

Update Unit Testing Evidence

Test codes starting WB are new tests implemented by us. Test codes that are fully numerical were inherited with the new code-base.

Test Class	Test Name	Test ID	Description	Result
Character Test	Characters With Same Position Should Collide	1.1.1	Attempts to collide a character with itself (should detect a collision)	PASS
	Touching Characters Should Collide	1.1.2	Creates two characters that are only just touching then attempts to collide them (should detect a collision)	PASS
	Non Touching Characters Should Not Collide	1.1.3	Creates two characters that are not touching and makes sure that no collision is detected when they are collided	PASS
	Get Center On Character With Positive Position	1.2.1	Tests the calculation for getCenter() on a character in the top right quad.	PASS
	Get Center On Character With Negative Position	1.2.2	The situation tested here should never happen. Like above this tests the getCenter() function	PASS
	Get Direction In Top Right Quadrant	1.3.1	Testing the getDirection method for each possible quadrant.	PASS
	Get Direction In Bottom Right Quadrant	1.3.2		PASS
	Get Direction In Bottom Left Quadrant	1.3.3		PASS
	Get Direction In Top Left Quadrant	1.3.4		PASS
	Characters Take Specified Damage	1.4	Tests that the takeDamage function has the expected effect on player health	PASS
	Get Dir Norm Vector To Negative Position	1.5.1	Testing that getDirNormVector calculates the correct normalized vector from the characters center to a positive coordinate.	PASS
	Get Dir Norm Vector To Positive Position	1.5.2	Testing that getDirNormVector calculates the correct normalized vector from the characters center to a negative coordinate.	PASS

Player Test	Movement Test	WB1	Tests movement by simulating a keypress updating the player position then checking to make sure they've moved	PASS
	Player Position Resets When Respawned	2.1	Checks that the player position resets when they respawn	PASS
	Player Does No Damage To Zombie When At Max Range	2.2.1	Makes sure that the player cannot damage a zombie who is on the edge of their range	PASS
	Player Does Damage To Zombie When In Range	2.2.2	Makes sure that the player can damage zombies that are within range	PASS
	Player Does No Damage To Zombie Out Of Range	2.2.3	Makes sure the player can't hurt zombies that are outside of their range	PASS
	Player Types Have Different Health	2.3.1	Generates a player of each type then compares their health to make sure they're different	PASS
	Player Types Have Different Speed	2.3.2	Generates a player of each type then compares their speed to make sure they're different	PASS
Zombie Test	Zombie Does No Damage To Player When At Max Range	3.1.1	The same as 2.1.1 but switch player and zombie positions and checking that the zombie does damage to the player.	PASS
	Zombie Does Damage To Player When In Range	3.1.2	The same as 2.1.2 but switch player and zombie positions and checking that the zombie does damage to the player.	PASS
	Zombie Does No Damage To Player Out Of Range	3.1.3	The same as 2.1.3 but switch player and zombie positions and checking that the zombie does no damage to the player.	PASS
	Zombie Cannot Attack Before Cooldown Complete	3.2.1	Make sure that a zombie can only trigger attack damage one per cooldown period	PASS
	Zombie Can Attack After Cooldown Complete	3.2.2	Makes sure that after a cooldown expires the zombie can damage the player again	PASS

PowerUp Test	Power Up Health Adds HP To Player	4.1	Reduces players health then activates a health power up and checks that the players health goes up by the amount specified by Constant.HEALUP.	PASS
	Power Up Speed Increase Players Speed	4.2.1	Compares the players speed before and after activating a speed power up to make sure the speed increases by the amount specified by Constant.SPEEDUP.	PASS
	Power Up Speed Deactivates After 10s	4.2.2	Compares the players speed before activating it and 11 seconds after it has been activated to make sure the speed is the same as the original speed.	PASS
	Power Up Speed Does Not Deactivate Before 10s	4.2.3	Compares the player speed before activating and 9s after activating to make sure the speed is still different.	PASS
	Power Up Speed Deactivate Method Resets Player Speed	4.2.4	Tests that the speed power ups effect can be cancelled at anytime by calling deactivated manually.	PASS
	Player Cannot Pick Up Far Away Power Up	4.3.1	Checks the player can't pick up a power up that is out of reach (must be overlapping) by using the overlapsPlayer() method of the PowerUp class.	PASS
	Player Can Pick Up Close Power Up	4.3.2	Checks the player can pick up a power up that is in reach (must be overlapping) by using the overlapsPlayer() method of the PowerUp class.	PASS
	Power Up Immunity Stops The Player Taking Damage	4.4.1	Activates an immunity power up and calls takeDamage on the player. Checks that the players health before and after takeDamage remains the same.	PASS
	Power Up Immunity Deactivates After 5s	4.4.2	Activates an immunity power up and calls takeDamage before and after 5 seconds. Checks the the player only lost hit points from takeDamage called after 5	PASS

			seconds.	
	Power Up Immunity Deactivate Method Cancels Immunity	4.4.3	Activates an immunity power up and calls takeDamage on the player before and after calling deactivate on the power up. Checks the player only lost hit points from the takeDamage called after deactivate.	PASS