Machine Learning For Kids :: Teachers' notes	
Worksheet	Snap
Activity	Make a card game in Scratch that learns to recognise pictures of your card.
Objective	Teach a computer to recognise what icons look like
	Learn how computers can be trained to recognise pictures
Difficulty level	Beginner
Time estimate	1.5 hours (for full version of the project, where the students make their own cards)
Cumanaan	45 minutes (if students are provided with pre-made cards)
Summary	Students make cards with different symbols. They will train a machine learning model to recognise what the symbols look like by taking pictures of them with a computer
	webcam. They use this in Scratch to make a Snap game where the computer recognises
	if it chooses a matching card.
Topics	image classification, supervised learning
100103	
	Setup Setup
Each student wi	Il need:
Print-outs	Project worksheet (download from https://machinelearningforkids.co.uk/worksheets)
	Blocks in Scratch scripts are colour-coded, so printing in colour will make it easier for students.
Resources	Paper, scissors, felt pens (for full project, where the students make their own cards)
	Or
Technology	Pre-made cards (download and print the "Additional project resources") Web-cam
Access	Username and password for machinelearningforkids.co.uk
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Class account w	
API keys	None
	Customizing
If you use PRIMIV	1 approaches with your class, add a step where students predict how the project template works
	crease the amount of coding involved, delete some of the code from the project template and
•	worksheet so students code it themselves.
•	courage problem solving, delete some of the detail in the worksheets and provide more general
instructions inste	ad. files & worksheets in MS Word format are available so you can modify them to suit your class .
Project template	https://github.com/IBM/taxinomitis-docs/tree/master/scratch-templates
templates	Scratch 3 templates end .sb3 Scratch 2 templates end .sb2
Worksheets	https://github.com/IBM/taxinomitis-docs/tree/master/project-worksheets/msword
	Help
Potential	·
issues	Students will take photos and upload them to a secure site. If only cards are visible in photos they take students will not be identifiable. If this raises concerns it may
133463	in photos they take, students will not be identifiable. If this raises concerns it may
	be sensible to obtain parental permission.

"https://machinelearningforkids.co.uk" is a long URL to type for some children. You may find it easier to set up a bookmark that they can click on instead.

General troubleshooting and help at https://machinelearningforkids.co.uk/help