Project Scope:

Initially, the U.S. Bureau of Labor Statistics (BLS) Public Data API (https://api.bls.gov/publicAPI/v2/timeseries/data/) was selected as the primary data source for this project. The BLS API offers comprehensive, official employment statistics directly from the federal government, which would have provided authoritative and regularly updated labor market data.However, due to technical issues during the data retrieval process from the BLS API. These issues prevented successful extraction of the required datasets As a result, I used alternative data source: the "AI Impact on Job Market 2024-2030" dataset available on Kaggle (https://www.kaggle.com/datasets/sahilislam007/ai-impact-on-job-market-20242030). This dataset provides structured information relevant to analyzing AI's influence on employment trends and job market dynamics over a six-year projection period. While this represents a deviation from the original data acquisition plan, the alternative source remains appropriate for the project objectives and provides sufficient data quality to support meaningful analysis.

Data Sources:

Task Statements.csv: I downloaded this data set from https:// www.on etcenter .org/dat abase.html and this is already downloaded in my git repository in the data folder. This dataset is extracted from the **O*NET 30.0 Database**, a comprehensive occupational information system maintained by the U.S. Department of Labor. The file specifically contains **task-level descriptions** for a wide range of occupations, allowing analysis of what workers actually *do* in different roles and moreover its relevance to my project is that I use this to explain that jobs whose task type is core are less likely to be automated as compared to the ones whose task type is supplemental.

ai_job_trends_dataset.csv: I used the kaggle API which automatically downloaded a zip file and then python code unzipped the file. Covers a future-facing time period: from 2024 to 2030. Kaggle Designed to reflect projected changes in job market dynamics influenced by AI—such as jobs increasing or decreasing, shifts in demand, and the interplay of technological change with workforce composition.

automation_data_by_state.csv: This dataset is basically containing jobs with their respective risks of being automated. The dataset links U.S. occupational data with automation risk scores, as well as salary and employment figures.It is designed to enable analysis of how vulnerable different professions may be to automation, and segregate them by states in the USA.

Issues/Difficulties:
The core issue I face is to make graphs,pie charts and histograms in python and how to present them. Another difficulty I face is that there are not many datasets available relevant to my project and the ones that do have a lot of repeated and overlapping information. The data is going fro csv to database but I am not able to make python ready form the database.