Ballon game documentation:

Line7-14, we import the library we need for this code

Line 17,18 design how big the windows is going to be

Line 20-39 is setting up the pictures for each actor

Line 41-48 is for initial define the variables

Line 49-66 is a function for making update for the high-score file we got. And we keep the score in the file location indicate in the string

Line 67-74 is set up the rule to record the score we make in the game

Line 76-86 is set up how many of the object we need to dodge in the game

Line 100-10 is set up how the bird wings flapping

Line 111-178 is set up how to make the object keep appearing on the screen

Documentation for AI CNN program

For this AI program, I am using the data set from datasets.cifar10

We need to run every block in order to make the AI training program working

In the first block is all the certification and license

The second block is inserting all the library and layers

The third block is use for downloading datasets.cifar10 data set to train the AI program. The data set is from keras.datasets

If we want to use other data set, we can pip install the data set from other website and make sure we currently import the data library

The next block is for use to separate the image category

The 5th block is the most important part of the code.

In this block we can edit our model for how the AI screen the pictures

In this block I used the combination of Conv2D, MaxPooling2D, Dense, Flatten layers to built the model. And the model type we use the Sequential

After built we complie the model

The next block we do model summary

The 7th block is building dense layers on top

Here we use Flatten and dense

The next block we make the summery again

The 9th block is making the AI program do the training.

By changing the number of epochs, we can design how many times we need it to train

When we look at the accuracy, we need to look for the “val-accuracy”

The 10th block is plot out the relationship of how the accuracy and Val-accuracy

Block 11th is print out our accuracy percentage

Block 12th is for save our training AI model

Block 13th is for us to download the trained AI model

Block 14th is for use to load the trained AI model

Block 15th is for us to insert the picture we found on the internet, and make sure the AI program can recognize the pictures.

And the address below is the changeling’s pictures that our AI can recognize

<https://ichef.bbci.co.uk/news/976/cpsprodpb/67CF/production/_108857562_mediaitem108857561.jpg>

<https://www.kbb.com/wp-content/uploads/2020/04/00-2020-bmw-8-series-gran-coupe.jpg>

https://hips.hearstapps.com/hmg-prod.s3.amazonaws.com/images/devel-motors-sixteen-1540564064.jpg

<https://images.all-free-download.com/images/graphiclarge/classic_jaguar_210354.jpg>

<https://amsc-prod-cd.azureedge.net/-/media/aston-martin/images/default-source/models/valkyrie/new/valkyrie-spider_f02-169v2.jpg?mw=1980&rev=-1&hash=92E23C911BDE23D418D37F9187844B7C>

<https://upload.wikimedia.org/wikipedia/commons/5/53/Weaver_bird.jpg>

<https://www.zdnet.com/a/img/resize/071727877ee9884b60edd728253d2baadcb3985f/2021/02/23/19631992-64df-4af9-a288-a0cb4112e682/bombardier-globaleye-jet.jpg?width=1200&height=900&fit=crop&auto=webp>

test\_image.py

we can use this to load our saved model in spyder app.

We can simpily change the picture link to change the picture

We can also change the name of the model to select the model we have

Make sure the model and thie .py document in the same file