

Unit 2: Scripting

Lesson 2: Scope and access modifiers

Activity 3 (🕒 10' minutes): **Gap text**

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

The _____ of a variable is the area in code which the variable can be used in.

A variable is said to be local to the place in code that it can be used. Code blocks are generally what defines a variable's scope, and these are denoted by _____.

Variables defined in the class, as opposed to those declared within a function, have an _____ modifier attributed to them. That modifier is a keyword placed before a _____ in a declaration and its purpose is to define where the variable or function can be seen from. As a general rule, if other scripts need access to a variable or function then it should be "public", otherwise it should be "private".

Declaring a variable as public means that it can be accessed from outside the class. It also means that the variable is shown and _____ on the component in the inspector. This allows the user to edit the variable whilst they test the game.

Imagine, for example, a value controls the speed of a car. It would be nice to _____ that variable whilst testing it without having to stop, edit the script and play again. As such, it makes sense to have this be a public variable. Note that, if a variable is initialised in the class to a default value, then it will still be _____ by the value that's written in the inspector.

Private variables can only be edited from within the class. In C# "private" is the default access modifier for any variable that doesn't have it specified. Setting variables and functions to public can also mean that you can access them from other scripts.

The _____ in Monodevelop, or any other code editor, always shows only the variables that are actually available to us.