Jason Kemp
Christopher Sayah

Final Project Outline:

1. What is your group's name?
    a. The SQL Injectors
2. Who are all the people in the group? List the first name, last name, and umich email for each.
    a. Christopher Sayah (sayah@umich.edu)
    b. Jason Kemp (jasonkem@umich.edu)
3. List the API(s) and/or website (using BeautifulSoup) that you will be gathering data from. If you have two people in a group you must use 2 APIs or 1 API and a website. If there are three people in a group you can use 3 APIs or 2 APIs and a website. The API(s) and website must be all different (not the same base URL)
    a. Weather: https://weatherstack.com/
    b. Football: https://collegefootballdata.com/key
    c. *Extra Credit* Baseball: https://appac.github.io/mlb-data-api-docs/
4. What data will you collect from each API/website and store in a database? Be specific.
    a. For the weather API, we will be storing all temperature, date/time, and accompanying location data within a database. By collecting this information, we will be able to cross-reference the temperature during specific games with the resulting scores of those games.
    b. For the football API, we will be storing all game scores, date/time, and accompanying location data within a database. By collecting this information, we will be able to cross-reference the resulting scores of each game with the temperature at each game.
    c. For the baseball API, we will be storing all game scores, date/time, and accompanying location data within a database. By collecting this information, we will be able to cross-reference the resulting scores of each game with the temperature at each game.
5. What data will you be calculating from the data in the database? Be specific.
    a. For the weather API, we will be calculating the average temperature for each location where professional teams play. We will break this data down per month and use that to run further analysis.
    b. For the football data, we will calculate the average amount of points scored, per city, per month. This will give us data that we can use to determine if the changing weather affects the point total.
    c. Similarly to the football data, we will find the average amount of points scored, per location, per month. Again, this data will be used to calculate whether the temperature of the location affects the total points scored in MLB games.
6. What visualization package will you be using (matplotlib, plotly, seaborn, etc)? See https://www.fusioncharts.com/blog/best-python-data-visualization-libraries/

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   a. For our project, we are planning on using Matplotlib. We have found this visualization package will display the information in which we want to present in the best manner.
7. What graphs/charts will you be creating?
   a. We are planning to utilize Matplotlib's bar graphs to display the average weather per month in professional sports team cities. In addition to bar graphs, we are planning to use a line graph that will display the regression of the data in which we are pulling from our APIs.
8. Who will be responsible for what? Please note that all team members should do an equal amount of programming and total work.
   a. For this project, we will be splitting the work up by discipline. Jason will be working with the APIs and getting relevant JSON data that will be used in the database. Chris will be doing the work with the database and importing and exporting all of the data. Once the data is finalized, Jason will be working on creating the infographics and final report. Chris will be in charge of importing the information back from the database, as well as any data clean-up that may be necessary.