INFO7374 AlgorithmicDigitalMarketing

Yifu Liu: 001083896
Pengfei He: 001426963

Presentation PDF version
Assignment2_Team7.pdf

Codelab Link
https://codelabs-preview.appspot.com/?file_id=1M_ro1iVXUX_ZfFXNPUn7OEgyWV1D0NAuIQdN_68AAKw#4

Our Submission
We implemented all the three similarity search methods.

We used the first implement version to create an app fulfill the mode two, which allows user to upload a new image and return k images similar to it. This app is published on Anvil cloud.
The public url is bitter-general-top.anvil.app

Since the reference app for **second implement version** is already a fully developed search app. We just **run it on docker** to use it.

We used the **third implement version** to create an app **fulfill the mode one**, which allows the user to select one image and get k similar images based on **elasticsearch**. Our web app is developed using django framework.

Data Preprocessing
Inside the data_preprocessing folder. We used the **bson_and_image preprocessing.ipynb** file to generate sample images, as well as have an insight of the category-id. Screenshot of run time Is included.

Assets
Inside the assets folder are images we used to run our implementaion.

Similarity Search
This folder holds the source code of our two app:

1 Implement Version 1
SearchAppFinal.ipynb is the source code (integrating of Anvil App is written inside). Screenshot of run time is included.

2 Implement Version 2
Screenshot of run time.

3 Implement Version 3
Inside the generate nearest neighbors are python code to generate nearest_neighbors.json. Indexing of elasticsearch is based on this json.
Inside search_app is the source code of django app. VIrtualenv is required to run it.
Screenshot of run time is included.