

UNITY GAME DEVELOPMENT

Hello Unity



OVERVIEW

- Unity
- Unity User Interface
- Assets
- Materials
- Prefabs
- Audio & Importing Assets



UNITY

- What is Unity?
 - It's a 2D and 3D graphics development environment.
 - Designed to create games, but is used for more
 - Multiplatform support
 - Includes VR support as well.
 - Write once, deploy to many.



<https://unity3d.com/get-unity/download/>

UNITY HISTORY

- Founded in a small Copenhagen apartment in 2004
- Nowadays half of the world games are done with Unity



UNITY HUB

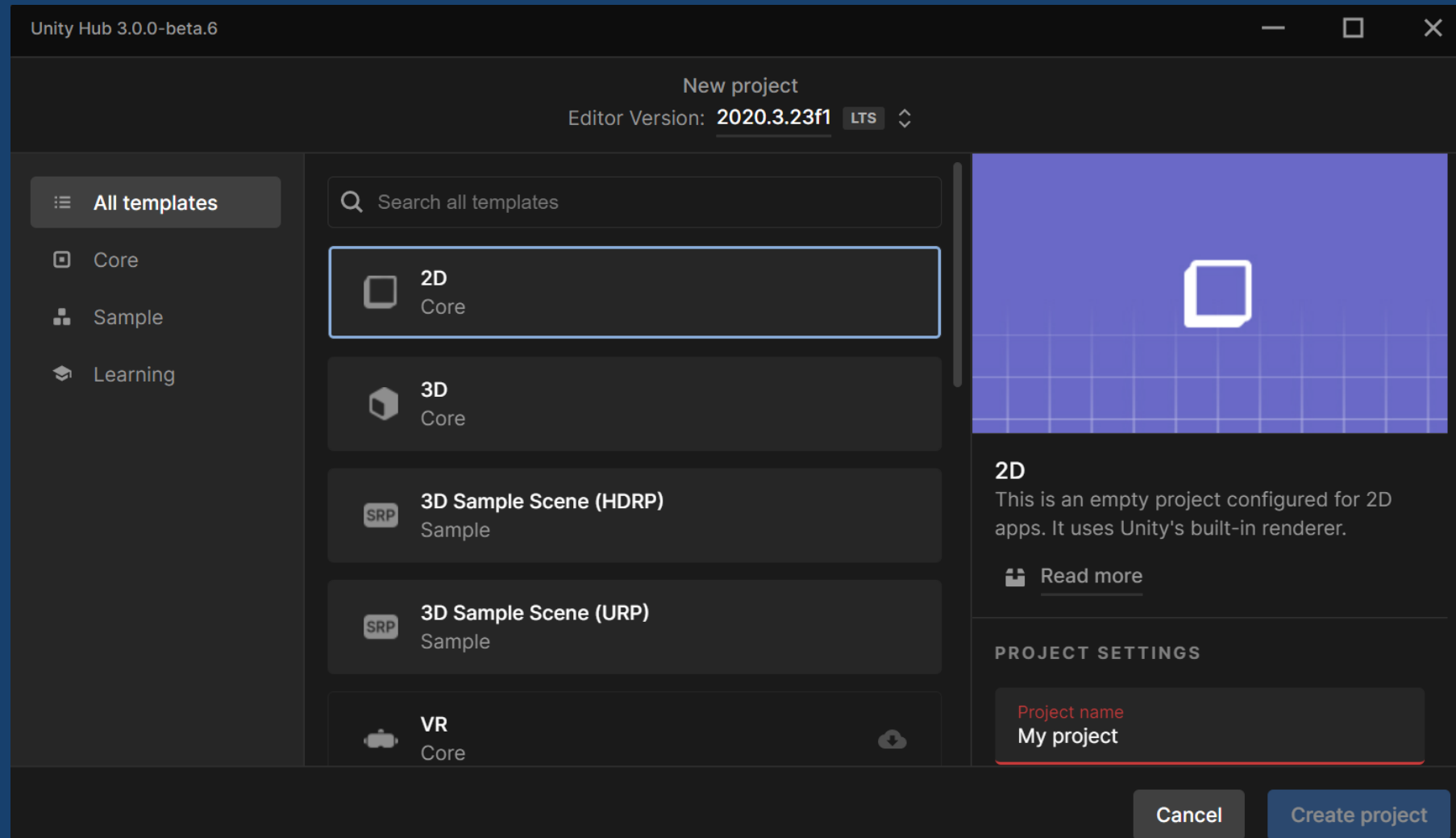
- Use the Unity Hub to:
 - manage multiple installations of the Unity Editor,
 - create new projects,
 - and access your work





Install Unity Hub

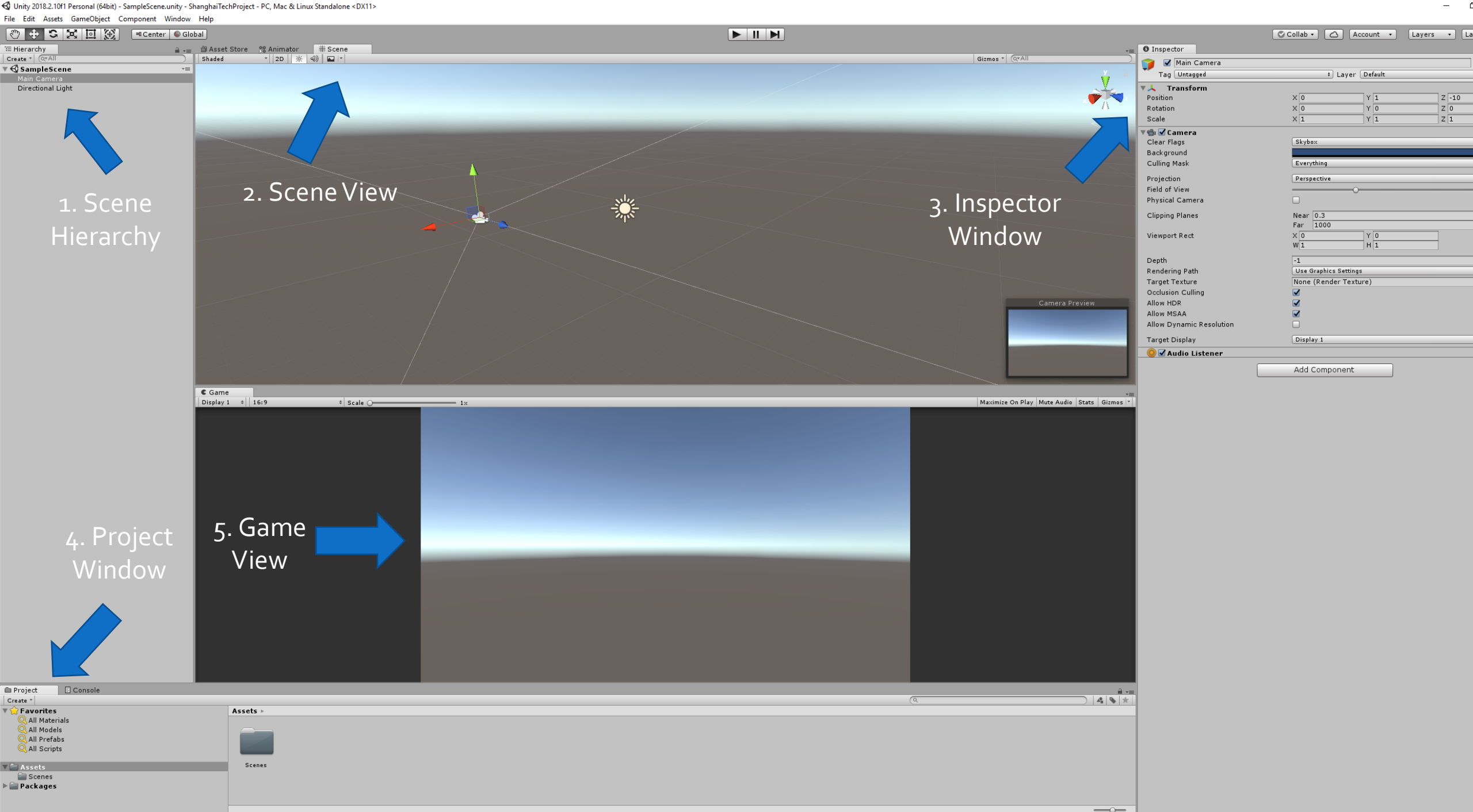
CREATE PROJECT

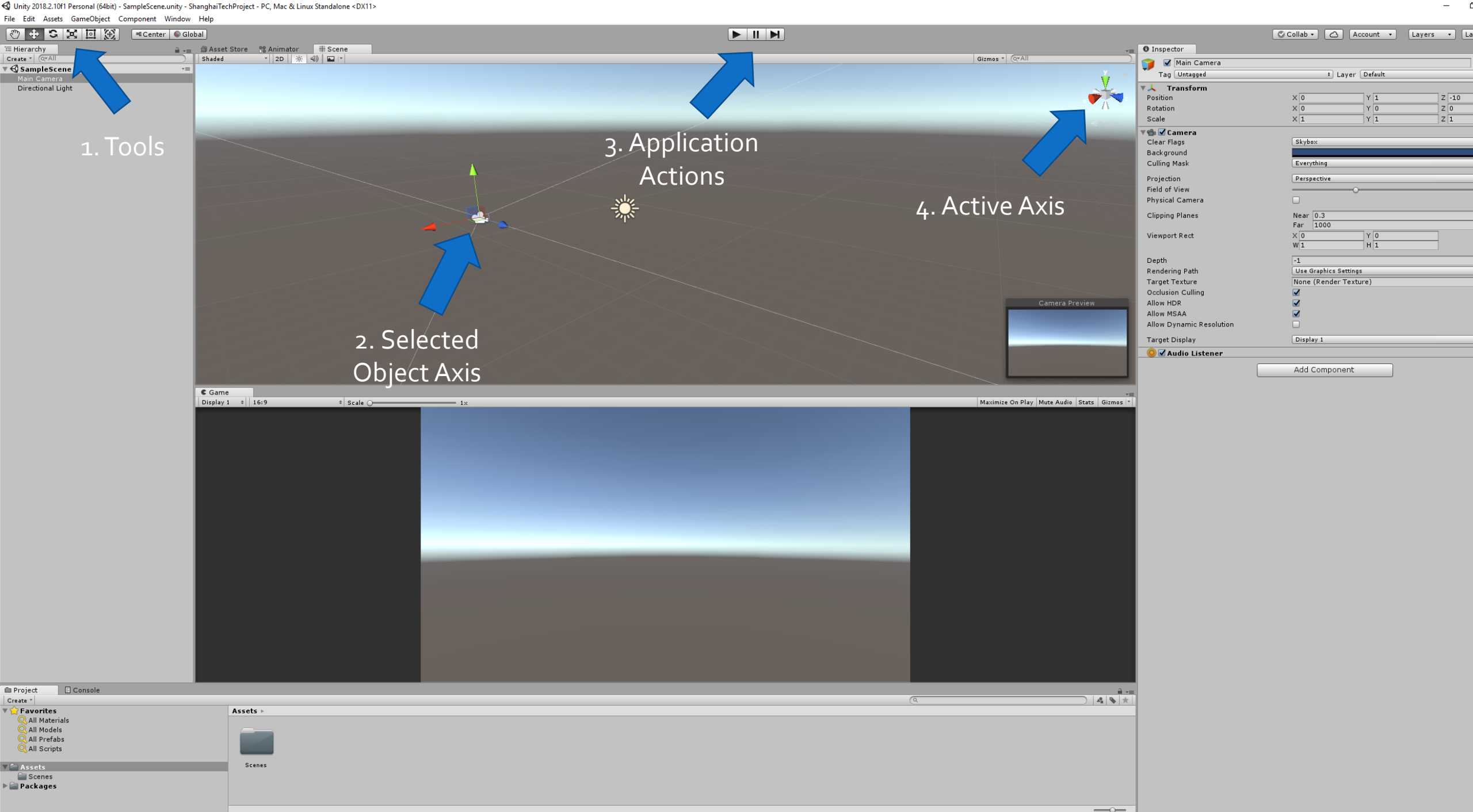


UNITY USER INTERFACE

- Creating 2D/3D Objects
- Move, Rotate, Scale
- Inspector Window & Scene Hierarchy
- Adding components
- Creating Materials





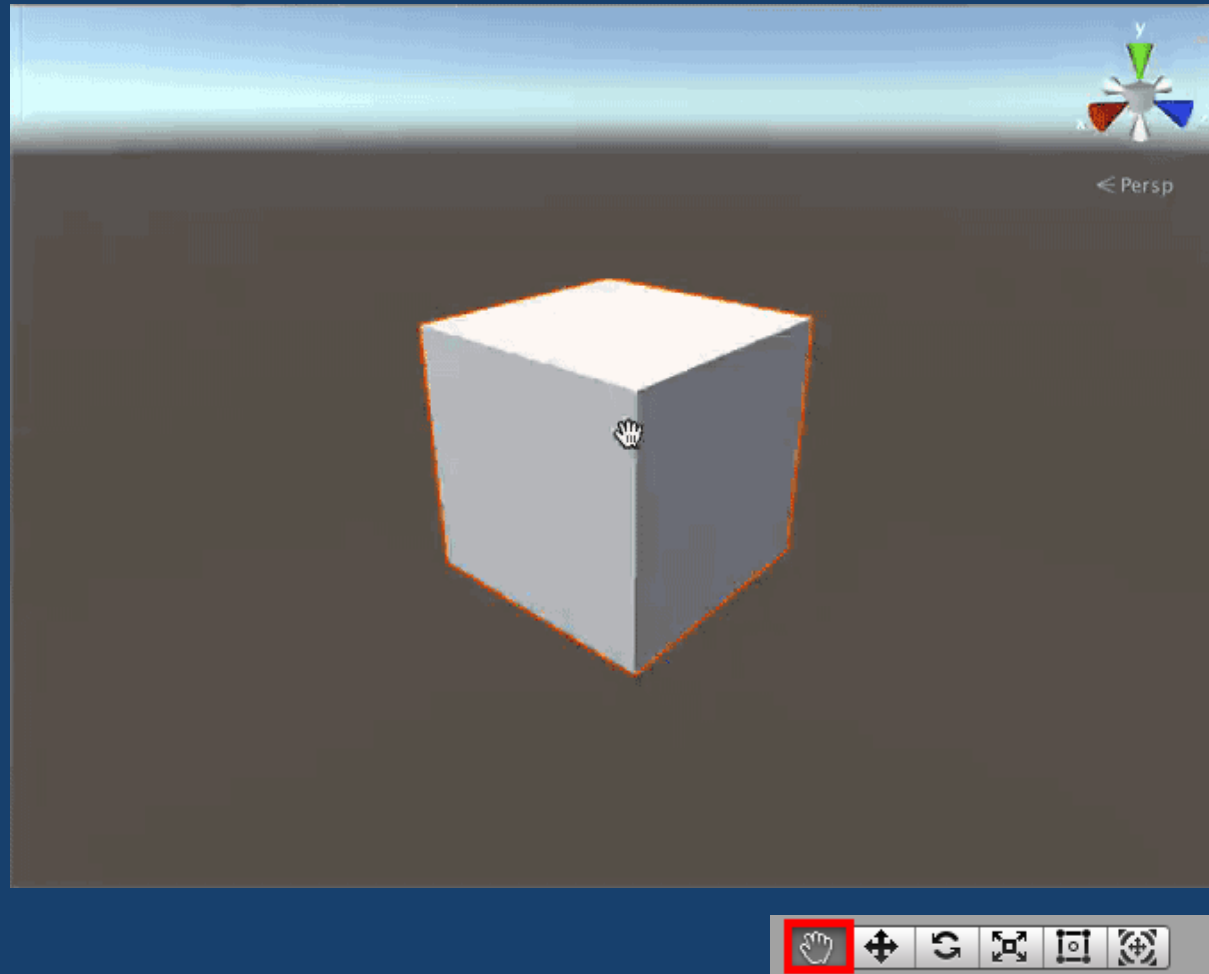


GAMEOBJECT

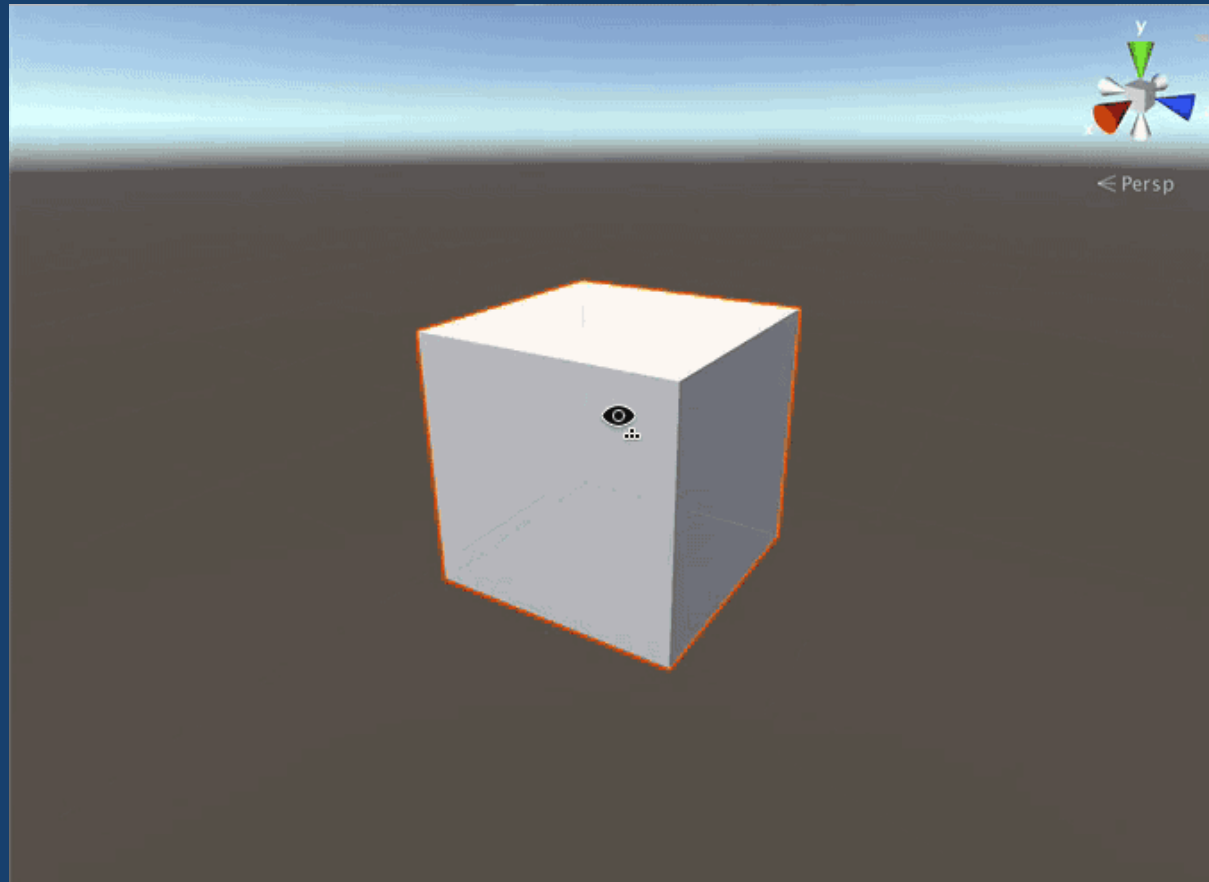
- GameObjects are the fundamental objects in Unity that represent characters, props and scenery.



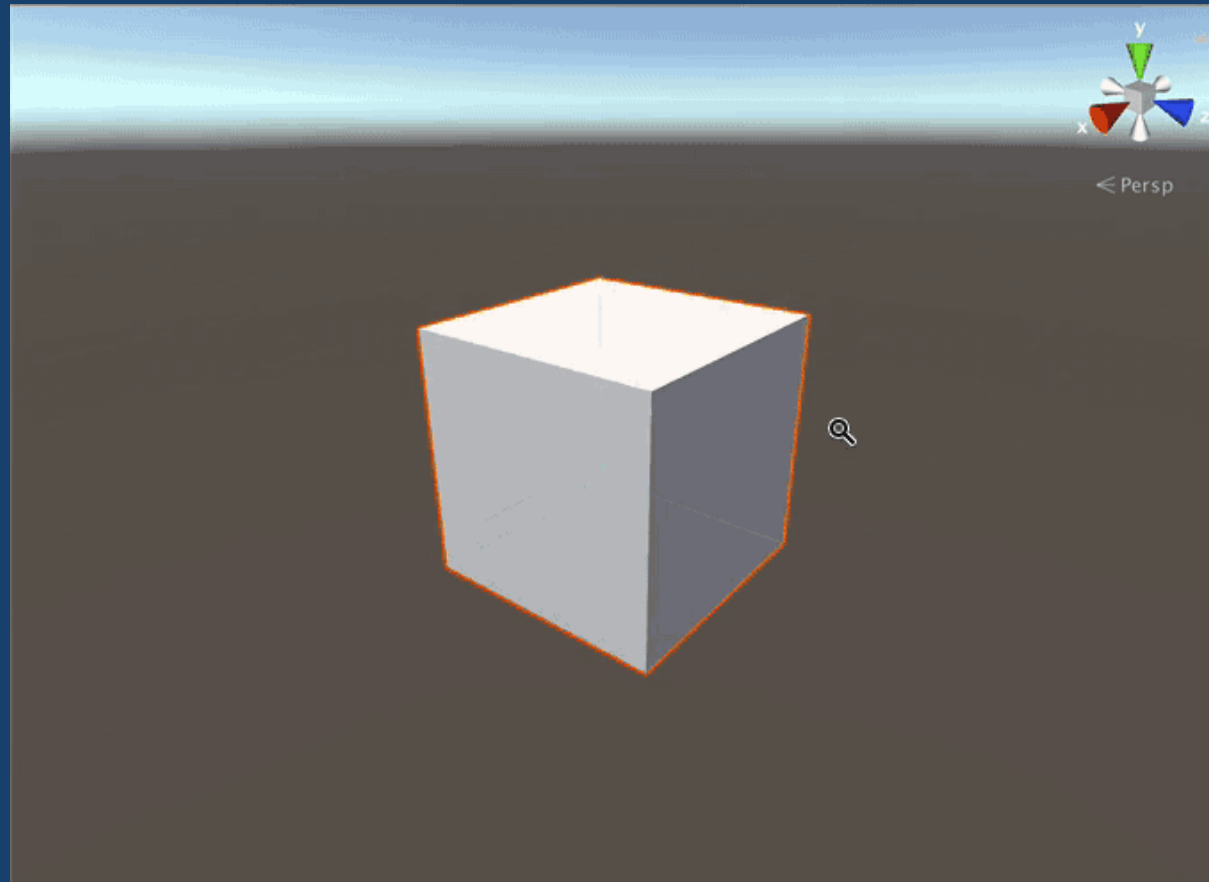
HAND TOOL



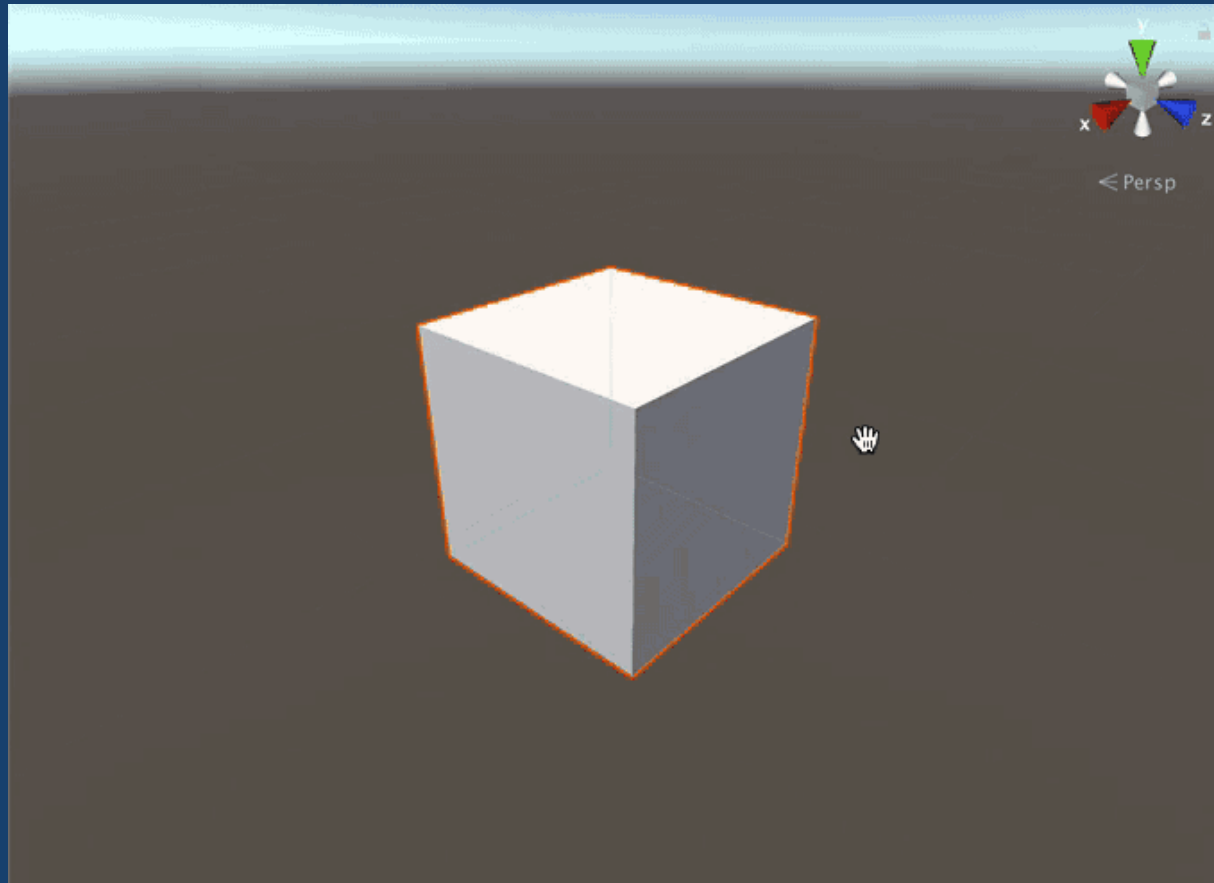
RIGHT-CLICK AND DRAG THE MOUSE TO ROTATE THE CAMERA AROUND



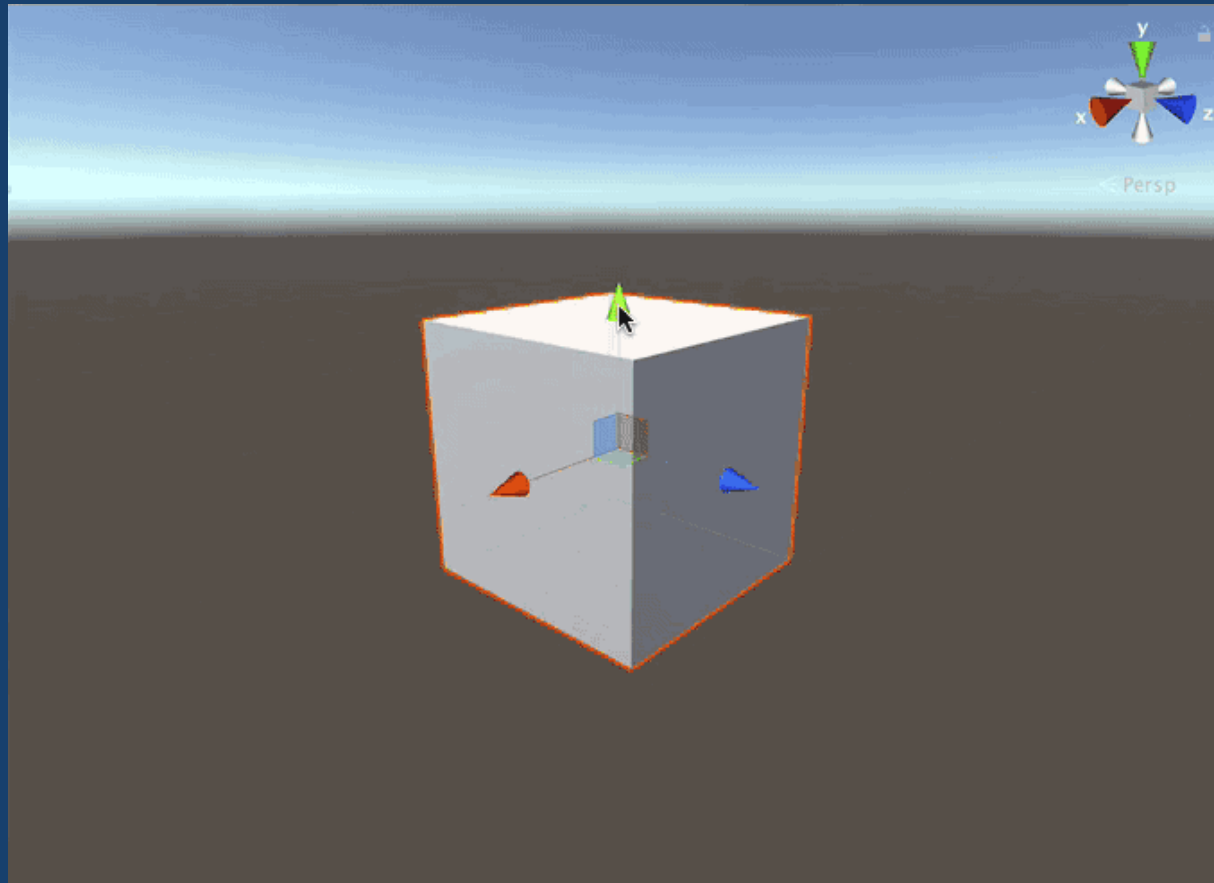
CTRL (OR CMD) AND ALT (OR OPTION). RIGHT-CLICK AND MOVE THE MOUSE UP TO ZOOM INTO THE SCENE.



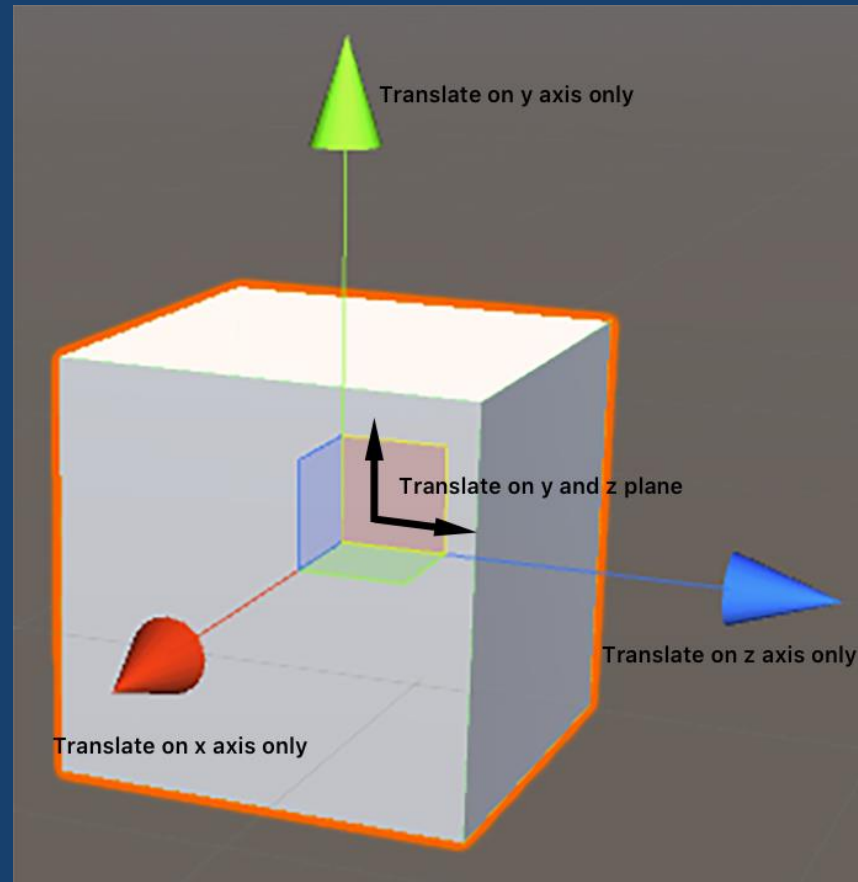
HOLD DOWN THE RIGHT MOUSE BUTTON AND
USE YOUR WASD KEYS TO MOVE AROUND THE
SCENE



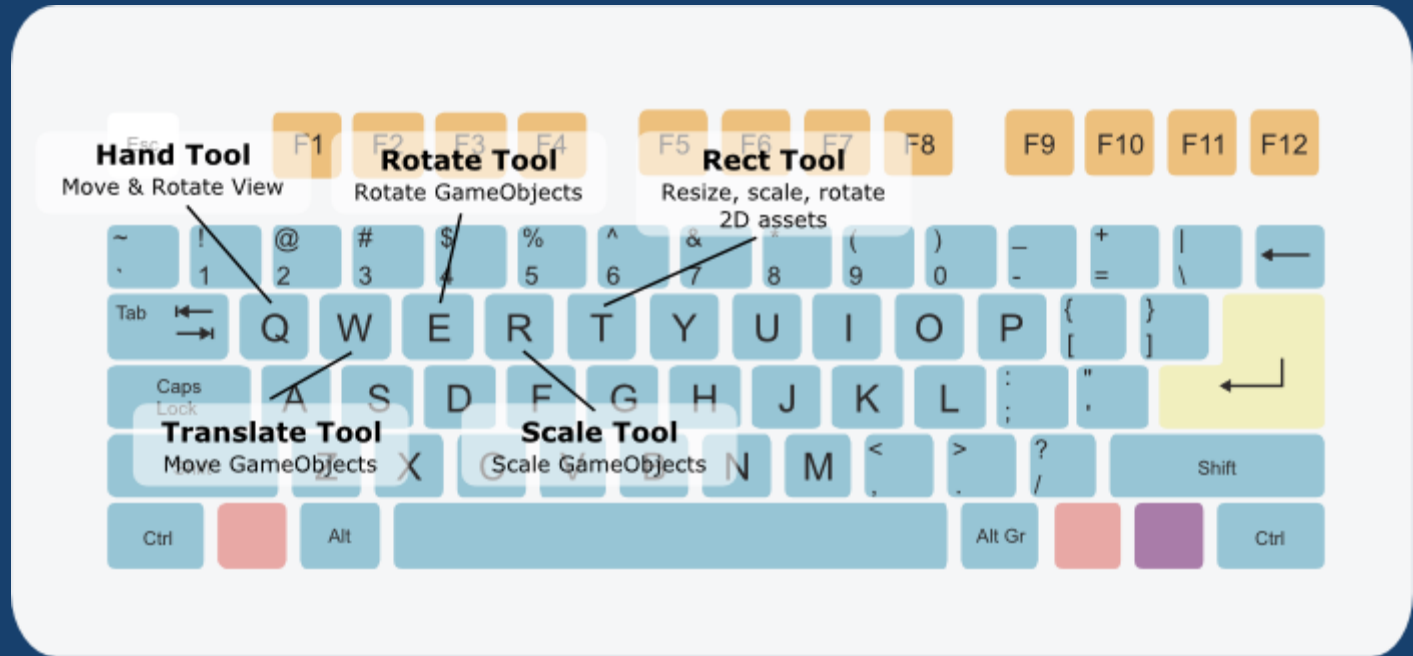
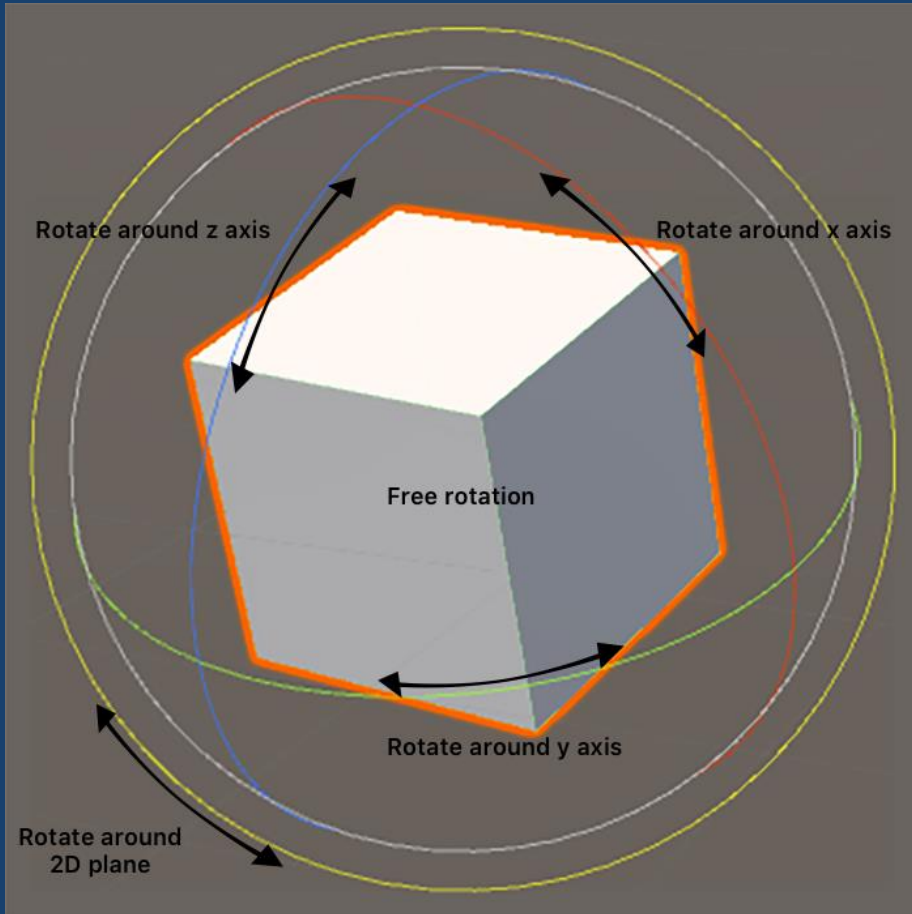
TRANSLATE TOOL



TRANSLATE TOOL

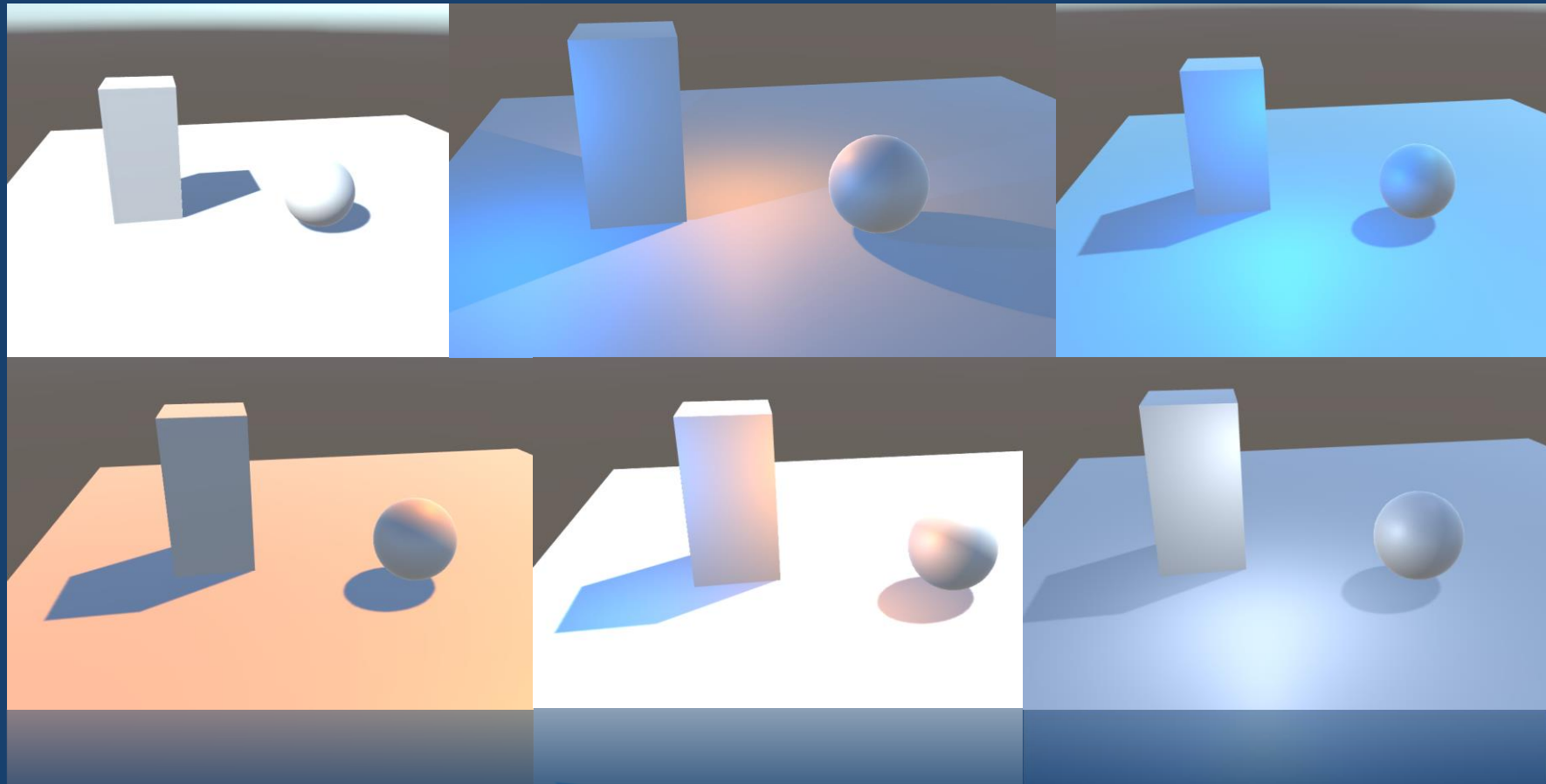


OPERATIONS & KEYMAP

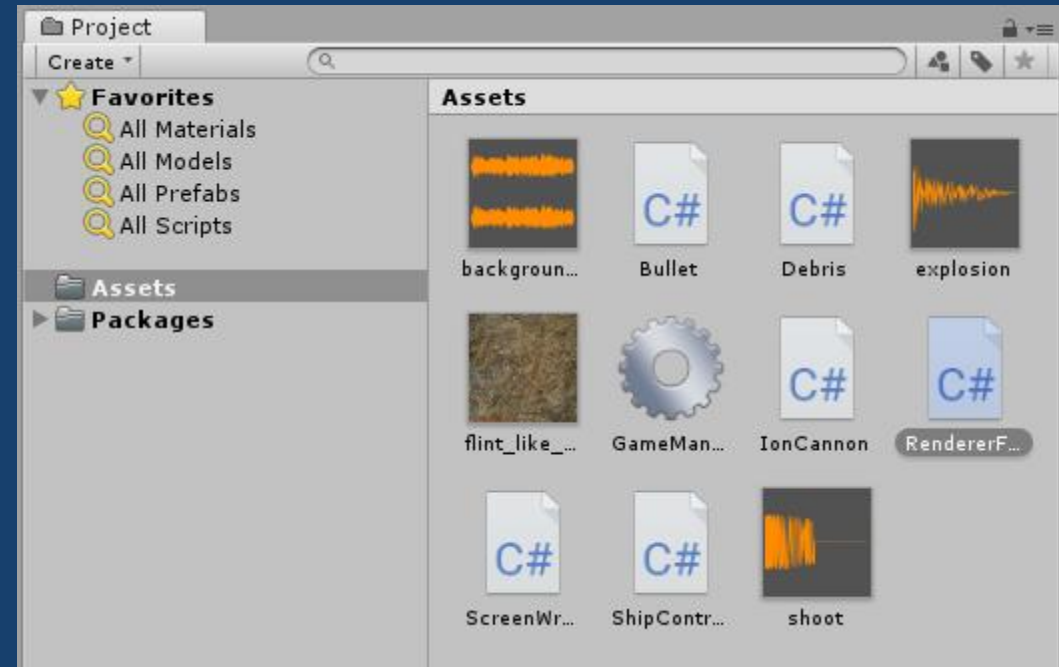
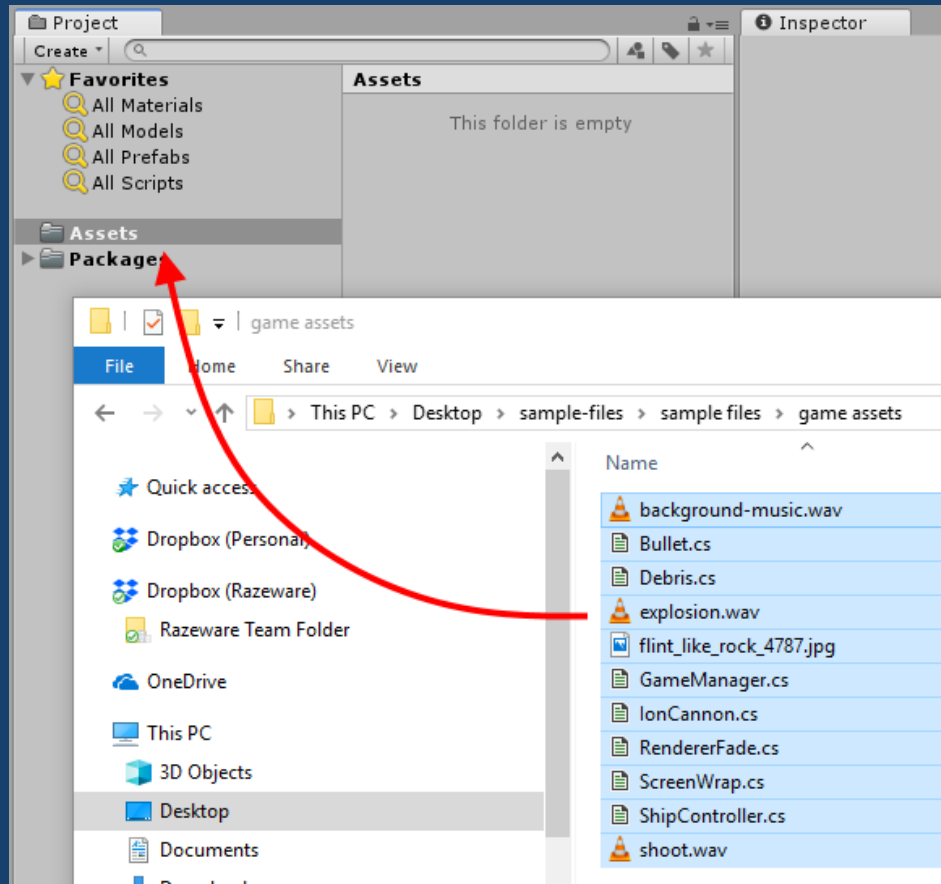


CAMERA & LIGHTING (3D)

- Using lighting to create atmosphere (Omni light, Directional Light, ...)

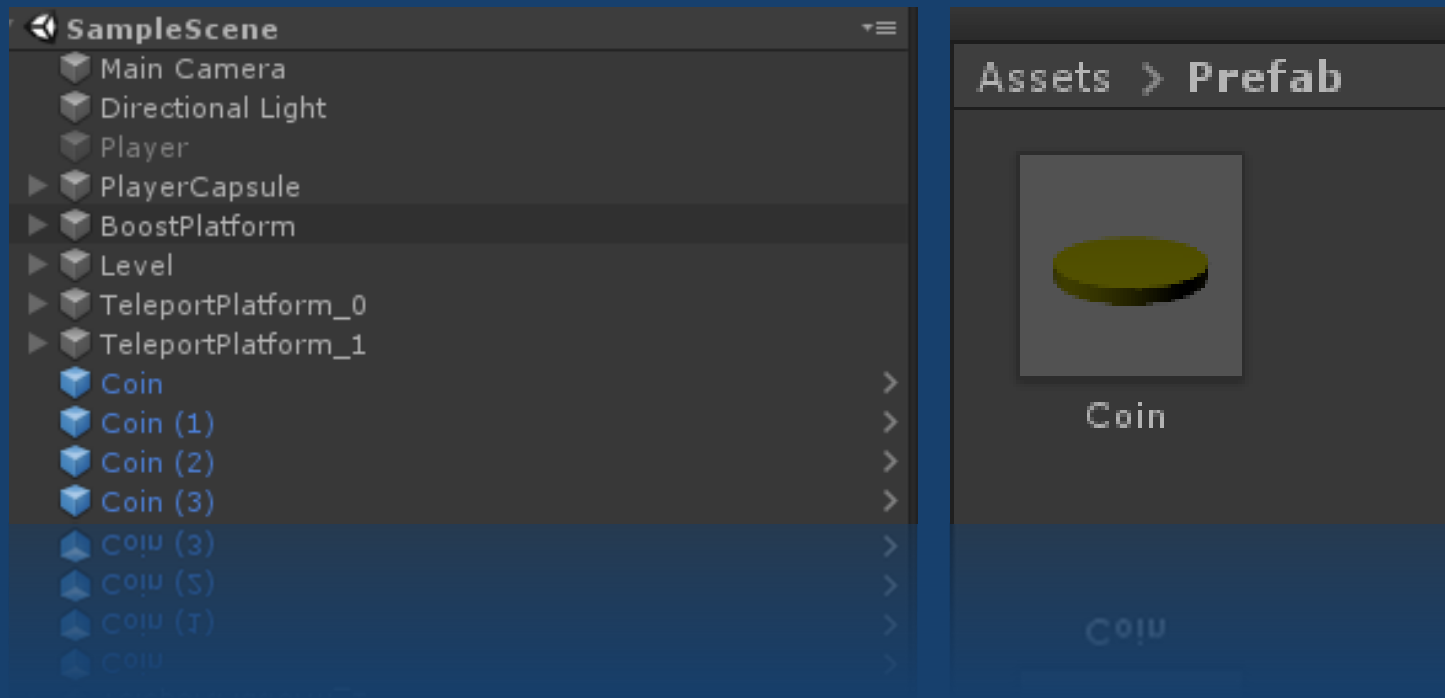


ASSETS

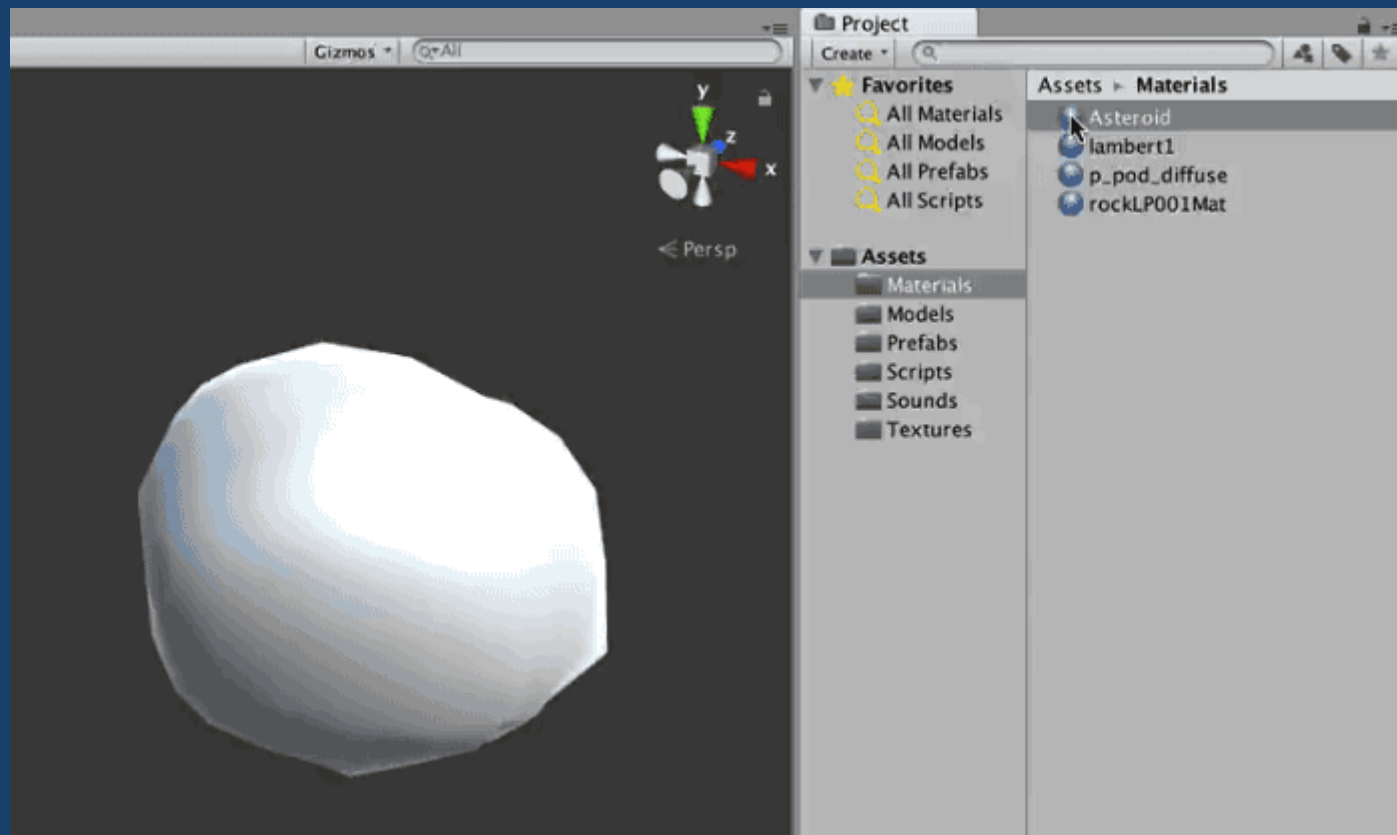


PREFABS

- Creating assets for instancing and updating scene

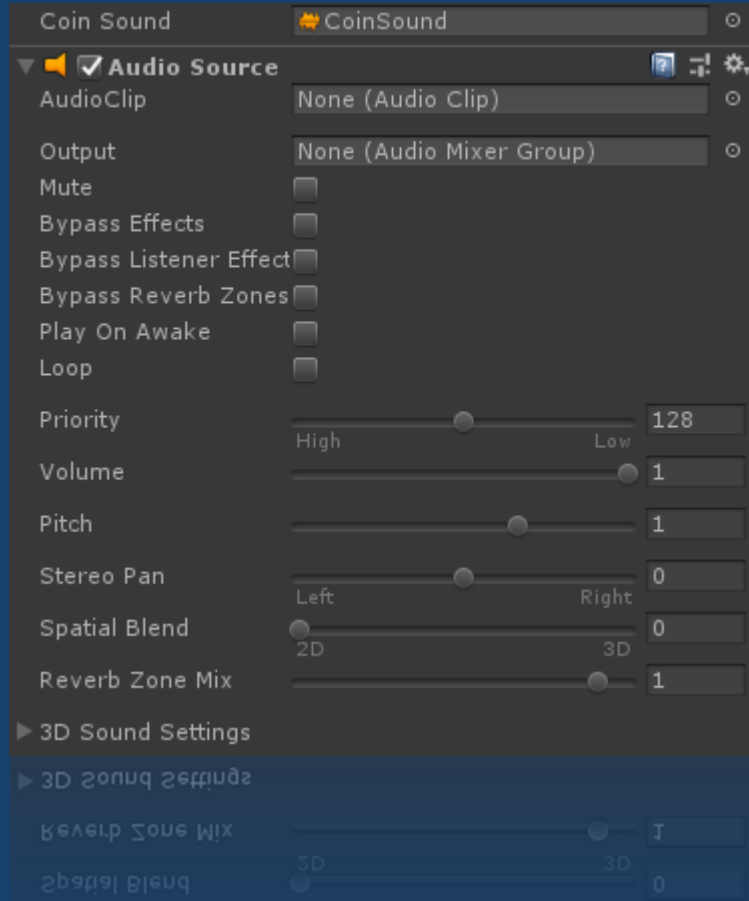


MATERIALS



AUDIO & IMPORTING CUSTOM ASSETS

- Playing sounds / Music using AudioSource and AudioClips

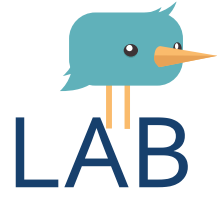


```
void OnTriggerEnter(Collider other)
{
    if (other.tag == "Player")
    {
        m_audioSource.PlayOneShot(m_coinSound);

        /*GameObject.Destroy(gameObject);*/

        m_meshRenderer.enabled = false;
        m_collider.enabled = false;
    }
}
```

(Note: The bottom part of the code block in the image is mirrored and appears to be a reflection of the code above.)



Meet Unity

Hello, Unity_