changes to a description of the player and the player has a blue shirt and 150HP when a level is played.	PASS		F3
	Sporty button sets the player type to sporty.	7.8	This test passes if the text below the player option changes to a description of the player and the player has a red shirt and moves faster when a level is played.	PASS		F3
	Engineer button sets the player to type engineer.	7.9	This test passes if the text below the player option changes to a description of the player and the player has a green shirt and the character can deal damage at a greater range.	PASS		F3

	Mini game button selects the mini game feature without having to select a level or character.	7.10	This test passes if on the pressing on the mini game button that player is taken to a separate screen where the mini game is loaded. From this point the payer can interact with the mini game's functionality.	PASS		F5
	CS Building button selects the computer science level.	7.11	The Courtyard level must be completed. Then this test passes if the text below the level buttons changes to a description of the level and the level has the Computer science when it is played.	PASS		F1, N6
	Greg's Place button selects the Greg's Place level.	7.12	The CS Building level must be completed. Then this test passes if the text below the level buttons changes to a description of the level and the level has the Greg's Place map when it is played.	PASS		F1, N6
	Library Button selects the library level.	7.13	The Greg's Place level must be completed. Then this test passes if the text below the level buttons changes to a description of the level and the level has the Library map when it is played.	PASS		F1, N6
User Interface: Pause Menu	Pressing escape in any level takes you to the pause menu.	8.1	Try pressing escape in each level. It should change the screen to one with a "Resume" and "Exit" button for every level.	PASS		E1
	Pressing the resume button should continue the level.	8.2	Check the game state before pausing and after resuming is the same.	PASS		E1
	Pressing the back button should return you to the level select screen.	8.3	If the back button is used there should be no change to the game progress.	PASS		E1

		8.4		PASS		E1
	Start a level after pausing and exiting it should give a fresh version of the level.		A fresh version of the level will start you from the player spawn point on wave 1 with all the zombie remaining.			

Game Logic	Completing the town or Halifax level increments game progress.	9.1	If completing the town or Halifax level displays the message "Level complete" and unlocks the next level, then the test passes.	PASS	Inconsistent error found late on by previous group has now been resolved.	N2
	Completing the Library level completes the game.	9.2	If completing the Library level displays the message "Game complete" then the test passes.	PASS		N2
	Completing an already completed level does not affect game progress.	9.3	Complete each level twice before moving on to the next level. Make sure the progress doesn't change after completing each level a second time. If it doesn't change the test should pass.	PASS		N2
	Killing a zombie decrements the zombies remaining counter.	9.4	Attack a zombie until it disappears (killed) and compare the number of zombies remaining before and after.	PASS		F10
	Killing all zombies in a wave increments the wave counter.	9.5	Attack all zombies until they disappear and compare the wave number before and after.	PASS		
	Completing a level returns you to the select level screen.	9.6	Completing a level takes the user to a new screen that says "Level completed" with a button that takes them back to the select level screen.	PASS		

If you die you return to the select level screen.	9.7	If the player dies, by taking damage from zombie, the game takes the user to a new screen that says "You died" with a button that takes them back to the select level screen.	PASS		F1
More zombies are spawned as the game progresses.	9.8	Each wave in a level has more zombies than the previous wave. Each equivalent wave across the levels has more zombies than the previous level.	PASS		F2
A power up is dropped after completing a wave in a level.	9.9	Once all the zombies in a wave have been killed a power up should be spawned.	PASS		F6
An evil boss will spawn after defeating the third wave of zombies on the Courtyard Level.	9.10	When the player kills the final zombie in the last wave on the Courtyard Level an evil boss, 'Big Chef' will spawn. The level will be complete when the player defeats this boss.	PASS		F7
An evil boss will spawn after defeating the third wave of zombies on the Library level.	9.11	When the player kills the final zombie in the last wave on the Library Level an evil boss, 'Evil librarian' will spawn. The level and game will be complete when the player defeats this boss.	PASS		F7, N2
Different Zombie types with different attributes spawn in each wave. Each zombie type is distinguishable from each other.	9.12	When a player begins a level or defeats a previous zombie wave. A new wave of zombies will spawn with an arbitrary number of each zombie type- Zombie Medic, Sporty Zombie, and generic zombie.	PASS		F4, N3
'Nuke' powerup will end current zombie wave.	9.13	When the player's character walks over a the 'Nuke' powerup the current wave of zombie will end by removing any remaining zombies on the map. The new wave of zombie will then spawn unless the level is complete. The powerup will disappear on contact with player's character made.	PASS		F6
'Insta Kill' powerup will increase player damage.	9.14	When the player's character walks over the 'Insta Kill' powerup the player's damage will increase so zombies can be killed with one hit. The powerup will disappear on contact with player's character made.	PASS		F6

	Sporty Zombie will move towards the player faster than the other zombies.	9.15	When a wave of zombies spawn, the Sporty Zombie (colour- …….) will move towards the player more rapidly compared to other zombie types.	PASS		F4
	Medic Zombie will take more damage before dying than other zombies.	9.16	When a wave of zombies spawn, the Medic Zombie(Colour- …….) will require more hits from the player's character in order to die.	PASS		F4
	Missing five shots in the mini game will end the mini-game.	9.17	When the player misses five shots within the 'Geese shooting' mini-game , the mini-game will end and the player will be returned to the selectLevel screen.	PASS		F5

Inputs	The player always faces in the direction of the mouse pointer.	10.1		FAIL	When holding down the left mouse button to attack, the player won't then change direction until the mouse button is released.	
	Holding down the left mouse button prevents the player's character from changing orientation	10.1.2	When the player attacks a zombie within the game by holding down the left mouse button, the player's character cannot change orientation until the button is released.	PASS		
	Clicking causes the player to attack in the direction of the mouse pointer.	10.2	It will be clear when the player attacks as it has a punching animation.	PASS		E1, E2, F10

	W, A, S, and D keys move the player up, left, down, and right respectively.	10.3	When the player presses or holds the 'W, A, S or D' key the character will walk the up, left, down and right respectively in relation to the world map.	PASS		E1, E2