

# **COP 701: SOFTWARE SYSTEMS LABORATORY**

## **ASSIGNMENT 2**

### **REPORT**

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## **Brief Introduction:**

We created a Metal-Slug like run and gun game based on Unity using C# scripts.

The gameplay is smooth and interesting with multiple levels, each level ending with a boss battle.

The defeat of boss triggers the jump to a new state.

We also included some additional features that made the game more interesting such as Traps, Rifle Changes, Bullet Change, LifeBar and HealthBar, alongside normal enemies we also created some enemy spawners that could collide with the player and push it back, taking a chunk of life out of the player as well. A detail is mentioned below:

**1. Traps:** We created multiple traps such as Saw trap, fire lane and turrets that makes the level interesting and leaves the player guessing the correct way to go to the end of the levels.

**2. Rifle Changes:** We created 2 more rifles for player to use alongside the basic rifle that the player carries along, this enhances the player engagement especially with each rifle having its own unique shooting power.

**3. Rifle PowerUps:** We also created multiple powerups for rifle shooting that increases the overall ability of players shooting skills. This essentially helps in providing extra damage to boss, who seems to have a good amount of health.

**4. EnemySpawners:** We created some enemyspawners that would just collide with the player and deal a lot of damage to the player alongside pushing it back, this creates crossing the level a lot more challenging.

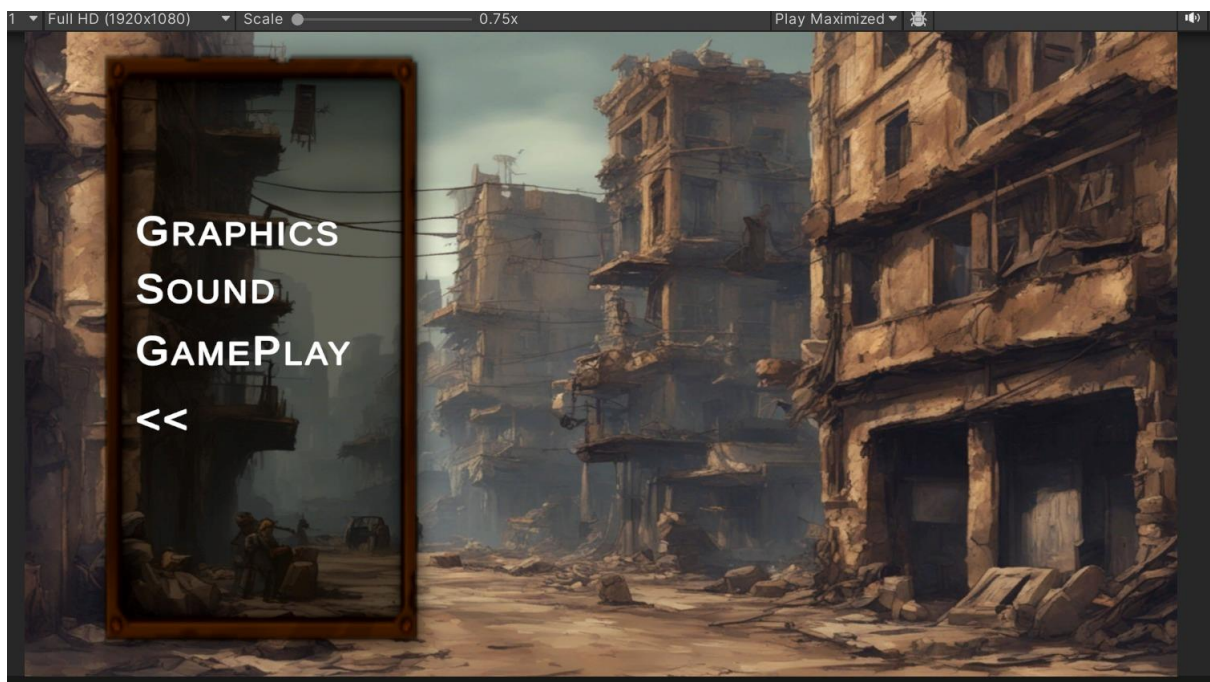
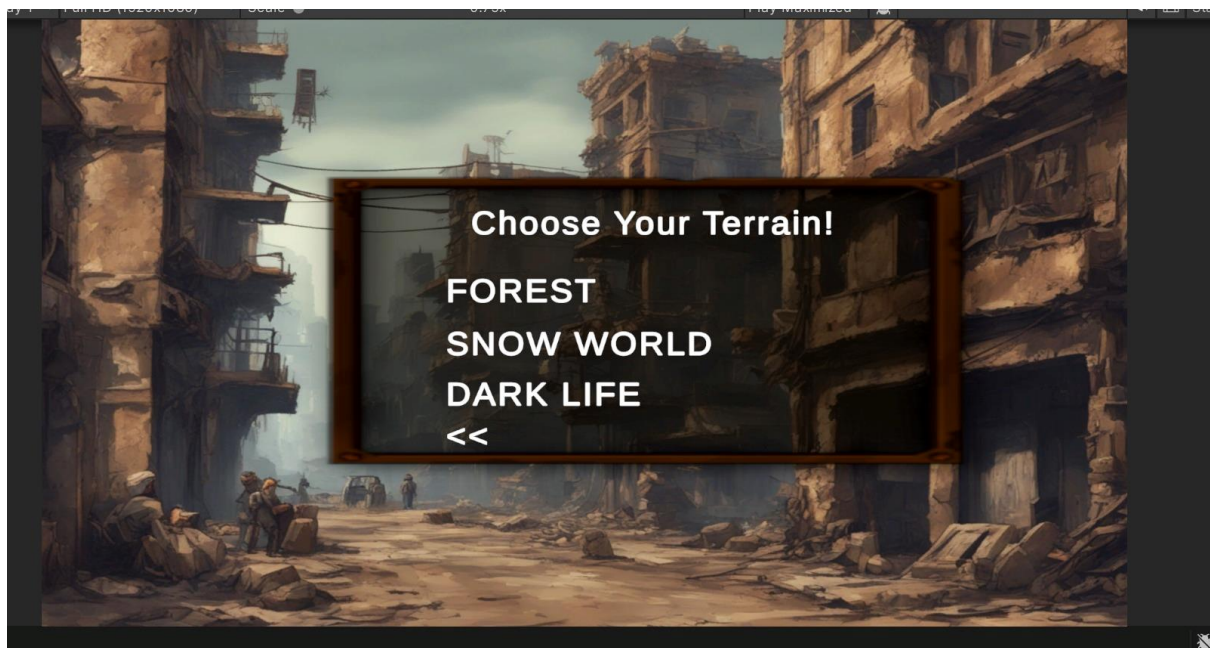
**5. Extra Lives:** We integrated both healthbar and lifebar, this was essential given the difficult gameplay set, alongside that we also have extra lives and extra health options as powerups.

**6. High Score Tracking:** We also keep a score tracking, with each bullet that hits the enemy a score of 50 is added to the players score, while collecting coins add 10 points.

### Gameplay Screenshots:

#### Main Menu:





**Start Screen:**



## Terrain 1: Forest



## Terrain 2: SnowWorld





### Terrain 3: Dark Life



## Quit Game:

