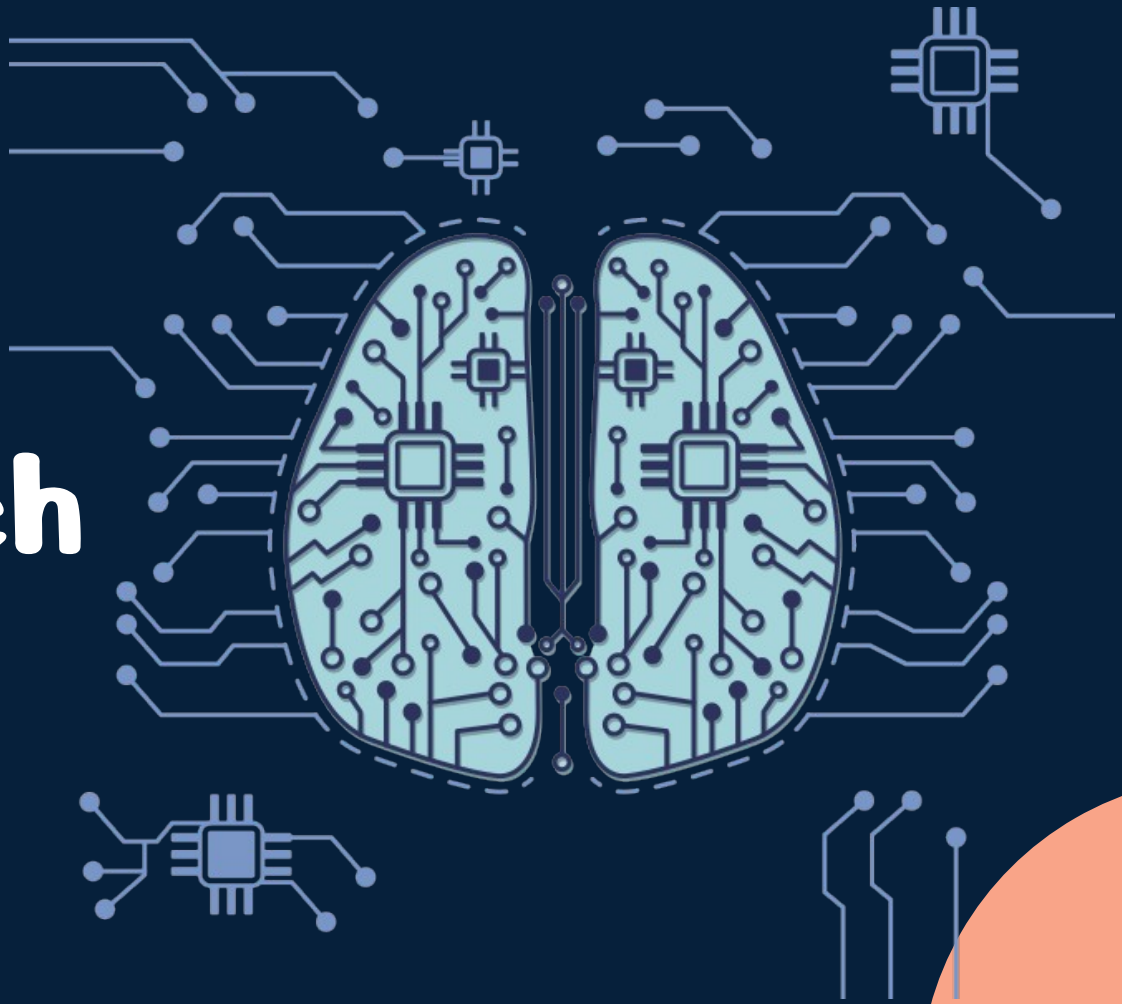
TM2Scratch



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Teachable Machine Model

- Teachable Machine produces a trained model
- To do useful things with it, we need to integrate it with a program. Eg...
  - Display a message when a cat is detected
  - Sound an alarm when a dog is detected
  - Move a robot arm to smack someone who’s not wearing a mask

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TM2Scratch

- Extension that runs on a special version of Scratch
  https://stretch3.github.io
- Can load the Teachable Machine model, and provide blocks to let you know which class was detected

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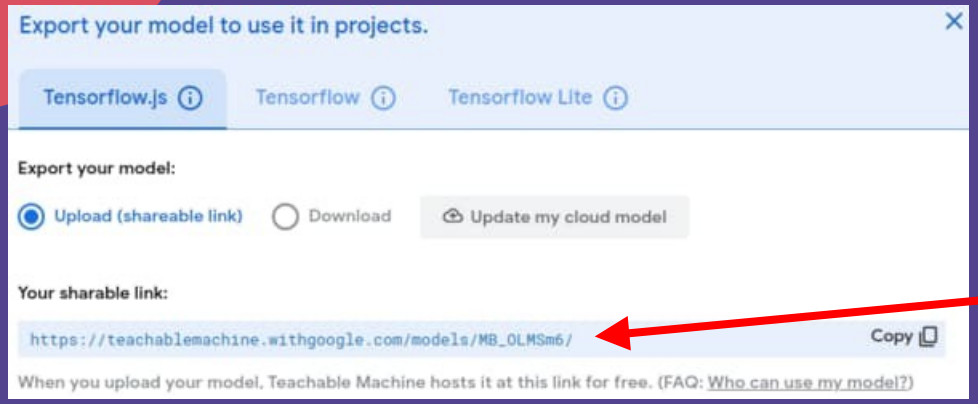
TM2Scratch



- Start by loading the model
- Copy this URL...
- ...and put it here
- Make sure to click the green flag to load the model

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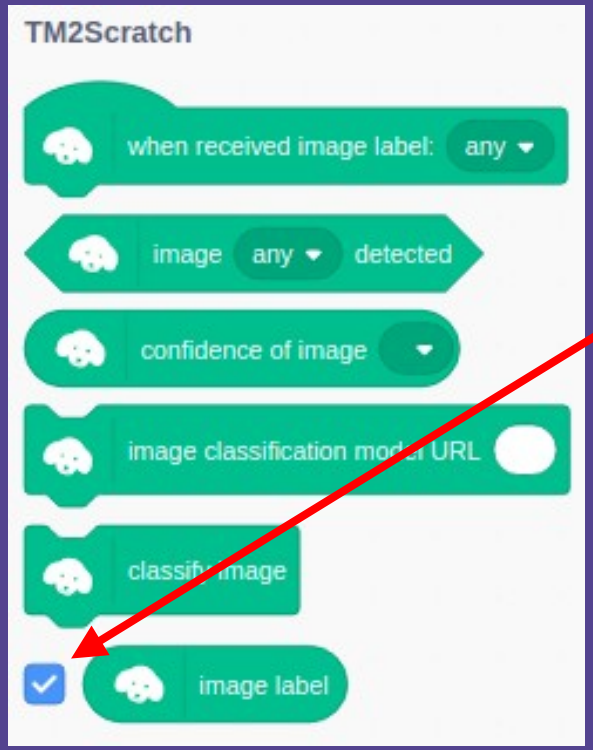

- Turn on the “image label” value display (...for easy checking of results)

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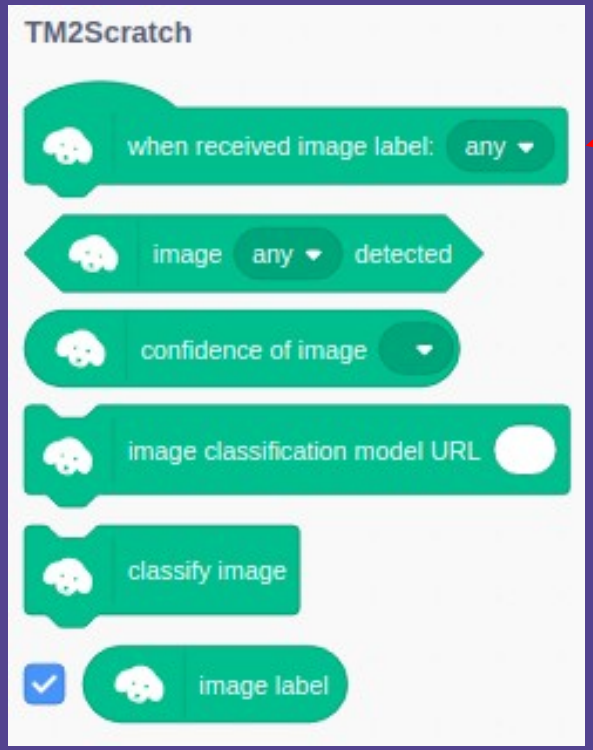

- Use the “when received image label” event to run a script...

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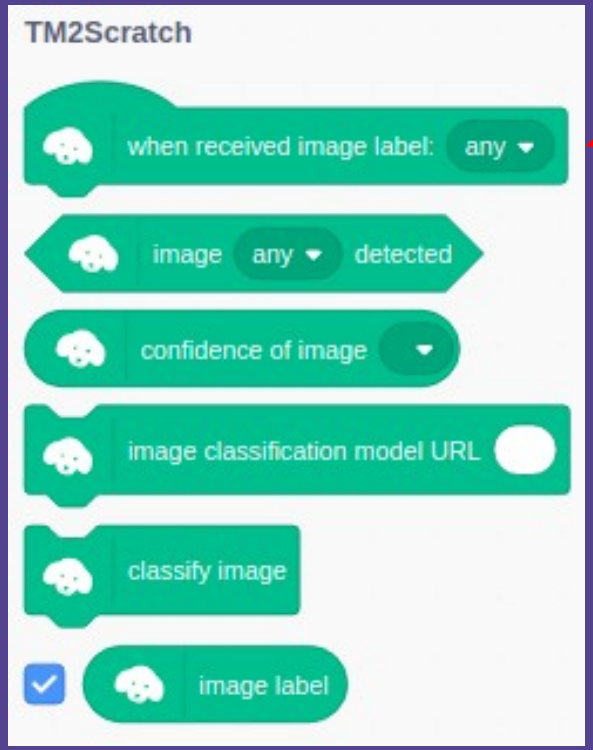

- ...or use the “image label” variable in an “if” condition

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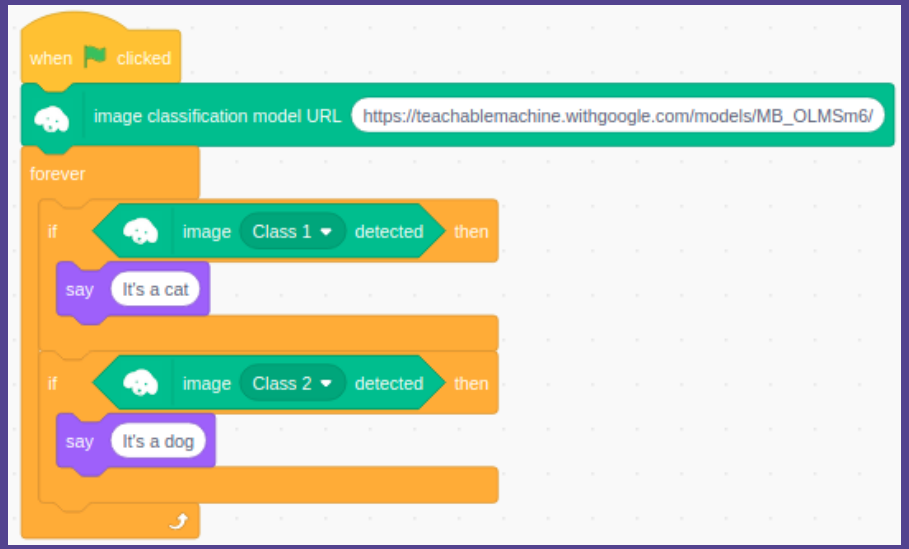
Using event blocks



Using loops and if

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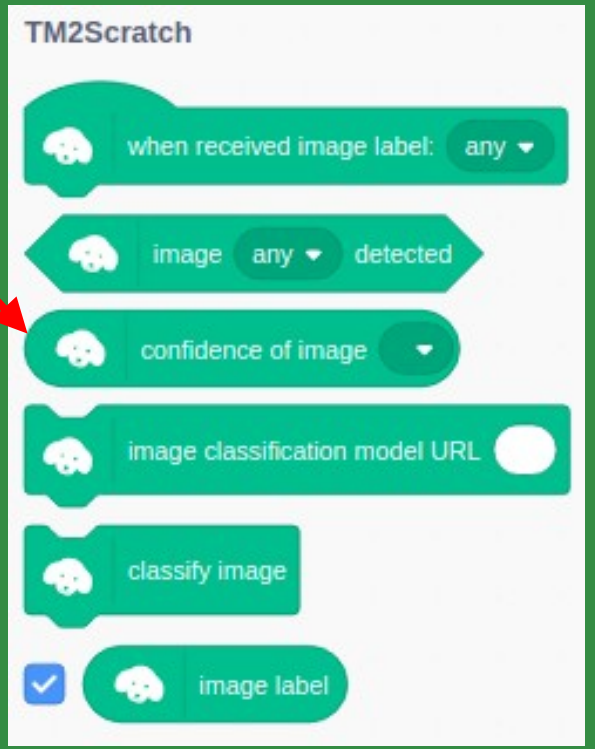
TM2Scratch

- Confidence of image
  - How sure the AI is that the class is present
  - Lowest: 0
  - Highest: 1



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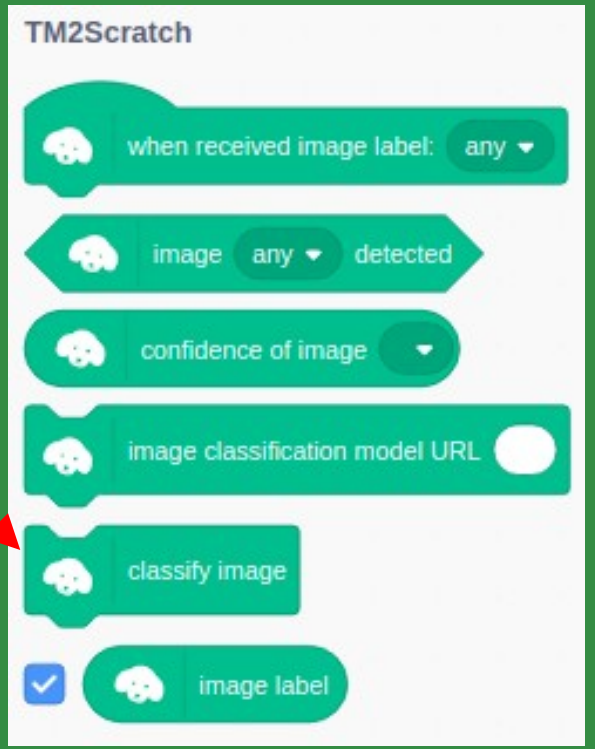
TM2Scratch

- Immediately classify the image in the webcam once
  - Only useful if classification is turned off



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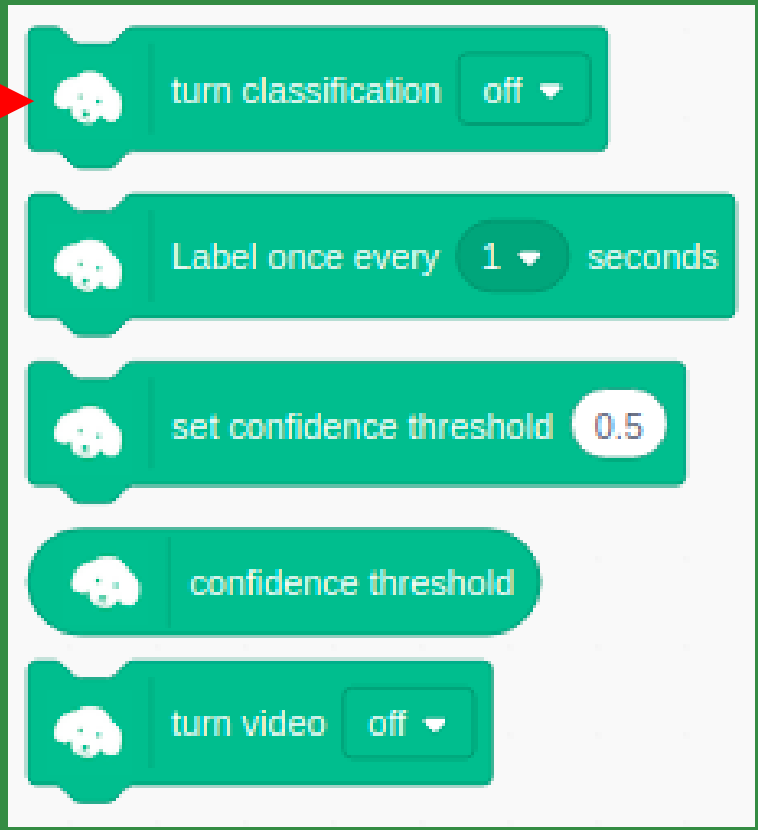
TM2Scratch

- Disable automatic classification
  - On : Automatically classify the image every X seconds
  - Off : Will only classify the image when we run the “classify image” block



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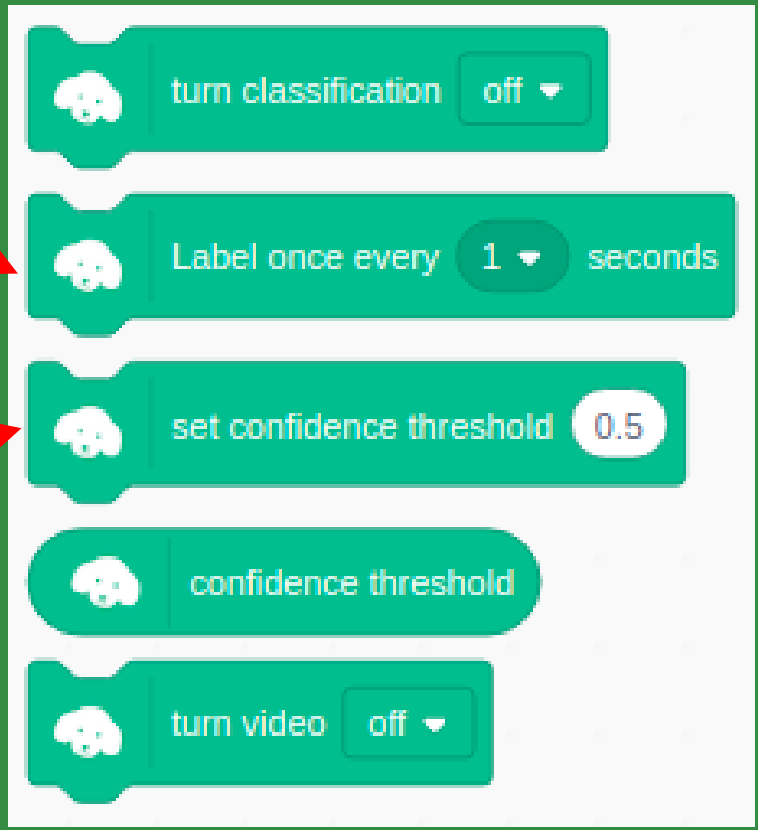
TM2Scratch

- How often to automatically classify image
- Threshold for confidence, before a class is considered detected



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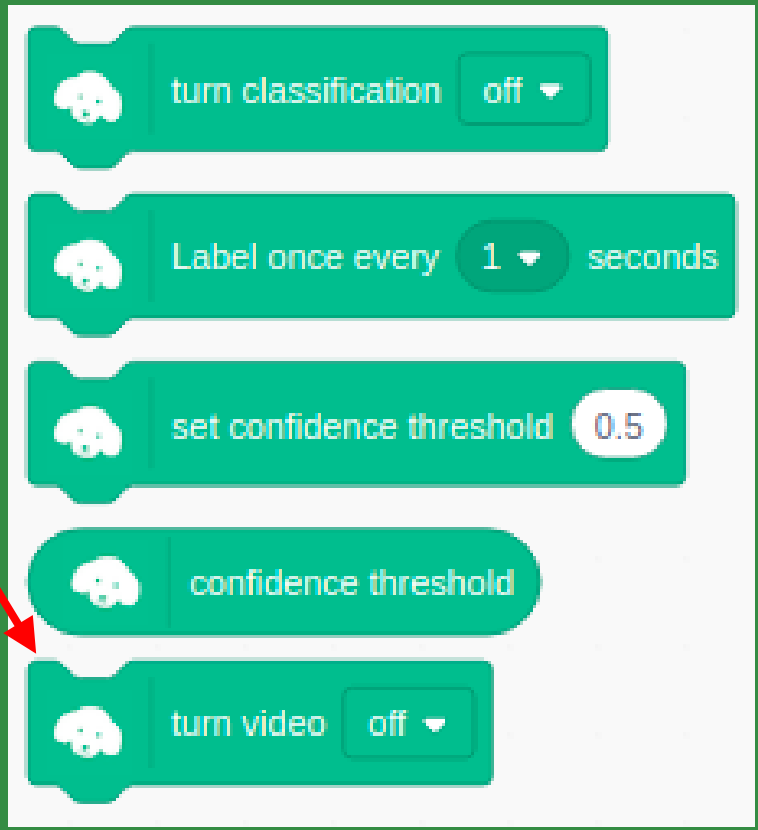
- Disable display of video
  - Does not disable camera
  - Image classification still works even with video turned off



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