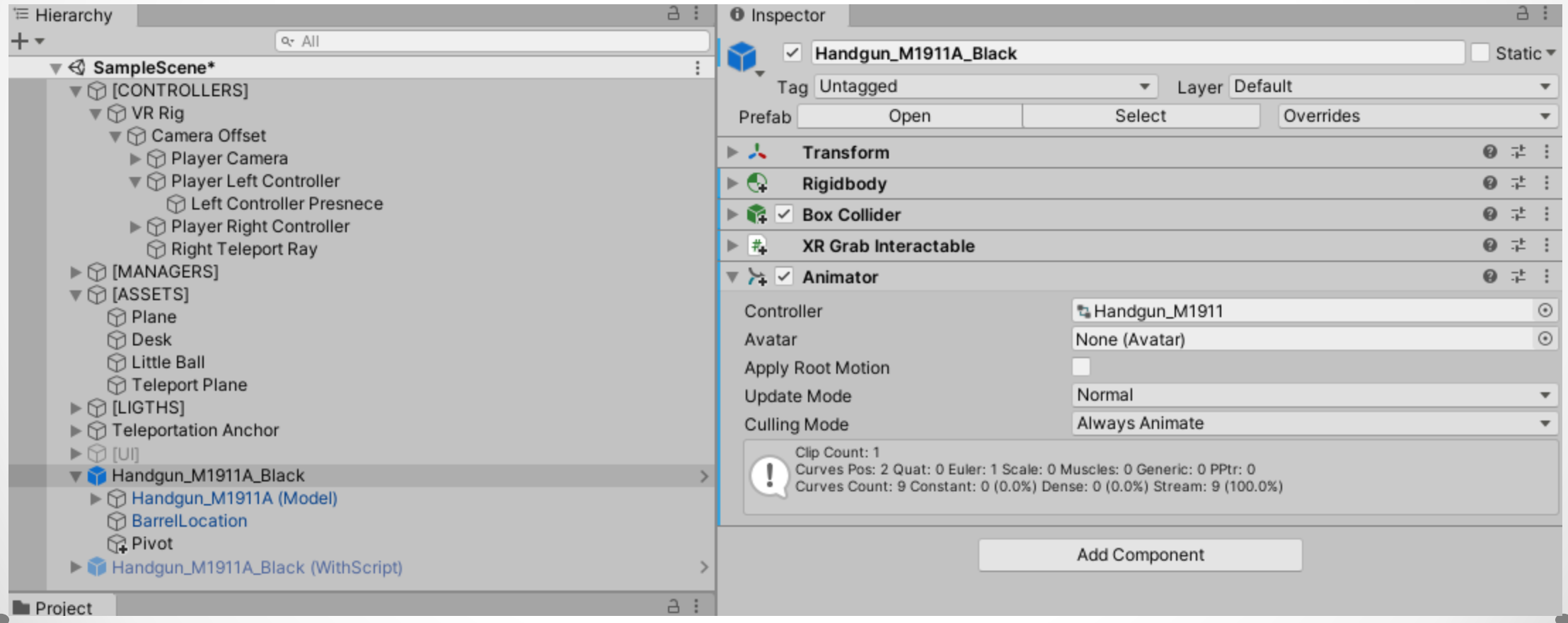


# 그래스핑 심화, 총잡기 및 총알 발사!

## 1. 이준

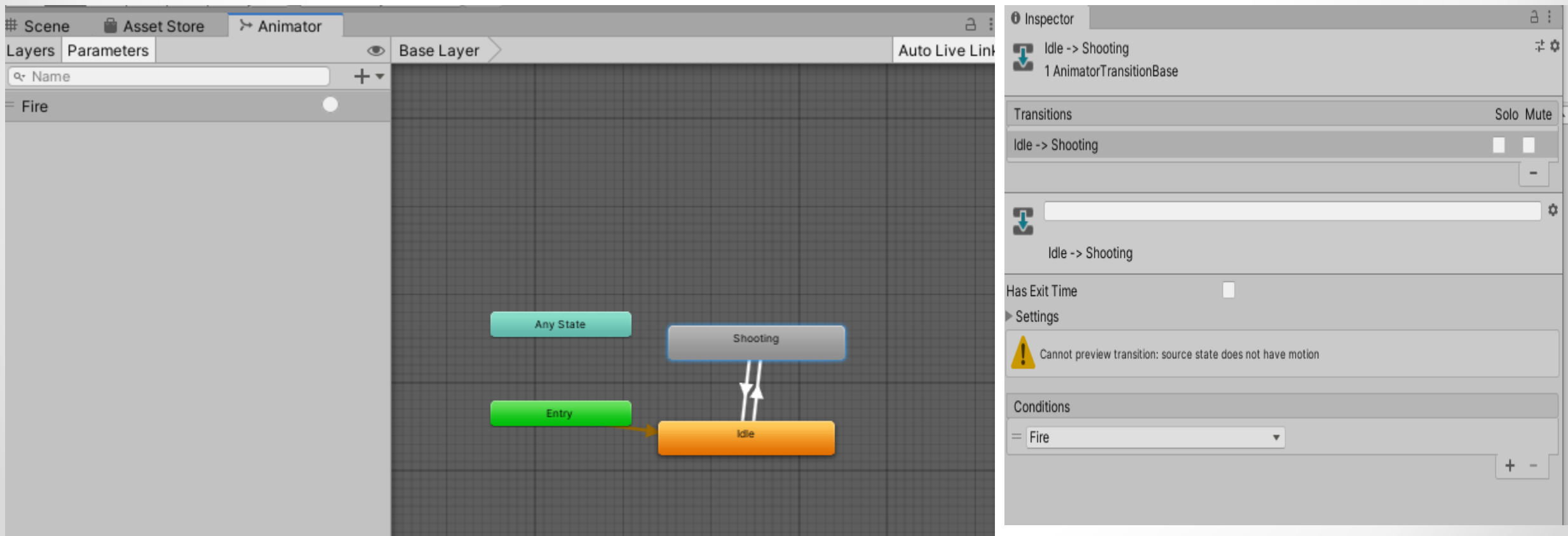
# 그래스핑 심화!

- 애니메이터 추가 Hangun\_M1911 설정!



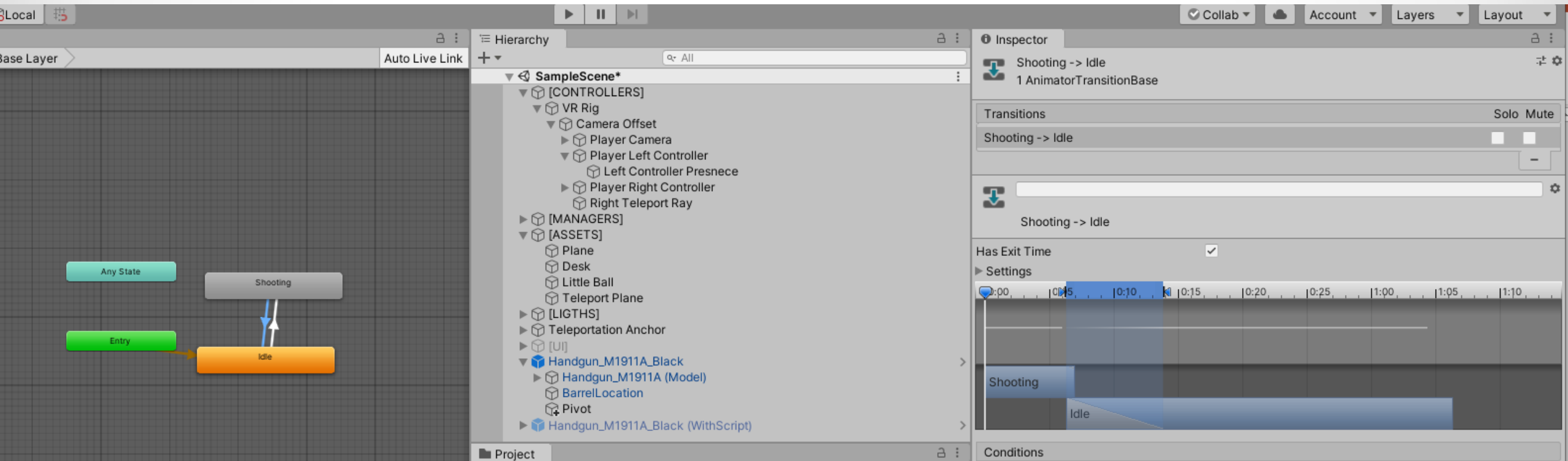
# 그래스핑 심화!

- Fire 라는 이벤트에 Shooting 애니메이션 실행!



# 그래스핑 심화!

- 슈팅 애니메이션 종료후 다시 idle 애니메이션으로 돌아옴!



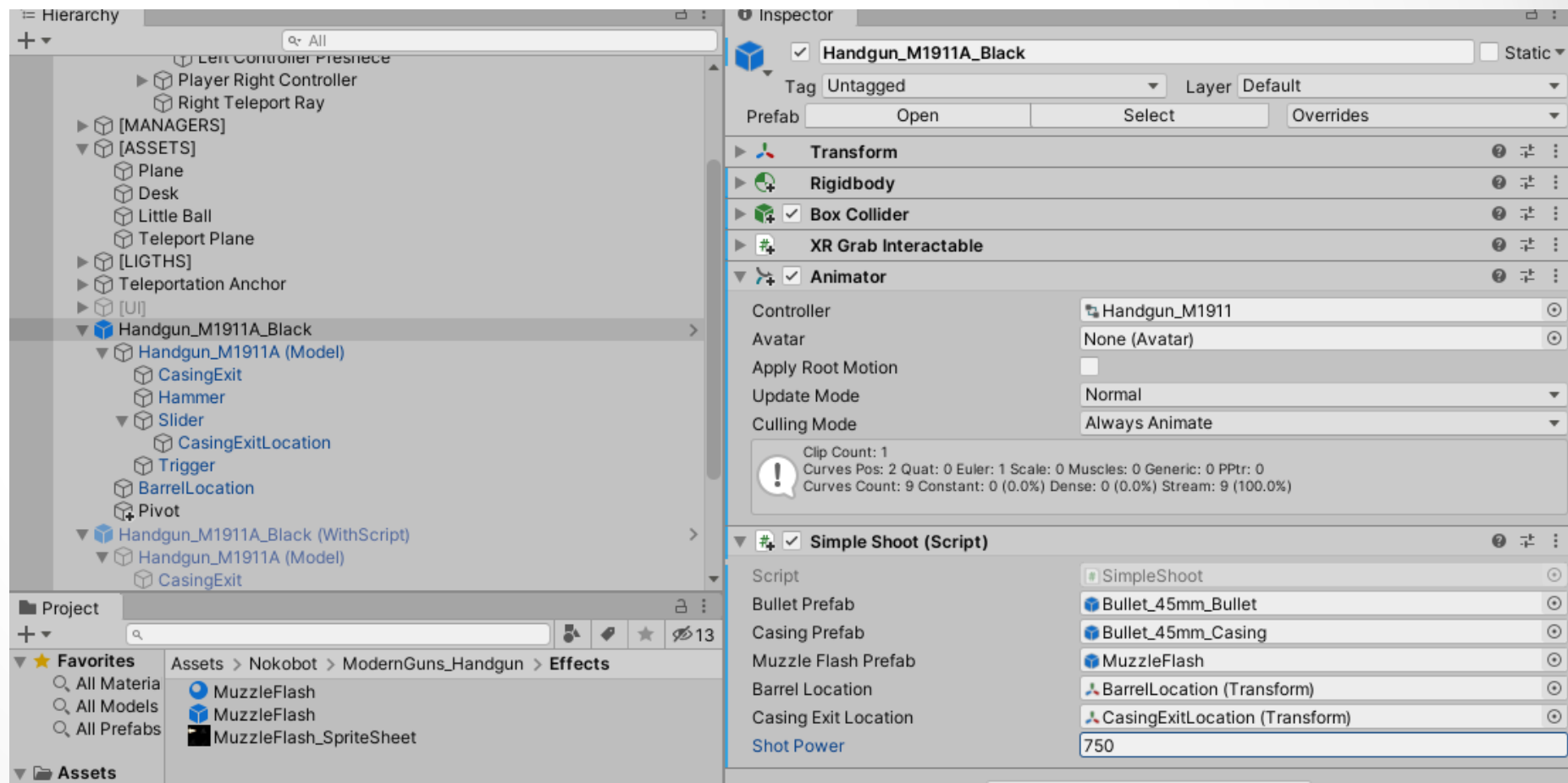
```

5 public class SimpleShoot : MonoBehaviour
6 {
7
8     public GameObject bulletPrefab;
9     public GameObject casingPrefab;
10    public GameObject muzzleFlashPrefab;
11    public Transform barrelLocation;
12    public Transform casingExitLocation;
13
14
15    public float shotPower = 100f;
16
17    void Start()
18    {
19        if (barrelLocation == null)
20            barrelLocation = transform;
21    }
22
23    void Update()
24    {
25        if (Input.GetButtonDown("Fire1"))
26        {
27            GetComponent<Animator>().SetTrigger("Fire");
28        }
29    }
30
31    public void Shoot()
32    {
33
34        GameObject tempFlash;
35        Instantiate(bulletPrefab, barrelLocation.position, barrelLocation.rotation).GetComponent<Rigidbody>().AddForce(barrelLocation.forward * shotPower);
36        tempFlash = Instantiate(muzzleFlashPrefab, barrelLocation.position, barrelLocation.rotation);
37
38    }
39
40    void CasingRelease()
41    {
42        GameObject casing;
43        casing = Instantiate(casingPrefab, casingExitLocation.position, casingExitLocation.rotation) as GameObject;
44        casing.GetComponent<Rigidbody>().AddExplosionForce(550f, (casingExitLocation.position - casingExitLocation.right * 0.3f - casingExitLocation.up * 0.6f), 1f);
45        casing.GetComponent<Rigidbody>().AddTorque(new Vector3(0, Random.Range(100f, 500f), Random.Range(10f, 1000f)), ForceMode.Impulse);
46    }
47
48
49 }

```

# 그래스핑 심화!

- 다음과 같이 Simple Shoot 에 해당 부분 구현!



# 그래스핑 심화!

- 그러면 슈팅은 어떻게? Trigger 버튼 클릭시 발사로 대체!

# 그래스핑 습

- SimpleShoot.cs 파일 생성!
- 총을 잡았을때만 발사 되도록 변경!

```
1 using System.Collections;
2 using System.Collections.Generic;
3 using UnityEngine;
4
5 public class SimpleShoot : MonoBehaviour
6 {
7
8     public GameObject bulletPrefab;
9     public GameObject casingPrefab;
10    public GameObject muzzleFlashPrefab;
11    public Transform barrelLocation;
12    public Transform casingExitLocation;
13
14
15    public float shotPower = 100f;
16
17    public bool isGrab = false ;
18
19    void Start()
20    {
21        if (barrelLocation == null)
22            barrelLocation = transform;
23    }
24
25    void Update()
26    {
27        if (Input.GetButtonDown("Fire1"))
28        {
29            GetComponent<Animator>().SetTrigger("Fire");
30        }
31    }
32
33    public void grabGun()
34    {
35        isGrab = true;
36    }
37
38    public void dropGun()
39    {
40        isGrab = false;
41    }
42
43 }
```

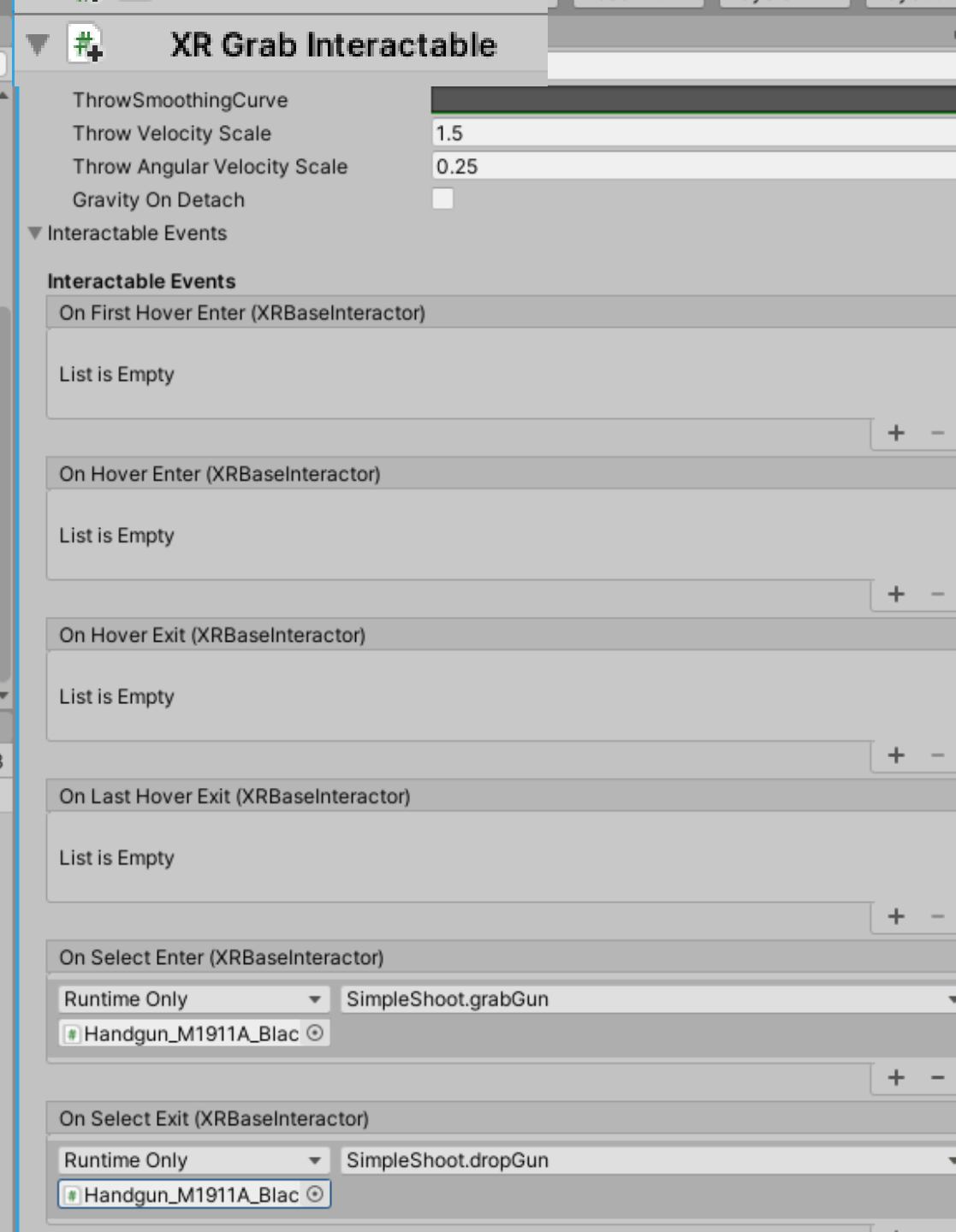
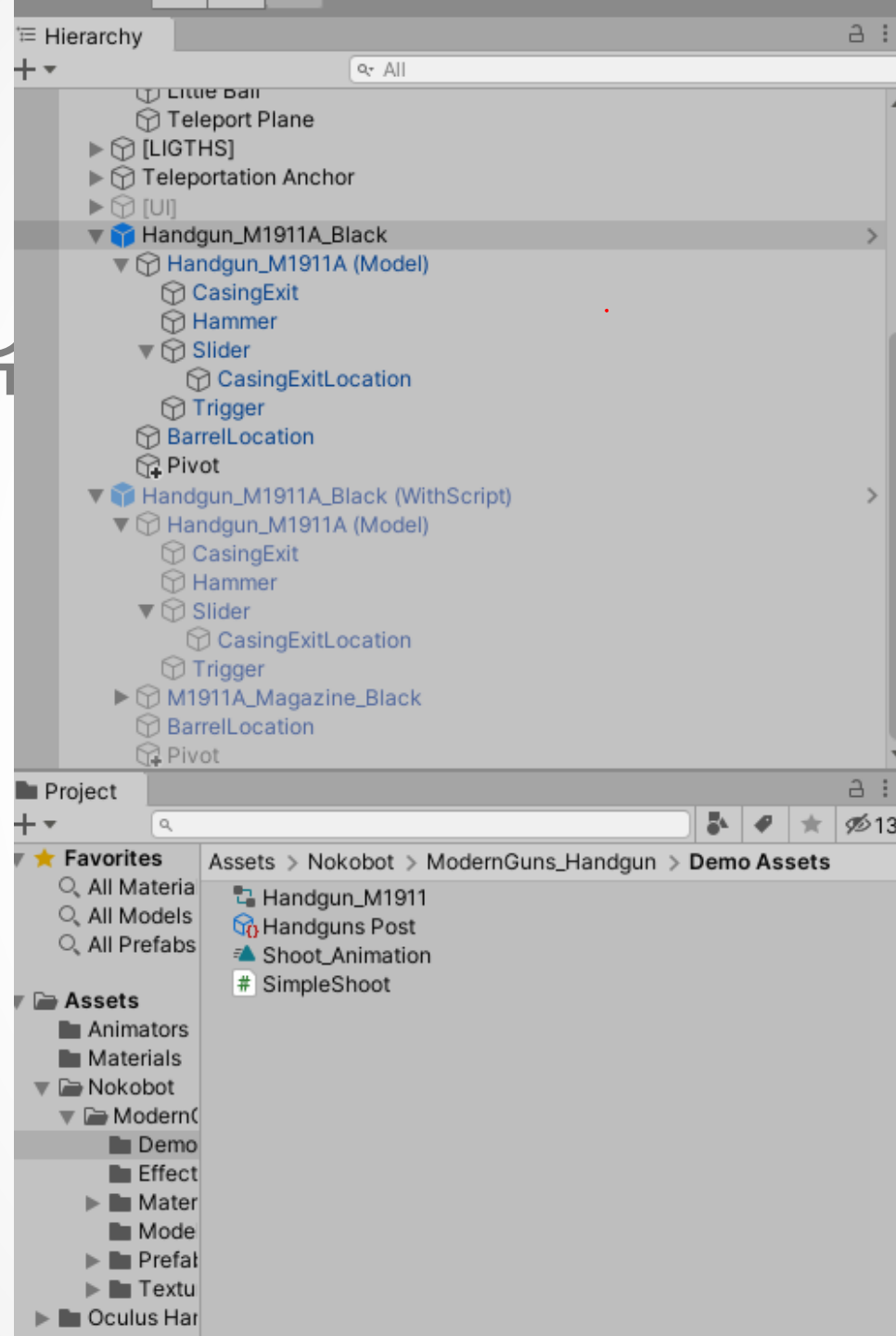


# 그래스핑 심화!

- 총을 잡았을때만 발사 되도록 변경!

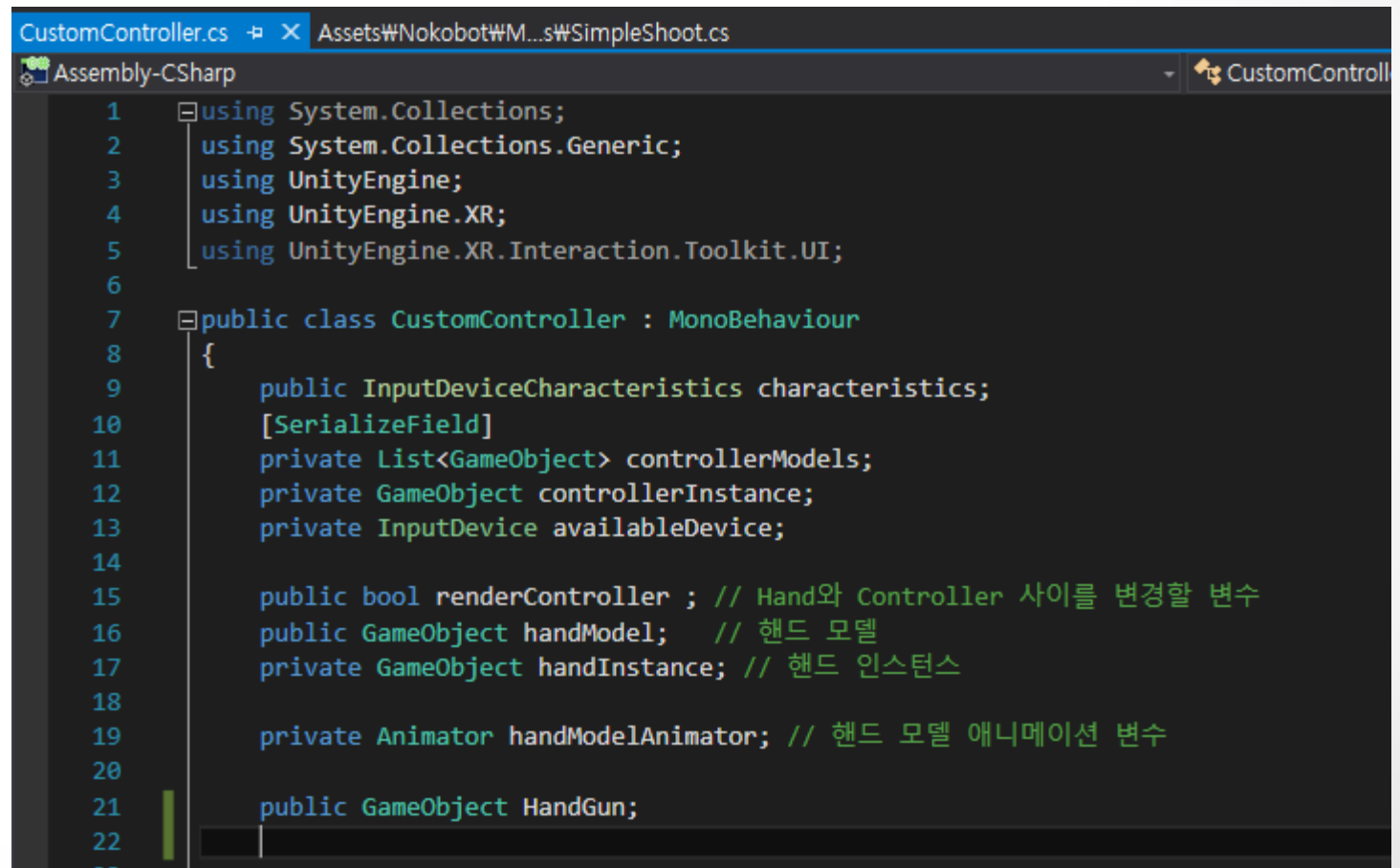
```
42  
43 public void Shoot()  
44 {  
45     if (isGrab == true)  
46     {  
47         GameObject tempFlash;  
48         Instantiate(bulletPrefab, barrelLocation.position, barrelLocation.rotation).GetComponent<Rigidbody>().AddForce(barrelLocation.forward * shotPower);  
49         tempFlash = Instantiate(muzzleFlashPrefab, barrelLocation.position, barrelLocation.rotation);  
50     }  
51 }
```

- 그러면



# 그래스핑 심화!

- CustomController 수정! – HandGun 객체 담기!



```
CustomController.cs [X] Assets\#Nokobot\#M...s\SimpleShoot.cs
Assembly-CSharp CustomControll

1  using System.Collections;
2      using System.Collections.Generic;
3      using UnityEngine;
4      using UnityEngine.XR;
5      using UnityEngine.XR.Interaction.Toolkit.UI;
6
7  public class CustomController : MonoBehaviour
8  {
9      public InputDeviceCharacteristics characteristics;
10     [SerializeField]
11     private List<GameObject> controllerModels;
12     private GameObject controllerInstance;
13     private InputDevice availableDevice;
14
15     public bool renderController ; // Hand와 Controller 사이를 변경할 변수
16     public GameObject handModel; // 핸드 모델
17     private GameObject handInstance; // 핸드 인스턴스
18
19     private Animator handModelAnimator; // 핸드 모델 애니메이션 변수
20
21     public GameObject HandGun;
22
23
```

# 그래스핑 심화!

- Update 함수에서 triggerButton 클릭시, SimpleShoot 컴포넌트의 Shoot 발사

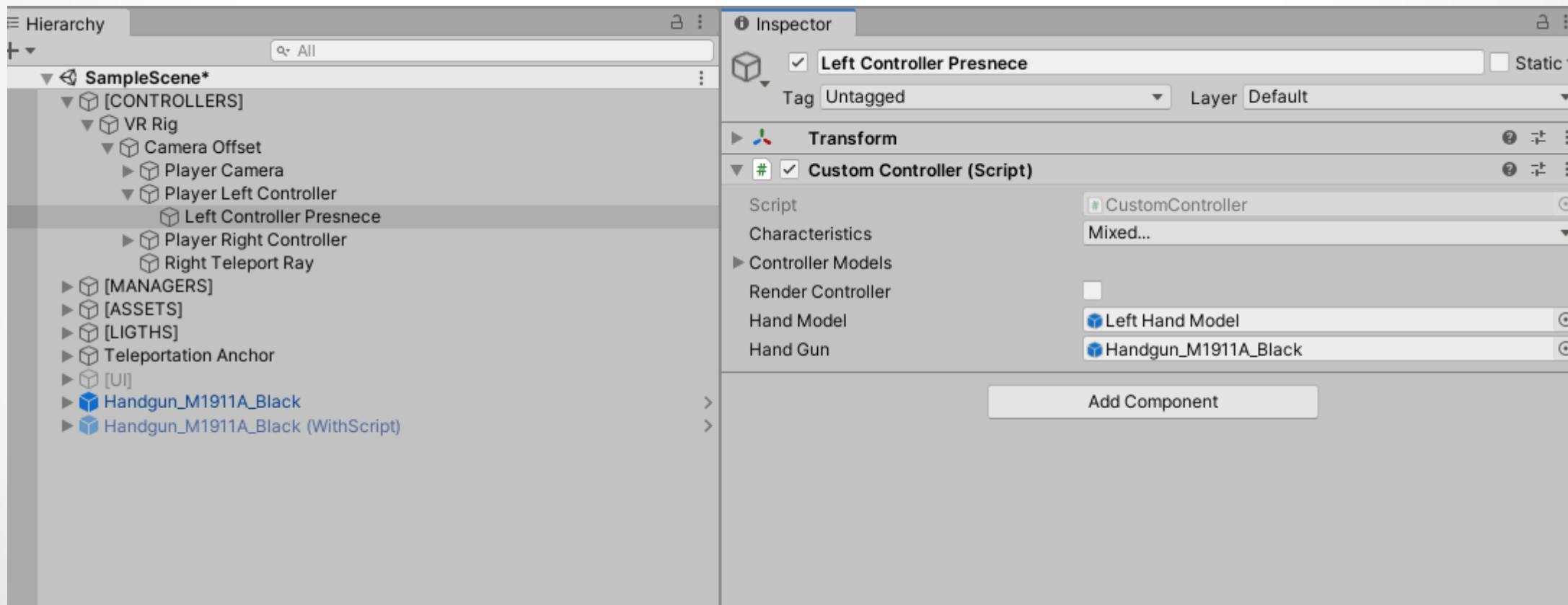
```
void Update()
{
    if (!availableDevice.isValid)
    {
        TryInitialize();
    }

    if (renderController)
    {
        handInstance.SetActive(false);
        controllerInstance.SetActive(true);
    }
    else
    {
        handInstance.SetActive(true);
        controllerInstance.SetActive(false);
        UpdateHandAnimation(); // 핸드 애니메이션은 여기서만 수행
    }

    if (HandGun != null)
    {
        bool menuButtonValue;
        if (availableDevice.TryGetFeatureValue(CommonUsages.triggerButton, out menuButtonValue) && menuButtonValue)
        {
            HandGun.GetComponent<SimpleShoot>().Shoot();
        }
    }
}
```

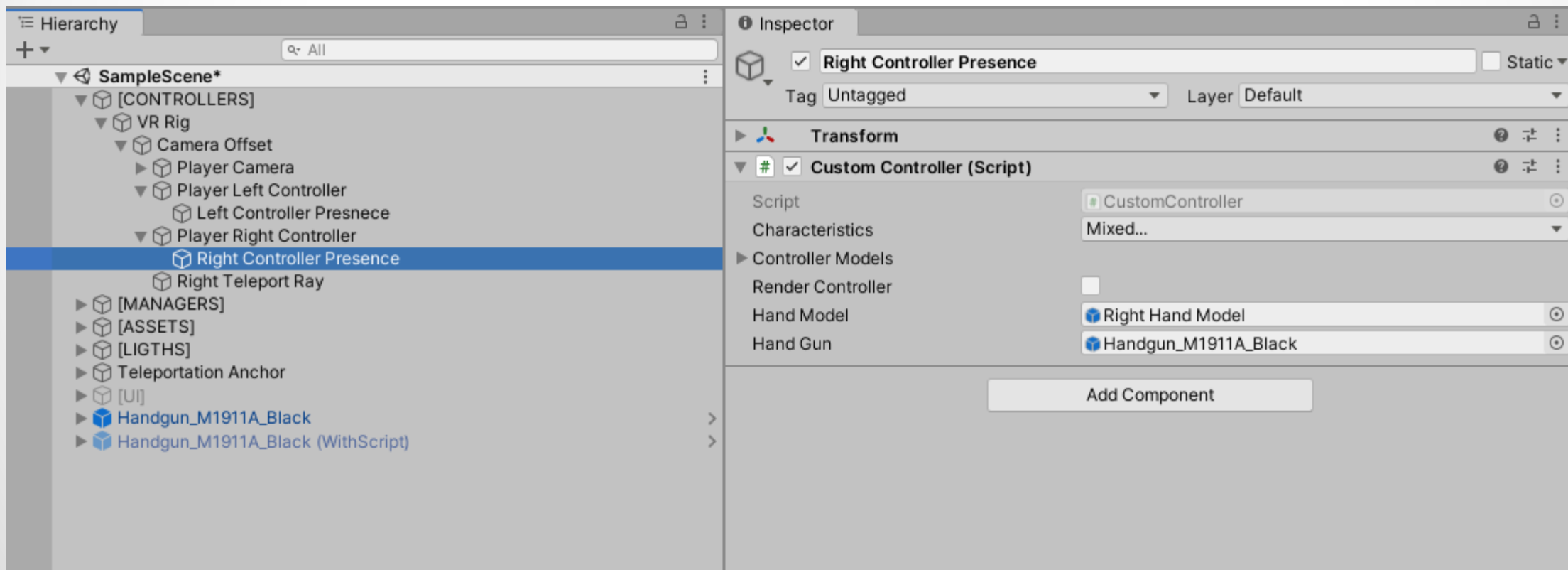
# 그래스핑 심화!

- Left Controller Presence 설정!



# 그래스핑 심화!

- Right Controller Presence 설정!



# 그래

- 테스트 및 검토

- 단발 샷으로 변경 필요
- 사운드 이펙트 필요
- 왼손 오른손 구분 필요!

