

AI & Machine Learning

Lesson 9

Saving/Evaluating Models in AI Lab & Writing Apps

Warm Up



Writing Prompt:

People often post information about themselves on social media like:

- . Their name and age
- . The school they go to
- . Where they live
- . Movies they like
- . Restaurants they've been to
- . Their birthday

If all of this data was collected, what is one thing you think a machine learning model could try and predict from this data?

Rhetorical Question of the Day

How can I use Model Cards to document my decisions when training a machine learning model?

Activity





AI and Machine
Learning

Model Cards in
AI Lab



Code.org

Log into Code.org

Navigate to Code.org
Lesson 9 Level 1

Zoo Models

You should have:
 Zoo Models Activity Guide (on Schoology)
 Code.org Open

Name(s) _____ Period _____ Date _____

Activity Guide - Zoo Models

Overview

We've been hired by a zoo to create different apps for customers to use around the park. A user should be able to answer a few questions about the animal they see, and then the app will tell them something new about the animal.

The zoo has created a dataset for us to use, which includes different properties of the animals they have in the zoo. Our job is to train three different models using the dataset they provided.

Level 1: Is it a Predator?

1) Train a machine learning model to help visitors identify whether or not the animal in the exhibit is a predator. Your model should be at least 70% accurate.

Label	Features	Accuracy at least 70%
Predator		

2) Save your model and create a model card. The zoo has asked us to use the following information for the Intended Use and Limitations section:

Intended Use
Can identify whether a zoo animal hurts its prey like a predator
Limitations and Warnings
The data is only from animals in this zoo. Don't use this app outside of the zoo.

Level 2: What Type of Animal is it?

1) Train a machine learning model to help visitors identify what type of animal they are looking at - for example, a mammal or reptile or bird, etc. Your model should be at least 70% accurate.

Label	Features	Accuracy at least 70%
Class		

2) Save your model and create a model card. The zoo has asked us to use the following information for the Intended Use and Limitations section:

Intended Use
Can identify what type of animal you are looking at
Limitations and Warnings
The data is only from animals in this zoo. Don't use this app outside of the zoo.

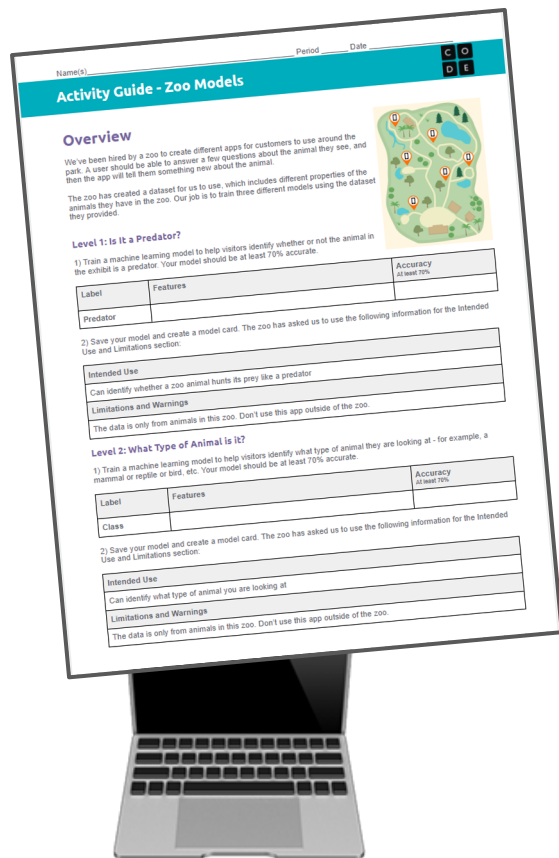




Overview

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A user should be able to answer a few questions about the animal they see, and then the app will tell them something new about the animal

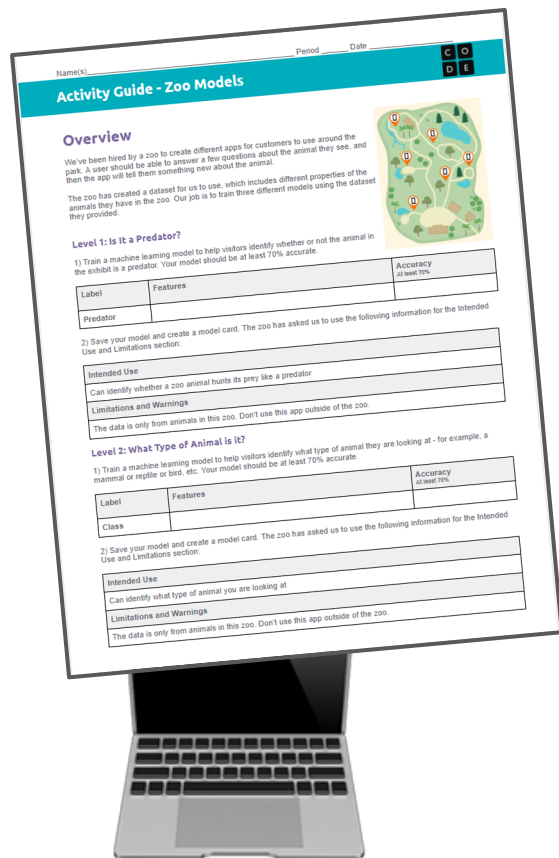


Do This

Complete the first three levels of Code.org

You will train and save 3 models
using the Zoo dataset

You will also record information in each level
on the activity guide



Code.org Level 4

Choose one of your models to import into Code.org and begin designing your app.

You may not have time to create a fully-designed app, but you will have time in the next lesson to work in App Lab

Wrap Up





Writing Prompt

Why is a model card useful when creating a model in AI Lab?

How is a model card useful when creating an app in App Lab?



Question of the Day

How can I use Model Cards to document my decisions when training a machine learning model?