

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	Research and Design – Home (24 Hours)				
Date Set	18/12/2020	Deadline Date	19/12/2020		
Student Name	Teodor Christian Grejdinoiu	ID Number	0140501A	Class / Group	MSD-4.2A

<input type="checkbox"/>	<i>Student's declaration prior to handing-in of assignment:</i> <i>✚ I certify that the work submitted for this assignment is my own and that I have read and understood the respective Plagiarism Policy</i>
<input type="checkbox"/>	Student's declaration on assessment special arrangements (Tick only if applicable) <i>✚ I certify that adequate support was given to me during the assignment through the Institute and/or the Inclusive Education Unit.</i> <i>✚ I declare that I refused the special support offered by the Institute.</i>
<input type="checkbox"/>	
Student Signature: Teodor Grejdinoiu	
Date : 19.12.2020	

Assessment Criteria	Maximum Mark	Mark Achieved
<i>KU1: Identify and describe different game engines for different tasks</i>	5	
<i>KU3: Describe file types for media assets</i>	5	
<i>KU4: State the relevance of compression settings in media assets</i>	5	
<i>SE1: Design and specify the details of the game to be developed, including a state machine</i>	10	
Total Mark	25	

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

Task 1

1. Unity
 - Unity uses C# as its scripting language.
 - “Genshin Impact” is an action role-playing game programmed using Unity.
 - It is both a 2D and a 3D engine.
2. Unreal Engine
 - Unreal Engine uses C++ as its programming language.
 - “Mortal Kombat X” is a fighting game programmed using Unreal Engine.
 - It is both a 2D and a 3D engine, but it uses the Paper 2D system to create 2D games.
3. Construct
 - Construct is based on the HTML5 and JavaScript programming languages.
 - “There Is No Game” is a puzzle game created using Construct.
 - It is a 2D engine.
4. Godot
 - Godot uses C# as its scripting language.
 - “Resoluitiion” is an action-adventure game programmed using Godot.
 - It is both a 2D and a 3D engine.
5. Game Maker
 - Game Maker uses GameMaker Language for programming.
 - “Katana Zero” is an action platformer game programmed using Game Maker.
 - It is primarily a 2D engine, but it has functionality for 3D graphics too.

Task 2

- a) Image Formats
 1. JPG is a lossy raster image format that can compress files to an adjustable degree.
 2. PNG is a lossless raster image format mostly used for uncompressed images, and it can also support transparency.
 3. GIF is a lossless raster image format that can also support animated images.
- b) Audio Formats
 1. MP3 is an audio format that can be compressed down to a much smaller size; however, the quality may decrease as well.
 2. WAV is an audio format used for uncompressed files; this preserves quality but increases file size.

Task 3

- a) The compression of images is used to reduce the file size so that more images can be stored on a fixed amount of disk space. It also speeds up the process of transferring the files across the internet. This also means that downloading, uploading, and emailing images is faster if compressed files are used instead of uncompressed files. A website's loading speed can also be affected by the size of the image files used in it. Using compressed images can increase the speed and decrease the amount of used bandwidth.

b)

