

Schoolprogramma voor leerlingen van de basisschool

Gevorderde leeractiviteit

Doukas School

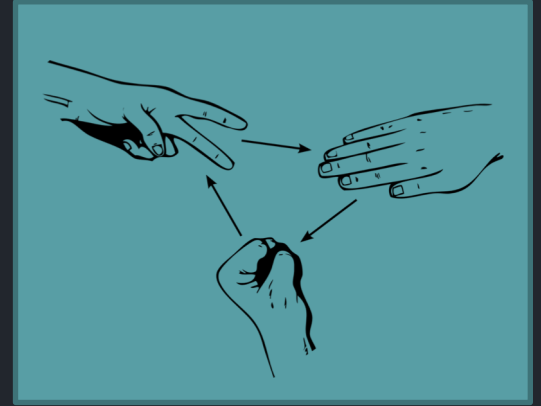
Kan een machine afbeeldingen
herkennen en met je spelen?



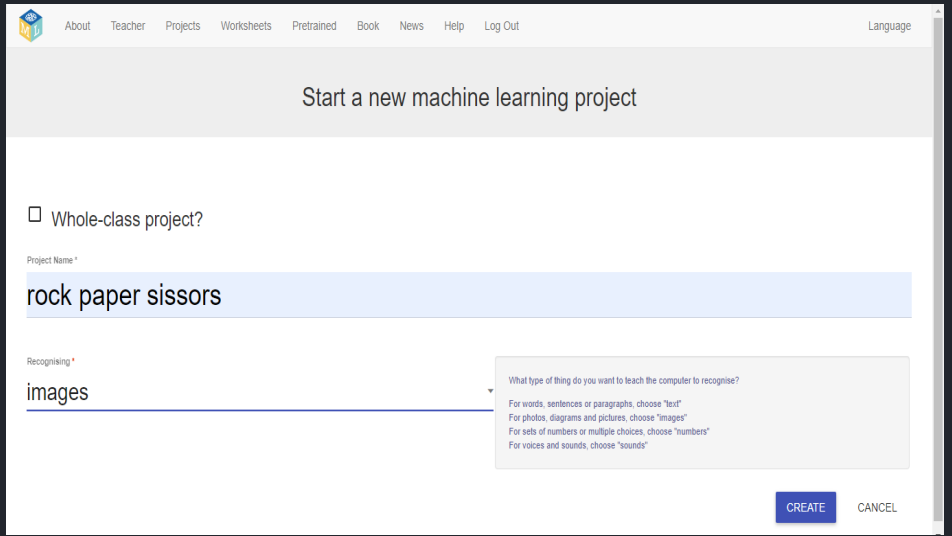
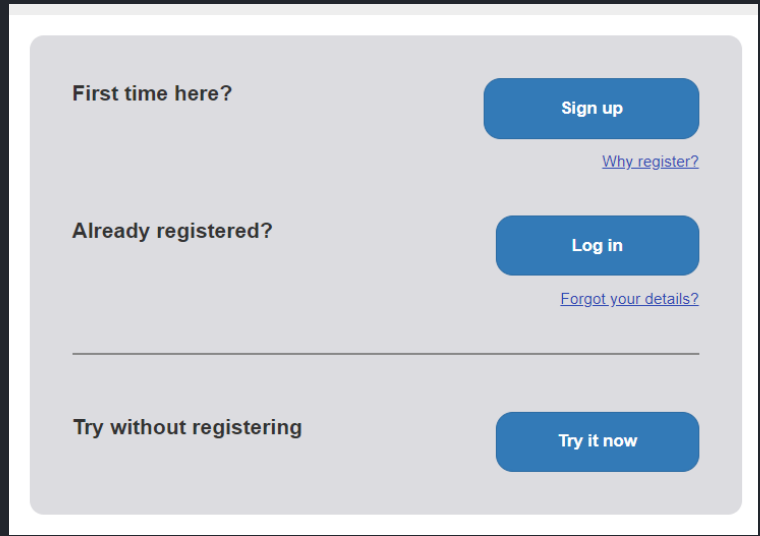
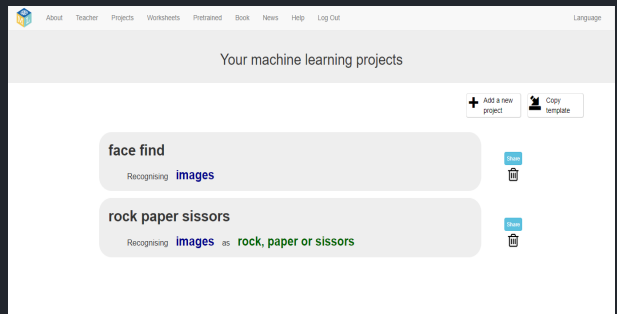
steen papier
schaar



a1

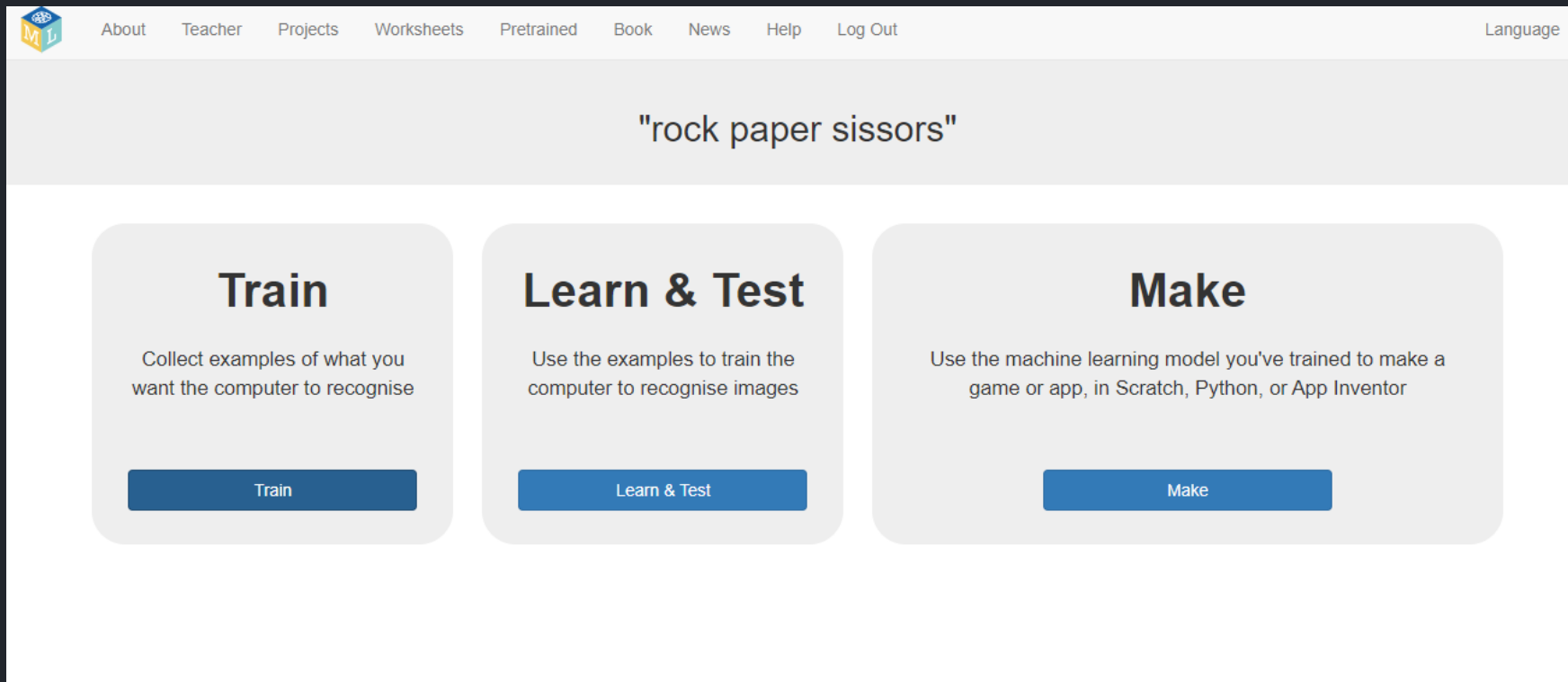


Maak een project



3 STAPPEN VAN ONS PROJECT

a4



The screenshot shows a web interface for a machine learning project. At the top left is the ML logo. The navigation menu includes: About, Teacher, Projects, Worksheets, Pretrained, Book, News, Help, Log Out. On the top right, there is a 'Language' dropdown. The main heading is '"rock paper sissors"'. Below this, there are three columns representing the project steps:

- Train**: Collect examples of what you want the computer to recognise. A blue button labeled 'Train' is at the bottom.
- Learn & Test**: Use the examples to train the computer to recognise images. A blue button labeled 'Learn & Test' is at the bottom.
- Make**: Use the machine learning model you've trained to make a game or app, in Scratch, Python, or App Inventor. A blue button labeled 'Make' is at the bottom.

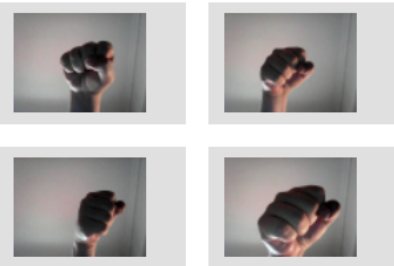
MAAK VOORBEEDEN

Recognising **images** as **rock, paper or sissors**

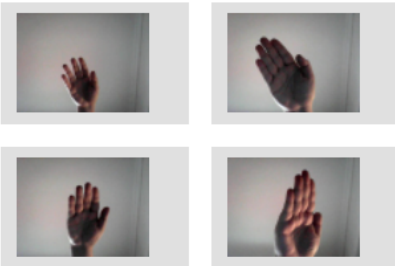
[Back to project](#)

+ Add new label

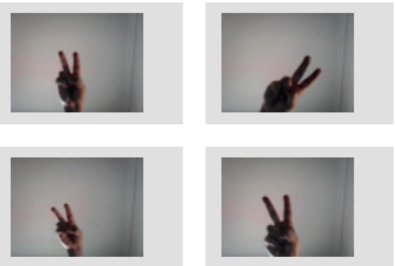
rock



paper



scissors



[www](#) [webcam](#) [draw](#)

[www](#) [webcam](#) [draw](#)

[www](#) [webcam](#) [draw](#)

20 20 20

ONS MODEL TRAINEN

What have you done?

You have trained a machine learning model to recognise when images are rock, paper or scissors.

You created the model on Tuesday, April 5, 2022 11:13 AM.

You have collected:

- 20 examples of rock,
- 20 examples of paper,
- 20 examples of scissors

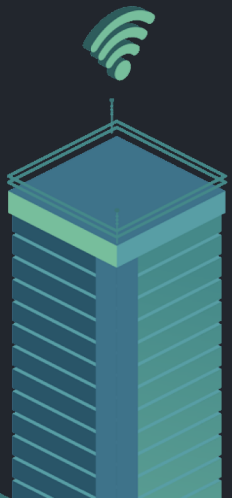
What's next?

Try testing the machine learning model below. Enter an example image below, that you didn't include in the examples you used to train it. It will tell you what it recognises it as, and how confident it is in that.

If the computer seems to have learned to recognise things correctly, then you can go to Scratch and use what the computer has learned to make a game!

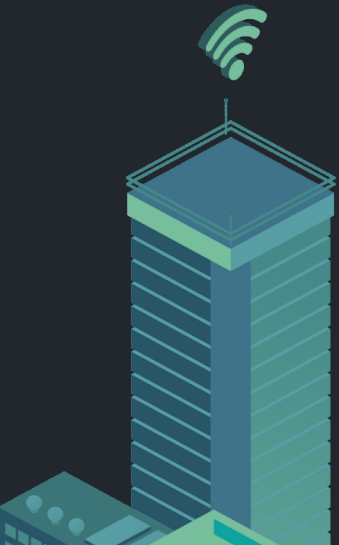
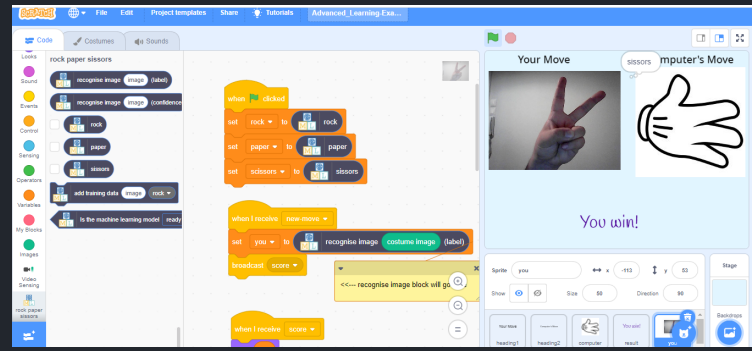
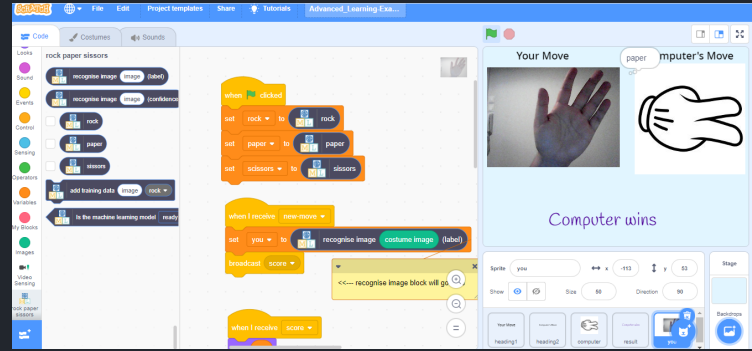
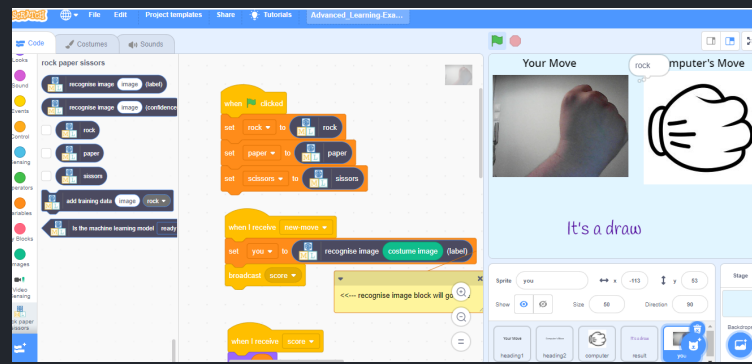
If the computer is getting too many things wrong, you might want to go back to the [Train](#) page and collect some more examples

Once you've done that, click on the button below to train a new machine learning model and see what difference the extra examples will make!



SPEEL

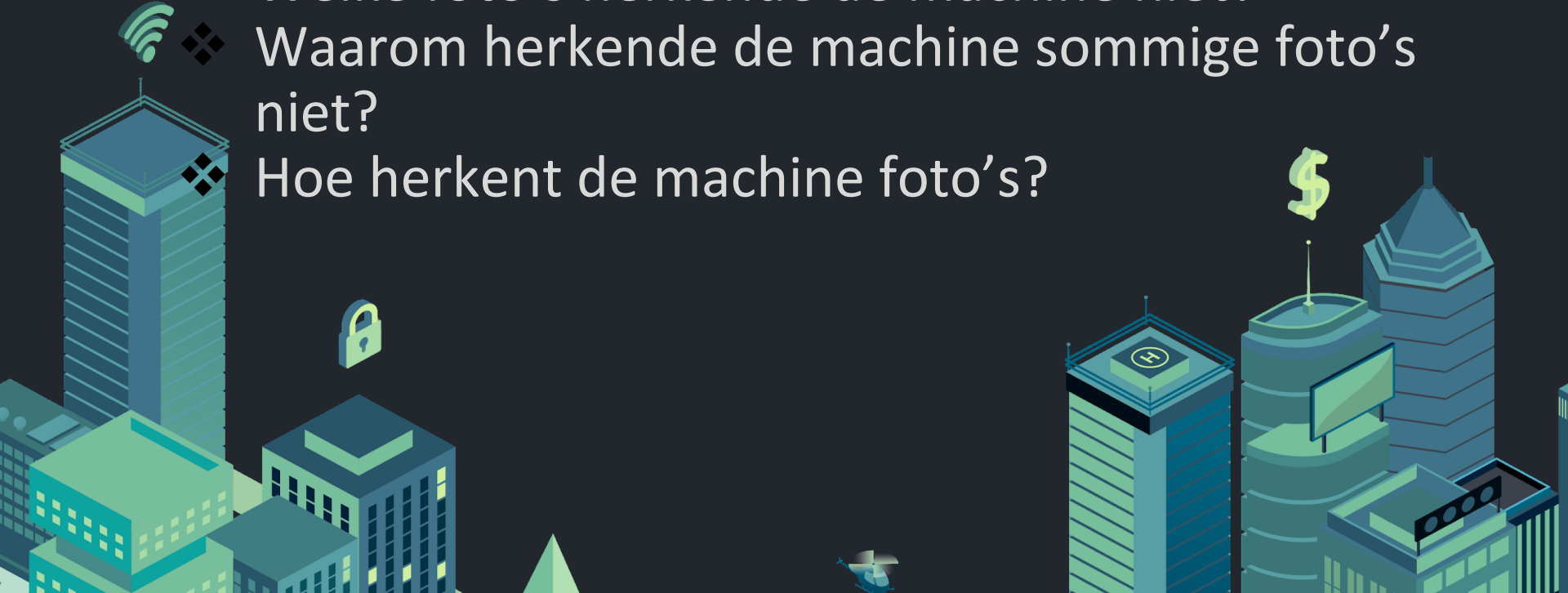
a7



Denk na...

a8

- ❖ Welke foto's herkende de machine?
- ❖ Welke foto's herkende de machine niet?
- ❖ Waarom herkende de machine sommige foto's niet?
- ❖ Hoe herkent de machine foto's?

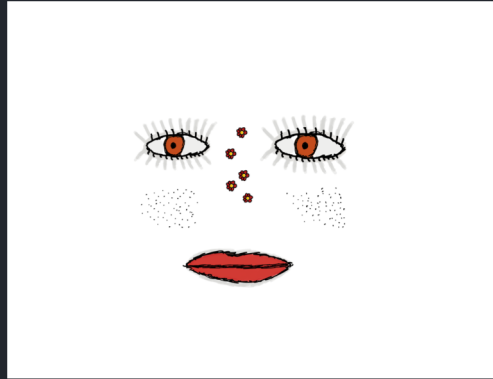


Een paar ideeën

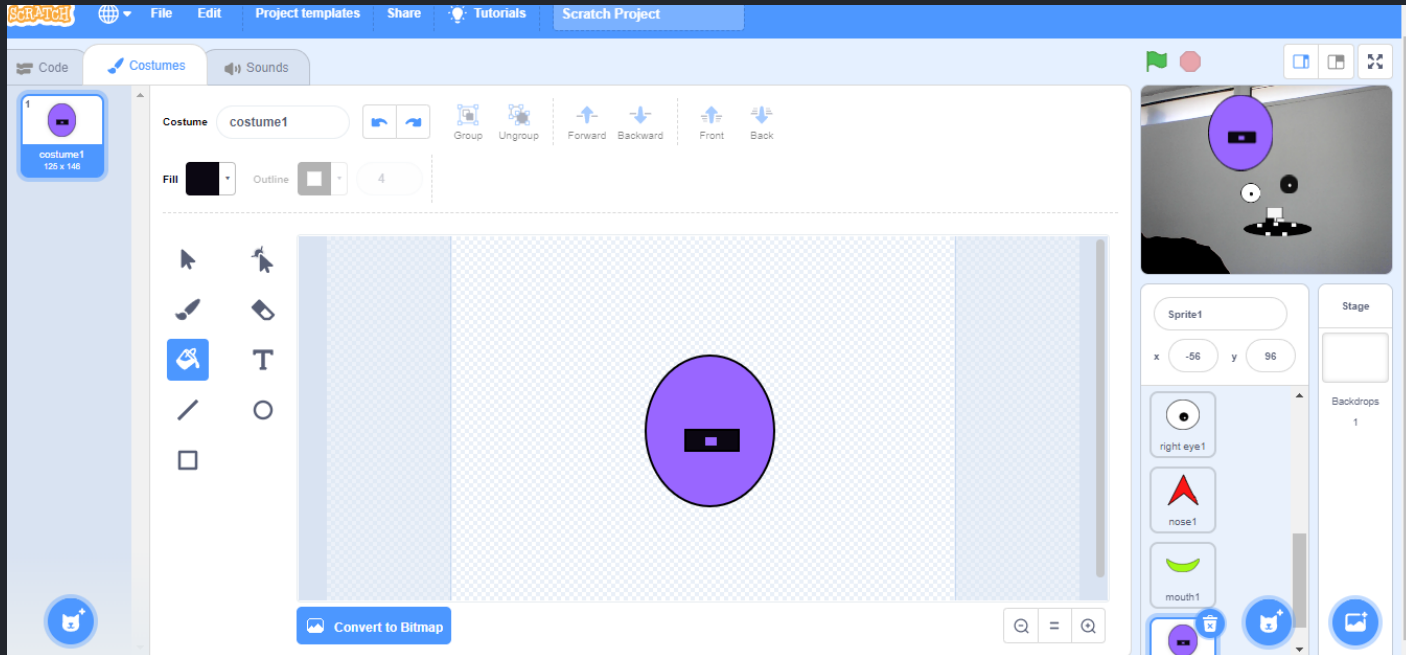
b1



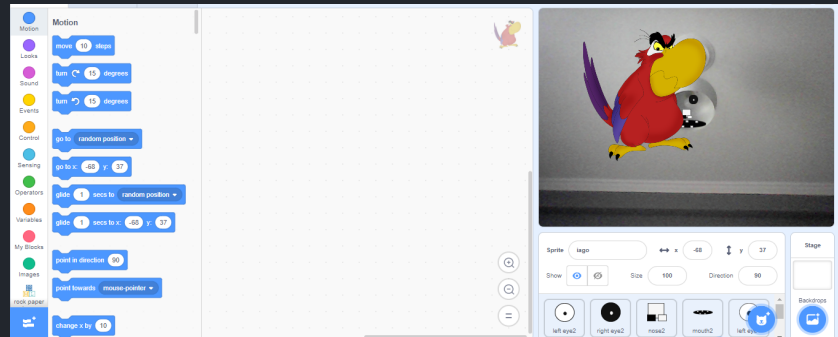
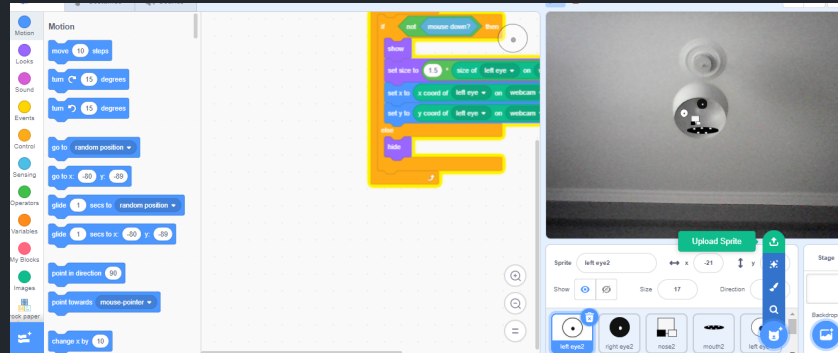
TEKEN JE GEZICHT



Maak Data (Sprite)

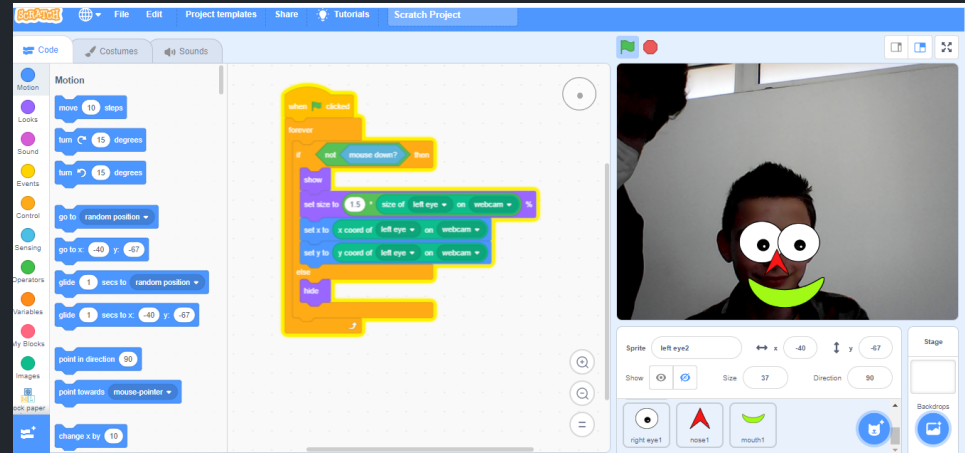
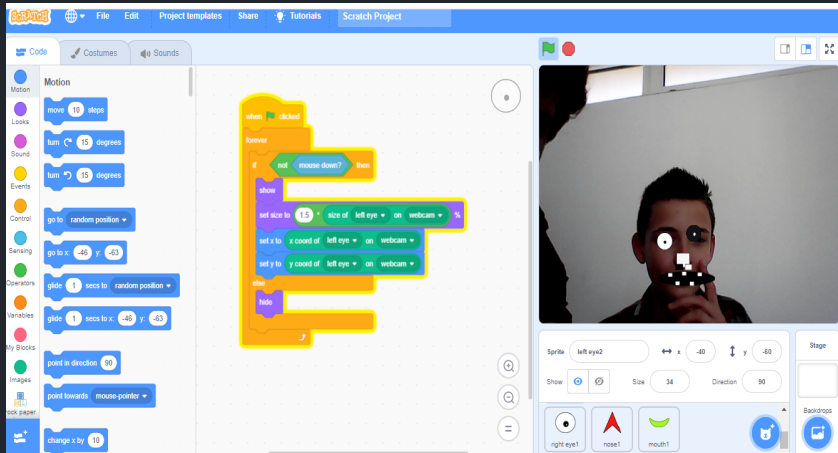


Laad een sprite



DE RESULTATEN IN HET PROGRAMMA

b5

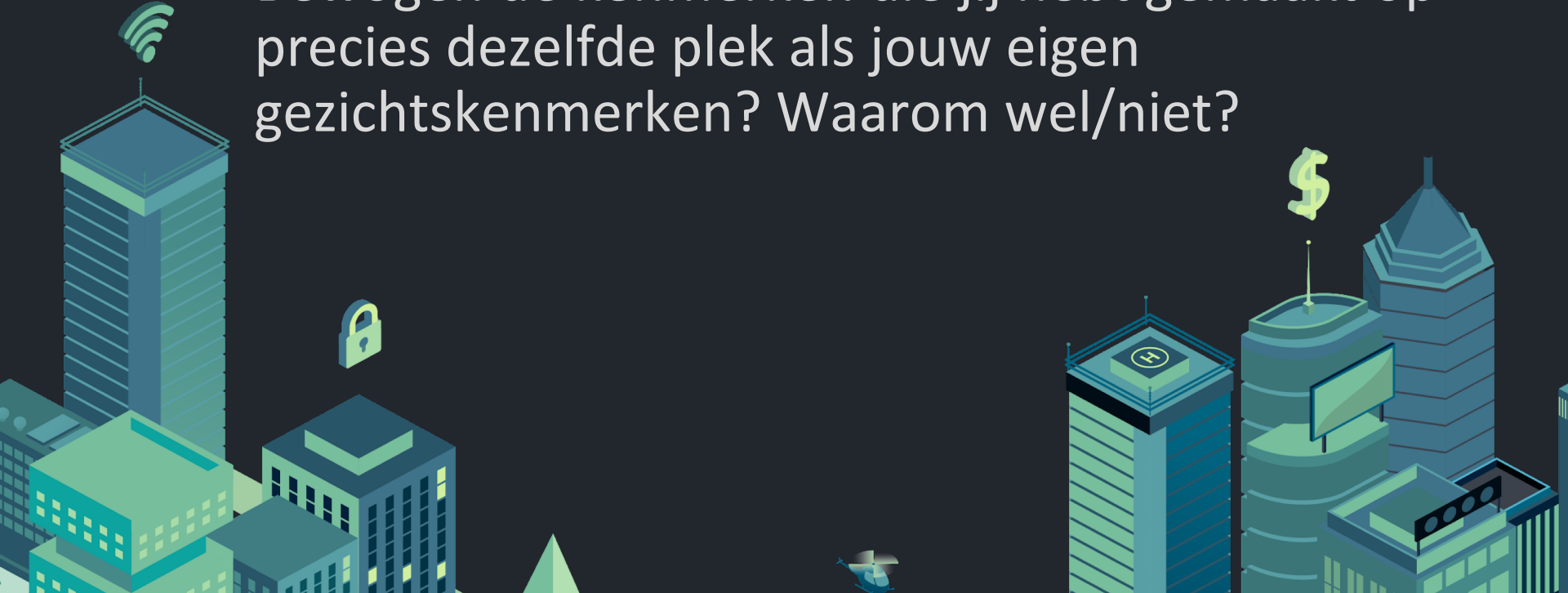


<https://machinelearningforkids.co.uk/scratch3> and

Denk na...

b6

- ❖ Hoe bewogen de filters wanneer jij bewoog?
- ❖ Bewogen de kenmerken die jij hebt gemaakt op precies dezelfde plek als jouw eigen gezichtskenmerken? Waarom wel/niet?



Video Production: George Tsigkos
Narrator (student): Christofer Chiras

