

Unity Developer Bootcamp

Lesson 03

Introduction to Game
Development with Unity

Learning Objectives

- Set up lighting in a Unity scene
- Create custom components in Unity
- Use Unity components to create gameplay

Lecture

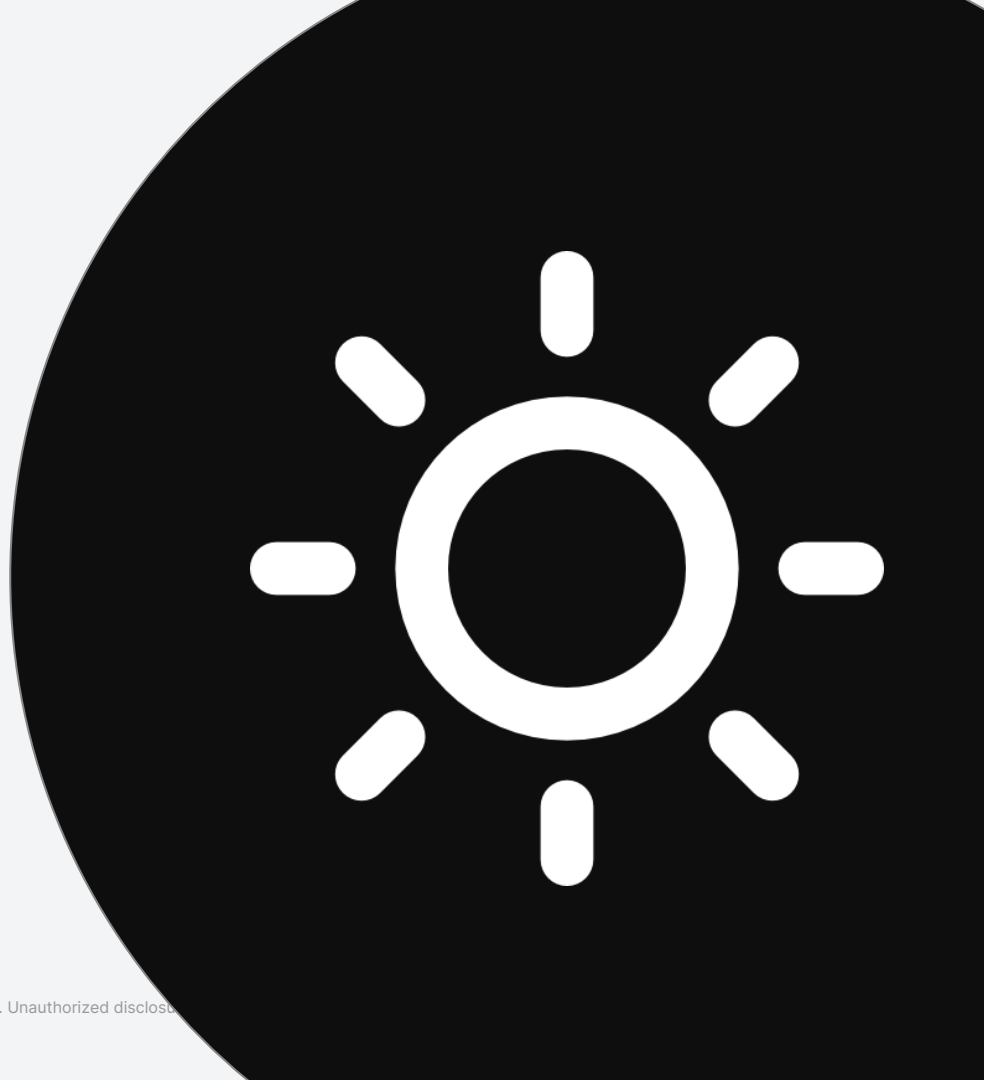


Environment

Lighting

To calculate how a lit object looks, the shaders must know information about the lights in the scene. This information is provided by **Light** components.

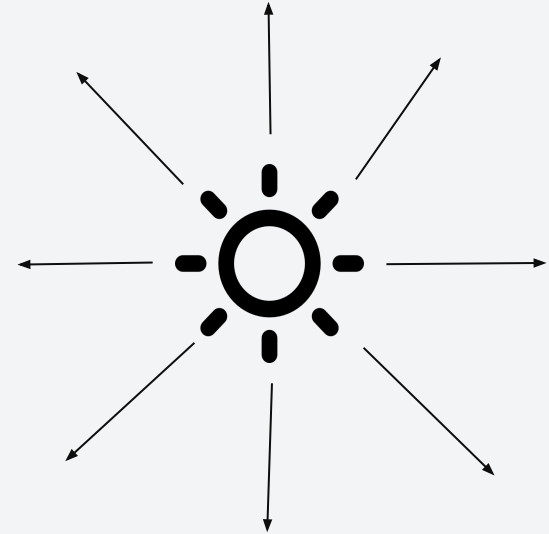
There are three main types of lights in Unity.



Lighting | Point Lights

They are located at a point in space and send out light omnidirectionally.

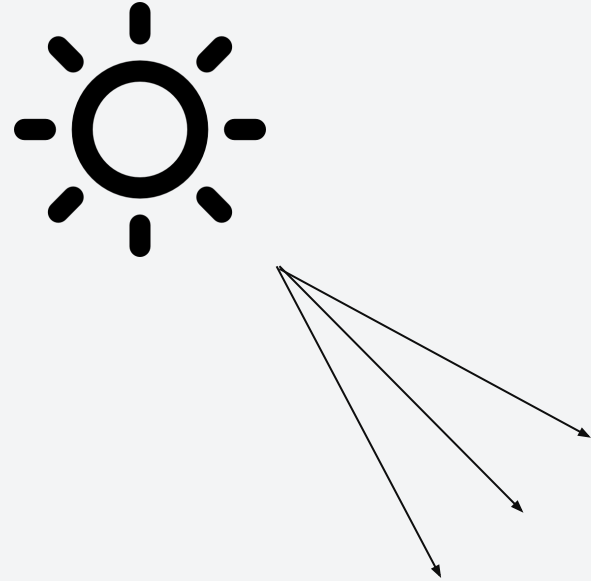
Example: a light bulb



Lighting | Spot Lights

They are similar to a point lights, but are constrained to an angle, resulting in a cone shape.

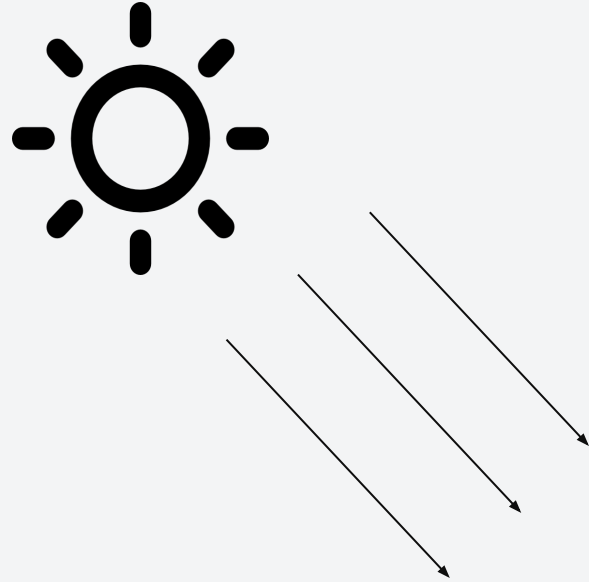
Example: a stage light



Lighting | Directional Lights

They represent a light source that is infinitely far away from the scene.

Example: sunlight



Skybox

A skybox represents the background of the entire scene.

It is drawn behind all of your GameObjects to make the scene seem larger than it actually is.



Post Processing

Post Processing includes **image filters and effects** that can be **added to your scene to improve the look and feel**.

- These could be used to simulate real camera properties. As is the case with: **Motion Blur**, **Depth of Field**, and **Chromatic Aberration**.
- They can also be used stylistically, to change the look of your scene. As is the case with: **Colour Wheels**, **Lift Gamma Gain**, and **Color Lookup**.



A scene with no post processing applied.



The same scene with post processing applied.