Exercise Session 2

Image Processing

Rolf Ingold, Anna Scius-Bertrand
DIVA Group, University of Fribourg, Switzerland

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Reminder: assignment 1

- Next week: assignment 1
  - Deadline: October 3, end of the day

- Use your own flipping algorithm. Do not use a numpy or pillow flipping function!

- Submit your solution via ILIAS with 3 files:
  - Original image.
  - Your image flip horizontally and vertically.
  - A text file with your name, surname, GitHub link and a brief description of your algorithm.

- Do not forget to invite us via github: anna.scius-bertrand@unifr.ch , rolf.ingold@unifr.ch

Assignment 2: Indexed colours

- Goal: represent a RGB image with indexed color using a limited number of colors.

- Define a universal color table with a maximum of 256 different colors.
- Transforms the initial pixel values with an index to the color table so that the return image looks as similar as possible to the original image.
- Replace the universal color table by an adaptive color table, which is optimized for the given input image.
- Apply it on “Lena”
- In both case, provide the color table.

Hand-in

- The second assignment is due in two weeks:
  - Deadline: **Tuesday, October 10, 2023** (end of day)

- Submit your solution via ILIAS with 5 files:
  - one image with a maximum of 256 colors with the universal color table,
  - one image of the universal color table,
  - one image with a maximum of 256 colors with the adaptive colour table,
  - one image of the adaptive colour table,
  - A text file with your name, surname, GitHub link and a brief description of your algorithm.

Questions?