

Kodu Programming: Lesson 1

Kodu Unit

This unit introduces children to programming with Kodu, a simple visual programming language made specifically for creating games. The distinguishing features of Kodu are visual icons that are added together like building blocks to form instructions and game environments constructed by the user in a 3D scene editor. It is designed to be accessible by children and enjoyable by anyone. As well as on a PC, Kodu is also available via the Xbox 360, which makes for additional appeal to many children.

The [Kodu Game Lab](#) can be downloaded for free.

If you are unfamiliar with Kodu, then a useful starting point are the sample games and tutorials that are provided as built-in worlds. Each sample game is editable so after playing, they can be opened up to see how they work.

Introducing Kodu

The aim of the first lesson is to give children an introduction to the software that they may well be seeing for the first time. There is no expectation to create functioning code in this lesson but for children to explore and investigate existing code to increase familiarity with a new programming environment. For some children, it may be suitable for them to follow instructions in the 'Lessons' (tutorials), accessible from the Kodu Game Lab menu, to help to demonstrate some processes. Others may be able to explore with less restriction and should be encouraged to try out the games, then go to edit mode to look at the programming involved.

The activity sheets and the lesson gives children some focus in what they are aiming to achieve and the requirement to feedback information in the plenary by becoming the teacher, gives further direction to the task. By the end of the lesson, all children should feel more familiar with what Kodu is and the type of game that it can produce, in readiness for creating their own basic programming code in the next lesson.

Adding Objects

To add a character or object to a world, select the Object Tool in the toolbox then click anywhere in the world environment. From the menu that appears, the type of character or object can be selected.

Available objects to add include: kodu, rover, apple, rock, underwater objects and many more under the sub-menu categories when clicking on the Object Tool.

Programming Objects

To add code that programs instructions for a character or object, right-click on any existing object and select Program. All sequences of instructions are in the format When and Do. These are covered in the next lesson but allow children to explore and experiment if they reach this point.