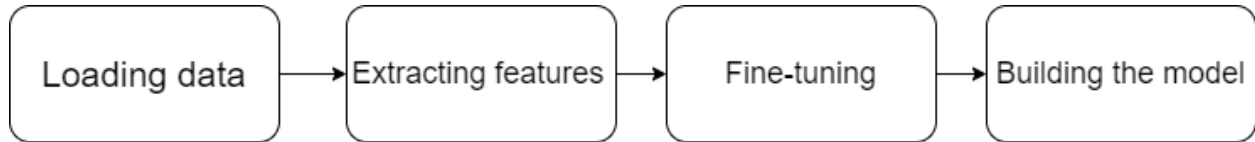


REPORT: EXERCISE 1

In exercise 1, I used the Teachable Machine as the main system to train my model. The model is based on Tensorflow.js, a library for machine learning.

The general idea for Tensorflow is:



After saving the model, I use Streamlit as a tool to execute the deployment. User will take input as an image either a dog or a cat to classify.

The data includes 700 images of dogs and 700 images of cats. I then split it into 2 groups: 70% will be used for training and 30% for testing. However, due to the lack of time I can only test out 20 images of cats and 20 images of dogs.

The results are very interesting. It can detect mostly cats and dogs in real life. However, when it comes to animated dogs or cats, especially with the additional style of creativity, it seems to struggle to differentiate the cats and dogs. Some of the results are quite unsure and the confidence is usually 50:50 for each class.

If I had more time, I would love to gather more data from many sources, including different breeds and from cartoons as well. Since I use Teachable Machine to create the model, I don't really have the chance to thoroughly understand how it works. If possible, I would try using Tensorflow to build a model and fine-tune it by myself.