Note after meeting with professor:

1. The deadline of the report is on Sunday midnight
2. Team members can have the same ideas/ content (not exactly same words) for “introduction”, “related work”, “method” and “experiment”. But the “discussion” and “conclusion” should be different for their own thoughts.

For dataset: thumbnails 128\* 128 resolution (Because when we refer to the Pluralistic Image Completion article, we detect the image inpainting is good especially for the face recovering)

1. Set-up:
   1. Didn’t change and code and didn’t cancel any image from the dataset, the maximum epoch is 41
   2. For training: thumbnails thumbnails128x128\_2 all images (65536 images)
   3. For testing: thumbnails thumbnails128x128\_2/00000 folder and my bio image
      1. One image can generate 50 different images ( 26 different images are used as input for testing) (50 different styles + 1 masked image + 1 ground truth)
2. Experiment:
3. Limitation
4. Testing

For dataset: Artwork: (is used because the authors used most of the popular images datasets and the author basically just did not use the art images so the art images will be interesting for using)

1. Set-up:
   1. In train.py: make change:
      1. At line 21: max\_iteration = 20,000 #opt.niter + opt.niter\_decay
   2. Dataset set-up:
      1. Training: 8 images used:
         1. The 8 original images for training: <https://drive.google.com/drive/folders/1KJNffbOsPTpF1MykQpu_X3klNvijUYtc?usp=sharing>
         2. Downsampling the 8 original images at a ratio of 4: <https://drive.google.com/drive/folders/1pAvGhnpMP7cjrjmrBAo2ixQ_7HjBeXHw?usp=sharing>
         3. I use the 8 downsampling images described above for training
      2. Testing: 8 images used
         1. The 8 original images for testing: <https://drive.google.com/drive/folders/12hxzdK6ZuNRGZHdb8a3wJpbcbGa5LXXP?usp=sharing>
         2. Downsampling the 8 original images at a ratio of 5: <https://drive.google.com/drive/folders/1_e-LpPxMJFP0BSmC3aLOz7Nbr107bQSU?usp=sharing>
         3. I use the 8 downsampling images described above for testing
2. Method / Experiment:
   1. Training process:
      1. Before training, need to update the line 68 and 69 in the Pluralistic/model/pluralistic\_model.py file:
         1. change from “async=True” to “non\_blocking=True” in line 68, 69 form the Pluralistic/model/pluralistic\_model.py file.
         2. Reason: because “cuda()” no longer has an argument “sync”. Ref: <https://stackoverflow.com/questions/53201534/calling-cuda-with-async-results-in-syntaxerror>
3. Limitation:
   1. Google Colab crashed after 12 hours of use even though I use the colab pro. So I set up the gpu on a local machine and I use Jupyter notebook to run the training and testing.
   2. If the testing is interrupted, we could not run the testing even though the model in the training is saved frequently while the training is running.

For Experimental Results:

1. SSIM
2. TV loss: I have a problem on this, the code cannot run
3. PSNR