

PARALLAX IN SCRATCH

Parallax is a fun technique that can create the illusion of 3 dimensions in a two-dimensional image. It's a really cool look that can add a little depth to the otherwise static background in platformers and other games. You can find the starter file for this project [here](#).

PARALLAX LAYERS

The image displays Scratch code blocks for implementing a parallax effect. The first code block, triggered by a 'when clicked' event, moves the cat sprite to the 'back' layer and then 'forward' by 3 layers. A callout box explains that the code for the other two background layers is identical, except for the parallax values: 'bkg building parallax = 0.1' and 'sky parallax = 0.05'.

The second code block, also triggered by a 'when clicked' event, sets the 'parallax' variable to 0.2. Below this is a 'forever' loop containing a 'go to x:' block. The x and y coordinates are calculated as 'x position of cat * parallax * -1' and 'y position of cat * parallax * -1' respectively. A callout box explains that this code connects the parallax effect to the cat's position.

The third code block is a 'go to x:' block where the x and y coordinates are calculated as 'mouse x * parallax' and 'mouse y * parallax' respectively. A callout box explains that this code substitutes the mouse cursor for the cat, noting that the mouse has a bigger range of movement, so the parallax values need to be ramped down: 'foreground buildings = 0.07', 'background buildings = 0.04', and 'sky = 0.03'.