
Instructions on how to start the Flask Application:

1. Open the "*web_application*" folder in a terminal or command prompt and navigate to the directory where the file "*app.py*" is saved.
2. Run the following command (or run from the IDE), to start the Flask development server: `python app.py`.
3. After the server starts, you can view the web pages by navigating to <http://localhost:5000/> (<http://localhost:5000/>) in your web browser.
4. After navigating to the port, a web page with two clickable links will be shown.
5. First link will show the Category data. The dropdown menu can be used to choose to view information about a specific category. There is as well the bubble chart which when a bubble is clicked will show information about a specific category.
6. On the other hand, the second link will show the Cluster data. The dropdown menu can be used to view information about a specific cluster.

Other Notes:

- The `category_data.json` and `cluster_data.json` files must be in the same directory as the script for the code to work correctly.
- The HTML files are found in the templates folder.
- The D3.js library was used to implement the Bubble Charts.

Difficulties:

1. The bubble chart for the list of categories (question 2,c) was implemented and the categories' information is outputted when the bubbles are clicked on, but for some reason the bubbles are too zoomed in and only two bubbles can be seen. Eventhough the other bubbles are there, I could not get the correct parameters to show them all.
2. The code for the bubble chart for the clusters (question 2,d) could not work.