# 1 How to run a scraper

1.1. Open a new cmd:



Figure 1: Open a new cmd.

1.2.Copy the first 5 lines of commands from HCNCSync/cmd commands.txt:

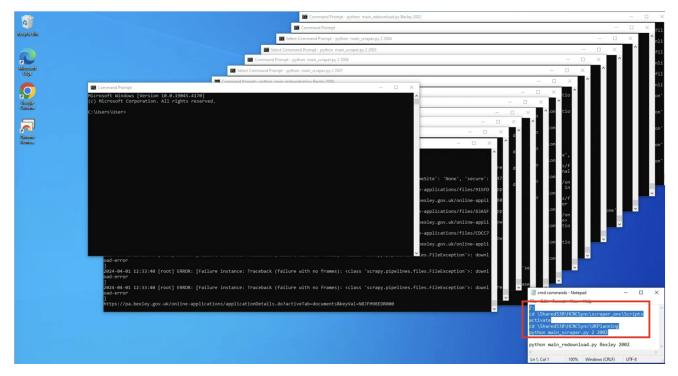


Figure 2: Copy the commands.

## 1.3. Paste commands to the opened cmd:

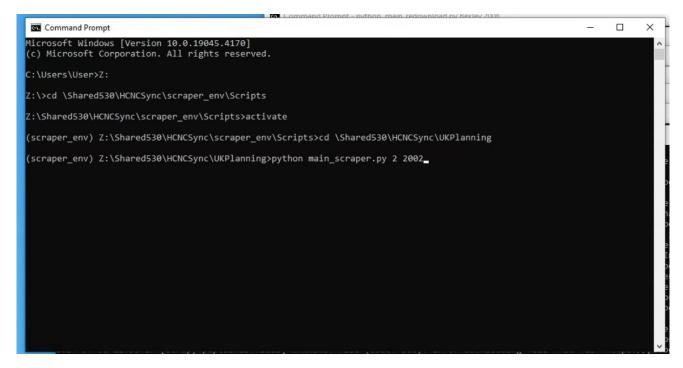


Figure 3: Paste the commands.

## 1.4. Modify the last command to run a specific scraper:

Please check HCNCSync/Lists to ensure the index and year of a specific authority is available before running a scraper. If the authority is not available, download it from Dropbox folder: HCNCSync/Xunzhao/Application lists (424 LAs).

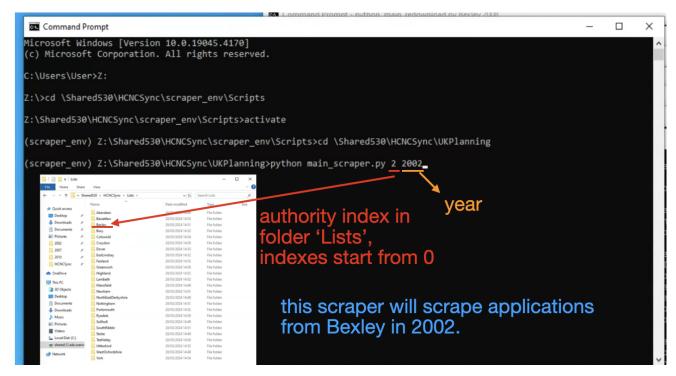


Figure 4: Modify the last command to run a specific scraper.

1.5. The scraped data will be stored in ScrapedApplications/authority\_name/year/0.results, while the scraped documents will be stored in separate folders: ScrapedApplications/authority\_name/year/application\_id.

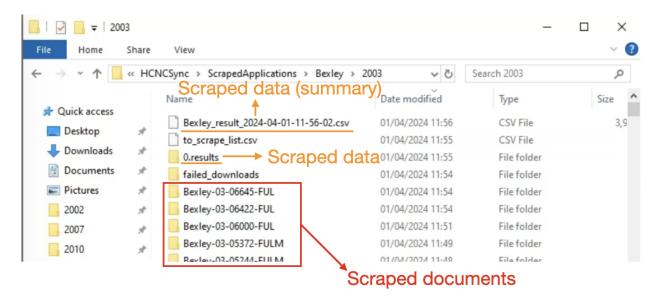


Figure 5: The scraped data and documents.

# 2 How to re-scrape and re-download

### 2.1 Re-scrape applications

- 2.1.1. We need to re-scrape applications for any of the following reasons:
  - #Failed# Some applications are unavailable for the moment (i.e. webpage maintenance, poor network connection);
  - #Failed# The scraper is crashed due to bugs;
  - #Uncompleted# The scraper is interrupted by users.

The indexes of failed applications and uncompleted applications are stored in ScrapedApplications/authority\_name/year/to\_scrape\_list.csv. The list is exemplified in Fig. 6.



Figure 6: The content of to\_scrape\_list.csv

2.1.2. To re-scrape applications, run the command below (see Section 1.4 for explanations):

python main\_scraper.py authority\_index yea

The scraper will load to\_scrape\_list.csv and scrape all applications in the list until the list is empty.

#### 2.2 Re-download documents

2.2.1. Similarly, some documents could be unavailable when scraping. If the download of a document was failed, the id of corresponding application would be stored in ScrapedApplications/authority\_name/year/failed\_downloads, as shown in Fig. 7.

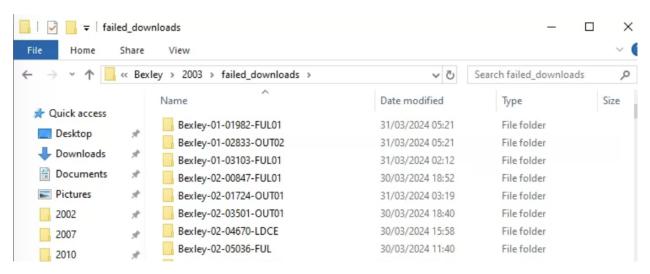


Figure 7: The failed\_downloads folder

2.2.2. To re-download documents, run the command below:

python main\_redownload.py authority\_name year

An example is available in HCNCSync/cmd commands.txt (see Fig. 8):

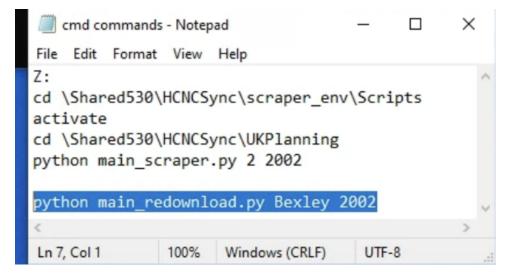


Figure 8: Re-download documents for applications from Bexley in 2002.