

# Virtual Pet – Example instructions

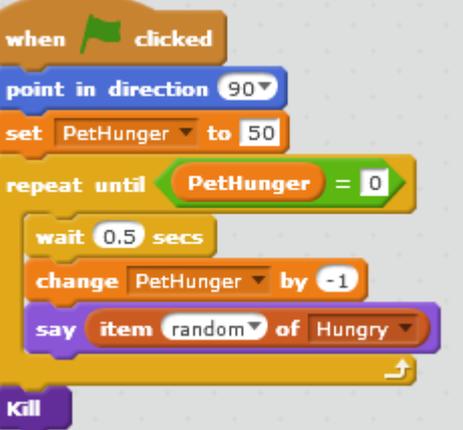
## Virtual Pet 1

| Instructions   | Example instructions   |
|--|--|
| <ul style="list-style-type: none"> <li>Choose a suitable sprite for your program's virtual pet</li> <li>Create a variable named <i>PetHunger</i>, which starts with a value of 50 and reduces by 1 every 0.5 seconds</li> <li>Once the value of <i>PetHunger</i> reaches zero, your sprite should "die" with an appropriate message</li> </ul> |  |

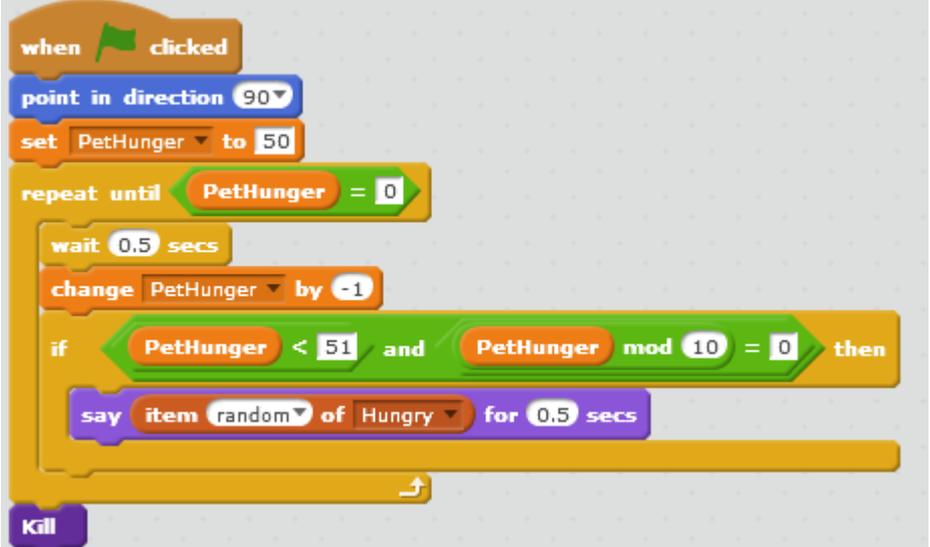
## Virtual Pet 2

| Instructions  | Example instructions  |
|---|---|
| <ul style="list-style-type: none"> <li>Create a Block named <i>Kill</i></li> <li>Add a number of instructions to this block, which should be undertaken when the sprite "dies" (e.g. display a message to the screen, rotate 90 degrees, change the costume, etc)</li> <li>Make the <i>Kill</i> block instructions take place once <i>PetHunger</i> has reached zero</li> </ul> |  |

## Virtual Pet 3

| Instructions   | Example instructions   |
|--|--|
| <ul style="list-style-type: none"> <li>Create a list named <i>Hungry</i></li> <li>Add three items to the list, which are displayed when your sprite requires food (e.g. "Feed me", "Gimme food", "Sooo hungry", etc)</li> <li>Make items from the <i>Hungry</i> list display randomly on the screen</li> </ul> |  |

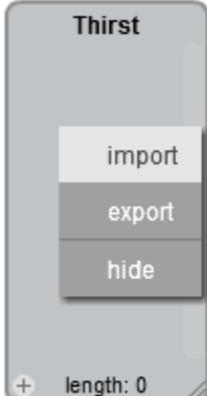
## Virtual Pet 4

| Instructions   | Example instructions  |
|--|---|
| <ul style="list-style-type: none"> <li>Make your <i>Hungry</i> messages only display when your pet is hungry (value of <i>PetHunger</i> is less than 50) <b>AND</b> at regular intervals (Hint – you may wish to research what the <b>mod</b> or “modulus” block does in Scratch)</li> </ul> |  <pre> when clicked   point in direction 90   set PetHunger to 50   repeat until PetHunger = 0     wait 0.5 secs     change PetHunger by -1     if PetHunger &lt; 51 and PetHunger mod 10 = 0 then       say item random of Hungry for 0.5 secs   Kill           </pre> |

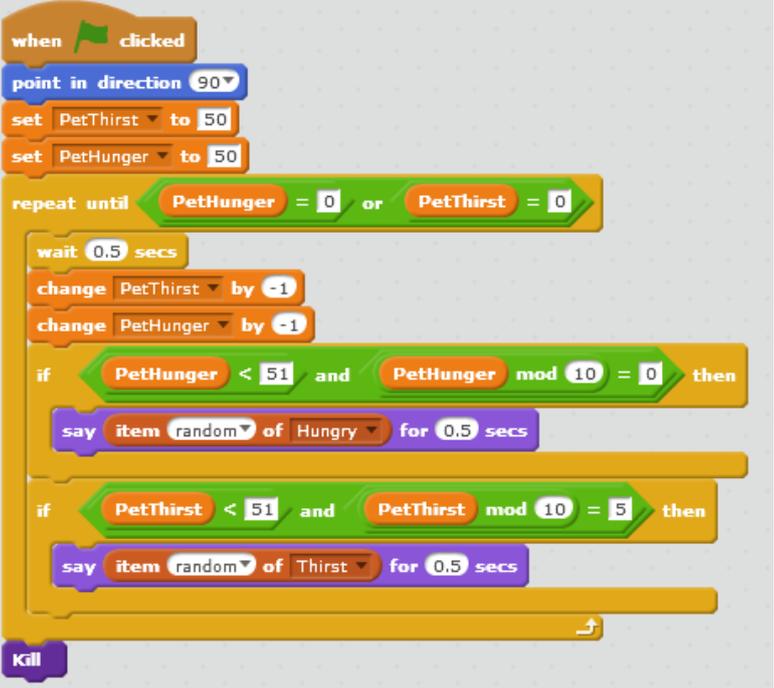
## Virtual Pet 5

| Instructions   | Example instructions   |
|--|--|
| <ul style="list-style-type: none"> <li>Add a second sprite, which, when clicked, increases the value of <i>PetHunger</i> by 10 and displays an appropriate message</li> <li>Ensure the value of <i>PetHunger</i> cannot go above 100. Display an appropriate message if the pet cannot be fed</li> </ul> |  <pre> when this sprite clicked   if PetHunger &lt; 91 then     change PetHunger by 10     say Pet fed for 2 secs   else     say Pet too full for 2 secs           </pre> |

## Virtual Pet 6 (part 1)

| Instructions   | Example instructions   |
|--|--|
| <ul style="list-style-type: none"> <li>Create a second List named <i>Thirst</i></li> <li>Using <i>Notepad</i>, add the items to be included to the list into a text file</li> <li>Import the items from the text file into the list</li> </ul> |  <p>The image shows a Scratch List widget titled "Thirst". It has three buttons: "import", "export", and "hide". At the bottom, it shows a plus sign and "length: 0".</p> |

## Virtual Pet 6 (part 2)

| Instructions  | Example instructions   |
|---|--|
| <ul style="list-style-type: none"> <li>• Create a second variable named <i>PetThirst</i>, which also starts at 50 and reduces by 1 every 0.5 seconds</li> <li>• Alter your program so once the value of <i>PetHunger</i> <b>OR</b> <i>PetThirst</i> reaches zero, your sprite should “die”</li> <li>• Make your <i>Thirst</i> messages only display when your pet is thirsty (value of <i>PetThirst</i> is less than 50) <b>AND</b> at regular intervals, but at different times to the <i>Hunger</i> messages</li> </ul> |  |

## Virtual Pet 6 (part 3)

| Instructions  | Example instructions   |
|---|--|
| <ul style="list-style-type: none"> <li>• Add a third sprite, which, when clicked, increases the value of <i>PetThirst</i> by 10 and displays an appropriate message</li> <li>• Ensure the value of <i>PetThirst</i> cannot go above 100. Display an appropriate message if the pet cannot be given more liquid</li> </ul> |  |

## Virtual Pet 7

| Instructions  | Example instructions   |
|---|--|
| <ul style="list-style-type: none"> <li>• Create a Block named <i>Status</i>, which contains the instructions to display the text from <i>Hungry</i> and <i>Thirst</i> at regular intervals</li> <li>• Alter your program so the <i>Status</i> block is used at appropriate time(s)</li> </ul> |  |

## Virtual Pet - Further enhancements

- Add further variables and sprites to manage your pet's happiness and / or toilet visits
- Display alternative costumes when the sprite is hungry, thirsty, etc or dies
- Add alternative backgrounds for different sections of the program
- Make the cat randomly be silly
- Pass the values of the variables *PetHunger*, *PetThirst* etc to your *Status* block, rather than using the variables values directly (Google "why do we avoid using global variables?")
- Add a "Maintenance Mode", which allows messages to be added or deleted to a specific list within the game