



**HW2**

# **Anime Face Generation**



# Outline

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Objection

Dataset

Evaluation

Submit Format

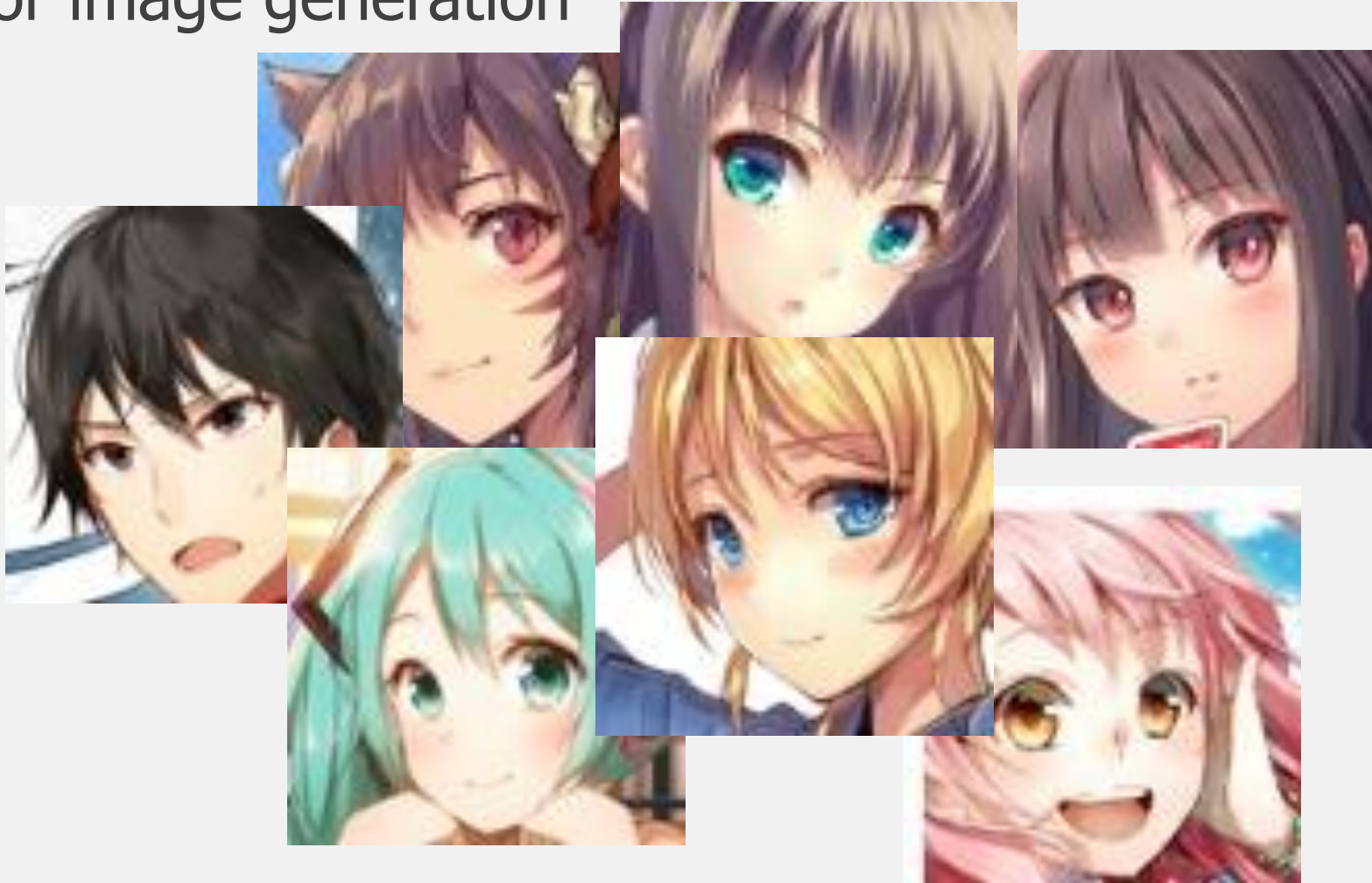
Grading

Deadline

Regulations

# Objection

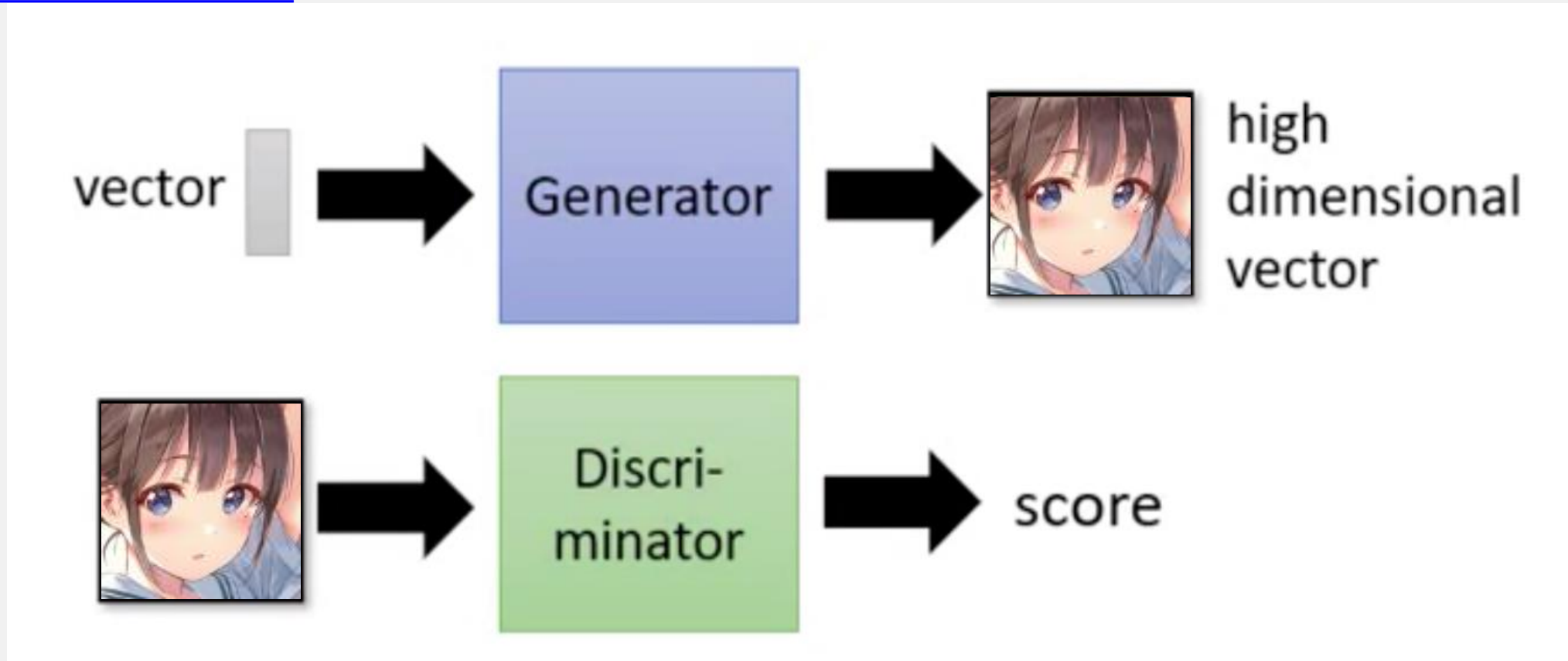
Using CNN for image generation



# Dataset

Thanks for collecting the dataset from [Getchu](#) by Mckinsey666

- 63,565 images
- [Download Link](#)



# Dataset

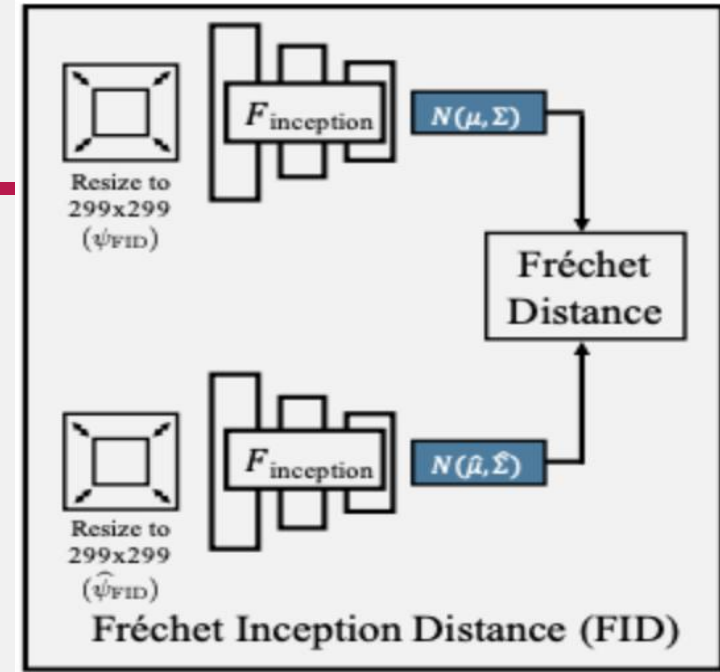


# Evaluation

FID Score ([Frechet Inception Distance](#))

Input Real/Fake image into a pretrained model

Count (mean, std) between Real and Fake Feature



## Usage

To compute the FID score between two datasets, where images of each dataset are contained in an individual folder:

```
python -m pytorch_fid path/to/dataset1 path/to/dataset2
```

```
python -m pytorch_fid ./anim ./Result --batch-size 128
```

# Submit Format and Grading

Name setting: student ID.tgz or student ID.zip

- M1000001.zip (**Result** folder, **Code** (ipynb or py), and **Report** file)

Result folder

- 500 images what you generate with .jpg as extension, ex: 1.jpg, 2.jpg, ...

Baseline (Fid < 110) (15 pts)

- Using a generation model (ex: WGAN, WGAN-GP, StyleGAN, or Diffusion)

Other pts (Fid < 110) ([Useful Link](#))

- Using other generation model (excluding the model used above)
  - **Each additional model used contributes an 15 points**

Report (40%)

- Architecture, Method (with code highline), Learned with course and homework, Conclusion

Upload

- Submit the zip file to NCUE Cloud

# Deadlines

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## Image and Report

- 2023/12/13 23:59 (UTC+8) Upload to NCUE Cloud Server
- 遲交分數會打折



# Regulations

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請自己完成作業，勿分享code與參數