



Machine Learning For Kids :: Teachers' notes

Worksheet	Newspaper shelves
Activity	Train a computer to recognise headlines from national newspapers.
Objective	Test the computer's ability to recognise use of language <ul style="list-style-type: none"> How computers can be taught to recognise the source of writing
Difficulty level	Intermediate The project is easy to make, but typing in headlines for training data can be time-consuming
Time estimate	1 hour
Summary	Students will collect examples of headlines from national newspapers. These will be used to train a machine learning model based on the use of language in headlines. They will create a Scratch project that puts a newspaper on the right shelf based on predicting which newspaper a new headline is from.
Topics	text classification, supervised learning

Setup

Each student will 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.
Access	Username and password for machinelearningforkids.co.uk

Class account will need:

API keys	Watson Assistant 1 workspace per student One "Lite" API key is free but can only be used to create 5 workspaces One "Standard" API key can be used to create to create 20 workspaces more detail at: https://machinelearningforkids.co.uk/apikeys-guide
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Customizing

If you use **PRIMM** approaches with your class, add a step where students predict how the project template works. If you want to **increase the amount of coding** involved, delete some of the code from the project template and add steps to the worksheet so students code it themselves.

If you want to **encourage problem solving**, delete some of the detail in the worksheets and provide more general instructions instead.

Project template files & worksheets in MS Word format are available so you can **modify them to suit your class**.

Template	https://github.com/IBM/taxinomitis-docs/tree/master/scratch-templates
Worksheets	https://github.com/IBM/taxinomitis-docs/tree/master/project-worksheets/msword

Help

Potential issues	<ul style="list-style-type: none"> Some newspapers use language that may not be appropriate for younger children. Tell your class which newspapers to choose if you have concerns. If you would like to save time, you could modify the worksheet to use two or three newspapers instead of four. "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. <p>General troubleshooting and help at https://machinelearningforkids.co.uk/help</p>
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