

## Black-Box Testing Evidence – Assessment 4

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
	The game runs at 30 frames per second on university computers.	5.2	The game has been run on multiple computers in the university computer science labs, and framerate has never been a noticeable issue and appears to be at least 30 at all times.	Pass		
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, storing the current progress.	PASS	The progress is saved to core/assets/saveData.txt See image 3	F8
	Load button gives you the option to load any of the save files.	7.3	Pressing the load button should load the save file.	PASS	The progress is loaded from core/assets/saveData.txt	F8

	The various stage buttons load the correct levels.	7.4	The level corresponding to the button should load correctly. When clicked, the correct stage description should be displayed. Later levels should have their buttons greyed out if the player has not progressed that far yet, but should one by one become available after the previous level is completed.	PASS	Depending on the the users progress in the game this button may be greyed out. In this case the button shouldn't select this level. See image 4	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	See image 5, 6	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	See image 5, 6	F3
	Artsy button sets the player type to artsy.	7.9	This test passes if the player is wearing a green shirt and has a noticeably higher attack damage	PASS	See image 5, 6	F3
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	See image 10	E1

	Pressing the resume button should continue the level.	8.2	Check the game state before pausing and after resuming is the same.	PASS	See image 10	E1
	Pressing the exit button should return you to the level select screen.	8.3	If the exit button is used there should be no change to the game progress.	PASS	See image 10	E1

	Start a level after pausing and exiting it should give a fresh version of the level.	8.4	A fresh version of the level will start you from the player spawn point on wave 1 with all the zombie remaining.	PASS		E1
Game Logic	Completing any level except the last 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	See image 1	N2
	Completing the Constantine level completes the game.	9.2	If completing the last level displays the message “Game complete” then the test passes.	PASS	In the current implementation of the game Constantine is the last level. If more were added this test would have to change.	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	See image 2	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” or “Game 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, <b>by taking damage from zombie</b> , 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 random 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. Having tested this extensively, we have seen every one of the 5 power ups appear which suggests that random selection is working.	PASS		F6
Each player type has a unique special ability	9.10	Each player type has a special ability which can be used by pressing ‘E’, and which lasts for a few seconds and can be only used once per level.	PASS		F3
The game starts with a tutorial mission	9.11	The first mission in the game displays a simple tutorial text	PASS	See image 13	N1
Game story prompts are displayed	9.12	The game displays the story premise on startup.	PASS	See image 14	N4
<b>When a player dies they return to the level but as a zombie</b>	9.13	<b>When a players dies by being attacked by a zombie they can press the ‘back’ button which will return them back to the level but they will play as a zombie.</b>	PASS		F11
<b>Picking up cure turns any zombies in range into humans</b>	9.14	<b>Any zombies within range will be turned into</b>	PASS	<b>Initially this test specified an exact radius but this was impossible to verify so the test</b>	F12

				had to be generalised.	
	9.15	When the player is a zombie they should appear visually different.	PASS		F13
	9.16	Player is able to harm human enemies when a zombie	PASS		F13
	9.17	On completing any level in zombie mode, the next level will not be unlocked. The player must pass the level as a human to progress.	PASS		
	9.18	When the player is in zombie mode picking up the cure does not result in any changes to enemies.	PASS		
Inputs	10.1	The player faces the mouse cursor at all times, including when attacking.	PASS		
	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
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Mini Game	The Minigame is accessible from the main menu	11.1	There is a button on the main menu which directs straight to the minigame	PASS	See Image 7	E1, F5
Enemies	There are three different zombie types	12.1	They all have different sprites and attributes, including attack damage, speed and health	PASS	See image 8	F4, N3
	There are two boss enemies	12.2	These appear on the last wave of zombies on the third and sixth level	PASS	See image 9	F7

## Images

#1



#2



#3



#4



#5



#6



#7



Team Craig

#8



#9



#10



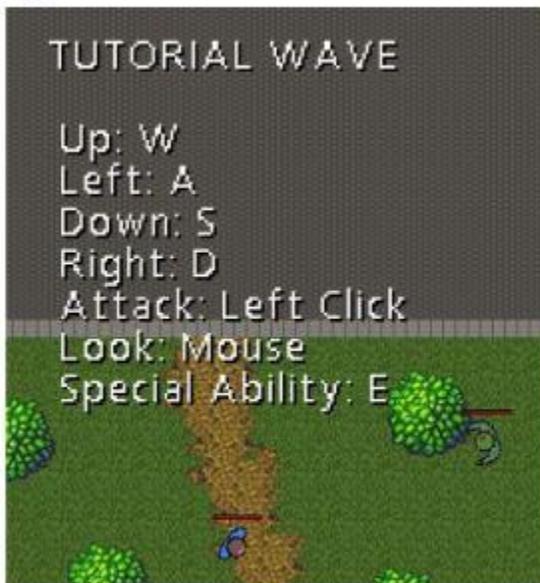
#11



#12



#13



#14

After a hard night of partying following the dreaded POPL exam, you wake up to find yourself in the middle of town, your friends nowhere to be found.

As you try and recall how you ended up here, you hear a low rumbling sound coming from the alleyway near you.

A horde of decaying zombies suddenly appear from the alleyways, their clothes tattered, blood and bone sticking out of their bodies.

Not soon after, the zombies notice you and charge towards you, trampling over each other, their rumbles turning into screams and cries. But in the spur of the moment, you suddenly realize...

**You forgot to hand in your SEPR Assessment!**

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