Readme.PDF
AI for media-Mini Project D
(CycleGAN and DcGAN are used to create different art pictures and compare the model performance through experiments)

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This is a project for artwork generation and creation through model training with CycleGAN and DCGANs. Due to the different models and datasets used, I will introduce the files and code and datasets of CycleGAN and DCGANs in two parts - part1 and part2.

Introduction
About dataset:

part1-CycleGAN
I used a dataset from the "TensorFlow Datasets" library. I loaded the dataset directly from python by "tfds.load()" function.
Dataset reference link :https://www.tensorflow.org/datasets/catalog/cycle_gan#cycle_ganiphone2dslr_flower
CycleGAN code:In this part, I used a lot of the model code from this link:https://www.tensorflow.org/tutorials/generative/cyclegan?hl=zh-cn

part2-DCGANs
I've referenced a lot of DCGANs models and code in this project here.
Reference:about Dataset link: frome Kaggle:
(1)Artwork_dataset link:
https://www.kaggle.com/datasets/ikarus777/best-artworks-of-all-time
(2)Anime_Face_Dataset
link:https://www.kaggle.com/datasets/defileroff/comic-faces-paired-synthetic-v2
(3)Human_Face_Dataset
link:https://www.kaggle.com/datasets/defileroff/comic-faces-paired-synthetic-v2
DCGANs code reference
link:https://www.kaggle.com/code/brsdincer/human-anime-face-transformation-artwork-dcgan

Here are all the file names:

1."code folder"
Contains two files, one "Part1 CycleGAN code.ipynb" and the other "Part2 DCGANs code.ipynb"
2."Dataset"
Contains one folder is "Part 2 DCGANs dataset". Open "Part 2 DCGANs dataset" contains three file is "Animeface"、"realface"、"Artwork".
3."readme.md"
4."readme.pdf"

About dataset part:

In this folder, only includes the dataset for "Part 2 DCGANs dataset", because part1-CycleGAN is a link
（https://www.tensorflow.org/datasets/catalog/cycle_gan#cycle_ganiphone2dslr_flower）

Code:
All code is in the GitHub repository:https://github.com/1999111Cherie/AIM

About LLM:

For this project, I only used chatgpt3.5 to check the cause of errors in my code. Otherwise, the code is based on what was taught in class.