Team Craig

Requirement Testing – Assessment 4

P (performance requirements), E (external interface requirements), F (functional requirements), and N (non-functional requirements).

ID	Requirement	Fit criteria	Pass/Fail	Tests that satisfy this requirement
P1	The game must run on Windows 10 in Java.	P1.1 - The computer boots into Windows 10.	Pass	5.1
		P1.2 - Java is installed on the computer.	Pass	5.1
		P1.3 - The source code is written in Java.	Pass	N/A
P2	The game must run smoothly on the university computers.	P2.1 - The game runs at a minimum of 30 frames per second at all times.	Pass	See tested 5.2, never during testing was a sub 30 frame rate noticeable.
		P2.2 - The game responds to user to input within 25ms.	Pass	10.x all concern this requirement and most pass but we could not measure response time. However, there is no noticeable delay.
E1	The user must be able interact with the system using an input system available to university computers.	E1.1 - The user can navigate the menus.	Pass	See UI black-box tests 6.x, 7.x, 8.x
		E1.2 - User is able to move their character.	Pass	10.3
E2	The system must provide feedback to the user.	E2.1 - There must be some visual output from the system.	Pass	5.1 the DesktopLauncher takes the user to the menu.

F1	The game must be split up into different stages which each have a few waves of zombies.	F1.1 - The game returns you to the stage select screen once you complete a stage.	Pass	9.6
.		F1.2 - Zombies are spawned at the start of each wave.	Pass	Zombies must have been spawned for test 9.8 to pass.
F2	The game must get progressively more difficult.	F2.1 - More zombies are spawned in later waves and stages.	Pass	9.8
		F2.2 - More difficult zombie types are spawned	Pass	12.1, 12.2

		at later waves and stages.		
F3	There must be three different player types the user can choose to play as with different abilities.	F3.1 - The different player types have different stats. e.g. run speed, hit points.	Pass	7.7, 7.8, 7.9
		F3.2 - The different player types have special abilities. e.g weapons, armour.	Pass	9.10. Special player abilities have been added to the game
F4	There must be at least 3 zombie types (based on societies) with different abilities.	F4.1 - The different zombie types have different stats. e.g. run speed, hit point.	Pass	12.1, 3.6, 3.7, 3.8
		F4.2 - The different zombie types have special abilities. e.g weapons, armour.	Pass	

			Pass	
		F4.3 - Each zombie type must reference a university society.		
F5	There must be a mini game, completely different from the main game.	F5.1 - The mini-game has a different objective to the main game.	Pass	11.1
		F5.2 - It is playable from the main menu.	Pass	
F6	There must be five different power-ups which are sometimes dropped when a wave is completed.	F6.1 - One power-up is dropped at the end of every wave.	Pass	9.9
		F6.2 - When a power-up is dropped it is selected randomly from all the power-up.	Pass	See test 9.9, as far as we can tell the random selection is functioning well.
F7	There must be two bosses. One half way through the game and one at the end.	F7.1 - The third and sixth stage finish with a boss.	Pass	12.2
F8	The game must be able to be saved and then reloaded at any time.	F8.1 - The game state is encoded into text to be stored in a plain text file.	Pass	7.2, 7.3

			Pass	We have interpreted this to mean that the unlocking of levels is saved. See test 7.2, 7.3.
		F8.2 - Loading a game save returns the game to the exact state it was in when it was saved.		

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F9	The zombies must seek out the player and do damage when they are within range.	F9.1 - The player loses a number of hit points depending on the zombie type.	Pass	12.1
		F9.2 - The player loses the hit points every second the zombie is within a certain distance from the player.	Pass	3.x are concerned with a zombie doing damage to a player depending on the range and the cooldown time on the zombies attack. All tests pass.
F10	The player should do damage to a zombie (when player is a human) and do damage to non-zombies (when player is a zombie), when they are in range and the user attacks in the correction direction.	F10.1 - The zombie or non-zombie loses a number of hit points depending on the weapon the player is using.	Pass	7.7, 7.8, 7.9 detail the different player types. The players have different attack damage stats as a result of the weapon that each player holds.
		F10.2 - The zombie or non-zombie loses the hit points when the user clicks in the direction of the zombie or non-zombie as long as it is within the range of the weapon. Range represented as a sector.	Pass	2.x test the players attack method on a zombie, all tests pass. 10.2 ensures that the left mouse button causes the player to attack.
F11	The player must turn into a zombie after dying and returning to level.	F11.1 When the player dies, on returning to the level the player will be a zombie.	Pass	9.13
F12	The game must contain a 'cure' item which turns zombies into non-zombie characters .	F12.1- When the cure item appears on screen, the player should be able to pick it up if a human. F12.1-When the player picks up the cure all zombies within range will turn into non-zombies and no longer be able to hurt player.	Pass	9.14
F13	There must be a tangible difference between zombie characters and non-zombie characters	F13.1- As a zombie, the player gains new sprites with new player statistics. F13.2- Player playing as a zombie character must be able to attack and deplete the health of non-zombie characters.	Pass	9.15, 9.16

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N1	The game must be easy to learn to play.	N1.1 - There is a controls option in the user manual.	Pass	N/A
		N1.2 - The game starts with a tutorial mission.	Pass	9.11 tests that tutorial text is shown at the beginning of the game
N2	The user must clear all stages and bosses in order to complete the game.	N2.1 - Once a stage is completed the next stage is available to play.	Pass	9.1 and 9.3
		N2.2 - Once the final stage is completed the game is completed.	Pass	9.2
N3	The different zombie types and player sprites should all be distinguishable from each other.	N3.1 - All sprites are different in design. They have different colours and features.	Pass	Test 12.1. The sprites are distinguishable.
N4	The game should guide the user through the story.	N4.1 - There are text prompts to give the user story information.	Pass	9.12
N6	The game could have an 8-bit aesthetic.		Pass	N/A

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References

[1] "Geese Lightning Updated Requirements" [Online] Available:
https://drive.google.com/open?id=1luMHzAq_EQ21EoLRIfGDPEYltgG2la
mL [Accessed 16-Feb-2019]