



TITLE: Smart home

LEARNING SCENARIO

<i>School:</i>	<i>Duration (minutes):</i>	90
<i>Teacher:</i>	<i>Students age:</i>	10+

Essential Idea:

Let's create a smart device in a smart home

Topics:

- designing, creating and writing in a visual programming language: ideas, stories and solutions to problems of varied complexity
- experimenting with AI
- civilization related implications of AI

Aims:

- design, create and test simple programs
- understand the concept of variable, define and use variable it in their programs

Outcomes:

- creating and testing simple program that present smart device at smart home

Work forms:

- individual work, work in pairs, group work

Methods:

- presentation, talk, discussion, interactive exercise

ARTICULATION

The course of action (duration, minutes)

INTRODUCTION

The teacher leads a conversation in which students revise the commands and skills of working in Scratch.





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The teacher starts a discussion:
Do we use smart devices every day?
What are smart devices?
Why do we call these devices smart devices?
Can houses be smart?
Which houses are "smart"?

A smart home refers to a convenient home setup where appliances and devices can be automatically controlled remotely from anywhere with an internet connection using a mobile or other networked device.

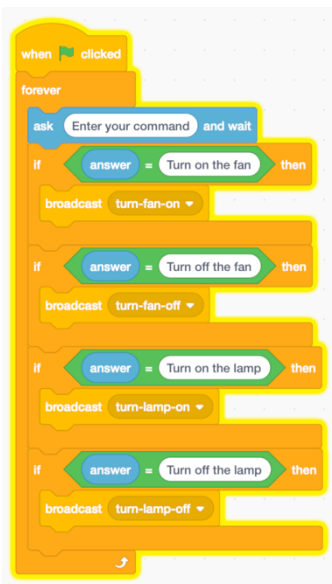
Announcement of the goal of the lesson:

Today we are going to create smart devices as a part of the smart home using Scratch.

MAIN PART

Instructions (steps):

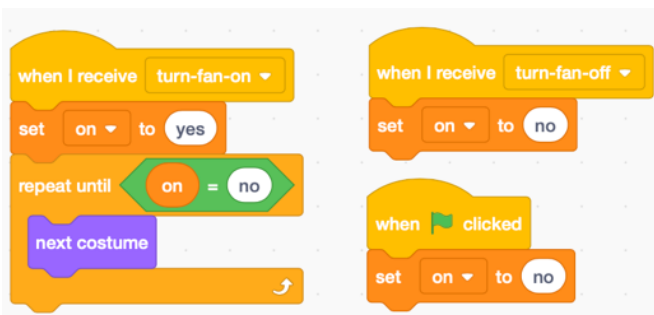
Stage:



```

when clicked
  forever
    ask Enter your command and wait
    if answer = Turn on the fan then
      broadcast turn-fan-on
    if answer = Turn off the fan then
      broadcast turn-fan-off
    if answer = Turn on the lamp then
      broadcast turn-lamp-on
    if answer = Turn off the lamp then
      broadcast turn-lamp-off
  
```

Fan:



```

when I receive turn-fan-on
  set on to yes
  repeat until on = no
  next costume

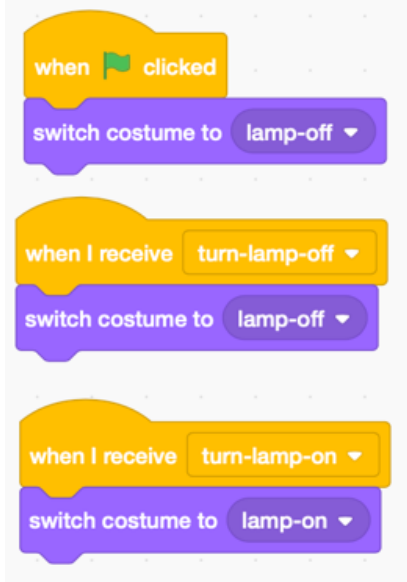
when I receive turn-fan-off
  set on to no

when clicked
  set on to no
  
```



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Lamp:



Present your project to the students in the class. Discuss. Peer evaluation.
Save your work to the class e-portfolio.

CONCLUSION

A smart home refers to a convenient home setup where appliances and devices can be automatically controlled remotely from anywhere with an internet connection using a mobile or other networked device. We can create smart devices as a part of the smart home using Scratch.

Methods		Work forms
<p><i>presentation</i></p> <p><i>talk/discussion</i></p> <p><i>work on the text</i></p> <p><i>graphic work</i></p> <p><i>interactive exercise /simulation on the computer</i></p>	<p><i>interview</i></p> <p><i>demonstration</i></p> <p><i>role playing</i></p>	<p><i>individual work</i></p> <p><i>work in pairs</i></p> <p><i>group work</i></p> <p><i>frontal work</i></p>

Material

- Scratch





Literature

- <https://dancingwithai.media.mit.edu>

PERSONAL OBSERVATIONS, COMMENTS AND NOTES

