Milestone 2

Objectives

How is the job market perspective for a job seeker currently? This is a question that is especially vital to us as young graduates. The motivation behind this data visualization project is to provide insights into the evolving job market, helping individuals and organizations understand which job titles, locations in the United States, and industries are experiencing the highest demand, as well as how compensation and benefits are distributed across different sectors.

We aim to build an interactive and informative visualization platform to:

- Explore job demand across roles and regions inside the United States of America, a very good referent around the world.
- Analyze compensation across sectors and industries.
- Understand the distribution of remote vs. on-site opportunities.

The primary audience for this tool is job seekers, particularly recent graduates, who are making crucial career decisions. Our goal is to empower them with data-backed insights into the labor market.

Tools

To build the visualizations and handle the data, we will use the following tools:

- JavaScript, HTML, CSS for frontend development and integration (Lectures 1 3).
- D3.js for building interactive, browser-based visualizations (Lectures 4 5).
- Leaflet.js, GeoJSON for interactive maps (Lecture 8).
- JSON/CSV as data formats for communication between preprocessing and visualization layers (Lecture 4).
- Python (Pandas, NumPy, Seaborn) for data preprocessing, cleaning, and aggregation (No lecture attached, previously acquired skills).

Minimal Viable Product (MVP)

The MVP will include:

- A dashboard-style page with a bar chart showing job demand by job title.
- A dropdown menu to filter results by industry or location.
- A salary overview with average or median compensation figures per role and location (already working with USA states).



These core features will deliver immediate value to users, allowing them to quickly gauge high-demand jobs and associated salaries.