Introduction:

My project is focused on the development of a Python-based application that web scrapes job websites and performs statistical analysis on the resulting data. The primary objective of the project is to provide a useful tool for job seekers and recruiters alike, helping them to identify trends in the job market.

We believe that by leveraging web scraping techniques and statistical analysis, our application will empower job seekers to identify job trends and help recruiters to streamline their hiring process. In this proposal, we will provide a detailed overview of the project’s technical details, including the programming languages and tools that we plan to use to achieve these objectives.

Our ultimate goal is to create a user-friendly application that delivers valuable insights into the job market, enabling job seekers and recruiters to make informed decisions and achieve their desired outcomes.

Project Description:

Our application will be developed in Python, utilizing popular libraries such as Selenium to scrape job listings from various websites in Lebanon. Our web scraping process will involve extracting key details such as job titles, locations, timeframes, departmental information, and other relevant information from the websites, which will then be stored in a JSON file.

To conduct statistical analysis on the scraped data, we plan to employ powerful tools like Pandas. In addition to these features, we also plan to implement a dashboard that will allow users to easily visualize job trends, as well as a recommendation system to assist job seekers in finding suitable employment opportunities. The user will be able to filter his selections.

Overall, our application will leverage cutting-edge technologies to deliver comprehensive job search functionality for users.

In the GUI I’ll be using the PYQT5 library. Plotly Express is also used for drawing interactive graphs in addition to folium to show locations.

Some more libraries might be included upon finishing the project and adding some more features.