

DL Lab 1: 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 $\times 0.9$.
- [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 **A1_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 **A1_studentID_studentName.pdf**.
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: 10/10 4:20 AM

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

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