

Developer Diary For MAD-3 (Space Runner 3D)

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02-11-2020 – 20-11-2020

Read the Design Document of Space Runner 3D started research on assets and endless runner implementations. Researched and Discussed Multiplayer Functionality with the designer. Discussed the 3d Design aspects of the game with the designer. Changed the design of the space gameplay by discussing with the designer like instead of moving the ship into only three lanes the ship now could move anywhere in the skybox.

21-11-2020

Project setup and Started the development of the game with the development of the ship with the help of cubes. Experimented with different player ship movements by adding the movement script to the ship by doing internet research [\[1\]](#) and at this point, there is a white ship made of cubes which can move left, right, down, and up with the delegated keys.

27-11-2020

Researched [\[2\]](#) Creating Asteroids and Created basis asteroid models and applied script which creates hundreds of asteroids in a grid that are rotating randomly.

29/11/2020

Discussed with the Designer to add trail renderer and Researched [\[3\]](#) trail renderer and created trail at the back of both wings and experimented with its different settings that leaves the trail of two colours yellow and red as the player ship moves and researched [\[4\]](#) how to make the camera follow the player could be done by making the camera a child object of the player but decided to have sway effect [\[5\]](#)[\[6\]](#) and did through the script. Searched the asset store for free particle system effects for player explosion and imported “particle dissolve shader by moonflower carnivore” [\[7\]](#) as this pack contains some cool realistic explosion effects and then applied the explosion effect upon collision with asteroids.

30/12/2020 – 04/12/2020

Searched for coin asset to add the “science coins” as specified by the designer and imported the old coin asset [\[8\]](#) and then applied texture to the coin and saved in the prefabs and then created the script similar to the asteroids one to randomly spawn the “science coins”. Tired to detect the collision [\[9\]](#) working with the is trigger box checked in but did not get that working, then added the score and distance UI texts to the game dashboard and implemented the calculation of distance in a script that is working with the speed, have written the script for high score and score display but still need some work to be implemented.

07/12/2020

Searched for skybox [\[10\]](#) and applied the skybox on the level changed the asteroids from sphere one to 3d model one [\[11\]](#) and searched for materials and applied spaceship kind of material [\[12\]](#) on the player spaceship. Fixed the score by adding an event manager to make a bridge for talking to the score script and the game object of score that add 10 science score to the score as player ship collides with a coin/science object as specified by the designer.

08/12/2020

Imported skybox pack from asset store [\[13\]](#) As designer mentioned in the design doc to change the background to show the level change so discussed with the designer by contacting him on teams to have score determine the high scores instead of distance because a player could wander around the free spaces of the skybox and that way his distance would be increasing as compared to the one who is dodging the asteroids and collecting the coins so implemented the skybox changes with the score as the player achieves 100 scores the skybox changes form level 1 skybox to next level skybox and the speed of the player increased to indicate the level change and to increase the difficulty and when the player achieves 250 scores by collecting coins/science points then skybox is changed again and speed of the player increases to increase the difficulty as mention in the design doc. Designed and implemented the splash screen scene as mentioned by the designer and the background of the splash screen scene is created with canva [\[14\]](#) and then the fade script is applied to it. Created the MainMenu scene and set of buttons for MainMenu and implemented the functionality of the play button that loads the level. Buttons Text are created using [\[15\]](#) TestMeshPro. Changed the score scripts and implemented scoring in another way so that it could be accessed easily in the future.

10/12/2020

Thought about how to implement a slowdown pickup so first searched for the pickup assets from the asset store and found a potion pack [\[16\]](#) decided to use green potion for slowing down the player speed and then implemented the slowdown potion by randomly generating the prefab thorough slowpotionmanager script and slowpotionpickup script and then thought that there should be messages displayed to the user so researched [\[17\]](#)[\[18\]](#) about it and added functions to display messages on the screen to let the player know when slowdown pickup id activated and deactivated.

11/12/2020

Thought that there should be messages displayed to the user about progression to other level and added functions to display messages on the screen to let the player know that he/she progressed to another level. Added main menu instructions button and text of instructions and added explosion [\[19\]](#) sound to the player that plays when playership collides with an asteroid. Added sound for the coins [\[20\]](#) which when collected plays a sound that depends on player speed so e.g if the speed is fast like in level 2 then it will play short and quick. Added background Sci-Fi music [\[21\]](#) to the game as specified in the design document by the designer.

12/12/2020

As specified in the game design document added options button on the game dashboard shows the two sliders for adjusting music and effects volume. And added a pause button that pauses the game and a tick sign resume button that resumes the game and added the functionality of the instructions panel, back button, options button, and added last scores in the scores panel of the main menu

13/12/2020

Discussed with the designer by contacting him through teams and we decided to not put sound to the player ship engine sound as it would no be suitable with background music and will be messy and limited the pickups to coins and potions the quantity of spawned potions could be increased through the script and researched on adding the multiplayer as specified by the designer in the design document about implementing split-screen for multiplayer so discussed with him that split-screen will put more pressure on the machine and will be difficult for two players to play at the same time on the same device so decide to let the 1st player play the game and then let 2nd player play the game whoever gets more science/score points wins so an appropriate message appears on the screen. So, implemented it by getting player names as input and saving them to player prefs, and accessing them. 1st player 1 will be able to play it by pressing the start button and then player 2 will be able to play it using the start button on the player 2 ready screen. And added a game over panel on which win, and loss condition messages are displayed same procedure done with the single-player mode so player inputs his/her name which is stored in player prefs and accessed at the game over panel to display name with result messages. Was stuck at the score which was not resetting as I was loading the game scene for player 2 it was taking the player 1 score to the player 2 game scene so researched about it [\[22\]](#)[\[23\]](#) fixed that by making the score variable public and setting it to 0 in the awake method of player movement script of multiplayer 2 scene. And tested the game now my game is completed at this stage I will make a test plan for it and provide the results.

14/12/2020

Thought to have a player 1 ready screen as well in multiplayer just like player 2 ready screen so added that. Started testing the game by unit testing the components of the

- Splashscreen scene
- Main menu scene
- Level123 scene (which is a single-player scene)
- Multiplayer1 scene
- Multiplayer2 scene

and after unit testing performing the test on the scene as a whole and then testing the complete project together as connected scenes. And the test plan screenshots are attached in this document as well as the excel file separately.

		Purpose:	This set of tests is intended to check functionality of MainMenu Scene								
Space Runner Unit Testing			Unity 2019.2.11f1 (64-bit)								
Requirement ID	Sprint	Test Case Ref	Test Case Name	Descriptions	Search Parameters / Instructions	Checks	Expected Result	Actual Result	Results Pass/Fail	Bug #	Comments
1.00	1	TC.001	SplashScreen	SplashScreen	play mainsplashscreen scene	Splashscreen displays with fade In and then plays mainmenu scene	Splashscreen displays with fade In and then plays mainmenu scene	Splashscreen displays with fade In and then plays mainmenu scene	Pass		
1.01	1	TC.002	MainMenu Panels	Instructions Panel	Instructions Panel should be displayed upon clicking on instructions button	Instructions panel displayed with 4 instruction on how to play	Instructions panel displayed with 4 instruction on how to play	Instructions panel displayed with 4 instruction on how to play	Pass		
1.02	1	TC.003	MainMenu Panels	Options Panel	Options Panel should be displayed upon clicking on Options button	options panel displayed with 2 slider that can change the music and sound	options panel displayed with 2 slider that can change the music and sound	options panel displayed with 2 slider that can change the music and sound	Pass		
1.03	1	TC.004	MainMenu Panels	Mode Panel	Mode Panel should be displayed upon clicking on Mode button of mainmenu	Mode panel displayed with 2 buttons 1 for single play which when clicked takes to singleplayer name input screen and when clicked on multiplayer takes to multiplayer name input panel	Mode panel displayed with 2 buttons 1 for single play which when clicked takes to singleplayer name input screen and when clicked on multiplayer takes to multiplayer name input panel	Mode panel displayed with 2 buttons 1 for single play which when clicked takes to singleplayer name input screen and when clicked on multiplayer takes to multiplayer name input panel	Pass		
1.04	1	TC.005	MainMenu Panels	Stats Panel	stats Panel should be displayed upon clicking on scores button of mainmenu	stats Panel should be displayed with lastscore and highscore	stats Panel should be displayed with lastscore and highscore	stats Panel displayed with lastscore and highscore	Pass		
1.05	1	TC.006	MainMenu Panels	Single Player Panel	single player panel displayed upon clicking the singleplayer button on mode panel	single player panel displayed with player name input fied and upon clicking start player name is saved and levelscene loads	single player panel displayed with player name input fied and upon clicking start player name is saved and levelscene loads	single player panel displayed with player name input fied and upon clicking start player name is saved and levelscene loads	Pass		
1.06	1	TC.007	MainMenu Panels	Multiplayer Panel	Multiplayer panel displayed upon clicking the Multiplayer button on mode panel	Multiplayer panel displayed with player name 2 input fieds sand upon clicking start player name is saved and takes to player 1 ready screen	Multiplayer panel displayed with player name 2 input fieds sand upon clicking start player name is saved and takes to player 1 ready screen	Multiplayer panel displayed with player name 2 input fieds sand upon clicking start player name is saved and takes to player 1 ready screen	Pass		
1.07	1	TC.008	MainMenu Panels	Player 1 Ready Panel	click on the start button of multiplayer panel after inputting the names of both players	player 1 ready panel displays with message and start button and upon clicking the start button it loads and starts the level for palyer 1	player 1 ready panel displays with message and start button and upon clicking the start button it loads and starts the level for palyer 1	player 1 ready panel displays with message and start button and upon clicking the start button it loads and starts the level for palyer 1	Pass		
1.08	1	TC.009	MainMenu Panels	MainMenu Panel	after running splashscreen mainmenu is displayed	after running splashscreen mainmenu is displayed	after running splashscreen mainmenu is displayed	after running splashscreen mainmenu is displayed	Pass		
1.09	1	TC.009.1	MainMenu Panels	quit Button Testing	play mainmenu scene and click quit button	quits the game	doesn't work inside unity	doesn't work inside unity	Pass		

		Purpose:	This set of tests is intended to check functionality of Level123 Scene									
Space Runner Unit Testing				Unity 2019.2.11f1 (64-bit)								
Requirement ID	Sprint	Test Case Ref	Test Case Name	Descriptions	Search Parameters / Instructions	Checks	Expected Result	Actual Result	Results Pass/Fail	Bug #	Comments	
2.01	1	TC.010	Level123 Scene	Level123 Scene Loads	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button	Level123 Scene starts	Level123 Scene starts	Level123 Scene starts	Pass			
2.02	1	TC.011	AsteroidManager Working	AsteroidManager Generating Asteroids	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button	Asteroids are generated and are rotating	Asteroids are generated and are rotating	Asteroids are generated and are rotating	Pass			
2.03	1	TC.012	CoinManager Working	CoinManager Generating Coins	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button	Coins are generated and are rotating	Coins are generated and are rotating	Coins are generated and are rotating	Pass			
2.04	1	TC.013	PlayerShip Movements	moving playship left,right,up,down	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and move the ship	playship moving left,right,up,down with assigned arrow keys	playship moving left,right,up,down with assigned arrow keys	playship moving left,right,up,down with assigned arrow keys	Pass			
2.05	1	TC.014	PlayerShip Explosion	player ship explodes when collide with asteroid	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button move the ship and collide with an asteroid	player ship explodes when collide with asteroid and explosion sound is played	player ship explodes when collide with asteroid and explosion sound is played	player ship explodes when collide with asteroid and explosion sound is played	Pass			
2.06	1	TC.015	Player Camera	camera follows the player ship with sway effect when moved in any direction	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and move the ship	camera follows the player ship with sway effect when moved in any direction	camera follows the player ship with sway effect when moved in any direction	camera follows the player ship with sway effect when moved in any direction	Pass			
2.07	1	TC.016	CoinPickUp Check	CoinPickUp Check with sound playing and score updating on the screen	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and move the ship and collect coins	coins sound works and that coin is destroyed and the score is updated on the screen	coins sound works and that coin is destroyed and the score is updated on the screen	coins sound works and that coin is destroyed and the score is updated on the screen	Pass			
2.08	1	TC.017	potionPickup check	slowdown potion check that player speed slows down for 10 seconds and messages are displayed upon activation and deactivation of the potion and potion is destroyed	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and move the ship and collect green potion	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	Pass			
2.09	1	TC.018	SlowPickUpManager Working	SlowPickUpManager Generating Coins	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button	Green slow down potions are generated in the skybox	Green slow down potions are generated in the skybox	Green slow down potions are generated in the skybox	Pass			
2.10	1	TC.019	SkyBox Changing Upon Level Change and level up messages	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and collect the coins required for level change e.g.140 score is needed for 1st level up	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	Pass			
2.11	1	TC.020	Distance Working	Distance value increasing and displayed on the dash	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and move the ship	Distance value increasing and displayed on the dash with playership movement	Distance value increasing and displayed on the dash with playership movement	Distance value increasing and displayed on the dash with playership movement	Pass			
2.12	1	TC.021	Pause Menu Working	Pausing and resuming game	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and then click the pause button in the top left corner or press esc to pause the game and press again to resume the game	game is paused and paused text appears on the screen	game is paused and paused text appears on the screen	game is paused and paused text appears on the screen	Pass			
2.13	3	TC.022	Options Menu Working	Options Menu Displayed	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and then click the Options button in the top right corner to bring up the options menu and pause the gameand back button to hide it and resume the game	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed but sometimes the start value of sliders i zero	Fail	the sliders initial value sometimes is zero		
2.14	1	TC.023	Singleplayer GameOverPanel Working	Singleplayer GameOverPanel Working	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and play the game while collecting points and then colliding with an asteroid	Singleplayer GameOverPanel displayed with player name his score and a message depending on if player achieved a highscore	Singleplayer GameOverPanel displayed with player name his score and a message depending on if player achieved a highscore	Singleplayer GameOverPanel displayed with player name his score and a message depending on if player achieved a highscore	Pass			
2.14	1	TC.024	Level123 Scene Complete Test	Testing all the above Functionalities	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and play the game while collecting coins,potions,reaching next levels and then ending game by colliding with an asteroid	All functionalities tested above working except sliders bug	All functionalities tested above working except sliders bug	All functionalities tested above working except sliders bug	Pass		Everything worked as expected	

			Purpose:	This set of tests is intended to check functionality of Multiplayer1 & Multiplayer2								
Space Runner Unit Testing				Unity 2019.2.11f1 (64-bit)								
Requirement ID	Sprint	Test Case Ref	Test Case Name	Descriptions	Search Parameters / Instructions	Checks	Expected Result	Actual Result	Results Pass/Fail	Bug #	Comments	
3.01	2	TC.025	Multiplayer1 Scene	Multiplayer1 Scene Loads	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start	Multiplayer1 Scene starts	Multiplayer1 Scene starts	Multiplayer1 Scene starts	Pass			
3.02	2	TC.026	AsteroidManager Working	AsteroidManager Generating Asteroids	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start	Asteroids are generated and are rotating	Asteroids are generated and are rotating	Asteroids are generated and are rotating	Pass			
3.03	2	TC.027	CoinManager Working	CoinManager Generating Coins	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start	Coins are generated and are rotating	Coins are generated and are rotating	Coins are generated and are rotating	Pass			
3.04	2	TC.028	PlayerShip Movements	moving playership left,right,up,down	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the playership	playership moving left,right,up,down with assigned arrow keys	playership moving left,right,up,down with assigned arrow keys	playership moving left,right,up,down with assigned arrow keys	Pass			
3.05	2	TC.029	PlayerShip Explosion	player ship explodes when collide with asteroid	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the ship and collide with an asteroid	player ship explodes when collide with asteroid and explosion sound is played and player 2 ready screen displays	player ship explodes when collide with asteroid and explosion sound is played and player 2 ready screen displays	player ship explodes when collide with asteroid and explosion sound is played and player 2 ready screen displays	Pass			
3.06	2	TC.030	Player Camera	camera follows the player ship with sway effect when moved in any direction	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the ship	camera follows the player ship with sway effect when moved in any direction	camera follows the player ship with sway effect when moved in any direction	camera follows the player ship with sway effect when moved in any direction	Pass			
3.07	2	TC.031	CoinPickUp Check	CoinPickUp Check with sound playing and score updating on the screen	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the ship and collect coins	coins sound works and that coin is destroyed and the score is updated on the screen	coins sound works and that coin is destroyed and the score is updated on the screen	coins sound works and that coin is destroyed and the score is updated on the screen	Pass			
3.08	2	TC.032	potionPickup check	slowdown potion check that player speed slows down for 10 seconds and messages are displayed upon activation and deactivation of the potion and potion is destroyed	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the ship and collect green potion	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	playership speed slows down for 10 seconds upon collecting green potion and messages are displayed upon activation and deactivation of the potion and potion is destroyed	Pass			
3.09	2	TC.033	SlowPickUpManager Working	SlowPickUpManager Generating Coins	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start	Green slow down potions are generated in the skybox	Green slow down potions are generated in the skybox	Green slow down potions are generated in the skybox	Pass			
3.10	2	TC.034	SkyBox Changing Upon Level Change and level up messages	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and collect the coins required for level change e.g 140 score is needed for 1st level up	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	SkyBox Changing Upon Level Change that changes after reaching a particular score by collecting coins and level up messages are displayed	Pass			
3.11	2	TC.035	Distance Working	Distance value increasing and displayed on the dash	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and move the ship	Distance value increasing and displayed on the dash with playership movement	Distance value increasing and displayed on the dash with playership movement	Distance value increasing and displayed on the dash with playership movement	Pass			
3.12	2	TC.036	Pause Menu Working	Pausing and resuming game	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and then click the pause button in the top left corner or press esc to pause the game and press again to resume the game	game is paused and paused text appears on the screen	game is paused and paused text appears on the screen	game is paused and paused text appears on the screen	Pass			
3.13	2	TC.037	Options Menu Working	Options Menu Displayed	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and then click the Options button in the top right corner to bring up options menu and pause the game and back button to hide it and resume the game	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed	game is paused and options menu is displayed and the music and sfs sliders works for controlling the volume and the back button works to exit the options menu and game is resumed but sometimes the start value of sliders is zero	Fail	the sliders initial value sometimes is zero		
3.14	2	TC.038	player 2 ready screen	player 2 ready screen Working	play mainsplashscreen scene then click play button,then click singleplayer button and then enter the player name and click start button and play the game while collecting points and then colliding with an asteroid and then press start button on the player 2 ready screen	player 2 ready panel displays and upon clicking the start button Multiplayer2 scene starts	player 2 ready panel displays and upon clicking the start button Multiplayer2 scene starts	player 2 ready panel displays and upon clicking the start button Multiplayer2 scene starts	Pass			
4.01	2	TC.039	Performing TC.025, TC.027, TC.028, TC.029, TC.030, TC.031, TC.032, TC.033, TC.034, TC.035, TC.036, TC.037 on the Multiplayer2 Scene	Performing TC.025, TC.027, TC.028, TC.029, TC.030, TC.031, TC.032, TC.033, TC.034, TC.035, TC.036, TC.037 on the Multiplayer2 Scene	Everything work as Expected and all functions work	Everything work as Expected and all functions work	Everything work as Expected and all functions work	Everything work as Expected and all functions work	Pass		Everything worked as expected	
4.02	2	TC.040	Multiplayer GameOverPanel Working	Multiplayer GameOverPanel Working	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and play the game while collecting points and then colliding with an asteroid and then clicking start and letting player 2 play the game same way and colliding with asteroid at the end	Multiplayer GameOverPanel displayed with player name 1 his score and player name 1 his score a message with a player name who won and draw in case both got same score	Multiplayer GameOverPanel displayed with player name 1 his score and player name 1 his score a message with a player name who won and draw in case both got same score	Multiplayer GameOverPanel displayed with player name 1 his score and player name 1 his score a message with a player name who won and draw in case both got same score	Pass			
	5	TC.041	Testing Complete Multiplayer Functionality	Testing Complete Multiplayer Functionality	play mainsplashscreen scene then click play button,then click Multiplayer button and then enter the player 1 name,player 2 name and click start button and then on player 1 ready screen click start and play the game while collecting points and then colliding with an asteroid and then clicking start and letting player 2 play the game same way and colliding with asteroid at the end	Everything work as Expected and all functions work except sliders bug	Everything work as Expected and all functions work except sliders bug	Everything work as Expected and all functions work except sliders bug	Pass		Everything worked as expected	

	Tab	Developped by	No of test cases	Tester	No of days	Unity Version	Test cases passed	Test cases failed	To be done	Percentage done	
	Sprint No	Muhammad Luqman G00353385		Muhammad Luqman							
	MainMenu Testing	Muhammad Luqman G00353385	10	Muhammad Luqman		Unity 2019.2.11 f1 (64-bit)	10	0	0	100%	
	Level123(single player) Testing	Muhammad Luqman G00353385	14	Muhammad Luqman		Unity 2019.2.11 f1 (64-bit)	13	1	0	93%	
	MultiPlayer scene Testing(Multiplayer1 & Multiplayer2 scene)	Muhammad Luqman G00353385	16	Muhammad Luqman		Unity 2019.2.11 f1 (64-bit)	15	1	0	94%	
	Total		40				38	2	0	95%	

15/12/2020

At this stage, my game is completed and tested so Showed the designer the final look of the game by sending him the screenshots of the game and having his point of view whether he is satisfied with the final look or he wants any change and received positive feedback from the designer about the final product.

References

1. <https://answers.unity.com/questions/384329/pitch-yaw-roll-user-input-on-an-object.html>
2. <https://answers.unity.com/questions/632931/random-generation-of-asteroids.html>
3. https://www.youtube.com/watch?v=sRkgvFe_vSI&ab_channel=VeryHotShark
4. <https://answers.unity.com/questions/571702/main-camera-follows-player.html#:~:text=All%20you%20need%20to%20do,%2C%20modified%20by%20the%20%2D1.5.>
5. <https://answers.unity.com/questions/976581/natural-camera-sway.html>
6. <https://stackoverflow.com/questions/49617198/unity-c-sharp-make-camera-sway-back-and-forth-while-keeping-direction>
7. <https://assetstore.unity.com/packages/vfx/particles/fire-explosions/particle-dissolve-shader-package-33631>
8. <https://assetstore.unity.com/packages/3d/props/old-coin-49530>
9. <https://docs.unity3d.com/ScriptReference/Collider.OnTriggerEnter.html>
10. <https://assetstore.unity.com/packages/2d/textures-materials/sky/starfield-skybox-92717>
11. <https://assetstore.unity.com/packages/3d/environments/asteroids-pack-84988>
12. <https://assetstore.unity.com/packages/3d/vehicles/space/highres-shuttle-class-starship-7480>

13. <https://assetstore.unity.com/packages/2d/textures-materials/sky/skybox-volume-2-nebula-3392>
14. <https://www.canva.com/>
15. <https://assetstore.unity.com/packages/essentials/beta-projects/textmesh-pro-84126>
16. <https://assetstore.unity.com/packages/3d/props/potions-115115>
17. <https://answers.unity.com/questions/44137/if-gameobject-is-active.html>
18. https://www.youtube.com/watch?v=lvHqAzhIDSE&ab_channel=Kalm1Games
19. <https://assetstore.unity.com/packages/audio/sound-fx/grenade-sound-fx-147490>
20. <https://assetstore.unity.com/packages/audio/sound-fx/free-casual-game-sfx-pack-54116>
21. <https://assetstore.unity.com/packages/audio/music/electronic/synthwave-sci-fi-music-pack-184583>
22. <https://answers.unity.com/questions/695265/score-not-resetting.html>
23. <https://forum.unity.com/threads/solved-how-to-fully-reload-a-scene-spawn-and-score-are-not-resetting.542768/>
24. <https://answers.unity.com/questions/64556/is-there-a-simple-way-to-delete-all-your-playerpre.html>
25. <https://answers.unity.com/questions/726114/problem-with-playing-sound-on-trigger-enter.html>