

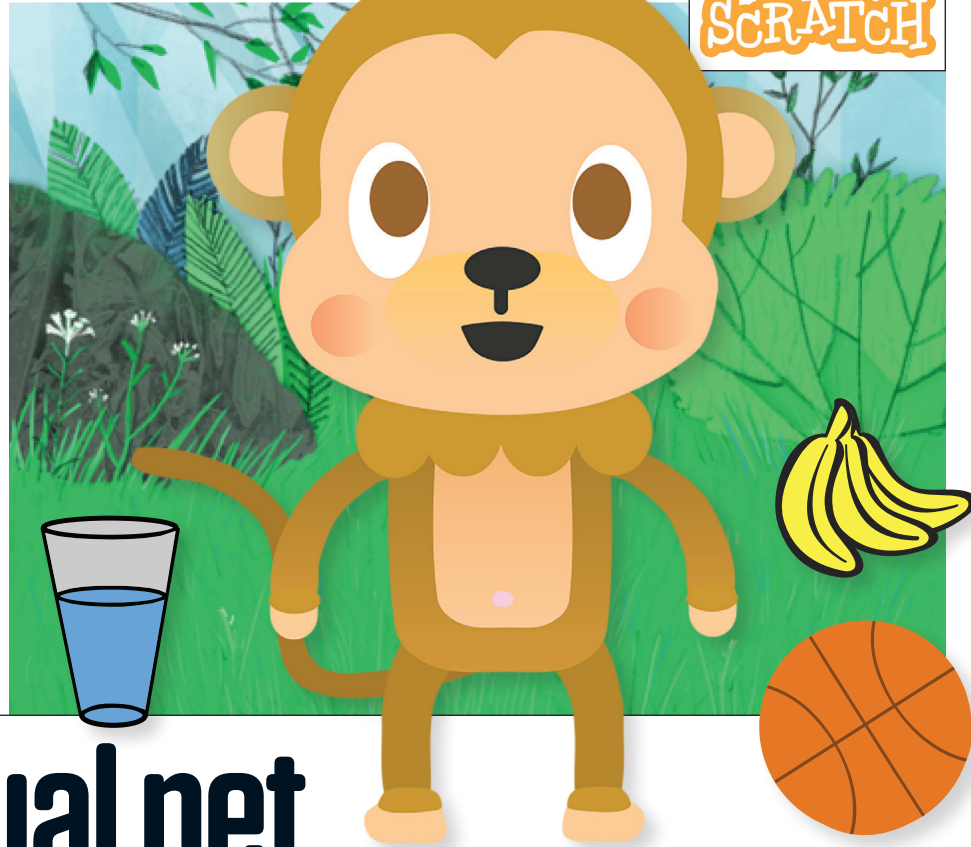
CODING CLUB

A place to code and create

The coding club is your place to learn and develop coding skills. We've created these pages with the Raspberry Pi Foundation to provide loads of projects, from building games to designing animations.

This project uses the Scratch programming language.

SCRATCH



Code a virtual pet

Create a digital animal and look after it.

Choose your pet

- 1 Open a new Scratch project at scratch.mit.edu/projects/editor.
- 2 First, delete the cat sprite. Next, click on the Choose a Backdrop button in the bottom right-hand corner of the screen and pick a backdrop. We chose a forest scene.
- 3 Choose your pet. You can do this by clicking on the Choose a Sprite button and selecting an animal from the list. We went for a cheeky monkey.

- 4 Build the five scripts (right) on your monkey sprite. You'll need to create new variables for hunger, thirst and fun. Switching costumes makes the monkey move. The "Chomp" and "Chee Chee" sounds are part of the monkey sprite, but you'll need to add "Glug". Go to the Sounds tab at the top of the screen, click the Choose a Sound button (bottom left) and search for Glug. This will now appear on the drop-down list.



when green flag clicked
go to x: 0 y: 0
switch costume to monkey-a
set size to 120 %
show

when green flag clicked
set hunger to 0
set thirst to 0
set fun to 0

when I receive eat
switch costume to monkey-b
wait 0.5 seconds
play sound Chomp until done
switch costume to monkey-a

when I receive play
switch costume to monkey-a
wait 0.5 seconds
play sound Chee Chee until done
switch costume to monkey-b

when I receive drink
switch costume to monkey-c
wait 0.5 seconds
play sound Glug until done
switch costume to monkey-a

TOP TIP!
The Make a Variable button is in the Variables coding blocks.

Feed your pet

- 1 Click on the Choose a Sprite button at the bottom right-hand corner of the screen and choose a food sprite. Monkeys love bananas.
- 2 Build these three scripts on the banana sprite. Double-check all the numbers, as these commands make the food appear and glide smoothly to feed the monkey.
- 3 Click the green flag to test whether the bananas move to the monkey.



when green flag clicked
forever
wait pick random 6 to 20 seconds
change hunger by 1

when green flag clicked
go to x: -170 y: -130
switch costume to bananas
set size to 80 %
show

when this sprite clicked
glide 1 secs to x: 0 y: 0
broadcast eat
wait 1 seconds
glide 0.5 secs to x: -170 y: -130
change hunger by -1

Play with your pet

- 1 Click on the Choose a Sprite button at the bottom right-hand corner of the screen and choose something your pet would enjoy playing with. We went for a basketball.
- 2 Build these three scripts (below and right). Double-check all the numbers and the options on the drop-down menus.
- 3 Test your game by clicking the green flag. When you click on the basketball, it should glide into your monkey's hand.



when green flag clicked
forever
wait pick random 6 to 10 seconds
change fun by 1

when green flag clicked
go to x: 150 y: -130
switch costume to basketball
set size to 80 %
show

when this sprite clicked
glide 0.5 secs to x: 61 y: -1
broadcast play
wait 1 seconds
glide 0.5 secs to x: 170 y: -130
change fun by -1
change thirst by 1

TOP TIP!
To change the value, click into the field.

DIGITAL PET



Give your pet a drink



- 1 Pick a glass of water for your pet to drink using the Choose a Sprite button.
- 2 Build the three scripts below. Double-check all the values and your game is ready to play. Keep your pet happy by not letting its hunger or thirst get too high, and by not letting it get too bored.

when green flag clicked
go to x: 0 y: -130
switch costume to glass water-a
set size to 50 %
show

when green flag clicked
forever
wait pick random 6 to 20 seconds
change thirst by 1

when this sprite clicked
glide 1 secs to x: 0 y: 0
broadcast drink
wait 1 seconds
switch costume to glass water-b
glide 0.5 secs to x: 0 y: -130
switch costume to glass water-a
change thirst by -1

TOP TIP!
Change a costume by selecting from the drop-down menu.

The Raspberry Pi Foundation is a UK-based charity with the mission to enable young people to realise their full potential through the power of computing and digital technologies. Discover more step-by-step coding projects at rpf.io/scienceandnature

