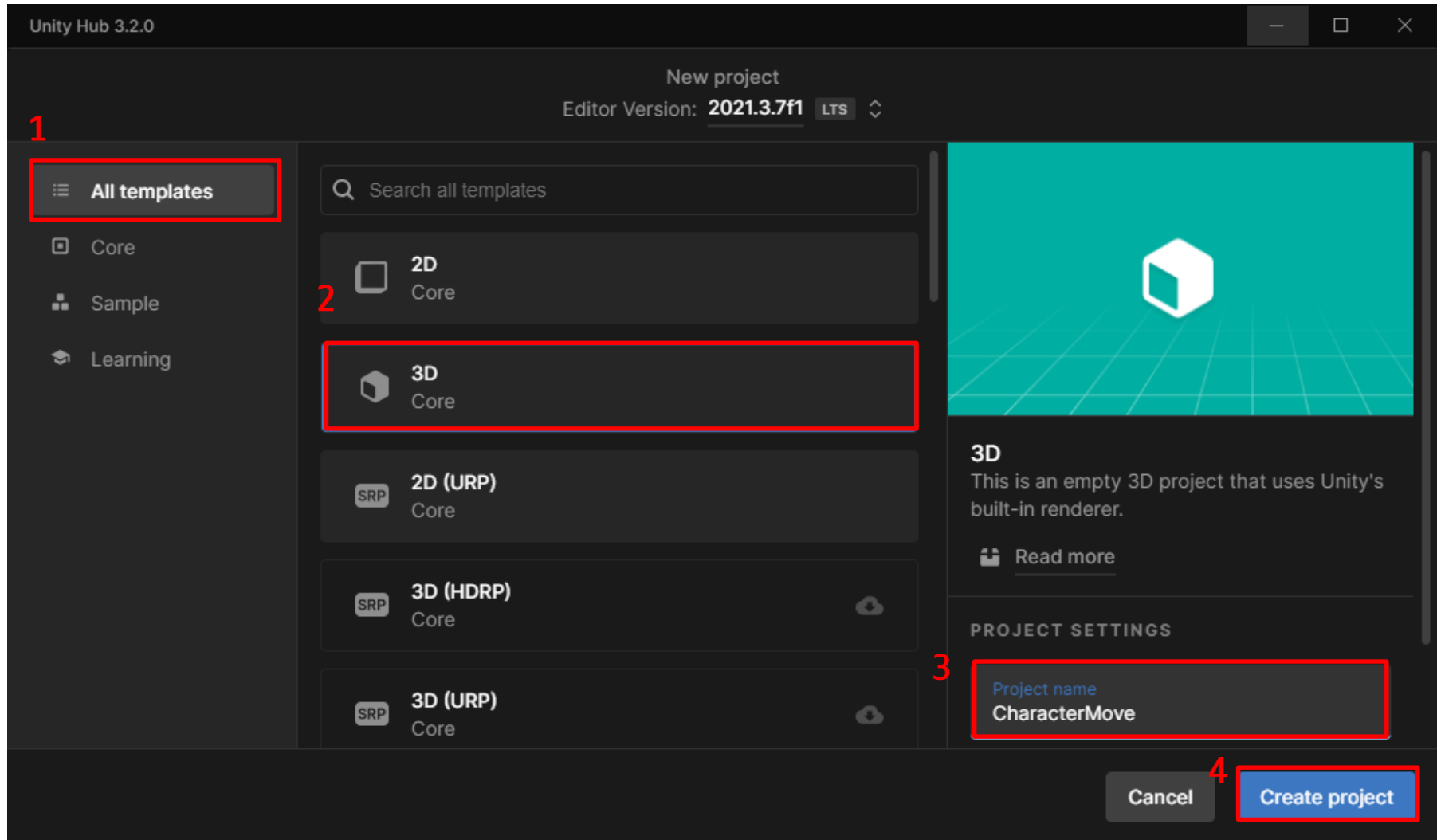


Game Programming

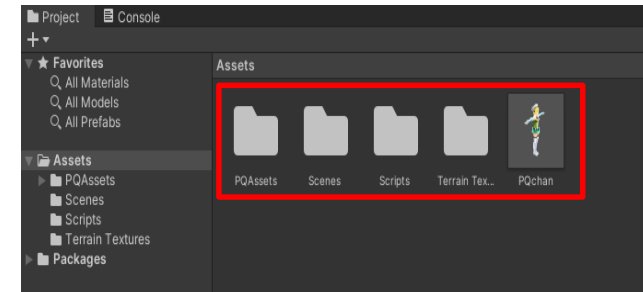
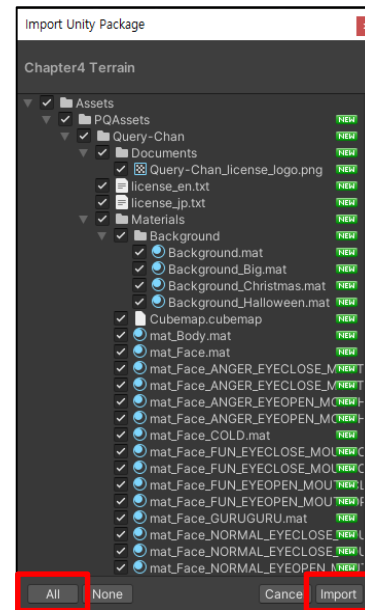
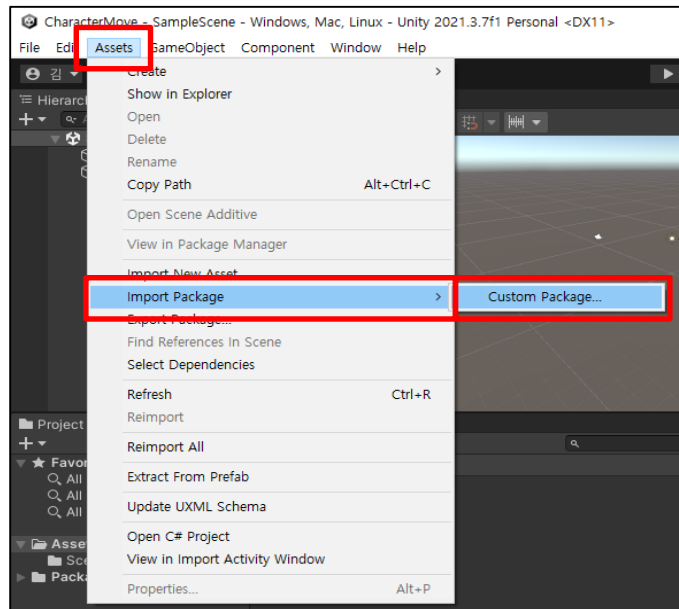
Character Move

2021.3.7f1



게임 리소스 가져오기

1. Menu – Assets – Import Package – Custom Package – Chapter4 Terrain.unitypackage
2. Import Unity Package – All – Import



스크립트 오류 수정하기 - 1

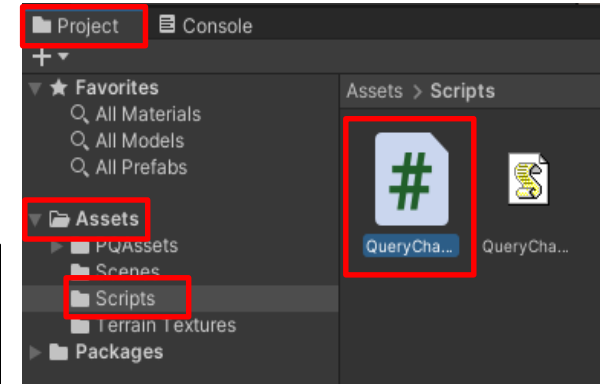
1. Project - Assets - Script - 마우스 우클릭 - Create - C# Script - Rename
- "QueryChanController" - 더블클릭

2. Coding

```
using UnityEngine;
public class QueryChanController : MonoBehaviour
{
    public float speed = 3.0f;
    public float jumpPower = 6.0f;
    private Vector3 direction;
    private CharacterController controller;
    private Animator anim;
    void Start()
    {
        controller = GetComponent<CharacterController>();
        anim = GetComponent<Animator>();
    }
}
```

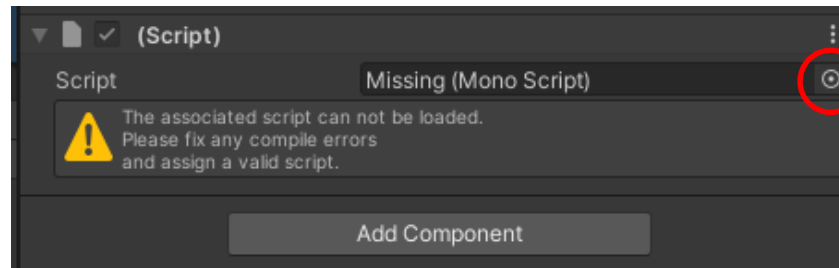
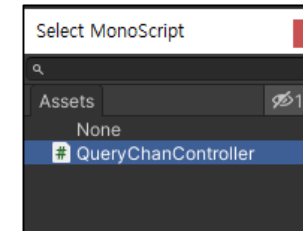
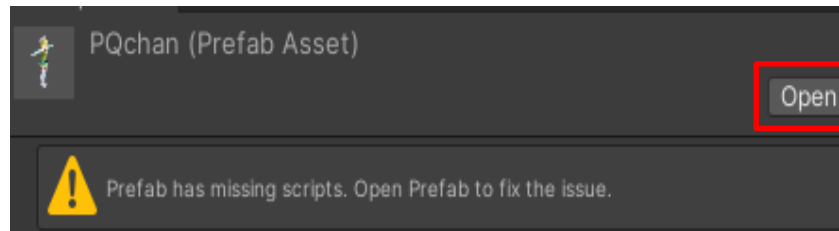
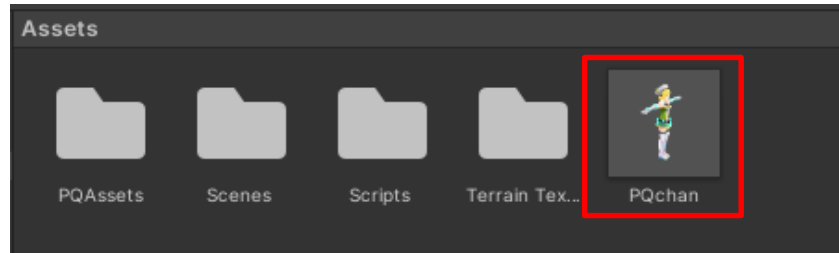
```
void Update()
{
    float inputX = Input.GetAxis("Horizontal");
    float inputY = Input.GetAxis("Vertical");
    Vector3 inputDirection = new Vector3(inputX, 0, inputY);
    direction = Vector3.zero;
    if (inputDirection.magnitude > 0.1f)
    {
        transform.LookAt(transform.position + inputDirection);
        direction += transform.forward * speed;
        anim.SetFloat("Speed", direction.magnitude);
    }
    else
    {
        anim.SetFloat("Speed", 0);
    }
}
```

```
if (Input.GetButton("Jump"))
{
    anim.SetTrigger("Jump");
    direction.y += jumpPower;
}
controller.Move(direction * Time.deltaTime);
direction.y += Physics.gravity.y * Time.deltaTime;
}
```



스크립트 오류 수정하기 - 2

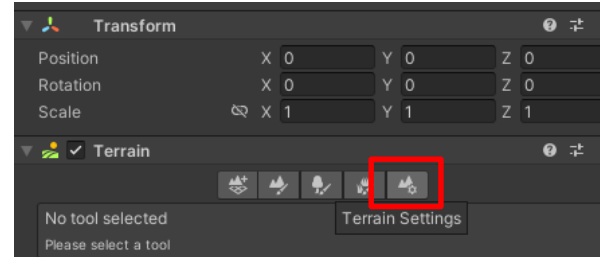
1. Project - Assets - PQchan(prefab) - Inspector - Open - Script - QueryChanController



스태이지 만들기 - 1

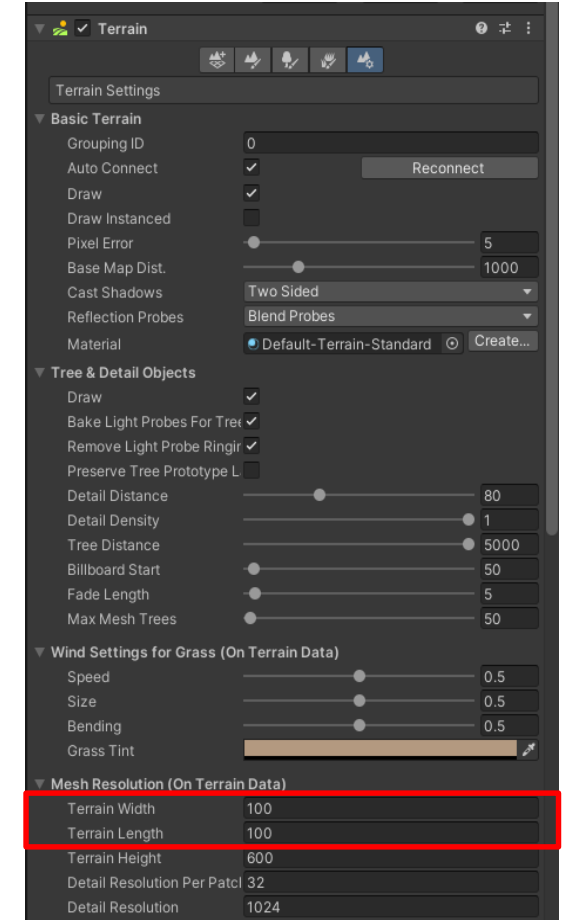
1. 터레인 추가하기

1. Hierarchy – 3D Object – Terrain



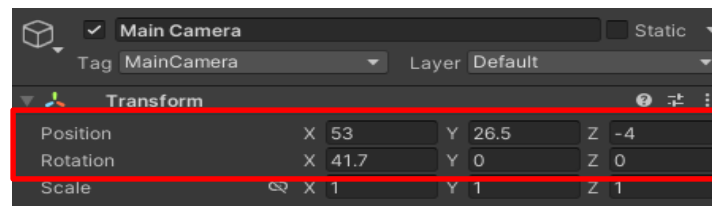
2. 터레인 크기 변경하기

1. Hierarchy – Terrain – Inspector – Terrain – Terrain Settings
2. Inspector – Terrain – Mesh Resolution – Terrain Width : 100, Terrain Length : 100



3. 카메라 방향 변경하기

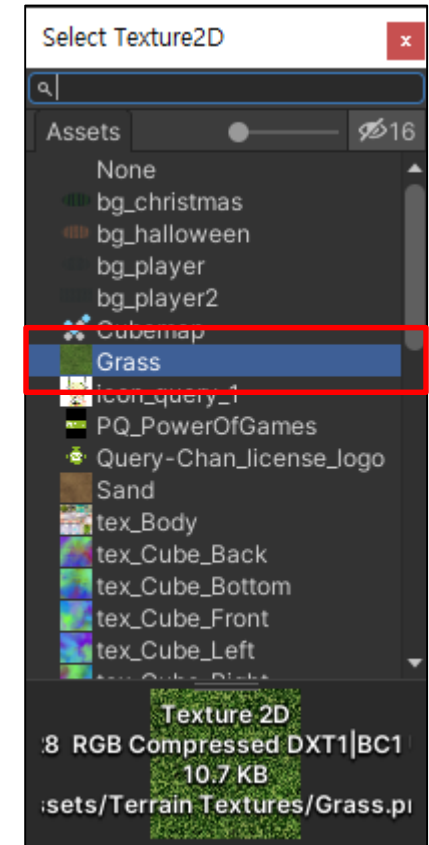
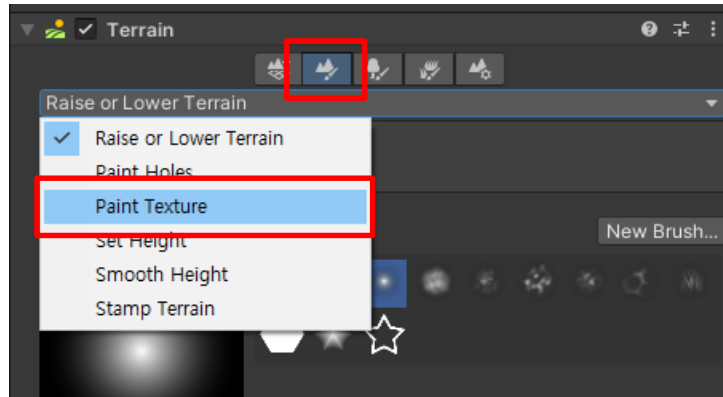
1. Hierarchy – Main Camera – Inspector – Position : 53, 26.5, -4
Rotation : 41.7, 0, 0



스테이지 만들기 - 2

1. 터레인 텍스처 입히기

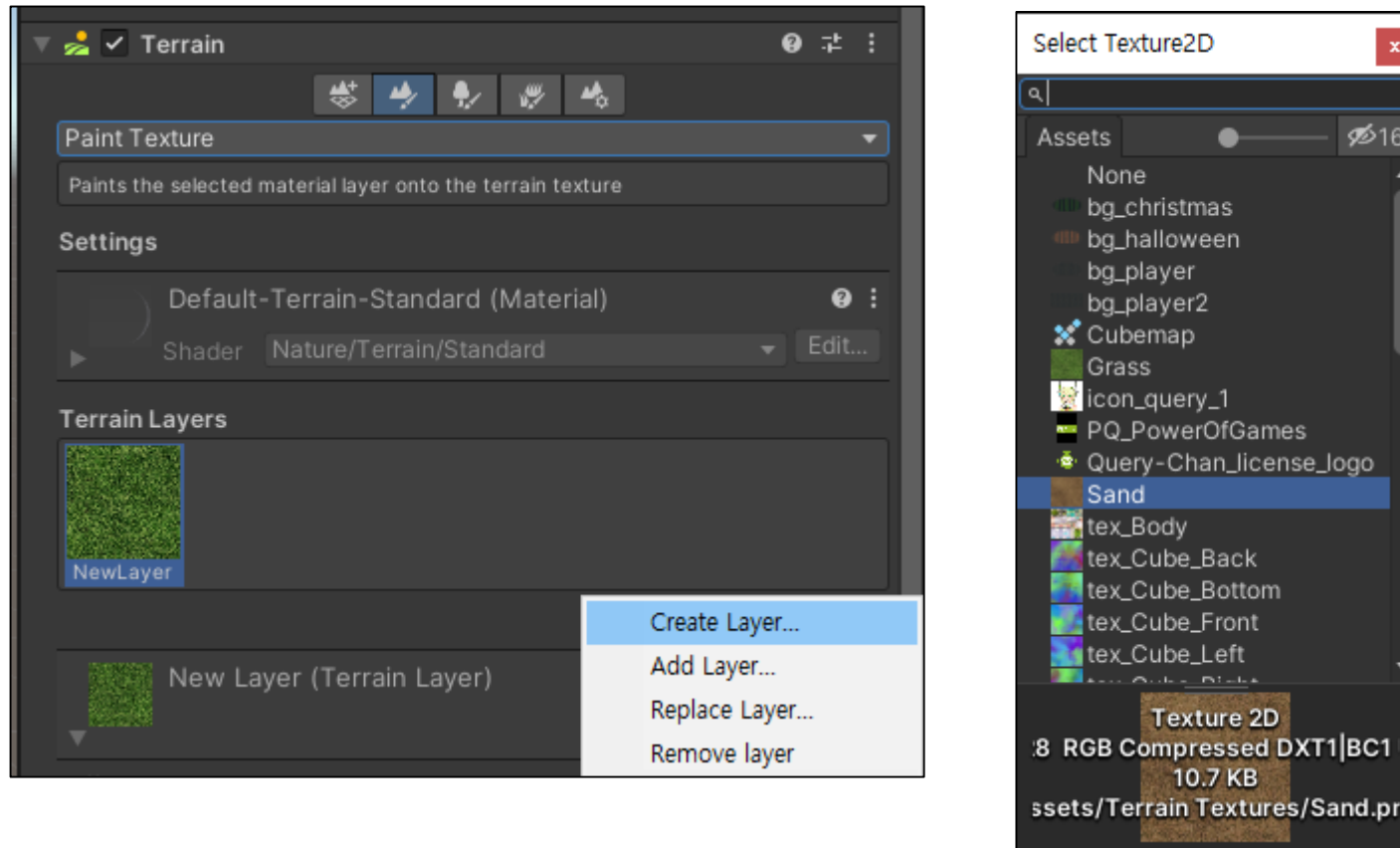
1. Hierarchy – Terrain – Inspector – Terrain – Paint Terrain – Paint Texture
2. Inspector – Terrain Layers – Edit Terrain Layers – Create Layer – Grass



스테이지 만들기 - 3

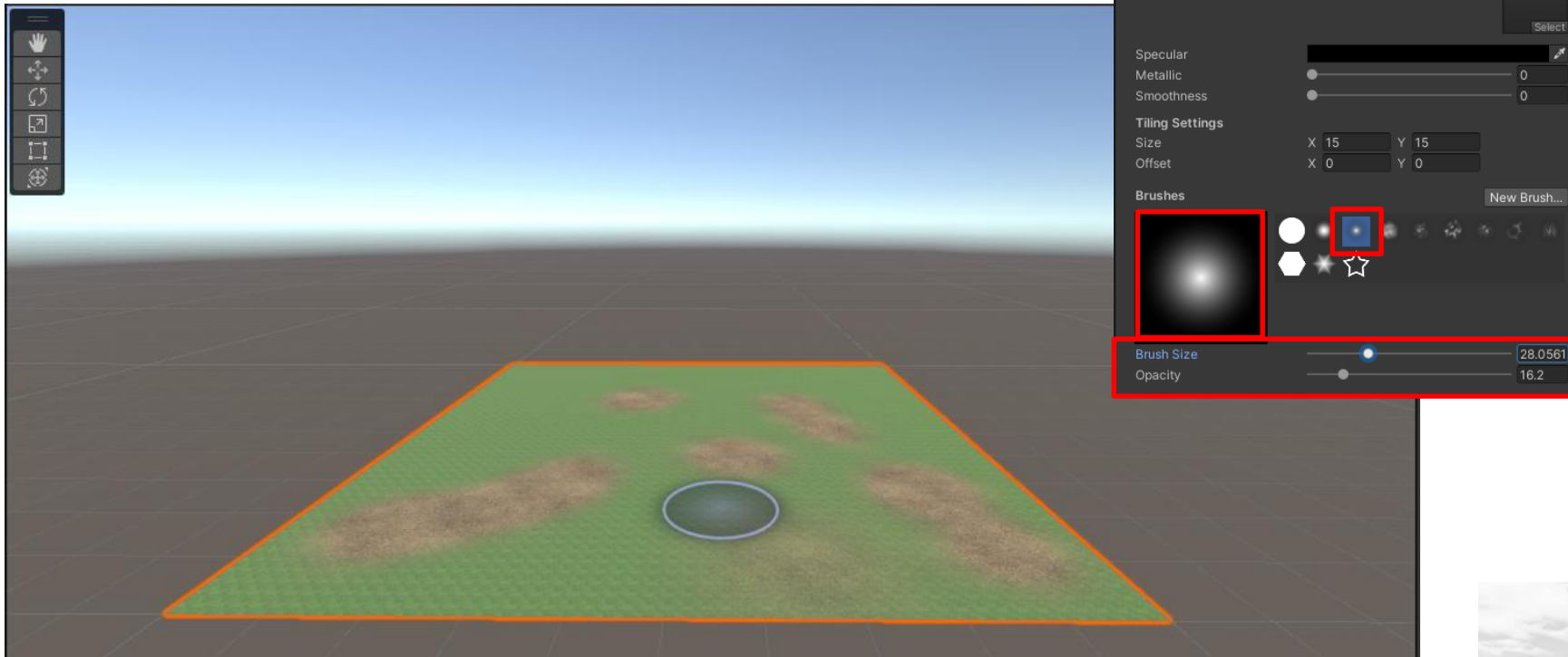
1. 터레인에 흙 텍스처 추가 및 반영하기

1. Hierarchy – Terrain – Inspector – Terrain – Paint Terrain – Paint Texture
2. Inspector – Terrain Layers – Edit Terrain Layers – Create Layer – Sand



스테이지 만들기 - 4

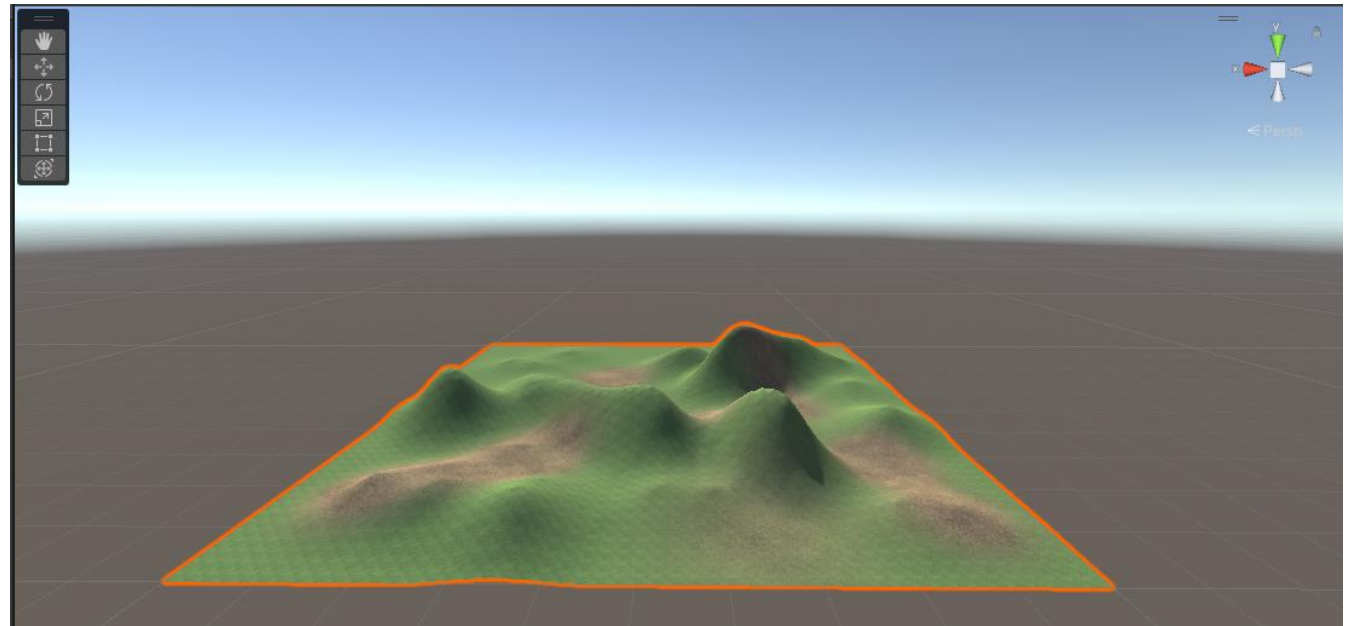
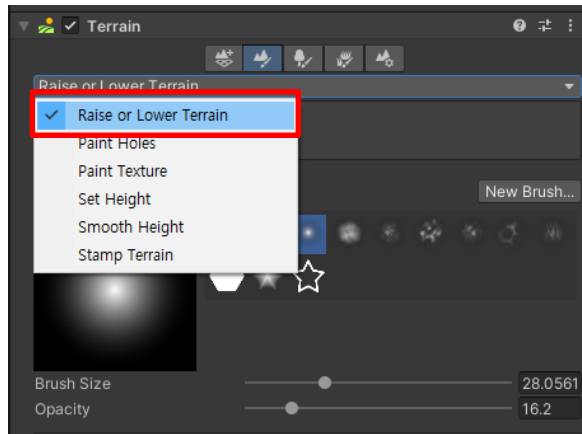
3. Inspector – Sand Layer 선택
4. Brush Size 선택
5. Brush Size : 20, Opacity : 20
6. '['와 ']'를 이용하여 Brush 크기 조절 가능
7. Scene에서 클릭 클릭



스테이지 만들기 - 5

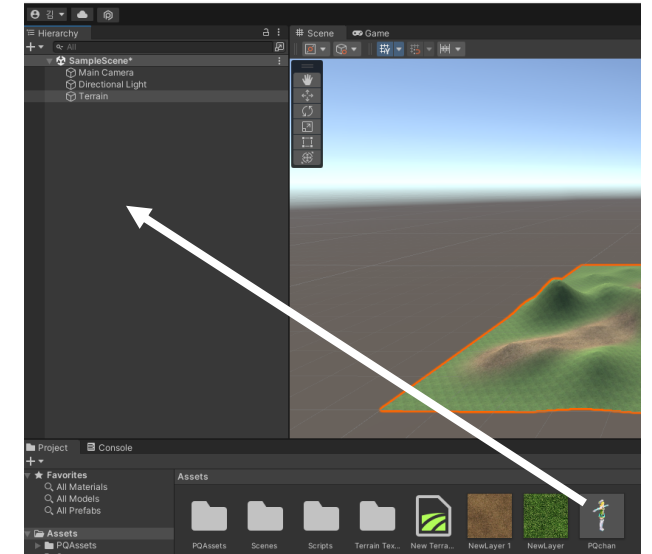
1. 산 만들기

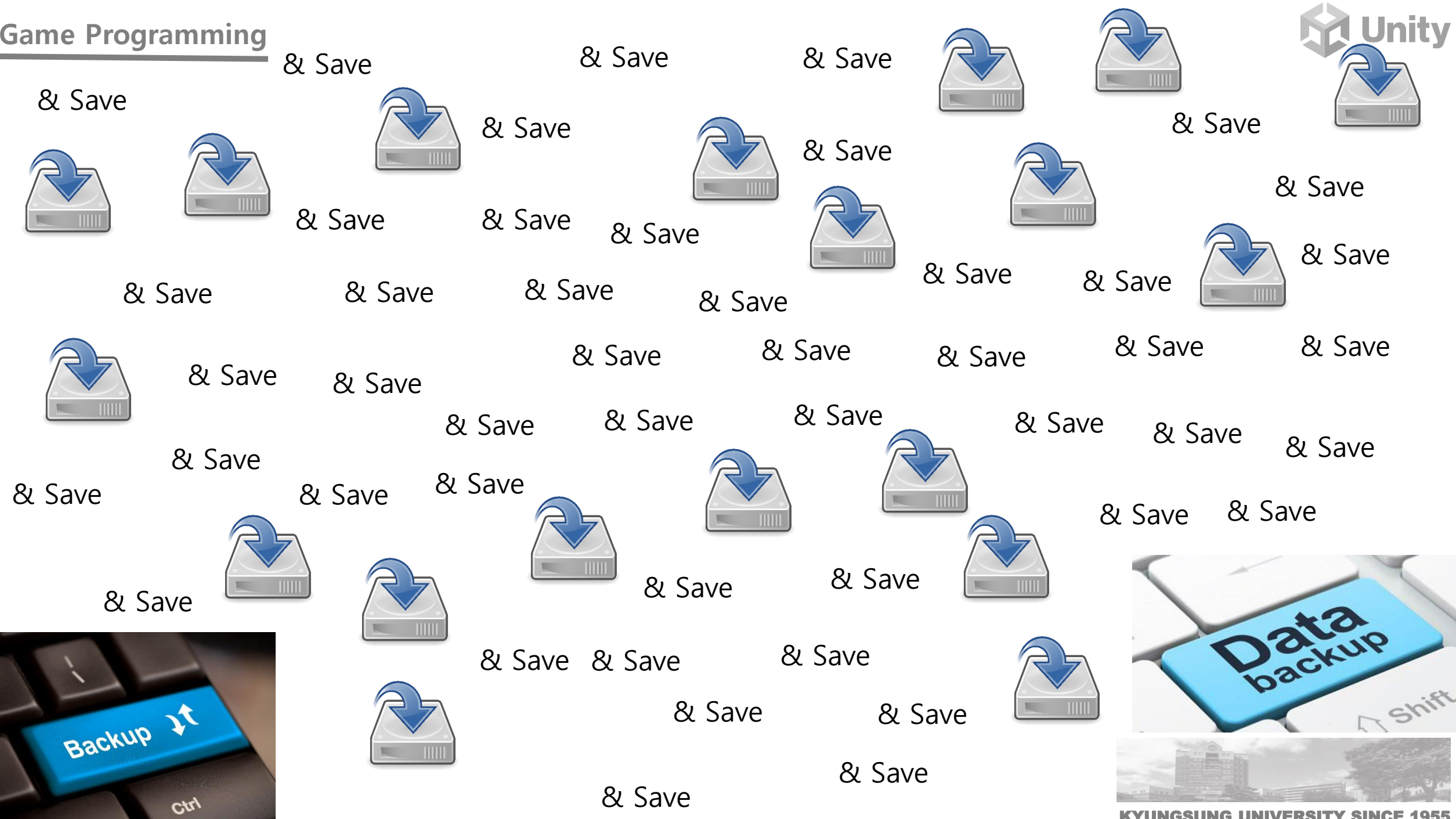
1. Hierarchy – Terrain – Inspector – Terrain – Paint Terrain – Raise or Lower Terrain
2. Brush Size & Opacity 선택
3. Scene에서 클릭 클릭



캐릭터 Scene에 배치 및 이동하기

1. Project – Assets – PQchan 을 Hierarchy로 DnD
2. Hierarchy – PQchan – Inspector - Position : 50, 0.2, 50
3. Hierarchy - Main Camera – Inspector – Position : 50, 2.5, 46
4. Play
 1. 방향 키, Space bar





Reference

- ✓ <https://unity.com/>
- ✓ <https://docs.unity3d.com/kr/2022.1/Manual/UnityManual.html>
- ✓ (초보자를 위한) 유니티 5 입문, 아라카와 다쿠야, 아사노 유이치 지음, 윤준 옮김, 한빛미디어

