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	Letizia Mifsud		**ID Number**	**483197M**	**Class / Group**	SWD 4.2B

✓	*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:	Letizia Mifsud	**Date :**	**20.01.2021**

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: Idenitfy 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	

Assessor's feedback to student
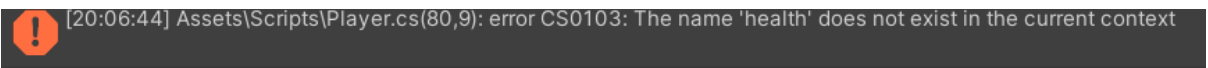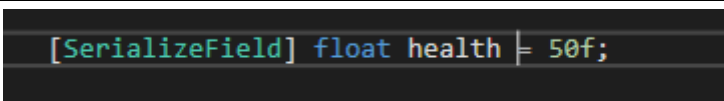

(If necessary, use reverse side of page for IV feedback on assignment brief / sample of assessment decisions)

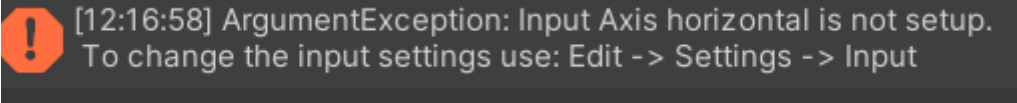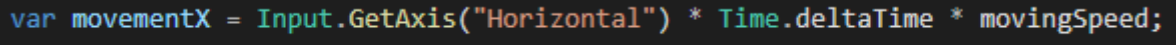|	Name & Surname	Signature	Date
Internal Verifier : Approval of _assignment brief_		For approval signature, please refer to electronic audit trail	
Lecturer / Assessor : Issue of results and feedback to student		For approval signature, please refer to electronic audit trail	
Internal Verifier : Approval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

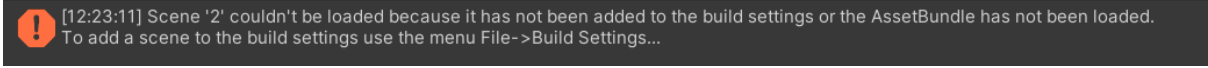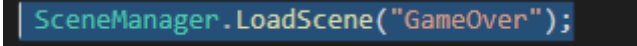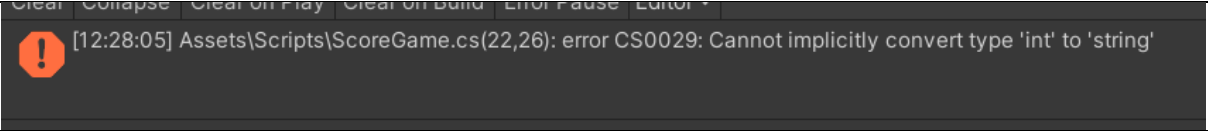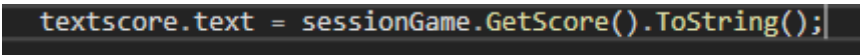| Assessment Criteria |
|---|
| *KU2: Describe asset types* |
| *KU5: Identify suitable resolution for images of various types* |
| *KU6: Select asset types and settings for a range of media assets for a game design* |
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| *AA4: Apply coroutines for a more interesting gameplay* |
| *AA5: Examine and solve gameplay problems* |
| *SE2: Resolve programming issues related to sound, graphics and gameplay* |

Task 3: Review, Build and Deploy the Game

During Development you will encounter programming issues and gameplay problems. You are to document 14 **different** errors shown by the Console, the line error where you had the problems and a short explanation on how you solved the problem. Use the Game Test Document provided to document such information. Save the Game Test Document as a PDF and upload on GitHub.
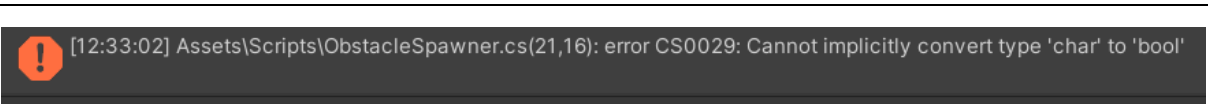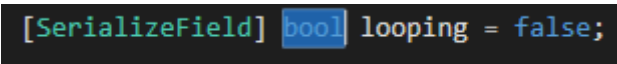
Test Case 1	⚠ [20:06:44] Assets\Scripts\Player.cs(80,9): error CS0103: The name 'health' does not exist in the current context
Line Error	health -= damageDeal.GetDamage();
Error Explanation	Health was not declared
Error correction	Health was declared
Error correction screenshot	[SerializeField] float health = 50f;

Test Case 2	⚠ [12:06:48] Assets\Scripts\Player.cs(134,35): error CS1061: 'GameSession' does not contain a definition for 'Getscore' and no accessible extension method 'Getscore' accepting a first argument of type 'GameSession' could be found (are you missing a using dir... Assets\Scripts\Player.cs(134,35): error CS1061: 'GameSession' does not contain a definition for 'Getscore' and no accessible extension method 'Getscore' accepting a first argument of type 'GameSession' could be found (are you missing a using directive or an assembly reference?)
Line Error	int pointscore = gamesess.Getscore();
Error Explanation	Getscore Method does not exist in Game Session.
Error correction	Getscore should be GetScore

Error correction screenshot	`int pointscore = gamesess.GetScore();`

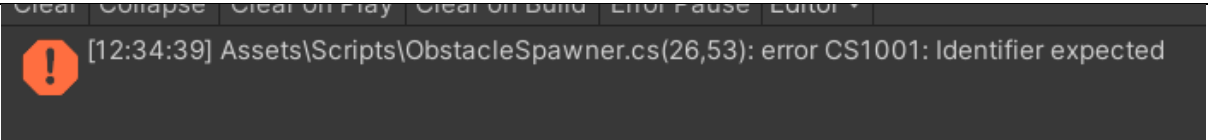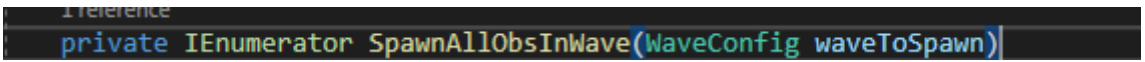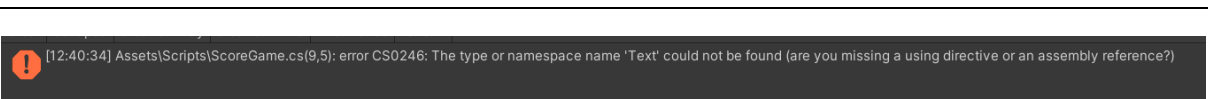| Test Case 3	[12:16:58] ArgumentException: Input Axis horizontal is not setup. To change the input settings use: Edit -> Settings -> Input
Line Error	`var movementX = Input.GetAxis("horizontal") * Time.deltaTime * movingSpeed;`
Error Explanation	One should either change the name from the Input settings so that it matches the one on script or vice versa. The name 'horizontal' does not exist in the input settings therefore it does not work.
Error correction	`var movementX = Input.GetAxis("Horizontal") * Time.deltaTime * movingSpeed;`
Error correction screenshot	`var movementX = Input.GetAxis("Horizontal") * Time.deltaTime * movingSpeed;`

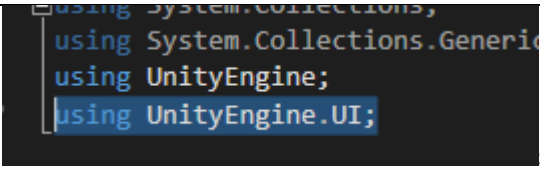| Test Case 4	[12:23:11] Scene '2' couldn't be loaded because it has not been added to the build settings or the AssetBundle has not been loaded. To add a scene to the build settings use the menu File->Build Settings...
Line Error	`SceneManager.LoadScene("2");`
Error Explanation	Scene 2 did not load as it was written as a string therefore the compiler could not load it as it is not a string.
Error correction	`SceneManager.LoadScene("GameOver");`
Error correction screenshot	`SceneManager.LoadScene("GameOver");`

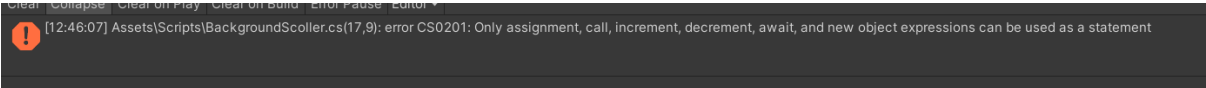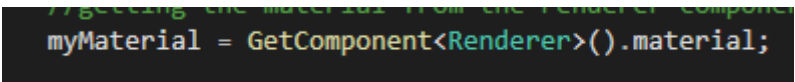| Test Case 5	Clear Collapse Clear on Play Clear on Build Error Pause Editor ▾
	⚠ [12:28:05] Assets\Scripts\ScoreGame.cs(22,26): error CS0029: Cannot implicitly convert type 'int' to 'string'
Line Error	textscore.text = sessionGame.GetScore();
Error Explanation	The text needs to be changed from int to string therefore '.ToString()' needs to be added.
Error correction	textscore.text = sessionGame.GetScore().ToString();
Error correction screenshot	`textscore.text = sessionGame.GetScore().ToString();`
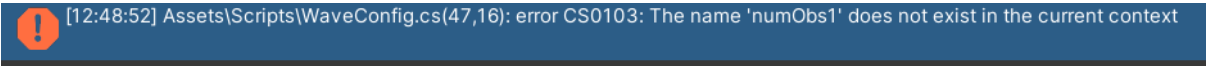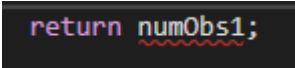
Test Case 6	⚠ [12:33:02] Assets\Scripts\ObstacleSpawner.cs(21,16): error CS0029: Cannot implicitly convert type 'char' to 'bool'
Line Error	`[SerializeField] char looping = false;`
Error Explanation	Data type used is incorrect, one should use bool not char.
Error correction	`[SerializeField] bool looping = false;`
Error correction screenshot	`[SerializeField] bool looping = false;`
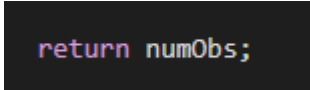
Test Case 7	[12:34:39] Assets\Scripts\ObstacleSpawner.cs(26,53): error CS1001: Identifier expected
Line Error	`private IEnumerator SpawnAllObsInWave(WaveConfig)`
Error Explanation	waveToSpawn was not taken as a parameter
Error correction	`private IEnumerator SpawnAllObsInWave(WaveConfig waveToSpawn)`
Error correction screenshot	`private IEnumerator SpawnAllObsInWave(WaveConfig waveToSpawn)`
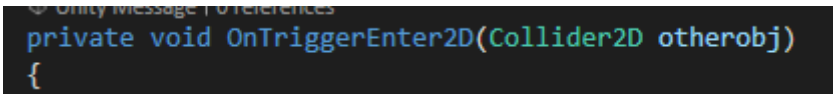
Test Case 8	[12:40:34] Assets\Scripts\ScoreGame.cs(9,5): error CS0246: The type or namespace name 'Text' could not be found (are you missing a using directive or an assembly reference?)
Line Error	`Text textscore;`
Error Explanation	The collection 'using UnityEngine.UI;' was not imported.
Error correction	`using UnityEngine.UI;`

Error correction screenshot	

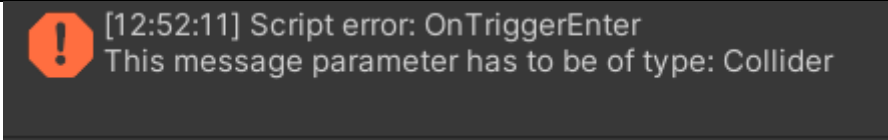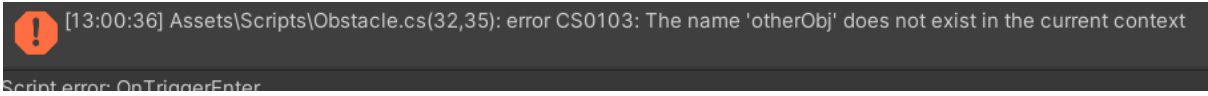|	
Test Case 9	[12:46:07] Assets\Scripts\BackgroundScoller.cs(17,9): error CS0201: Only assignment, call, increment, decrement, await, and new object expressions can be used as a statement
Line Error	GetComponent<Renderer>().material;
Error Explanation	The above is not a statement, one should assign a value before.
Error correction	myMaterial = GetComponent<Renderer>().material;
Error correction screenshot	

Test Case 10	[12:48:52] Assets\Scripts\WaveConfig.cs(47,16): error CS0103: The name 'numObs1' does not exist in the current context
Line Error	return numObs1;
Error Explanation	numObs1 was not declared as a variable in the beginning of the script.

Error correction	Return numObs;
Error correction screenshot	`return numObs;`

Test Case 11	⚠ [12:52:11] Script error: OnTriggerEnter This message parameter has to be of type: Collider
Line Error	`private void OnTriggerEnter(Collider2D otherobj)`
Error Explanation	Since the game created is 2D not 3D, while having the OnTriggerEnter one needs to specify that the OnTriggerEnter that needs to be used is 2D.
Error correction	`private void OnTriggerEnter2D(Collider2D otherobj)`
Error correction screenshot	`private void OnTriggerEnter2D(Collider2D otherobj)` `{`

Test Case 12	⚠ [13:00:36] Assets\Scripts\Obstacle.cs(32,35): error CS0103: The name 'otherObj' does not exist in the current context Script error: OnTriggerEnter

Line Error	`private void OnTriggerEnter2D(Collider2D collision)`
	`    {`
	
	`        DamageDealer damageDeal = otherObj.gameObject.GetComponent<DamageDealer>();`

Error Explanation	Parameters used were not the same, one should either write collision throughout the whole method

Error correction	
| Error correction screenshot | ```
private void OnTriggerEnter2D(Collider2D otherObj)
{


    //accesses the damage dealer calss from other objects.
    DamageDealer damageDeal = otherObj.gameObject.GetComponent<DamageDealer>();
``` |

Test Case 13	Clear Collapse Clear on Play Clear on Build Error Pause Editor ▼ ⚠ [13:06:14] Assets\Scripts\Player.cs(88,59): error CS1503: Argument 2: cannot convert from 'float' to 'UnityEngine.Vector3'
Line Error	`AudioSource.PlayClipAtPoint(obstacleAvoided, obstacleAvoidedVol);`
Error Explanation	Thee point where the audio should sound, should be specficied.
Error correction	`AudioSource.PlayClipAtPoint(obstacleAvoided, Camera.main.transform.position, obstacleAvoidedVol);`
| Error correction screenshot | ```
{
    //audio of player gaining points
    AudioSource.PlayClipAtPoint(obstacleAvoided, Camera.main.transform.position, obstacleAvoidedVol);
}
``` |

Test Case 14	⚠ [14:00:55] Assets\Scripts\ScoreGame.cs(6,23): error CS1514: { expected
| Line Error | ```
public class ScoreGame
{
    //used to update the text in the UI
    Text textscore;

                    GameSession sessionGame;
``` |
| Error Explanation | The ScoreGame script was described as a MonoBehaviour which therefore lead to errors that variables were not declared and there is missing curly brackets. |
| Error correction | ```
public class ScoreGame: MonoBehaviour
{
    //used to update the text in the UI
    Text textscore;
``` |

		GameSession sessionGame;	
Error correction screenshot			

```
0 references
public class ScoreGame : MonoBehaviour
{
    //used to update the text in the UI
    Text textscore;

    GameSession sessionGame;
```