DL Lab 2: flowers_102 CNN classifier

Lab Objective:

In this assignment, you should build a simple convolutional neural network (CNN) to do classification with Flowers102 dataset(use torchvision.datasets.Flowers102() to load dataset, and you may need to use some resize method to restrict image size.).

Rules:

[1] You should implement model by yourself. This assignment should be done individually. Please do not plagiarize the assignment. Once the T.A. finds plagiarism, these students will receive a score of zero on the assignment.

[2] Only PyTorch are allowed in this lab.

[3] If the assignment format and files are not in accordance with the regulations, the assignment score × 0.9.

[4] If the assignment is missing or incomplete training for any item, the assignment score will be deducted proportionally to the incompleteness.

[5] If you submit your assignment late, your score will be multiplied by 0.9 for **each day** of delay.

Submission:

[1] Please submit your code on Jupyter notebook and the filename should be A2_studentID_studentName.ipynb.

[2] Implement a ResNet model.

[3] Try three different activation function and compare the performance.

[4] A Report in PDF format and filename should be A2_studentID_studentName.pdf with at most 6 pages.

The report needs to compare the different of your ResNet model and the model in example code last week, than try to explain why ResNet's performance is better than the example model.

Descriptions of code:

Your code must be submitted following the format provided in last week's example code at a minimum. Any additional sections can also be included.

Assignment Evaluation:

Code & model performances (60%)

Report (40%)

Bonus: Try more model or other training strategy.

Deadline: 9/29 5:20 **AM**

----------**TA Contact information**----------

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