CS 410 Presentation

YELP Review Text Extraction
Team NVK
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Prerequisites

- A Python 3.8 or 3.9 environment
  - Our team used Anaconda environment to run the application
- Node.js v16.17.0 or similar
- Cloned github repo: https://github.com/nikhilk7153/NVK-Final-Project

Set Up Python Environment

1.   Open the Python folder inside of the project folder
2.   Run the `pip install -r requirements.txt` command to install the required modules
3.   Run the `python -m flask run` command to run the API application

Set up Node.js Environment

1. Open the js-ui inside the project folder
2. Run the 'npm install' command
3. Run the 'npm start' command and then the webpage will open automatically in the browser (this may take a minute)
4. If the app starts and the page doesn't open you can open it by opening http://localhost:3000/ in the browser
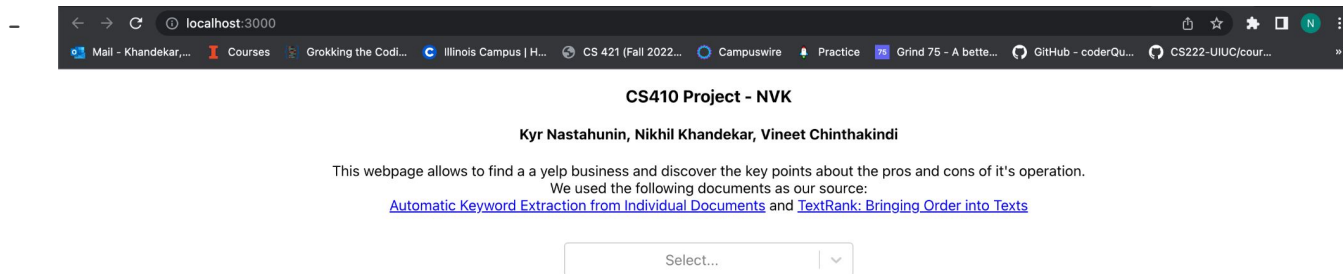
How to Run

- Using the UI
  - Run the `python -m flask run` command from the Python folder to run the API application
  - Run the `npm start` command from the js-ui folder to run the UI application (this may take some time)
  - Open http://localhost:3000/ in your browser
- Using HTTP requests
  - Run the `python -m flask run` command from the Python folder to run the API application
  - Enter http://localhost:5000/api/keywords/ChIJ4Vrk3Bo3DogRpHfXxy0yu98 as a URL
  - You can change the ID at the end of the request to a different Google Place ID. The IDs can be found on this web page: https://developers.google.com/maps/documentation/places/web-service/place-id

Webpage at the beginning

- Upon starting the page, you will see the following page:

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Supply Input

- Type in the name of a restaurant and it will show up if there is a Yelp Review Available from the Yelp API and click on it

Obtain Output

You can obtain the output of a review and see the importance of the extracted key words along with the classified sentiment

McDonald's, East Green Stre... ✕ | ⌄

Keywords

keyword	importance	sentiment
small fries	4	Neutral
40 minutes	4	Neutral
employee gave	3.5	Neutral
employee	1.5	Neutral
ordered	1	Neutral
getting cold	4	Neutral
kindly ask	4	Positive
worst employees	4	Negative
hire anybody	4	Neutral
small order	3.333333333333333	Neutral
order	1.3333333333333333	Neutral
place	1	Neutral
receive free fast service ..	22	Positive
coffee .. apparently nonpaying customers	19.166666666666668	Neutral
left waiting ..	9.5	Neutral
constantly asking staff	8	Neutral
day yelling talking	7.666666666666667	Neutral
free coffee	6.166666666666666	Positive
harassing customers	5	Negative
paying customers	5	Neutral
occasional sandwich	4	Neutral

Original reviews:
- "Horrible! We ordered a small fries and nuggets. That's it and we were waiting for 40 minutes. When we asked the employee (nicely might I added) about the order the employee gave us an attitude and argued."
- This place has the worst employees I guess they just hire anybody. You'll be waiting an hour for a small order and sometimes the order will be just sitting there getting cold and if you kindly ask about your order after they've seen you standing there for an hour and ignoring you they'll get mad at you, yell at you, and refuse to help you. This place is wild idk where they find these people.

Demo Video