


## ASSESSMENT AND INTERNAL VERIFICATION FRONT SHEET (Individual Criteria)

Course Title	Advanced Diploma			Lecturer Name & Surname	NEIL AQUILINA	
Unit Number & Title		Programming for Computer Games				
Assignment Number, Title / Type		Simple 2D Car Game - Home				
Date Set		09/12/2020	Deadline Date	19/01/2021		
Student Name	Mikael Zammit		ID Number	0003403L	Class / Group	4.2B

<input type="checkbox"/>	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
<input type="checkbox"/>	<b>Student's declaration on assessment special arrangements (Tick only if applicable)</b> † I certify that adequate support was given to me during the assignment through the Institute and/or the Inclusive Education Unit.
<input type="checkbox"/>	† I declare that I refused the special support offered by the Institute.
Student Signature: 	
Date : 17/01/2021	

Assessment Criteria	Maximum Mark	Mark Achieved
KU2: Describe asset types	5	
KU5: Identify suitable resolution for images of various types	5	
KU6: Select asset types and settings for a range of media assets for a game design	5	
KU7: Identify resolution issues for the development platforms	5	
KU8: Identify appropriate input devices and methods for development platforms	5	
KU9: Show and explain how to deploy a game to multiple devices	5	
AA1: Examine and apply basic programming techniques for a simple game	7	
AA2: Develop a game with graphical and audio assets	7	
AA3: Demonstrate ability to resolve issues and input devices in the development environment	7	
AA4: Apply coroutines for a more interesting gameplay	7	
AA5: Examine and solve gameplay problems	7	
SE2: Resolve programming issues related to sound, graphics and gameplay	10	
Total Mark	75	

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

	Name & Surname	Signature	Date
Internal Verifier : Approval of <u>assignment brief</u>		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 <u>assessment decisions</u> (Sample)		For approval signature, please refer to electronic audit trail	
Learner's signature upon collection of corrected assignment.			

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



# IICT4016 - Programming for Computer Games

## Create a Simple 2D Car Game

### Scenario: 2D Car Game

You are to create a simple 2D Car Game where your goal is to move the car left and right to avoid the obstacles found on the way, while having a scrolling background.

The game:

You should be able to control the car by moving only left and right. Obstacles will spawn and move from top to bottom at different speeds and having different damage levels. Obstacles can be other cars, stones, barriers, etc. 2 types of obstacles should also fire.


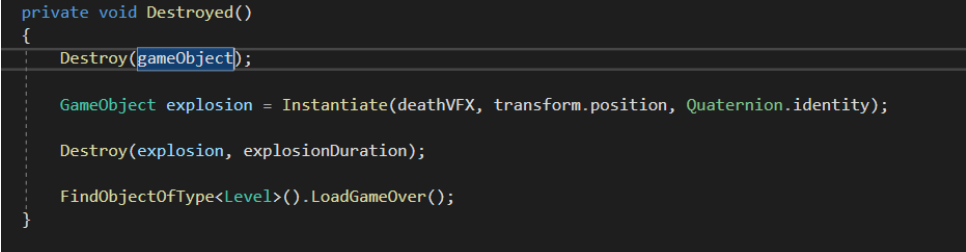
For every obstacle that your car avoids you get 5 points. When you reach 100 points you win the game.


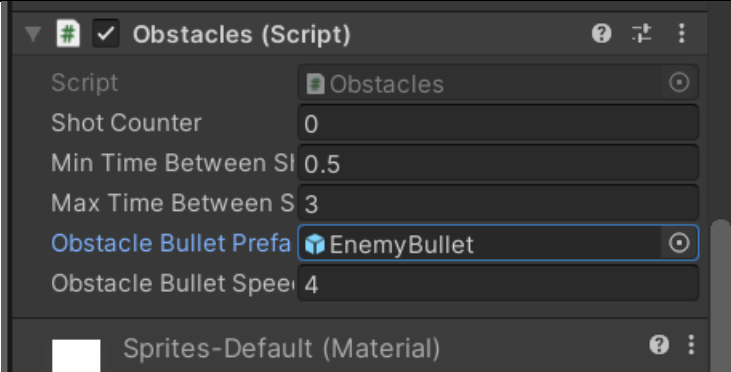
If you get hit by obstacles, your health is reduced. If your health  $\leq 0$ , Game Over.

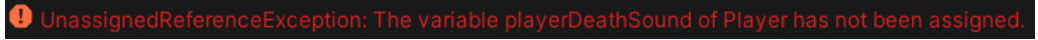
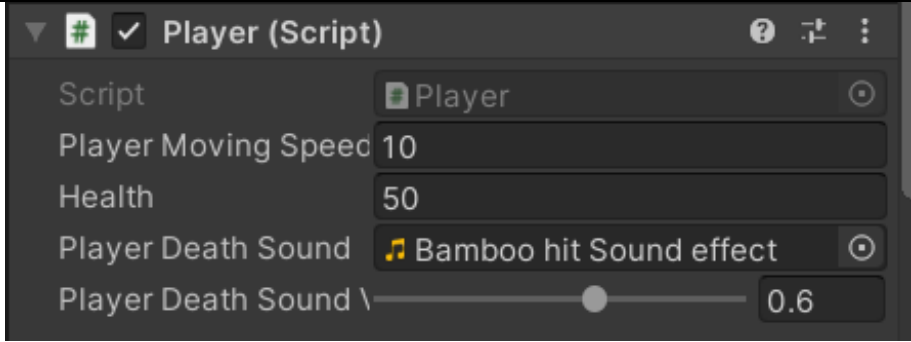
**N.B.: Different tasks have different deadlines so make sure that you keep up with your deadline dates.**


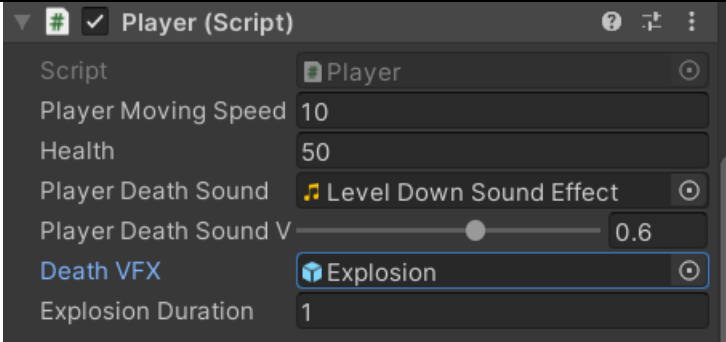
**Always upload your project on GitHub repository and share it with your lecturer.**




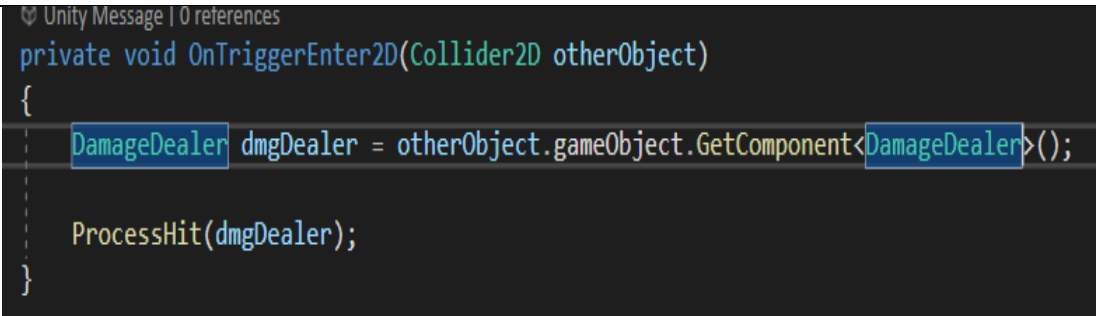
Test Case 2	 Assets\Scripts\Player.cs(41,9): error CS1501: No overload for method 'Destroy' takes 0 arguments
Line Error	Destroy();
Error	Destroy(); on its own does not work
Explanation	Added gameObject between parameters of Destroy
Error Correction ScreenShot	 <pre>private void Destroyed() {     Destroy(gameObject);      GameObject explosion = Instantiate(deathVFX, transform.position, Quaternion.identity);      Destroy(explosion, explosionDuration);      FindObjectOfType&lt;Level&gt;().LoadGameOver(); }</pre>

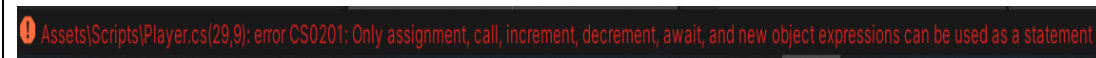
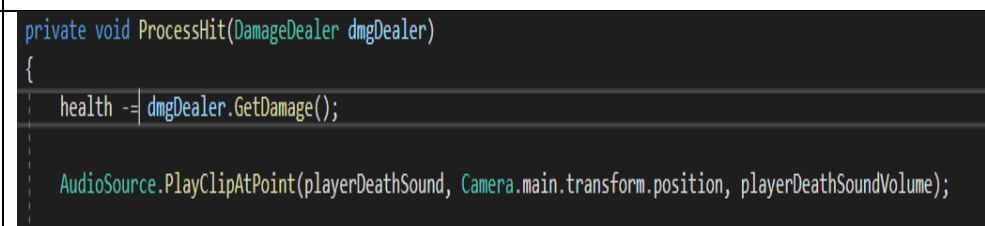
Test Case 3	 UnassignedReferenceException: The variable obstacleBulletPrefab of Obstacles has not been assigned.
Line Error	[SerializeField] float obstacleBulletSpeed = 0.3f;
Error	The bullet prefab needs to be set in order to act as a bullet
Explanation	Instead of none (game object) I put EnemyBullet
Error Correction ScreenShot	 <p>Obstacles (Script)</p> <ul style="list-style-type: none"> <li>Script: Obstacles</li> <li>Shot Counter: 0</li> <li>Min Time Between Shots: 0.5</li> <li>Max Time Between Shots: 3</li> <li>Obstacle Bullet Prefab: EnemyBullet</li> <li>Obstacle Bullet Speed: 4</li> </ul> <p>Sprites-Default (Material)</p>

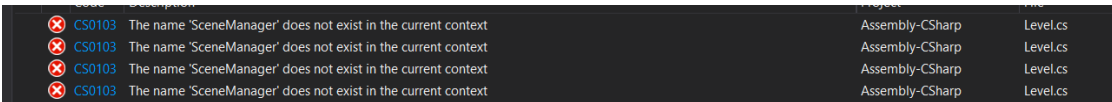
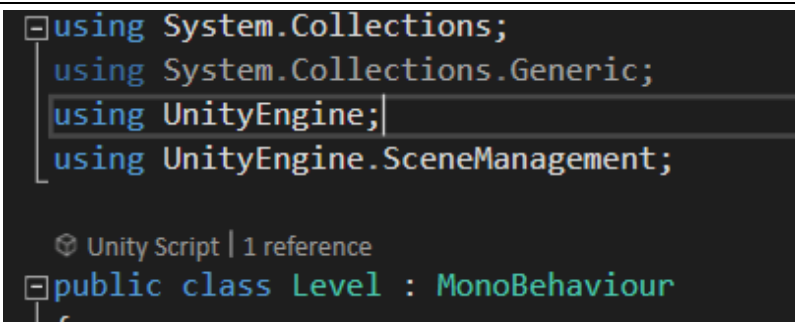
Test Case 4	
Line Error	[SerializeField] AudioClip playerDeathSound;
Error	The audio Clip was set in Visual studio by code but not from the unity serialized field
Explanation	I inserted an audio filen in the playerdeathsound field to make a sound effect when enemy dies.
Error Correction ScreenShot	

Test Case 5	
Line Error	[SerializeField] GameObject deathVFX;
Error	DeathVFX is the death visual effects that is going to be appearing when colliding. In unity it was not set.
Explanation	I set up deathVFX so that the explosion could be shown
Error Correction ScreenShot	



Test Case 6	
Line Error	DamageDealer dmgDealer = otherObject.gameObject.GetComponent();
Error	The line of code was not finding a connection or a reference from the DamageDealer class
Explanation	In the GetComponent parameter there needs to be the Damage dealer reference GetComponent< DamageDealer >()
Error Correction ScreenShot	

Test Case 7	
Line Error	health - dmgDealer.GetDamage();
Error	The line of code is missing something that is not letting the programm to decrement the score
Explanation	The problemi s that after the '-' there needs to be an '=' to the code to be exectuted well.
Error Correction ScreenShot	

Test Case 8	
Line Error	SceneManager.LoadScene("GameOver");
Error	The line of code is missing something the library SceneManager at the top of the program
Explanation	I added the line of code "using UnityEngine.SceneManagement;"
Error Correction ScreenShot	

(AA5 – 7 marks)