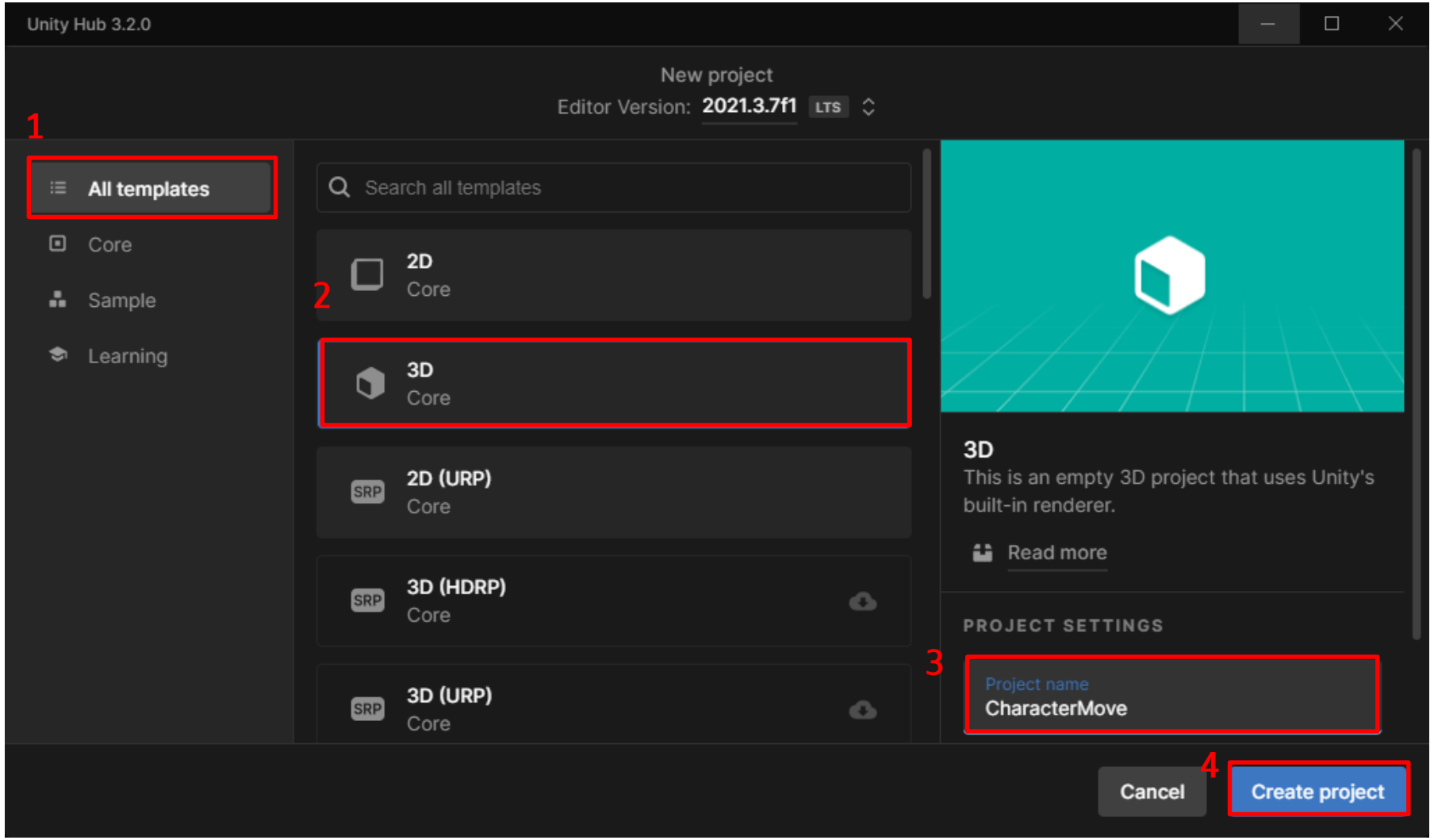
Unity

Game Programming

Character Move

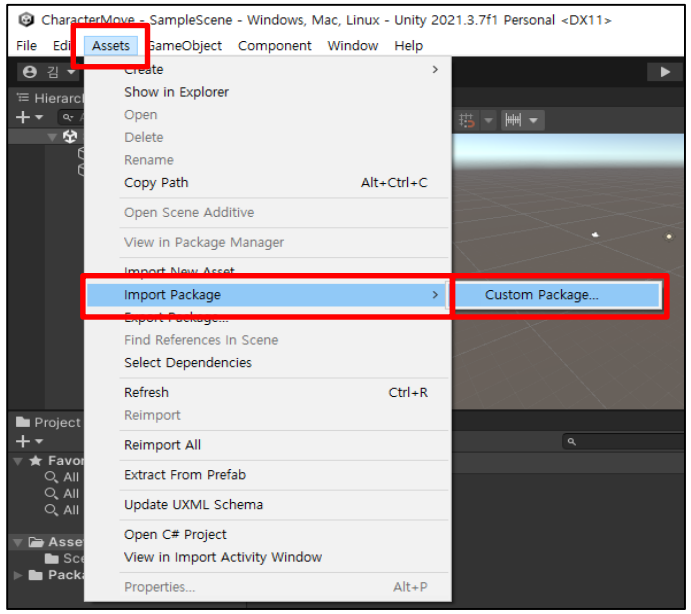
2021.3.7f1

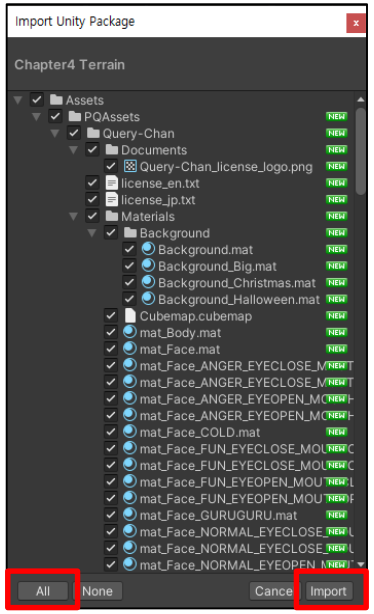
KYUNGSUNG UNIVERSITY SINCE 1955

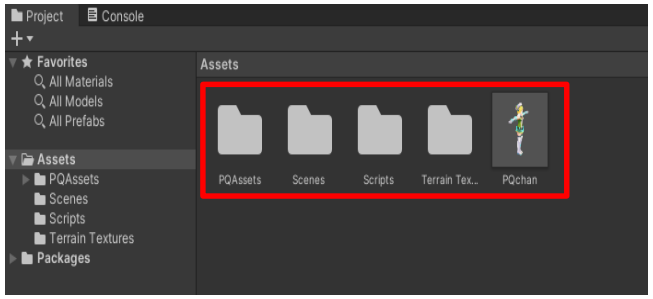

Unity Hub 3.2.0
New project
Editor Version: 2021.3.7f1 LTS
1
All templates
Core
Sample
Learning
Search all templates
2
2D
Core
3D
Core
2D (URP)
Core
3D (HDRP)
Core
3D (URP)
Core
3D
This is an empty 3D project that uses Unity's built-in renderer.
Read more
PROJECT SETTINGS
3
Project name
CharacterMove
Cancel
4
Create project

게임 리소스 가져오기

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

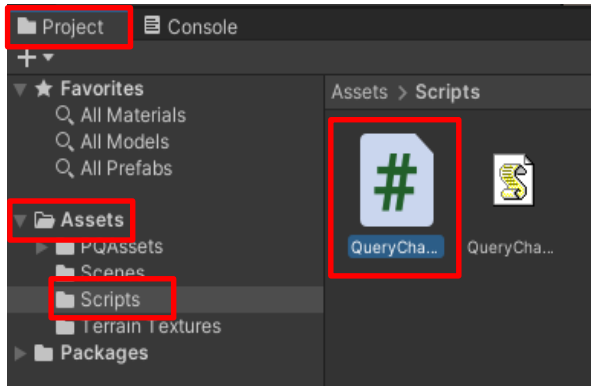






스크립트 오류 수정하기 - 1

1. **Project** - Assets – Script – 마우스 우클릭 – Create – C# Script – Rename – “QueryChanController” - 더블클릭



2. **Coding**

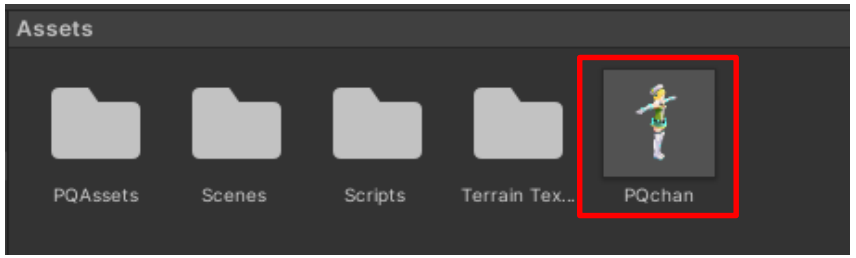
```
using UnityEngine;
public class QueryChanController : MonoBehaviour
{
  public float speed = 3.0f;
  public float jumpPower = 6.0f;
  private Vector3 direction;
  private CharacterController controller;
  private Animator anim;
  void Start()
  {
    controller = GetComponent<CharacterController>();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

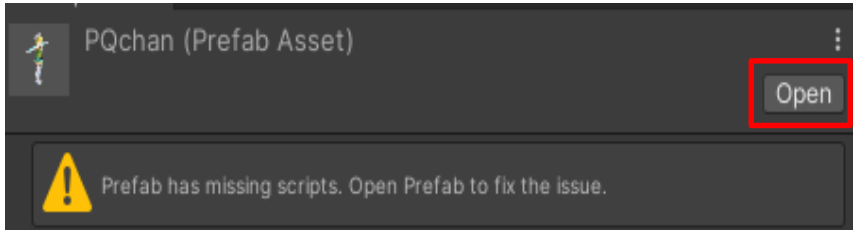
```
void Update()
 {
   float inputX = Input.GetAxis("Horizontal");
   float inputY = Input.GetAxis("Vertical");
   Vector3 inputDirection = new Vector3(inputX, 0, inputY);
   direction = Vector3.zero;
   if (inputDirection.magnitude > 0.1f)
   {
     transform.LookAt(transform.position + inputDirection);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

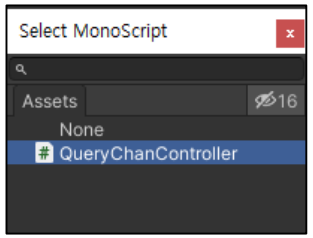
```
  if (Input.GetButton("Jump"))
     {
       anim.SetTrigger("Jump");
       direction.y += jumpPower;
     }
     controller.Move(direction * Time.deltaTime);
     direction.y += Physics.gravity.y * Time.deltaTime;
   }
}
```

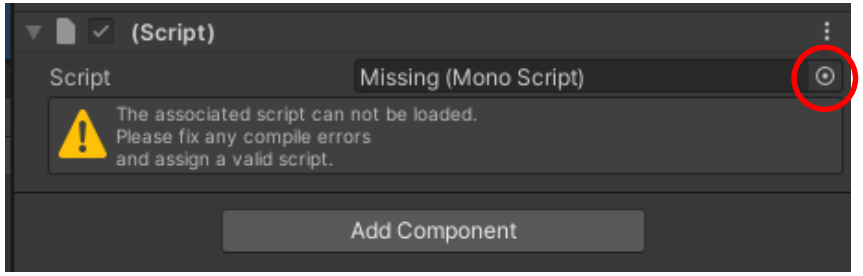
스크립트 오류 수정하기 - 2

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





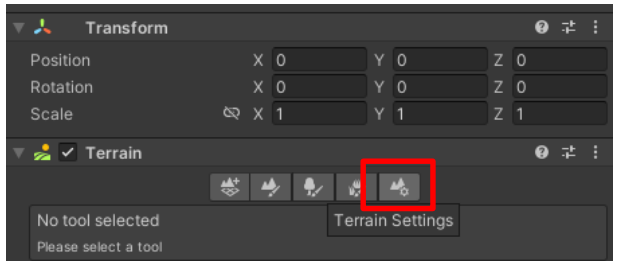




스테이지 만들기 - 1

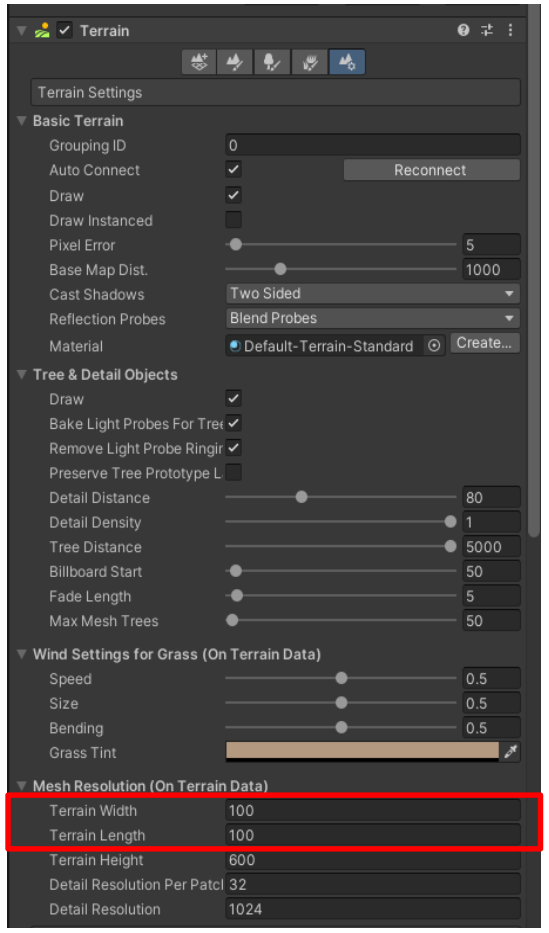
1. 터레인 추가하기

1. Hierarchy – 3D Object – Terrain



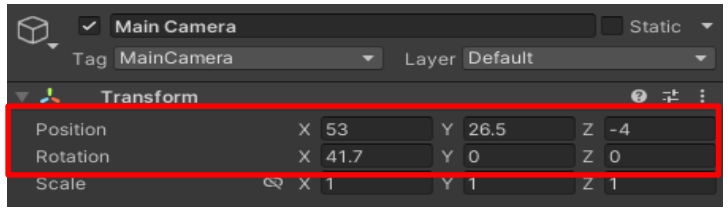
2. 터레인 크기 변경하기

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



3. 카메라 방향 변경하기

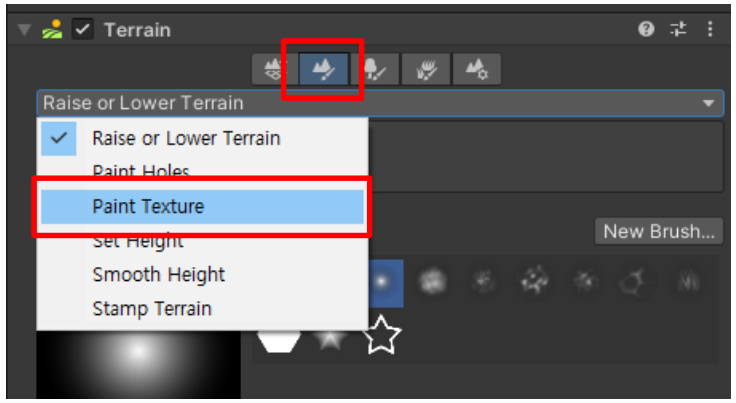
1. Hierarchy – Main Camera – Inspector – Position : 53, 26.5, -4 Rotation : 41.7, 0, 0

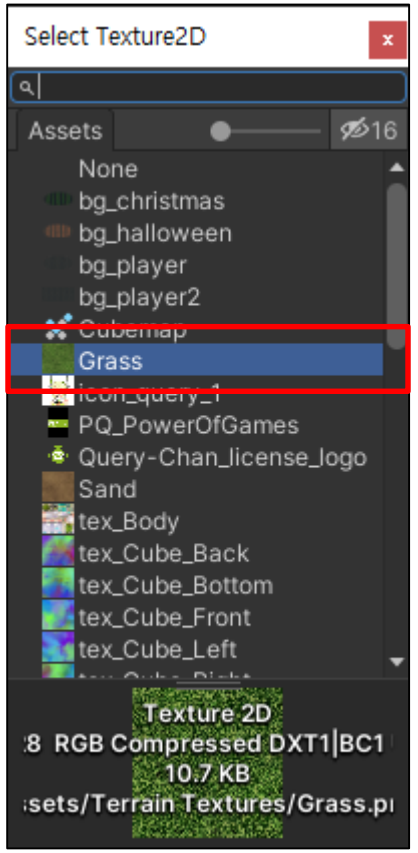


스테이지 만들기 - 2

1. 터레인 텍스쳐 입히기

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

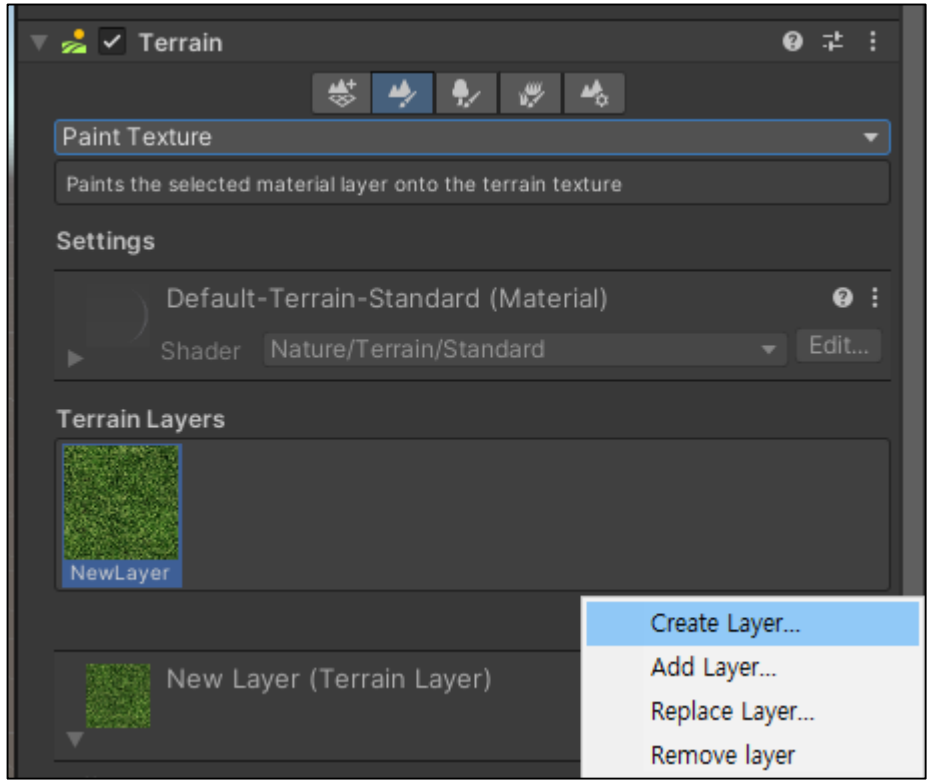


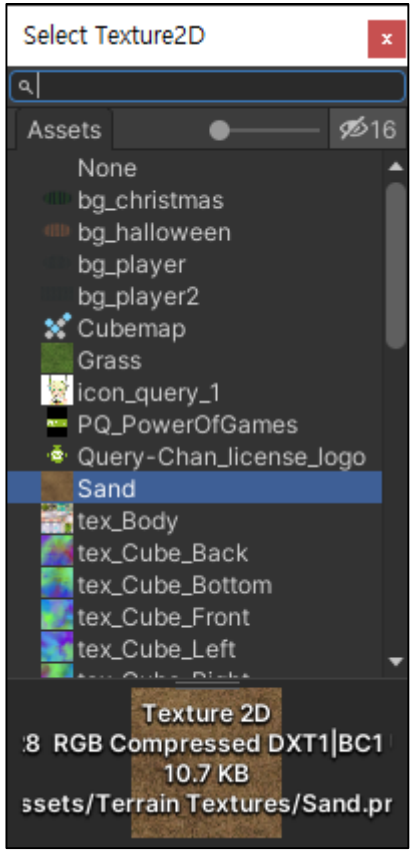


스테이지 만들기 - 3

1. 터레인에 흙 텍스쳐 추가 및 반영하기

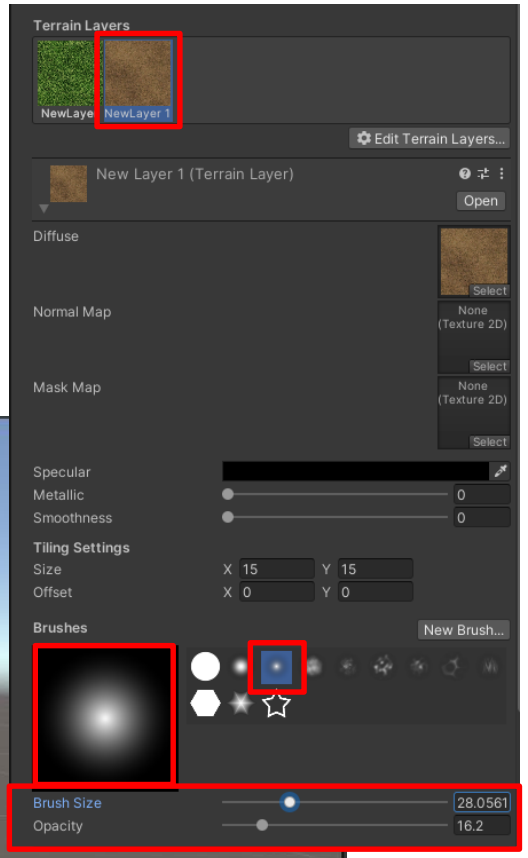
1. Hierarchy – Terrain – Inspector – Terrain – Paint Terrain – Paint Texture
2. Inspector – Terrain Layers – Edit Terrain Layers – Create Layer – Sand

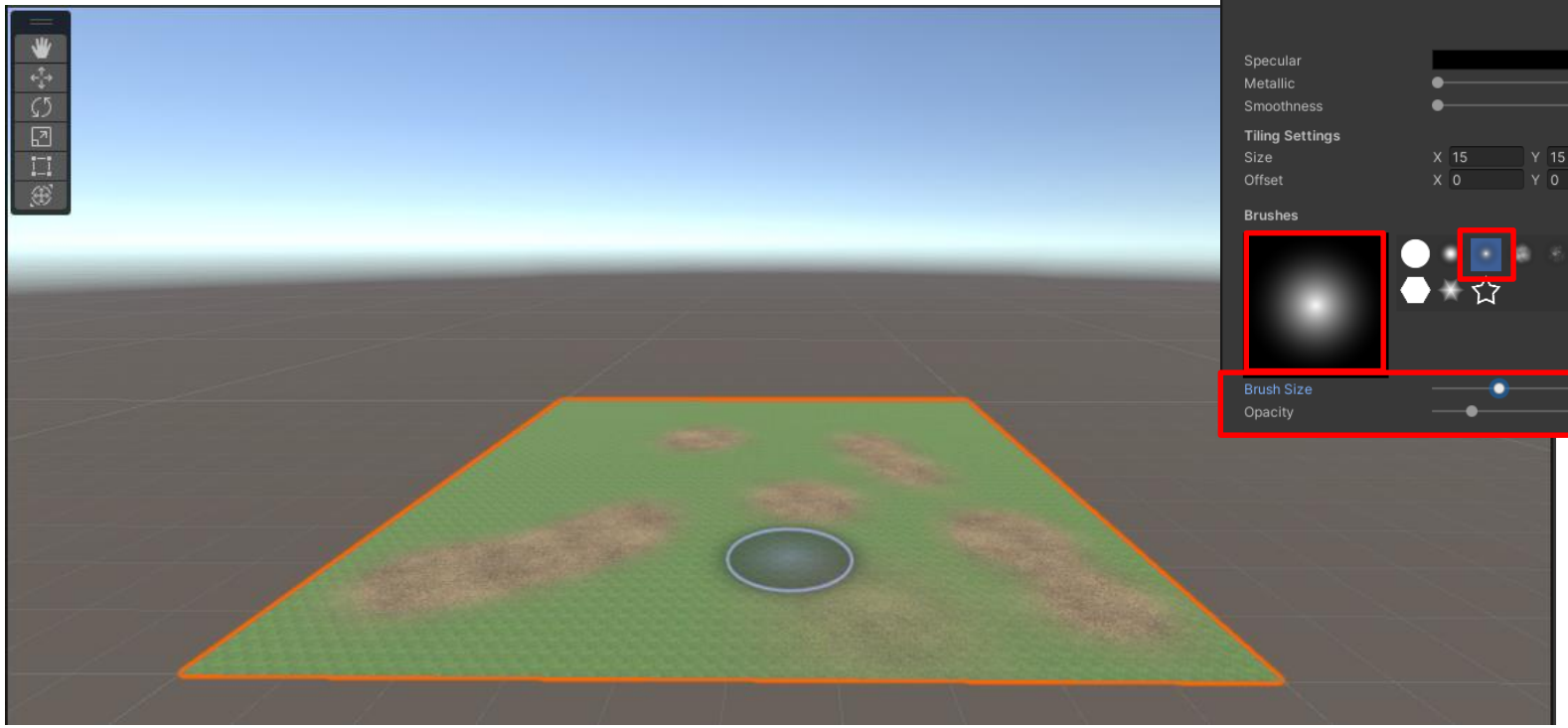




스테이지 만들기 - 4

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

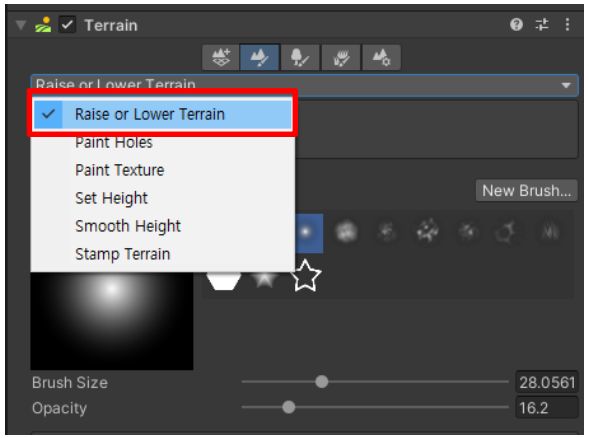


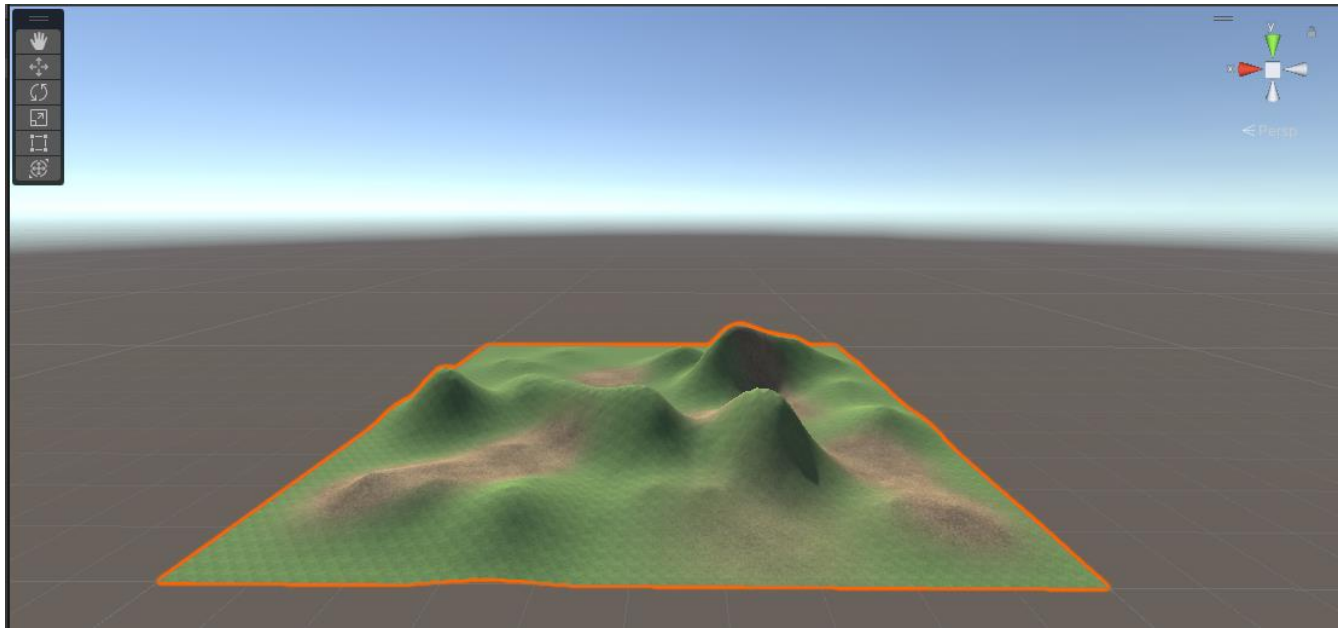


스테이지 만들기 - 5

1. 산 만들기

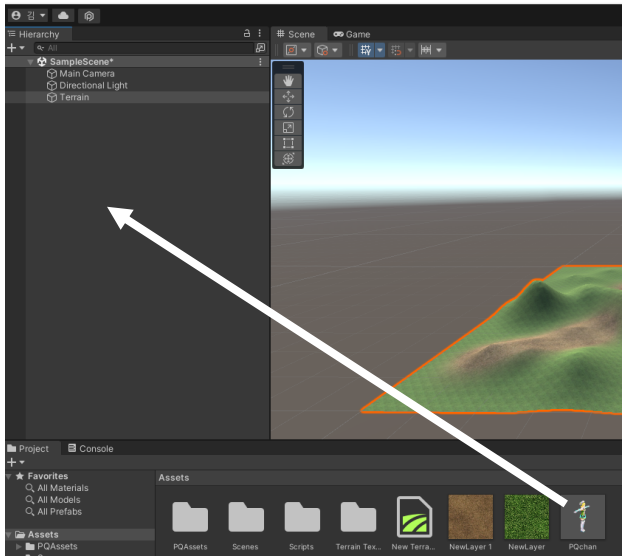
1. Hierarchy – Terrain – Inspector – Terrain – Paint Terrain – Raise or Lower Terrain
2. Brush Size & Opacity 선택
3. Scene에서 클릭 클릭





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



Unity

& Save

Unity

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