Assignment <2>– SPRING 2024

Course Title:	Game Development		Course	CSC495	Credit	3(2,1)
Course Instructor/s:	Saira Aslam		Program Name:	BCS/BSE/BCE		
Due Date:	**11:55 pm 20th April 2024**		**Maximum Marks:**	50		
	Important Instructions: • Do your Assignment in new Unity Project • **Submit 5 screenshots of your game and cs scripts as in Assignment 2 SUBMISSION FILE, also upload a 5 seconds video separately and submit as your registration_number.doc , like FA21-BCS-00.doc** • DO NOT COPY YOUR WORK FROM ANY SOURCE • Submit your Assignment at Google Classroom Assignment 2 folder • **MAKE THIS ASSIGNMENT IN A GROUP OF TWO STUDENTS**					

Question   **Marks: 50**

CLO: <2>; Bloom Taxonomy Level: <Creating>

Introduction

Your assignment is to make an engaging FPS game. Target of the game is to make one level of the game where you start your journey through a heavy guarded area and reach your target without getting killed. The game will have 2 check points, if you reach a checkpoint you will respawn on the last checkpoint where you died. You have limited ammo so use wisely.

Setting

It's a combination of an army base and a wild area, so setup a terrain. The fun will be in the detail of the level design and amount of effort you put in making it a playable scene. Use army buildings, barricades, drums, containers, concrete blocks, trees, vehicles, big stones, flags and posts, power poles and lines, bird cages, wooden blocks, walls, water tanks, may be a train track and engine and any other fun things on the way so that you can hide behind them during your journey.

The game is set in the day, early morning, with a bit of haze and the props and terrain and buildings should be set in a way that user NEVER gets to see a very long distance, so there are no long roads or alleys , you always have a short area visible to make a fun battle in that limited surrounding.

It'll be fun if you find a few buildings with windows so that people could camp in the room windows to kill enemies (may be a multiplayer scene usage in future).

At no point the user should find an end of the terrain and multiple streets and paths to same location are encouraged with very slight visual hints to make user walk toward his destination instead of going back. One hint is usually that if the enemies are coming, it is the right path.

We need to make the environment visually appealing so fireplaces with smoke form the night, haze, birds chirping, wind sound, some gun fire in the distance time to time, passing by helicopter for no reason, any other interesting detail that is not required for your battle but feels good is always encouraged.
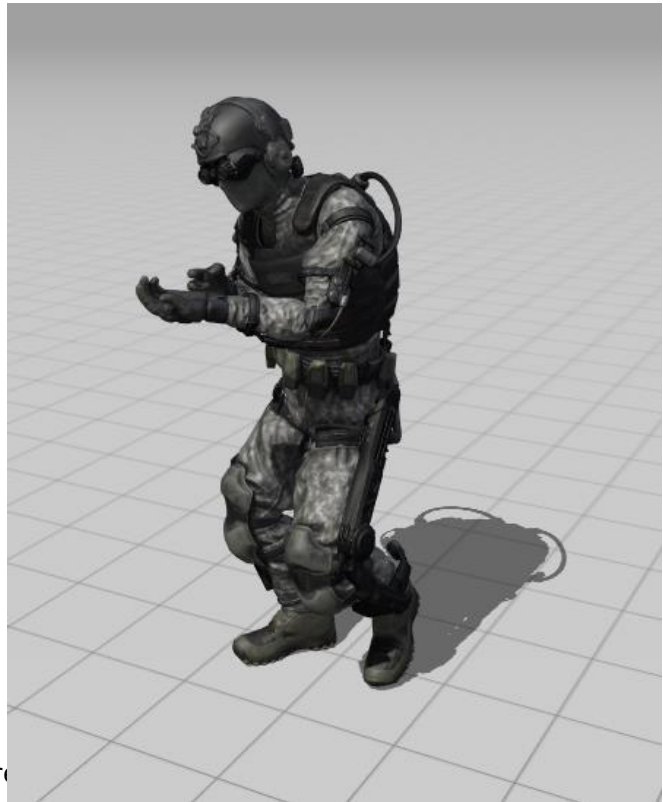
The Enemy

Enemy soldiers, all human(oid) will be carrying guns and will be firing bullets at you making sure they kill you before you reach them. They will also come at you but at a certain distance they'll slow down or stop to shoot extensively to make the game more fun. They'll not physically reach you usually. The number and initial location of the enemy will be set manually to make it more fun. For example enemy could come out of a room, or jump down from a cliff or step out behind a vehicle.

Once the enemy is killed, his gun will be dropped with ammo on the ground

You

You are a first person shooter with only one gun as a weapon and a shortcut key to throw a gr[...] 2 grenades but you can collect more as you go through the game. You have no face (3d character) but your gun should be placed correctly and bullets should be small and use a good particle system to see a good smoke trail where the bullet goes. Also use an explosion when you fire your gun.

Weapons

Everyone in the scene , you and the enemy will have the same gun so the same ammo is shared, you can pick enemy ammo.

The gun will have a magazine of 20 bullets, it's a machine gun and you can fire them all in one mouse click with a delay. You will show the number of bullets on screen on a canvas. Once you run out of bullets, you press R to reload the weapon.

Sounds

Use proper weapon firing sound, firing gun, dropping grenade, grenade blowing up, gun reload, magazine pickup , empty gun firing.

Use proper human footstep sounds for yourself and also for the enemies so that you can hear them a round the corner and even aim at them without seeing them on the 3d sound.
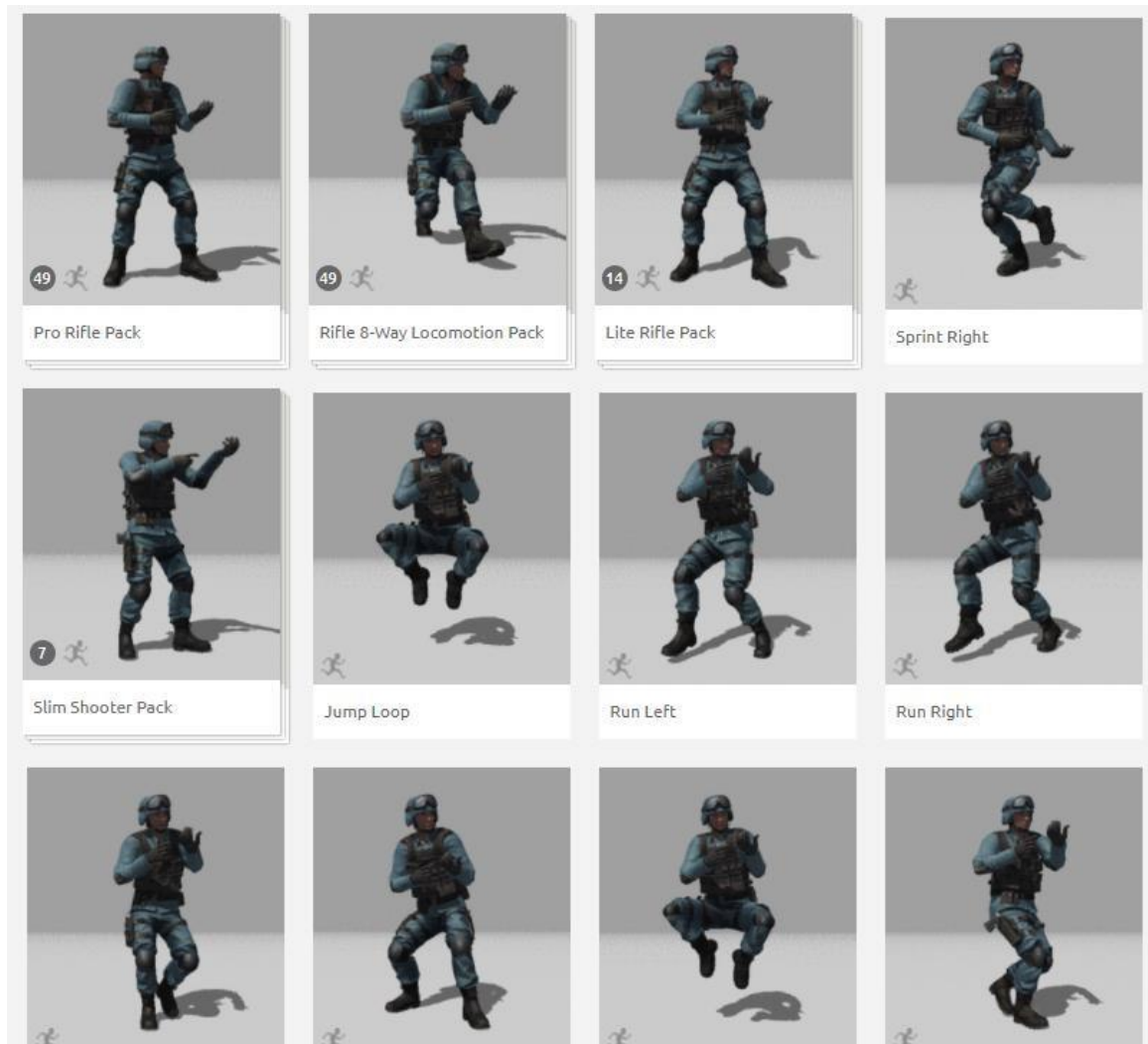
Prop sounds is a must, surrounding sounds, winds, enemies talking in the distance, birds, chicken, distant firing time to time, helicopter passing by, some radio chatter etc.

Enemy hit? Make them scream when they die, use random sounds 🦇

And a cool background music is a must, you can try websites like bensounds.com to get free music with attribution.

Animations

Your own character has no animation or body but enemies have a number of animations. Walk with gun, aim, shoot, run away, dodge, get hit by a bullet, die, crouch firing etc. Make it fun (you can find free animations and soldiers from mixamo).

Pro Rifle Pack	Rifle 8-Way Locomotion Pack	Lite Rifle Pack	Sprint Right
Slim Shooter Pack	Jump Loop	Run Left	Run Right

Don't hide the dead enemies and leave them there to pickup their ammo. We are not applying for any rating so I don't mind if there are blood splats around dead enemy or killing details.

Target

If you play the game real well, you should not take less than 10 minutes to finish this level. There is a visual item, a building with lights or something very distinct to show that it is the target of your game. Once you reach the target, you'll see a message on screen saying you have reached your destination and you won.