SRS Document

# Background

Millions of students apply for internships/jobs every year, resumes play an important role in playing the first impression. The recruiters spend a max of 2-3 minutes reviewing a resume after it landed in their mailbox, job boards or ats application. surprisingly, more than 70% of resumes get rejected in the initial screening.

# Project Overview

We aim to conduct a comprehensive analysis of our student interns to gain insights about relationship between their academic performance, event participation, career aspirations and factors influencing their success. We have collected a dataset containing various attributes for each student.

# Hardware requirements

**Computer:** A standard laptop or desktop with at least 8GB of RAM and a modern multi-core processor (e.g., Intel i5 or equivalent).

**Storage:** Sufficient storage capacity to handle the dataset and any intermediate files.

**Internet Connection:** Stable internet connection for downloading datasets, libraries, and other resources.

# Software requirements

**Operating System:** Windows, macOS, or Linux.

**Programming Language:** Python (with relevant libraries).

**Python Libraries:**

* **Data Manipulation & Analysis:** pandas, NumPy
* **Data Visualization:** Matplotlib, Seaborn

**Development Environment:**

* **IDE/Editor:** Jupyter Notebook, or VS Code

# constraints

* **Time**: The project must be completed within a given timeframe.
* **Resources**: Limited to personal capacity and Python tools.
* **Technology**: Exclusively using Python for all stages of the project.

# assumptions

* The dataset provided is comprehensive and accurate, with no outlier effects.
* Stakeholders are available for regular reviews and feedback.
* Necessary tools and resources (e.g., Python libraries, software) are accessible throughout the project.

# risks

* **Data Quality**: Incomplete or inaccurate data could impact analysis results.
* **Technical Challenges**: Potential difficulties in handling and processing large datasets.
* **Stakeholder Expectations**: Misalignment of expectations regarding the depth and scope of the analysis.

# functional requirements

* **Data Handling:** Import, clean, and transform data.
* **Analysis:** Perform statistical and comparative analysis (e.g., GPA vs. income).
* **Visualization:** Create charts and plots to represent data.
* **Reporting:** Generate and export reports of findings.

# non-functional requirement

* **Performance:** Efficient processing of moderate to large datasets.
* **Usability:** User-friendly interface and clear documentation.
* **Reliability:** Accurate results and robust error handling.
* **Security:** Protection of sensitive data.
* **Maintainability:** Well-organized and modular code for easy updates.

# external interface requirements

NA

# techonology used

* **Version Control:** Git and GitHub for version control and collaboration.
* **Data Processing Frameworks:** Pandas for data manipulation, and matplotlib/seaborn for data visualization.
* **Documentation Tools:** Markdown or other documentation tools for creating reports and presentations.