# Final-term Project

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# Dataset

- Image dataset

The dataset deployed for this assignment is modified as followed:

| ***Imbalanced*** |
| --- |
| Some classes may have different number of samples |
| ***Noisy*** |
| Some samples are labelled wrong |
| ***Tensor*** |
| Tensors are provided instead of images |
| ***Fake Testset*** |
| Testset is completely fake and only given to build a test program |

# Requirements

- Tasks

Use PyTorch

Design a Deep Learning model to classify the provided dataset

Train and save the model

Write a python program to load and test the model

Write a report which includes:
- The explanation of preprocessing of the data
- The explanation of the architecture of the model
- Process and results of training

# Requirements

- Environment

The program must be able to run in:

- Ubuntu 18.04LTS
- Python 3.6+
- NumPy 1.18+
- PyTorch 1.5.0
- Torchvision 0.6.0

# Submission

- *[student id number].zip*

Codes
- Train file → ***'train_[student id number].py'***
- Test file → ***'test_[student id number].py'***
- Any other python files should be under folder ***'utils_[student id number]'***

Model file → ***'model_[student id number].pth'***

Report → ***'[student id number].pdf'***

Zip everything under → ***'[student id number].zip'***

Submission due date ***19 June 2020***

# Criteria

- Grades

| | |
|---|---|
| Rank by test accuracy | 50% |
| Report | 50% |

--- Warning ---

Plagiarism, submitting a model that is not trained by the train program will give you ***"F"***

- Plagiarism will be decided by common sense

Every day late in submission gets 15 points off