ASSESSMENT AND INTERNAL VERIFICATION FRONT SHEET (Individual Criteria)

Course Title	MCAST Advanced Diploma (MQF Level 4)		**Lecturer Name & Surname**	Neil Aquilina	
Unit Number & Title	Programming for Computer Games				
Assignment Number, Title / Type	Simple 2D Car Game - Home				
Date Set	9th December 2020	Deadline Date	19th January 2021		
Student Name	Nathan Abela	ID Number	439799M	Class / Group	MSD 4.2C

■	***Student's declaration prior to handing-in of assignment:*** ❖ *I certify that the work submitted for this assignment is my own and that I have read and understood the respective Plagiarism Policy*
☐	***Student's declaration on assessment special arrangements (Tick only if applicable)*** ❖ *I certify that adequate support was given to me during the assignment through the Institute and/or the Inclusive Education Unit.* ❖ *I declare that I refused the special support offered by the Institute.*
☐	

Student Signature:	N.Abela	**Date:**	20/01/2021

Assessment Criteria	Maximum Mark	Mark Achieved
KU2: Describe asset types		
KU5: Identify suitable resolution for images of various types		
KU6: Select asset types and settings for a range of media assets for a game design		
KU7: Identify resolution issues for the development platforms		
KU8: Identify appropriate input devices and methods for development platforms		
KU9: Show and explain how to deploy a game to multiple devices		
AA1: Examine and apply basic programming techniques for a simple game		
AA2: Develop a game with graphical and audio assets		
AA3: Demonstrate ability to resolve issues and input devices in the development environment		
AA4: Apply coroutines for a more interesting gameplay		
AA5: Examine and solve gameplay problems		
SE2: Resolve programming issues related to sound, graphics and gameplay		
Total Mark	100	

Assessor's Feedback to student
(If necessary, use reverse side of page for IV feedback on assignment brief / sample of assessment decisions)

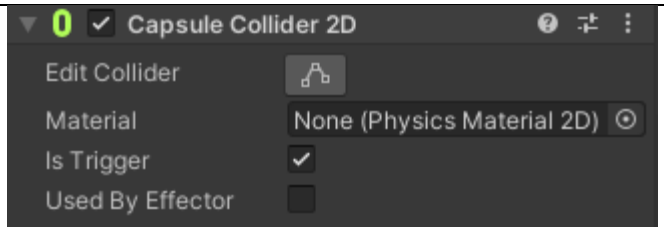
	Name & Surname	Signature	Date
Internal Verifier: Approval of assignment brief		For approval signature, please refer to electronic audit trail	
Lecturer / Assessor: Issue of results and feedback to student		For approval signature, please refer to electronic audit trail	
Internal Verifier: Approval of assessment decisions (Sample)		For approval signature, please refer to electronic audit trail	
Learner's signature upon collection of corrected assignment.			

Nathan Abela
January 2021

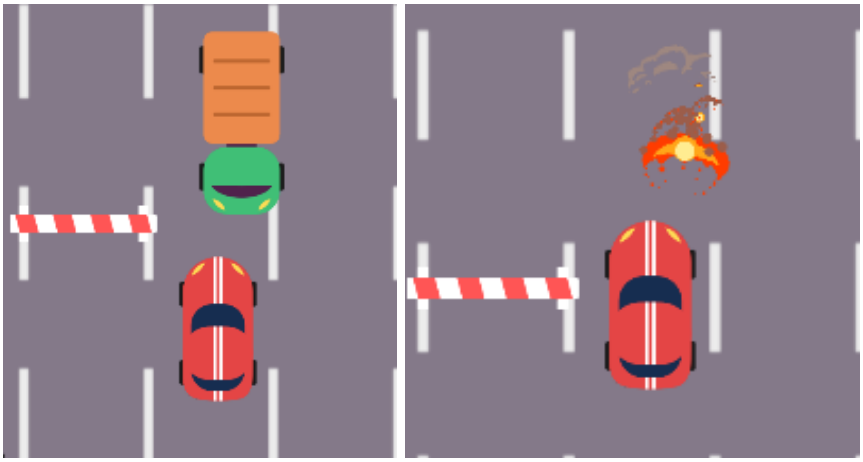
Task 3

Review, Build and Deploy the Game

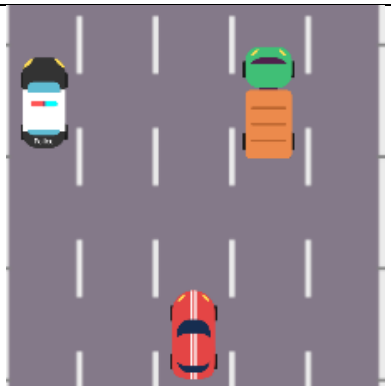
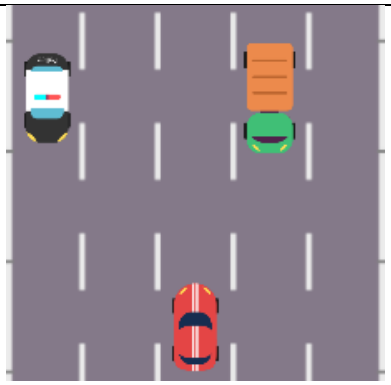
Error 1:

Test Case 1	Obstacle Bullets passing through destroyer (shredder)
Line Error	/
Error Explanation	Since the obstacle bullets do not have a collision component, they would pass through other objects without triggering anything
Error Correction	A Capsule Collider 2D and 'Is Trigger' were added
Error Correction Screenshot	

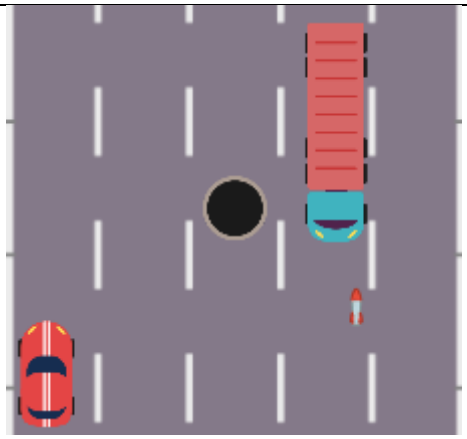
Error 2:

Test Case 2	Adding a collision on the obstacle meant that once the missile is fired the same obstacle will be destroyed
Line Error	`private void OnTriggerEnter2D(Collider2D otherObject)`
Error Explanation	Due to the fact that the obstacle bullet is spawned from the obstacle, a collision would occur and would destroy both
Error Correction	Collision was added to other objects
Error Correction Screenshot	

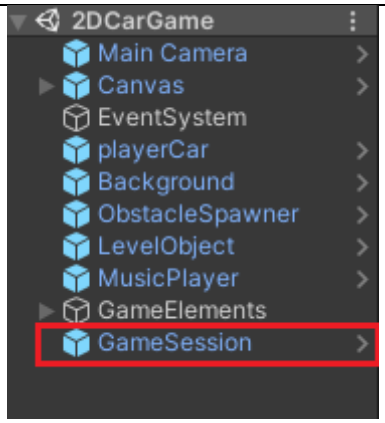
Error 3:

Test Case 3	
Line Error	Obstacles spawning facing the wrong direction
Error Explanation	Obstacles were spawning in the direction they originally have form the .png
Error Correction	`// Rotating the obstacle so it faces the player direction` `transform.rotation = Quaternion.Euler(new Vector3(0, 0, -180));`
Error Correction Screenshot	

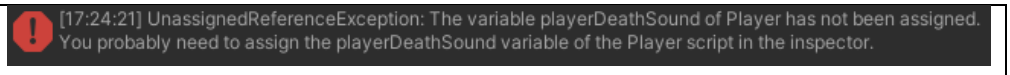
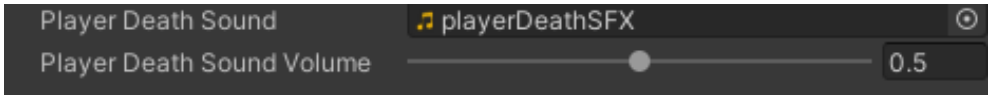
Error 4:

Test Case 4	
Line Error	Obstacle Bullets spawning facing the wrong direction
Error Explanation	Obstacles Bullets were spawning in the direction they originally have form the .png
Error Correction	`// Rotating the obstacleBullet so it faces the player direction` `obstacleBullet.transform.rotation = Quaternion.Euler(new Vector3(0, 0, -180));`
Error Correction Screenshot	

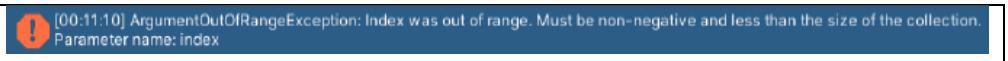
Error 5:

Test Case 5	
Line Error	FindObjectOfType<GameSession>().LoadGame();
Error Explanation	The 2D Car Game Scene could not find the GameSession in the Scene
Error Correction	GameSession prefab was moved in the Hierarchy
Error Correction Screenshot	

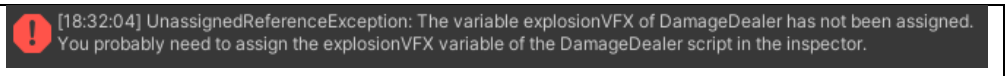
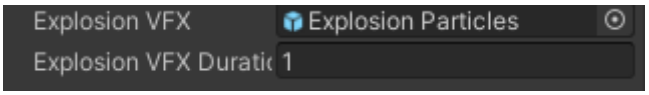
Error 6:

Test Case 6	
Line Error	Player Death Sound Effect was not being played
Error Explanation	A field with AudioClip ‘playerDeathSound’ was created but no audio clip was assigned to it
Error Correction	An audio file was specified in the inspector of the respective prefab
Error Correction Screenshot	

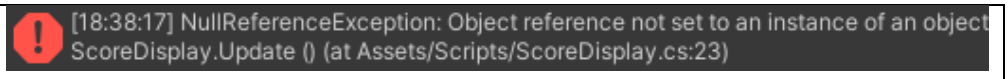
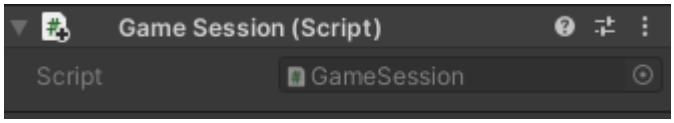
Error 7:

Test Case 7	
Line Error	/
Error Explanation	Changing the position of the waypoints, the obstacles positions were not changed
Error Correction	The path was unpacked completely and re-added
Error Correction Screenshot	

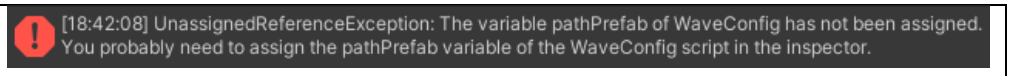
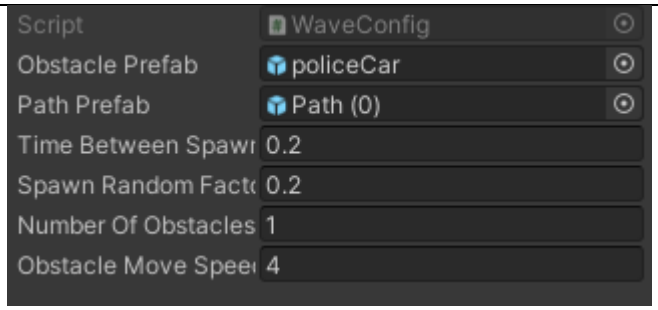
Error 8:

Test Case 8	
Line Error	Obstacle Explosion particles were not being shown
Error Explanation	A field with GameObject ‘explosionVFX’ was created but no particle was assigned to it
Error Correction	A particle system was assigned to it in the inspector of the respective prefab
Error Correction Screenshot	

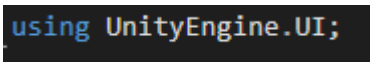
Error 9:

Test Case 9	
Line Error	/
Error Explanation	Trying to access a reference variable that is not referencing an object
Error Correction	It was found that the GameSession did not have a script assigned to it. The GameSession script was added
Error Correction Screenshot	

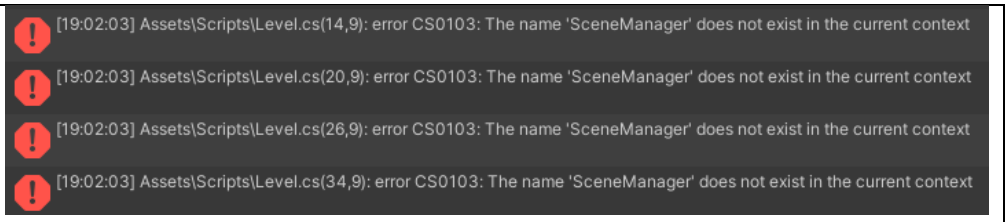
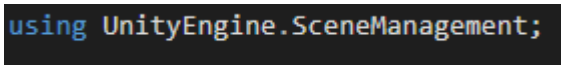
Error 10:

Test Case 10	
Line Error	/
Error Explanation	The WaveConfig did not have a path prefab assigned to it. This was found after unpacking a path prefab to update its waypoints
Error Correction	This was fixed by assigning the correct path in the WaveConfig inspector
Error Correction Screenshot	

Error 11:

Test Case 11	
Line Error	/
Error Explanation	A field of type ‘Text’ was created using the ‘UI’ class, but the class was not imported
Error Correction	The ‘UI’ class from UnityEngine was declared at the top of the script
Error Correction Screenshot	

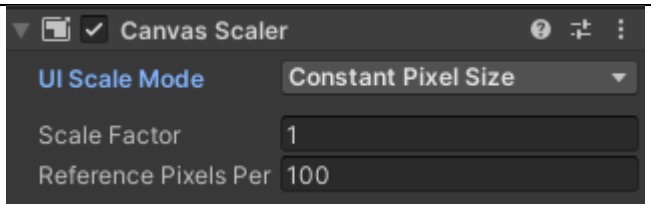
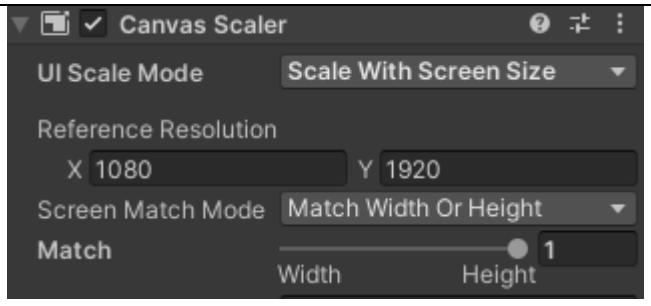
Error 12:

Test Case 12	
Line Error	/
Error Explanation	A class ‘SceneManager’ from the class ‘SceneManagement’ was used, but the class was not imported
Error Correction	The ‘SceneManagement’ class was imported at the top of the script
Error Correction Screenshot	

Error 13:

Test Case 13	
Line Error	/
Error Explanation	Score was not being updated
Error Correction	It was found that the the script GameSession, the method AddToScore() was missing a '+', thus the scoreValue was being sent to 0 regardless other factors
Error Correction Screenshot	`score += scoreValue;`

Error 14:

Test Case 14	
Line Error	Upon building the .exe the text was covering all of the screen
Error Explanation	The exported game was being shown differently on the .exe. than on the editor. Despite the aspect ratio being set to 10:16.
Error Correction	The Canvas of each scene was using 'Constant Pixel Size' rather than 'Scale with Screen Size', this was changed in the inspector.
Error Correction Screenshot