~\OneDrive - St Paul's Catholic College\Documents\2D Strategy Game - Liberator\Assets\Scripts\Bullet.cs

```
1  using System.Collections;
2  using System.Collections.Generic;
3  using UnityEngine;
4  using UnityEngine.UIElements;
5
6  public class Bullet : MonoBehaviour
7  {
8      private int speed = 70; // the speed which I can set any value to make the bullet slower or faster
9      private float damage = 20;
10     SpriteRenderer Rifle; // variable referncing the rifle the soldier is carrying
11     MoveSoldier Soldier; // variable referncing the Soldier in the game
12     float bulletTime = 0.5f; // bullets last for 0.5 seconds on the map
13     bool coolDown = false; // cooldown variable so the bullets dont register on the monster too many times
14     bool DirectionLeft = false;
15     bool DirectionRight = false;
16
17     void Start()
18     {
19         Soldier = FindObjectOfType<MoveSoldier>(); // getting the soldier
20         SpriteRenderer[] allSprites = FindObjectsOfType<SpriteRenderer>(); // creating an array for all the spriterender's in the game
21         for (int i = 0; i < allSprites.Length; i++) // looping through the array to find the gun called "Rifle"
22         {
23             if (allSprites[i].name =="Rifle") // checking if the name is "Rifle"
24             {
25                 Rifle = allSprites[i]; // assigning the variable Rifle from the top to the SpriteRenderer.
26                 if (Rifle.flipX) // checking if the rifle is facing left
27                 {
28                     DirectionLeft = true;
29                 }
30                 else
31                 {
32                     if (Rifle.flipX != true) // checking if the rifle is facing right
33                     {
34                         DirectionRight = true;
35                     }
36                 }
37             }
38         }
39     }
40
41     void Update()
42     {
43
44         if (DirectionLeft) // checking if the rifle is facing left and checking if he is not moving
45         {
46             if (Soldier.isMoving == false)
47             {
48                 // if the rifle is facing left then so is the character
49                 transform.Translate(Vector3.left * speed * Time.deltaTime); // making the bullets fly left in the scene from the rifle
50                 Destroy(gameObject, bulletTime); // destroying the bullets after 0.5 seconds
```

```
            }
        }
        else
        {
            if (DirectionRight) // checking if the rifle is facing right
            {
                if(Soldier.isMoving == false)
                {
                    transform.Translate(Vector3.right * speed * Time.deltaTime); // making the bullets fly right in the scene from the rifle
                    Destroy(gameObject, bulletTime);
                }
            }
         }


    }

    private void OnTriggerEnter2D(Collider2D collision) // function detects when a bullet hits a monster, then deals damage. Assigns the cooldown to prevent multiple trigger events
    {
        Monster monster = collision.GetComponent<Monster>();

        if (monster != null && coolDown == false)
        {
            monster.TakeDamage(damage);
            coolDown = true;
            Destroy(gameObject);
        }
    }
}

```