

COMP1150/MMCC1011 Game Design

Task Report

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GitHub Repo (link):	https://github.com/COMP1150-24s1/comp1150-gdt-2024-Extro101

Claimed Elements Table

Claimed Element ID	Claimed Element	Marks
01	First-Person Controller (mandatory)	N/A - Provided
02	Outdoor Environment (mandatory)	25%
03	Indoor Environment (mandatory)	25%
04	Indoor Textures	5%
05	Height and Normal Maps	5%
06	Physics Objects	5%
07	Physics with Joints	5%
08	Direct Light Sources	5%
13	Audio Source	5%
15	Global Post-Processing Effect	5%
16	Local Post-Processing Effect	5%
18	Multi State Animation	5%
19	Particle System	5%
	Total:	

Scene Breakdown

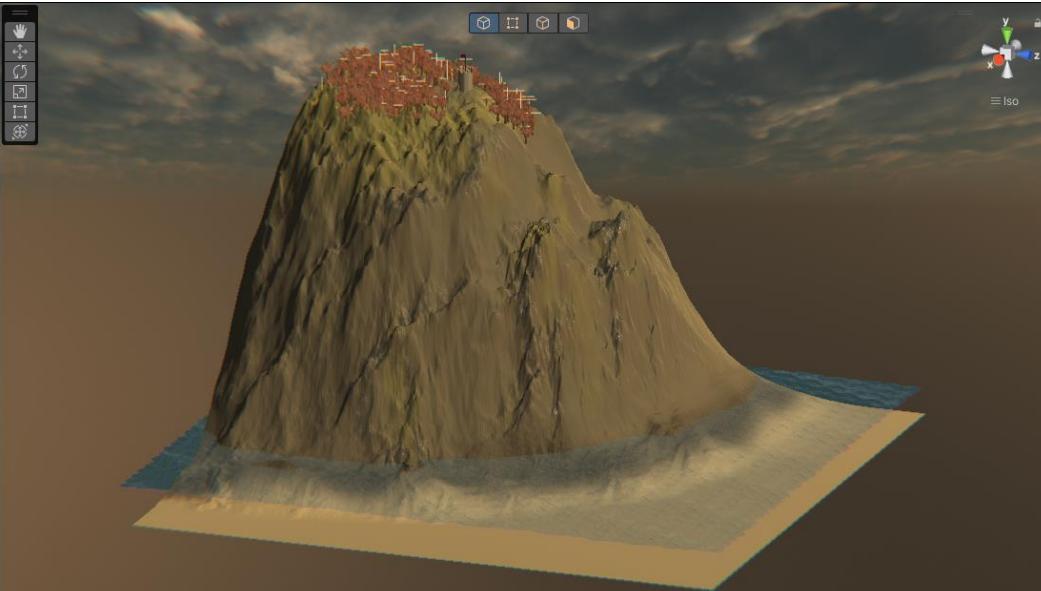
Scene Overview

Scene Overview	
Scene Theme Aim:	Castle tower on mountain
Theme Summary / Goal / Targeted Player experience(s):	Medieval theme aimed at players who enjoy exploration, creating unease and excitement while ascending a perilous mountain. Target audience includes those passionate about uncovering new experiences.

Element 01 – First-Person Controller

Element 01 – First-Person Controller	
Claimed:	Yes – Mandatory – Provided
Placement within Scene:	By the Japanese maple trees, near the castle tower
Name in Hierarchy:	Player
Location in Hierarchy:	Player
Purpose within scene:	The First-Person controller is used to explore the scene by the player. I aim for the player to experience a sense of travel from a distant place and discovering their sought-after goal at the mountain's peak with a designated path leading towards the tower.
Screenshot :	

Element 02 – Outdoor Environment

Element 02 – Outdoor Environment	
Claimed:	Yes – Mandatory
Placement within Scene:	Terrain
Name in Hierarchy:	Land
Location in Hierarchy:	Terrain/Land
Purpose within scene:	The majestic mountain with jagged peaks and treacherous terrain challenges all who approach, embodying nature's power and beauty with its near ocean.
Screenshot :	  

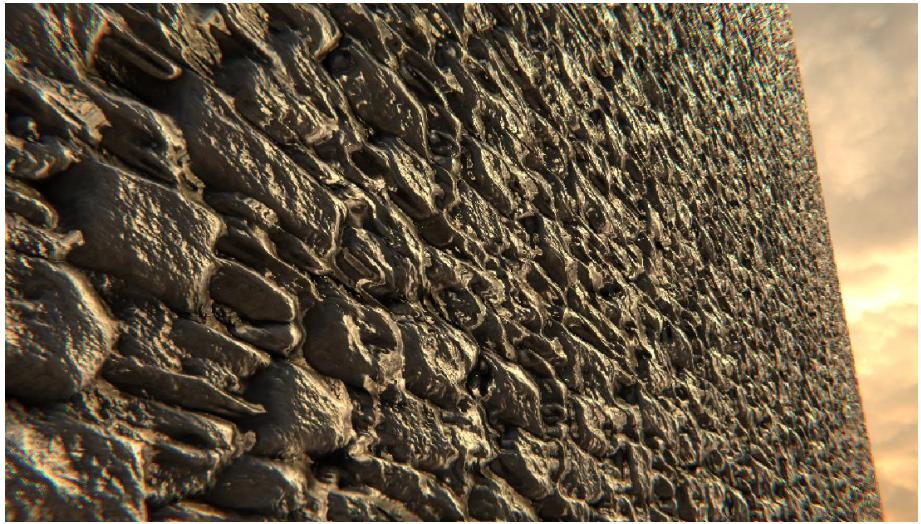
Element 03 – Indoor Environment

Element 03 – Indoor Environment	
Claimed:	Yes
Placement within Scene:	Inside the castle on top of mountain
Name in Hierarchy:	Interior
Location in Hierarchy:	Tower/Interior
Purpose within scene:	Extends a gracious embrace to the player, with furniture adorning the space.
Screenshot:	  

Element 04 – Indoor Textures

Element 04 – Indoor Textures	
Claimed:	Yes
Placement within Scene:	Stone Walls, Bottom Floor, Top Floor, Stairs
Name in Hierarchy:	StoneWalls, BottomFloor, TopFloor, Stairs
Location in Hierarchy:	Tower/Exterior/Structure
Purpose within scene:	The wood and stone provides a sustainable structure with appealing textures.
Screenshot:	 A photograph showing a close-up view of a rustic interior. On the left, there's a wall made of horizontal wooden planks. In the center-right, a round wooden table with a dark, textured base is partially visible. A wooden chair with vertical slats is tucked under the table. The lighting is warm, highlighting the grain of the wood.
	 A photograph of a wooden double door set into a wall made of large, irregular stones. The doors have a traditional panel design with a central circular door pull. To the left of the door, there are some small, white, star-shaped decorative elements on the stone wall. The floor in front of the door is made of light-colored wooden planks.

Element 05 – Height & Normal Maps

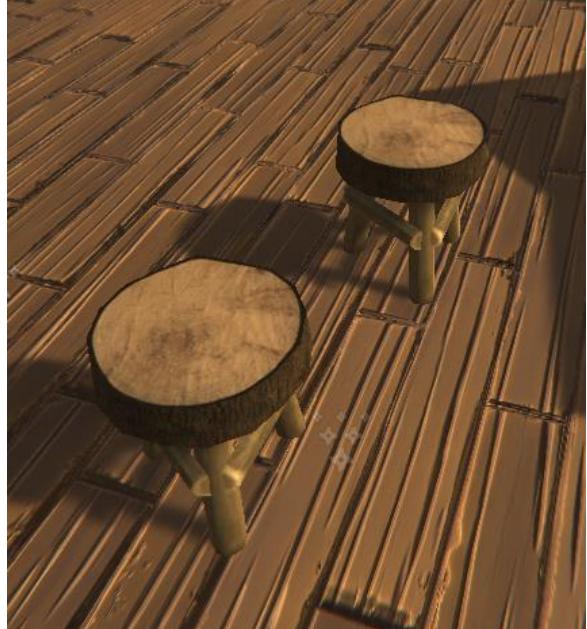
Element 05 – Height & Normal Maps	
Claimed:	Yes
Placement within Scene:	The stone walls of the tower use height and normal maps, including the six different wood textures inside.
Name in Hierarchy:	StoneWalls, BottomFloor, TopFloor, Stairs
Location in Hierarchy:	Tower/Exterior/Structure
Purpose within scene:	Delivers an authentic medieval experience enriched with intricate details.
Screenshot:	

Element 06 – Physics Objects

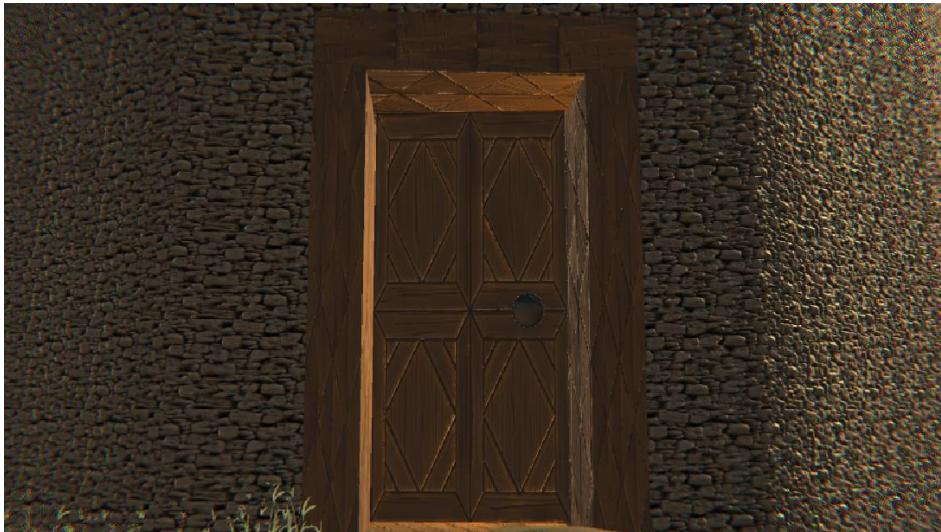
Physics Object 1

Element 06 – Physics Objects – Physics Object 1	
Claimed:	Yes
Placement within Scene:	Inside the tower. Bottom and top floor.
Name in Hierarchy:	Table, Chair, Cabinet, Bed, Bedside, Stool1, Stool2
Location in Hierarchy:	Tower/Interior/Furniture
Purpose within scene:	Within the tower, you will encounter an array of furniture items with rigid bodies and box colliders that can be interacted with, allowing actions like pushing them.
Screenshot:	A screenshot from a video game showing a wooden interior of a tower. In the foreground, there is a bed with a green mattress and a wooden frame. To the right of the bed, there is a small wooden table with four cylindrical legs and a single wooden chair with a dark backrest. The floor is made of light-colored wood planks, and the walls are made of vertical wooden slats. The lighting is warm, coming from a window or opening in the background.

Physics Object 2

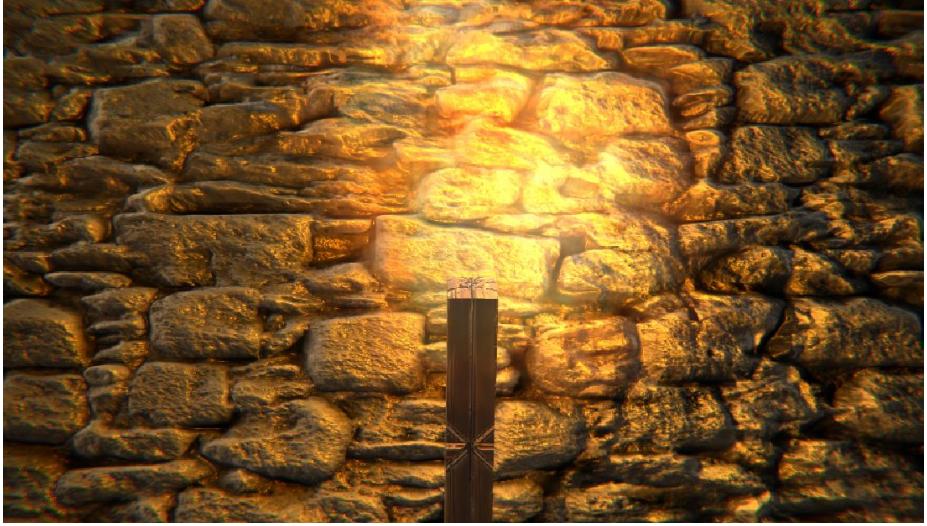
Element 06 – Physics Objects – Physics Object 2	
Claimed:	Yes
Placement within Scene:	Inside the tower. Bottom and top floor.
Name in Hierarchy:	Table, Chair, Cabinet, Bed, Bedside, Stool1, Stool2
Location in Hierarchy:	Tower/Interior/Furniture
Purpose within scene:	Within the tower, you will encounter an array of furniture items with rigid bodies and box colliders that can be interacted with, allowing actions like pushing them.
Screenshot:	 <p>A screenshot from a video game showing two wooden stools on a wooden floor inside a tower. The stools are round with four legs and have a dark brown finish. The floor is made of light-colored wooden planks. The lighting suggests it's daytime, with sunlight streaming in from the side, casting shadows on the floor. The background shows the interior of a wooden structure with vertical walls.</p>

Element 07 – Physics with Joints

Element 07 – Physics with Joints	
Claimed:	Yes
Placement within Scene:	Bottom of the tower. The door contains a hinge joint to close automatically when opened. It uses a spring and damper.
Name in Hierarchy:	Pivot
Location in Hierarchy:	Tower/Exterior/Door/Pivot
Purpose within scene:	Fits in with the medieval tower aesthetic with its complex texture and provides the player to interact with entering in and out.
Screenshot:	 A screenshot of a dark wooden door with a geometric panel design, set into a stone wall. The door is slightly ajar, revealing a dark interior. The surrounding wall is made of rough, grey stone blocks.

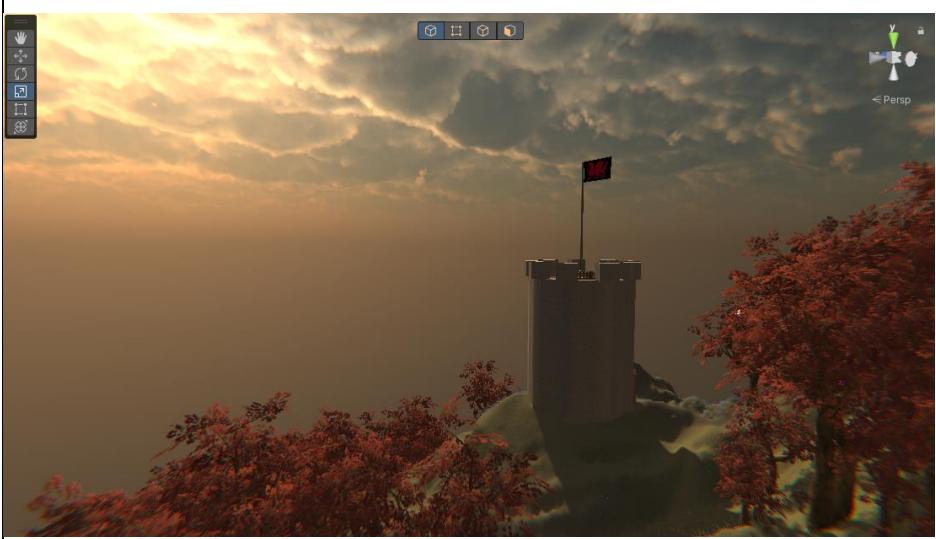
Element 08 – Direct Light Sources

Direct Light Source 1

Element 08 – Direct Light Sources – Direct Light Source 1	
Claimed:	Yes
Placement within Scene:	Along the stone walls inside the tower going upstairs.
Name in Hierarchy:	TorchBottom, TorchTop, TorchStair1-4
Location in Hierarchy:	Tower/Interior/Torches
Purpose within scene:	Works perfectly with the stone walls which adds a realistic medieval look for the player to observe. Includes flickering and a particle system.
Screenshot:	 A screenshot of a stone wall made of large, irregular stones. Several torches are mounted on the wall, their flames glowing brightly and casting a warm, golden light. The light from the torches illuminates the surrounding wall and creates a dramatic, atmospheric effect. A wooden post or railing is visible in the foreground on the right side.

Direct Light Source 2

Element 08 – Direct Light Sources – Direct Light Source 2

Claimed:	Yes
Placement within Scene:	The sun is a directional light providing a soothing sunset blending in with the skybox texture.
Name in Hierarchy:	Sunlight
Location in Hierarchy:	Terrain/Sunlight
Purpose within scene:	An uplifting sunset painting the sky with a visual symphony providing shadows across the scenery emphasizing realism.
Screenshot:	 

Element 09 – Baked Indirect Lighting

Element 09 – Baked Indirect Lighting	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 10 – Light-Probes

Element 10 – Light-Probes	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 11 – Reflection-Probes & Reflective Surfaces

Element 11 – Reflection-Probes & Reflective Surfaces	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 12 – Multiple Cameras

Camera 1

Element 12 – Multiple Cameras – Camera 1	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Camera 2

Element 12 – Multiple Cameras – Camera 2	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 13 – Audio Source

Element 13 – Audio Source	
Claimed:	Yes
Placement within Scene:	Mountain
Name in Hierarchy:	Wind
Location in Hierarchy:	Terrain/Wind
Purpose within scene:	The hollowing wind bestows immersion upon the player at the highest point of the mountain.
Screenshot:	

Element 14 – Audio Reverb Zones, Effects and Filters

Audio Element 1

Element 14 – Audio Reverb Zones, Effects and Filters – Audio Element 1	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Audio Element 2

Element 14 – Audio Reverb Zones, Effects and Filters – Audio Element 2	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 15 – Global Post-Processing Effect

Element 15 – Global Post-Processing Effect	
Claimed:	Yes
Placement within Scene:	Camera
Name in Hierarchy:	GlobalPostProcessor
Location in Hierarchy:	Player/Processors/GlobalPostProcessor
Purpose within scene:	The chromatic aberration effect is used to draw the player's focus to the center of the screen or to highlight specific areas by creating a subtle blurring at the periphery while outside.
Screenshot:	

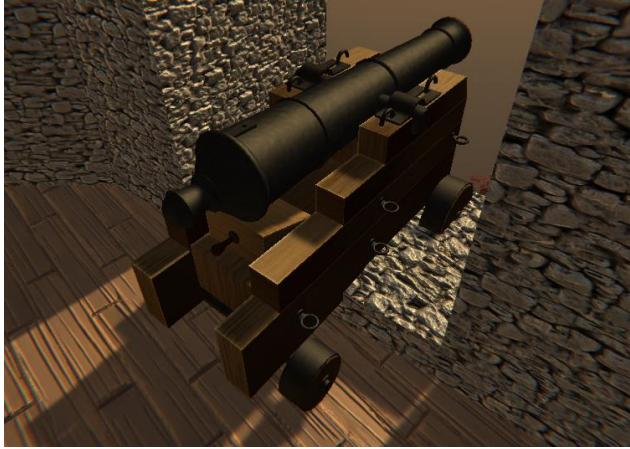
Element 16 – Local Post-Processing Effect

Element 16 – Local Post-Processing Effect	
Claimed:	Yes
Placement within Scene:	Camera
Name in Hierarchy:	LocalPostProcessor
Location in Hierarchy:	Player/Processors/LocalPostProcessor
Purpose within scene:	As you enter the tower, a vignette effect appears darkening the edges of the screen. This provides the player a claustrophobic and intimidating experience.
Screenshot:	 A screenshot from a video game showing the interior of a tall, narrow tower. The camera is positioned looking down a long corridor. The lighting is dramatic, with the center of the frame being bright and the edges fading into deep shadows, creating a strong vignette effect. The walls appear to be made of stone or wood paneling. The floor is a smooth surface, possibly stone or polished wood. The overall atmosphere is dark and enclosed, emphasizing the claustrophobic nature of the space.

Element 17 – Single-State Animation

Element 17 – Single-State Animation	
Claimed:	No
Placement within Scene:	
Name in Hierarchy:	
Location in Hierarchy:	
Purpose within scene:	
Screenshot:	

Element 18 – Multi-State Animation

Element 18 – Multi-State Animation	
Claimed:	Yes
Placement within Scene:	Top of the tower by the edge
Name in Hierarchy:	CannonAnim
Location in Hierarchy:	Tower/Exterior/Cannon/CannonAnim
Purpose within scene:	The cannon is a weapon the player can interact with multiple times by double clicking on it. Once double clicked, it fires a particle in the form of a cannon ball.
Screenshot:	 

Element 19 – Particle System

Element 19 – Particle System	
Claimed:	Yes
Placement within Scene:	The torches along the stone walls and the cannon on the top of the tower
Name in Hierarchy:	Torch - Particle System Cannon - CannonBall
Location in Hierarchy:	Tower/Interior/Torches/TorchBottom, TorchStair1-4, TorchBottom/Flame Tower/Exterior/Cannon/CannonAnim/CannonBall
Purpose within scene:	The fire emitting from the torches adds an atmospheric effect and grudge towards the player as you enter in the tower. Once you shoot the cannon, the cannon ball launches across traversing downwards.
Screenshot:	 

Assets Used

Texture Assets Used

Usage	3rd Party Asset	Author	Path/Link
Element 02 – Terrain	Terrain Sample Asset Pack	Provided Standard Assets	https://assetstore.unity.com/packages/3d/environments/landscapes/terrain-sample-asset-pack-145808
Element 02 – Water	Water4Advanced	Provided Standard Assets	Assets\Standard Assets\Environment\Water\Water_Simulated\Prefabs
Element 02 – Red mountain trees	Japanese Maple Trees	Provided Standard Assets	Assets\Standard Assets\Waldemarst\JapaneseGardenPackage\Prefabs
Element 02 – The sky	Skybox	Avionx	https://assetstore.unity.com/packages/2d/textures-materials/sky/skybox-series-free-103633
Element 04 – Stone walls	Stone Wall - Photo Based PBR	David Cseh	https://assetstore.unity.com/packages/2d/textures-materials/stone-wall-photo-based-pbr-160540
Element 04 – Stairs and floors	Stylized Wood Textures	Camisado Studios	https://assetstore.unity.com/packages/2d/textures-materials/wood/stylized-wood-textures-213607
Element 19 – Cannon ball	Cannon Ball	pngimg.com	https://pngimg.com/image/108030
Element 19 – Torch	Flame	Provided Standard Assets	Assets\Standard Assets\Textures

Music/SFX Assets Used

Usage	3rd Party Asset	Author	Path/Link
Element 13 – Mountain wind	Wind	Mixkit	https://mixkit.co/free-sound-effects/wind/ (Arctic winds)

Models Assets Used

Usage	3rd Party Asset	Author	Path
Element 03 - Flag wailing in the wind	Cloth animation based flag	telecaster	https://assetstore.unity.com/packages/3d/props/exterior/cloth-animation-based-flag-65842
Element 03 - Furniture interior	Raw wooden furniture	AmbiMesh	https://assetstore.unity.com/packages/3d/props/furniture/raw-wooden-furniture-free-

Usage	3rd Party Asset	Author	Path
design			166329
Element 03 - Rug	Rug	Azerilo	https://assetstore.unity.com/packages/3d/props/interior/free-rug-pack-118178
Element 03 - Fence	Snowed fence	Justwo	https://assetstore.unity.com/packages/3d/environments/snowed-fence-6722
Element 03 - Cannon	Medieval cannon	Art georg	https://assetstore.unity.com/packages/3d/props/weapons/medieval-cannon-61834

Script Assets Used

Usage	3rd Party Asset	Author	Path
Element 18 – Fire the cannon	Click To Anim	Provided Standard Assets	Assets/Standard Assets/Interactivity/ClickToAnim.cs

Other Assets Used

Usage	3rd Party Asset	Author	Path
Element 01 – First Person	Player	Provided Standard Assets / Unity Technologies	https://assetstore.unity.com/packages/essentials/starterassets-firstperson-updates-in-new-charactercontroller-pac-196525

Element Descriptions Table

Element ID	Element	Description	Skill Group	Week Covered	Marks	Optional?
01	First-Person Controller	A First-Person Controller for the player to navigate the scene with.	Navigation	Week 06	N/A – Provided	Mandatory
02	Outdoor Environment	An outdoor section built using the Terrain editor (and dressed/painted appropriately with terrain elements).	Terrain	Week 07	25%	Mandatory
03	Indoor Environment	A dressed/furnished indoor section constructed using ProBuilder and/or Unity primitives (cubes, spheres, etc).	Primitives & ProBuilder	Week 06 Week 08	25%	Mandatory
04	Indoor Textures	Appropriate textures applied to the indoor environment of your scene. NOTE: Cannot be claimed if Element 03 (Indoor Environment) has not been implemented/claimed.	Meshes & Textures	Week 06	5%	Optional
05	Height & Normal Maps	Height maps and normal maps have been applied appropriately to the textures of the indoor environment in your scene. NOTE: Cannot be claimed if Element 04 (Indoor Textures) has not been implemented/claimed.	Meshes & Textures	Week 06	5%	Optional
06	Physics Objects	At least two (2) objects which demonstrate physics .	Physics	Week 03 Week 05 Week 12	5%	Optional
07	Physics with Joints	At least one (1) object which uses a physics system with joints . NOTE: Cannot be claimed if Element 06 (Physics Objects) has not been implemented/claimed.	Physics	Week 03 Week 05 Week 12	5%	Optional
08	Direct Light Sources	Minimum two (2) direct light sources . Does not include the default Directional Light provided in the scene.	Lighting	Week 10	5%	Optional
09	Baked Indirect Lighting	Baked indirect lighting used in the indoor section of your scene. NOTE: Cannot be claimed if Element 08 (Direct Light Sources) has not been implemented/claimed.	Lighting	Week 10	5%	Optional
10	Light-Probes	Use of light-probes for dynamic indirect lighting. NOTE: Cannot be claimed if Element 09 (Baked Indirect Lighting) has	Lighting	Week 10	5%	Optional

Element ID	Element	Description	Skill Group	Week Covered	Marks	Optional?
		not been implemented/claimed.				
11	Reflection-Probes & Reflective Surfaces	Appropriate use of reflection-probes and reflective surfaces in outdoor environment of your scene.	Lighting	Week 10	5%	Optional
12	Multiple Cameras	Use of multiple cameras (at least two (2) excluding the provided First-Person Controller camera). For example, overlaid cameras or rendering to a texture.	Cameras & Rendering	Week 09	5%	Optional
13	Audio Source	At least one (1) appropriate 3D spatialised audio source within your scene.	Sound	Week 03	5%	Optional
14	Audio Reverb Zones, Effects and Filters	Use of at least two (2) of the following within your scene: <ul style="list-style-type: none"> • Audio reverb zones • Audio effects • Audio filters 	Sound	Week 03	5%	Optional
15	Global Post-Processing Effect	An appropriately chosen post-processing effect for your scene using a global volume .	Cameras & Rendering	Week 09	5%	Optional
16	Local Post-Processing Effect	An appropriately chosen post-processing effect for your scene using a local (trigger) volume .	Cameras & Rendering	Week 09	5%	Optional
17	Single-State Animation	A simple single-state animation clip .	Animation	Week 04 Week 06	5%	Optional
18	Multi-State Animation	A multi-state animation that responds to trigger or mouse events.	Animation & Interactivity	Week 12	5%	Optional
19	Particle System	At least one (1) particle system appropriately placed within your scene.	Particle Systems	Week 11	5%	Optional