

For my final project – I am planning on developing a tool that allows a user to input the name of a company they hope to explore and a location in which they hope to do so. My program will scrape LinkedIn to find the employees that work for that company in the specified location using the advance filter options. After doing so, program will create a dictionary of universities that the employees of these companies graduated from. The value corresponding to each university (key) will be the total number of employees that come from that university who are currently working for that company. The program will finally output the top 10 represented universities at that company. Additionally, my program will scrape a college ranking website (U.S. News Best College Rankings) to extract and output the ratings of those top 10 universities in the united states. My main stat source will be LinkedIn: <https://www.linkedin.com> and U.S. News Best College Rankings <https://www.usnews.com/best-colleges/rankings/national-universities>. Here are my data challenge score components:

- Web API you haven't used before that requires OAuth (6 points): LinkedIn **+6**
- Scrape a new single page: U.S. News Best College Rankings **+4**
- Total score: **10**

This project will allow me to scrape at least 100 records that have 5 corresponding fields. My presentation will include an interactive prompt that allows a user to look up a company and then choose a presentation option for the top 10 schools represented at the company whether that is a pie chart or a bar or a map graphic. Additionally, a user will be allowed to select one of the schools to display their rankings in addition to having a graphic that compares the ratings of the top 10 represented schools.

The data presentation tools are the interactive command prompt that allows the user to choose a type of graph they want to have displayed – whether that's a bar graph, or a pie chart or a map graphic. I will be using plotly graphics in addition to the Flask app to allow the user to choose data visualization options and display those in HTML tables.