Unit 2: Scripting

Lesson 8: Cloning an object

Activity 3 (⏱ 10' minutes): Gap text

Fill the gaps with the words you've heard in the video.

Instantiate is a function used to create clones of GameObjects, usually from a prefab. A prefab is simply a preconfigured object saved in the project's assets. Once such example might be firing rockets from a bazooka. Each of the rockets needs to be instantiated in to the game world so that it could be fired.

The most basic form of Instantiate simply takes one parameter, the object that we wish to clone. However, this means that the prefab will be instantiated at its default position, which is the centre of the world.

Instead, we want to fire it like a rocket, so it needs to appear to be coming from the barrel of our bazooka. For this, we need a slightly different version of Instantiate that takes 3 parameters: the object to be instantiated, a position and rotation to give our new clone.

We need to be able to affect the object that's created by our instantiation, the clone of the rocket. As standard, Instantiate returns a type called Object, but in order to fire our rocket we are going to cast that type to a Rigidbody. Now we can use it and address anything within the Rigidbody class, for example the AddForce method.