**Team Members:**

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**Summary:**

This project aims to create compelling visualizations of job market data, including job listings, job descriptions, required skills, salary information, and educational requirements. By analyzing this data, we intend to provide insights into the job market landscape, such as the most in-demand skills, salary trends, and educational prerequisites for various professions.

**Motivation:**

Understanding the dynamics of the job market is crucial for both job seekers and employers. Job seekers need to know which skills are in high demand, what qualifications are required for specific roles, and what salary ranges to expect. Employers benefit from insights into the talent pool's characteristics and salary benchmarks in their industry. This project seeks to address these needs by creating informative visualizations that help individuals make informed career decisions and assist businesses in talent acquisition strategies.

**Background:**

Job market data is abundant, but there is a lack of comprehensive datasets that include job descriptions, skills, salaries, and educational requirements. Existing visualizations often focus on singular aspects of the job market, such as salary comparisons or skill demand, without offering a holistic view.

Our project aims to fill this gap by collecting and curating a rich dataset that encompasses various dimensions of job listings. We will leverage data visualization techniques, learned this semester, to present this information in an easily digestible format.

**Questions / Objectives:**

What are the most sought-after skills in the current job market?

How do salary expectations vary by industry and location?

What educational backgrounds are commonly required for specific professions?

Can we identify emerging job trends or skill shifts in the market?

**Datasets:**

We will gather data from various job listing websites and potentially collaborate with companies to obtain more detailed job information. Some of our resources and references, at this point in time, are:

https://medium.com/@msalmon00/web-scraping-job-postings-from-indeed-96bd588dcb4b

https://www.kaggle.com/datasets/ravindrasinghrana/job-description-dataset

https://www.kaggle.com/datasets/ruchi798/data-science-job-salaries/data

We are primarily interested in fields listed below:

* Job title
* Job description
* Required skills
* Salary information
* Educational requirements
* Company details (if possible)

**Methods:**

**Data Cleaning and Preparation**

Data cleaning will involve standardizing job titles, handling missing values, and categorizing industries. We will also ensure data consistency and quality.

**Visualization Methods**

We may utilize a range of visualization methods, including:

* Bar charts and heatmaps to display skill demand by industry.
* Scatterplots to illustrate the correlation between education level and salary.
* Sankey diagrams to depict career pathways based on educational backgrounds.

**Dataset Adequacy**

We will ensure our dataset is adequate for this project. It will cover essential attributes of job listings. Including job descriptions, skills, salaries, and education requirements will allow us to create meaningful visualizations that address the project objectives.

**References**

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