**Jason Chou Final Project Documentation**

**Project code**

* <https://github.com/jason97729/final_project>
* README: <https://github.com/jason97729/final_project/blob/master/README.md>

**Data sources**

* Bing Covid-19 API (It has become inaccessible; however, I was able to cache the data. I have uploaded the cache onto GitHub. Please download it from there.)
  + Website: <https://bing.com/covid>
  + Data: <https://bing.com/covid/data>
  + Documentation: <https://www.programmableweb.com/api/bing-covid-19-data-rest-api-v10>
  + Format: json
  + I access the data through <https://bing.com/covid/data>
  + Summary of data:
    - More than 5000 records available
    - 51 records retrieved
    - State that report confirmed Covid-19 cases. The attributes are ‘totalConfirmed’ and ‘totalDeath’. Which represent the total confirmed covid-19 cases and total covid-19 deaths.
  + Cache file:

A screenshot of a computer

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* NY Times API
  + Website: <https://developer.nytimes.com/apis>
  + Documentation (Top Stories): <https://developer.nytimes.com/docs/top-stories-product/1/overview>
  + Format: json
  + I accessed that data through <https://api.nytimes.com/svc/topstories/v2/health.json> and my NY Times’ API key.
  + Summary of data:
    - 25 records available
    - 5 records retrieved
    - Information about the top stories in health category. The attributes are ‘title’ and ‘url’. Which represent the title and the url of the top stories.
  + Cache file:

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**Database**

* Database schema:

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* Foreign key-primary key relations:

In Counties table, it contains a foreign key (StateId) that point to the primary key (Id) in the States table.

* Screenshots showing some of the data in each of your tables:

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**Interaction and Presentation Plans**

* High-level, plain-English description of the user-facing capabilities of your project—what options does the user have for selecting and displaying data?

On the home page, the user will first see the top five headlines about health from the New York Times, with the options to click to go to the articles. Then, the user will see a table, bar graph, and two pie charts for the cases and deaths reported for each state in the United States. Also, the user has the option to click on the state and view a table, bar graph, and two pie charts for cases and death reported for each county.

* Interactive and presentation technologies you plan to use (e.g., Flask, Plotly, command line prompts)

I used Flask and Plotly for the interactive data presentation.

* How to interact with the program:

1. Download all the necessary files from the GitHub repository

2. Run final\_project.py in your terminal

3. Browse the site and see the data visualization in the Flask app

## Demo Link

## Demo Link: <https://youtu.be/hEk0X3YpxEI>