HW4_CNN report

I.   Basic part

A. Model architecture

It depends on the shape of input image and the channels. While we are using the RGB images which requires the three channels. The depth of that also take a great part in the design of model, because it also decides the required information about constructing the feature map. Try and error to get the best one.

B. Hyper parameters

Just use the common one, we set learning rate at 0.001 and optimizer of Adam!

C. Difficulties

While testing phase, I was trying to put a single image on the pretrained model, and it didn't work. I tried so many times and found out it's all about dimension again!

You should always keep this in mind that out model is training based on the resized image so every time you tried to test a new data, you should reshape it to fit your model. By doing so you can do it without error!

II.   Advanced part

D. Model architecture

Same as above

E. Hyper parameters

Same as above except that the loss should change to categorical cross entropy! Since it is multi label classification problem!

F. Difficulties

Since it not a simple binary classification problem, our predict label

should do some preprocess to make sure fit the current one! In this part, we might need some preprocessing skill such as one-hot code or argmax… And the other part just same as the basic one!