

HW3 Readme

106753027 戎諒

1. Usage

python Search_Gui.py

Then follow the step of Chapter 4.

2. Dependencies

OS: Ubuntu 16.04 LTS

Python: 2.7.12

Numpy: 1.13.3

Scipy: 1.0.0

Sklearn: 0.19.1

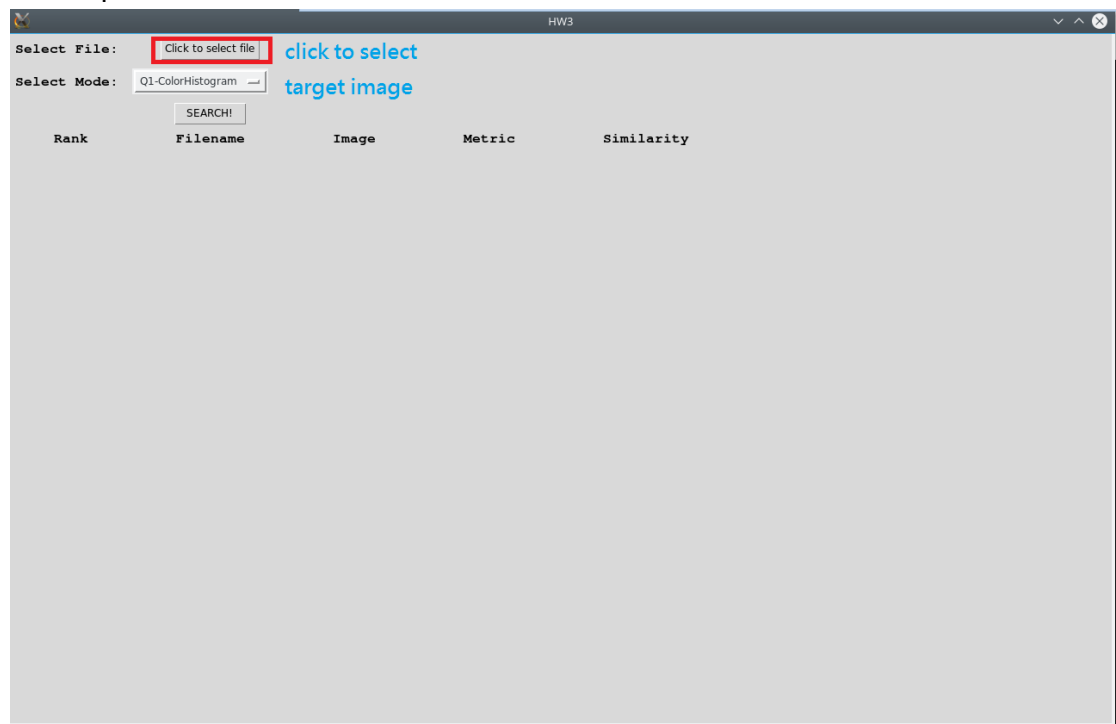
Pillow: 4.3.0

3. File structures

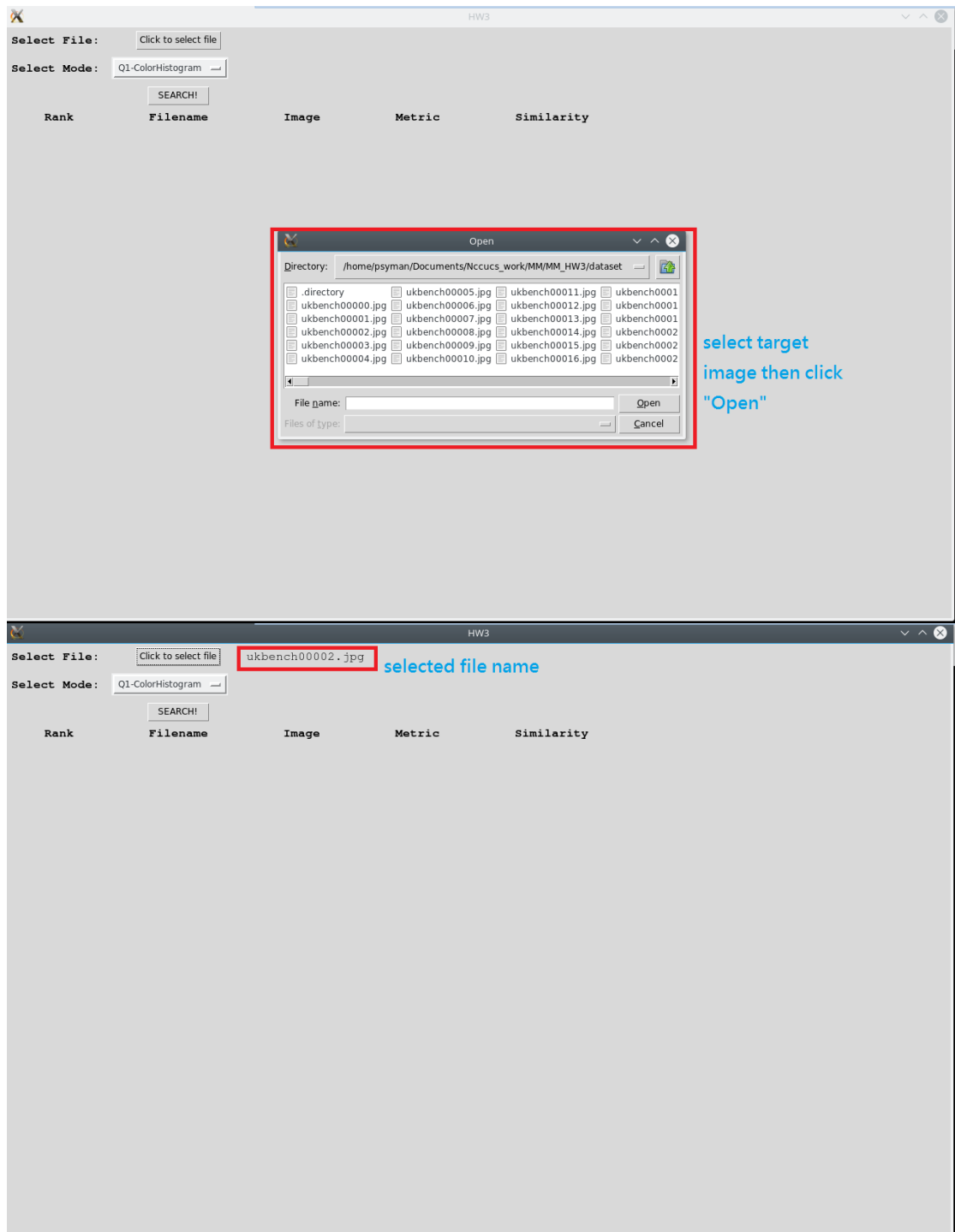
Please refer to FileStructure.txt

4. GUI

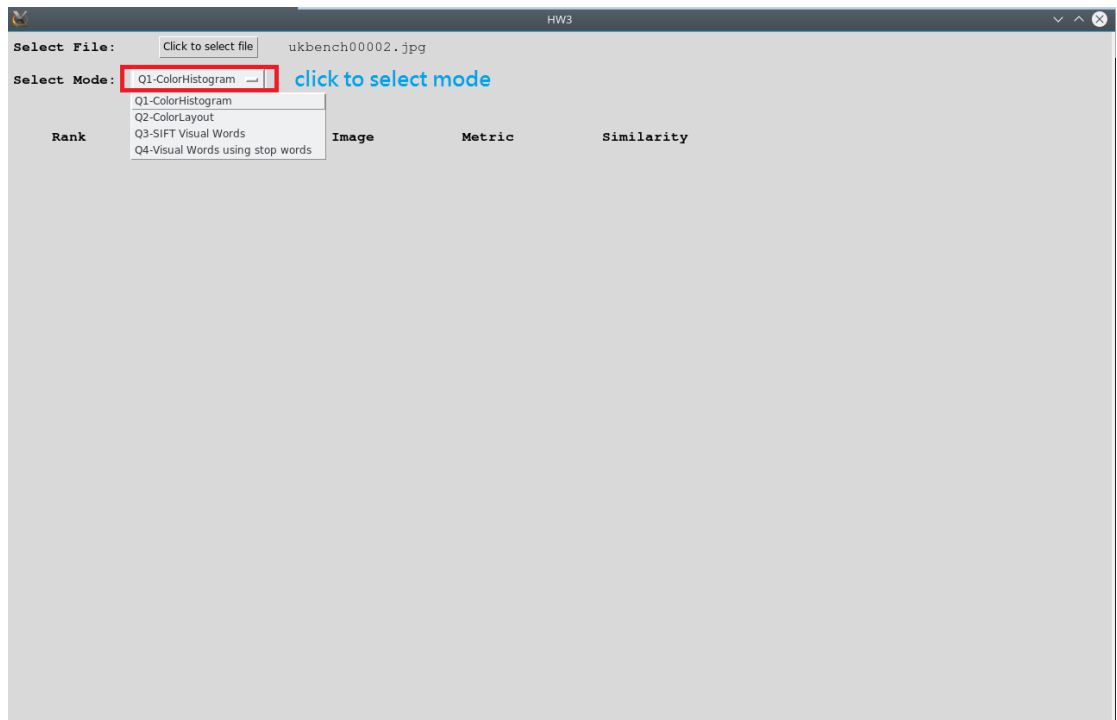
1. Startup



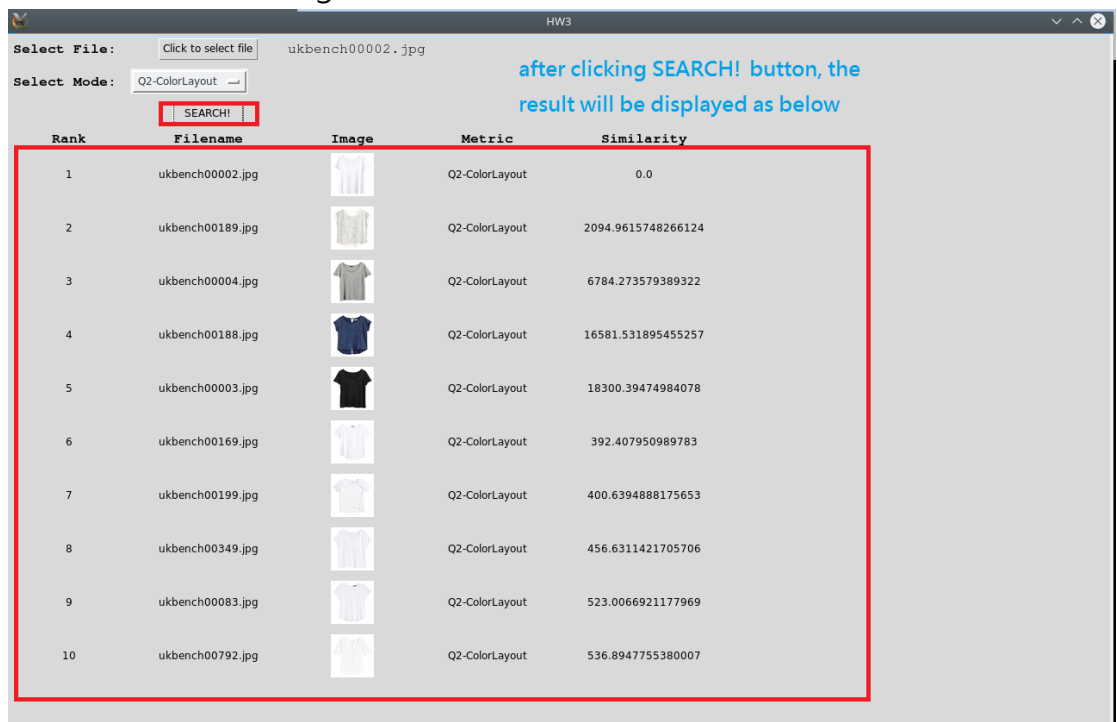
2. File selection



3. Mode selection



4. Search & result listing



5. Control flow

1. Select target image file, must be .jpg type
2. Select a search mode
3. Click "SEARCH!" button

6. Search logic

Cloth type (from clothing_metadata.csv column 2) > similarity

(ColorHistogram...etc)

7. Other notes

- A.** Will take about 3~5 minutes for the GUI to start due to the calculation of KMeans and sift file loading.
- B.** KMeans—K = 20 after a couple of experiments
- C.** Metric : L2 norm