Humanalytics

Human Resource Analytics Dashboard

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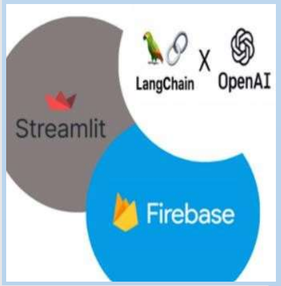
Abstract

Integrating sentiment analysis into **HR dashboard** to understand employee reactions during **layoffs**. By analyzing feedback and social media posts, we gain insights into **emotional** impacts. This aligns with our goal of improving user experience, promoting mobility, and ensuring compliance. Our AI-driven analytics provide actionable insights for proactive decision-making.

Introduction

- **Humanalytics** addresses sentiment surrounding layoffs in organizational restructuring.
- **Utilizes datasets** containing employee feedback to delve into emotional impact.
- **Implements** advanced AI techniques like the Large Language Model (LLM).
- **Analyzes** textual data to extract sentiments and understand emotional responses.
- **Aims** to gain insights into morale implications of layoffs within the organization



Target Audience: Audience is mid-level company HR departments. Using sentiment analysis, they can understand layoff impacts and adjust policies for better management.
Empowering HR Departments: Empowers HR by providing insights to navigate layoffs sensitively. Data-driven approaches address concerns, fostering empathy and support.
Comparative Analysis for Affected Employees: Laid-off employees receive comparative analyses, aiding their transition.

Dataset

Raw Data of Layoffs It contains essential information regarding employee layoffs, including details such as employee names, departments affected, dates of layoffs, and reasons for termination.

Raw Data from Employee Tweets

The raw data collected from employee tweets constitutes another crucial dataset for our HR Dashboard project. This unstructured dataset captures textual nuances related to HR activities, including employee feedback, sentiments, and perceptions.

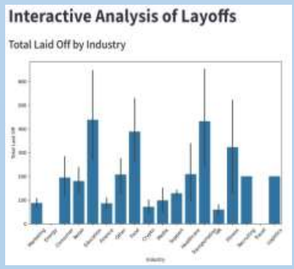
Dataset. A
- | - Code
- | |- App.py
- | |- Sentimental analysis.py
- | - Data
- | |- Processed
- | |- Raw
- | - Results/
- | |- Figure.1
- | |- Figure.2
- | |- Models
- | readme.txt

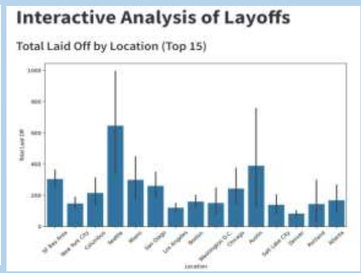
Methodologies

- **Frontend Development:** VS Code and Streamlit, enhancing accessibility and usability for HR professionals and recruiters.
- **Backend Infrastructure:** Powered by Python,
- **Database Solution:** Firebase serves as our chosen database solution, **AI. Model Integration:** GPT-3.5, llm for intelligent data analysis and interpretation.

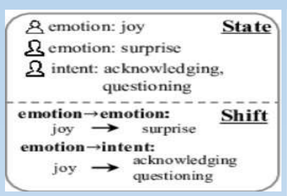
Results

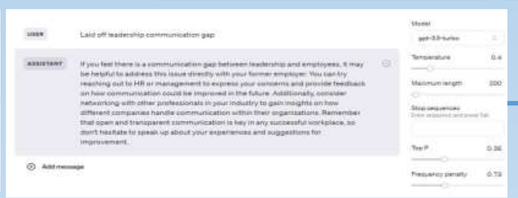
- **Comprehensive** view of workforce dynamics Implemented two graphs in HR Dashboard for workforce analysis.
- First graph displays layoff percentage for departmental impact assessment.
- Second graph shows total layoff numbers for quantitative perspective.
- These graphs offer visual insights into workforce dynamics and organizational changes. Introduces innovative approach to HR practices with Recruitment Prediction Dashboard.

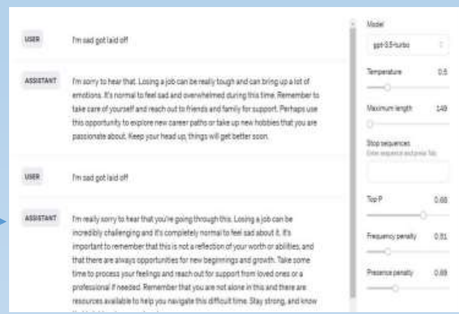


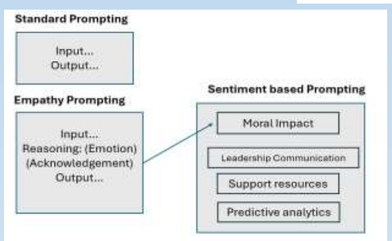


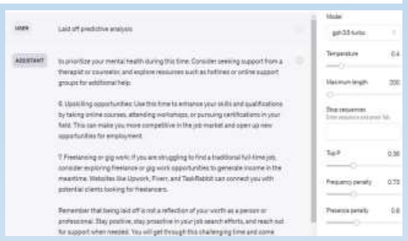
Open Ai LLM Fine Tuning

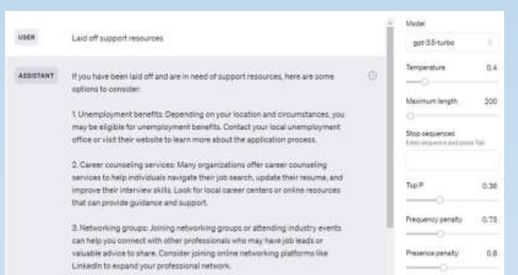




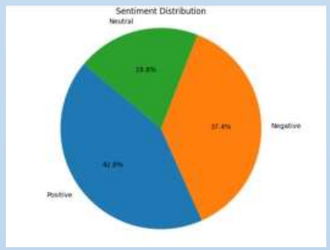


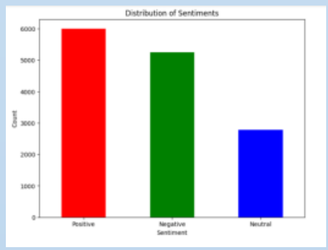


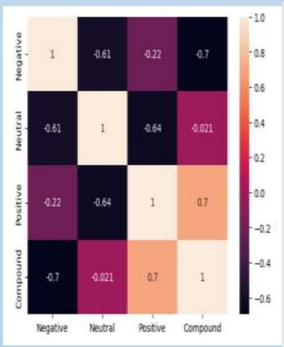




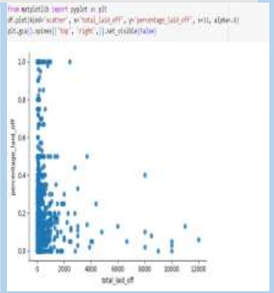
Results (cont..)





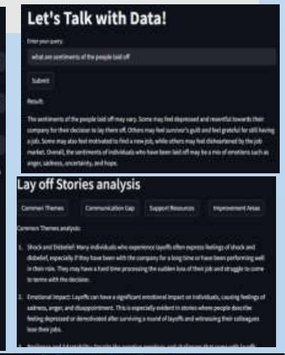


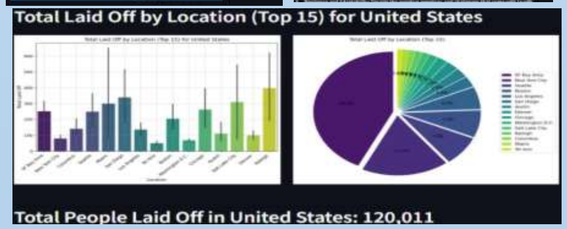
Sentiment analysis on layoff text data reveals a prevailing negative sentiment.
- Employees express feelings of disappointment, frustration, and sadness.
- Negativity is heightened in texts discussing ramifications on careers and financial stability.
- Sentiments of uncertainty and anxiety about the future are evident.
- Employees express apprehensions about securing new job opportunities and navigating post-layoff challenges



Discussion

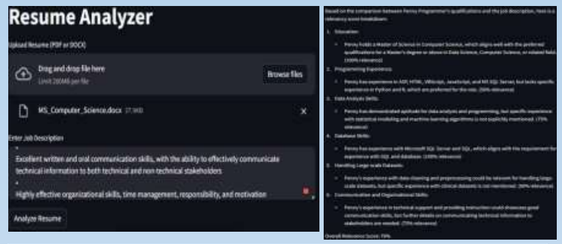
Utilizes natural language processing for sentiment analysis.
- Provides valuable data for informed decision-making.
- Leverages GPT models to uncover emotional responses during transitions.
- Enables organizations to tailor support initiatives effectively.
- Encourages integration of innovative approaches for managing layoffs.
- Prioritizes empathy and proactive support for employee





Conclusion

- Introduces innovative approach to HR practices with Recruitment Prediction Dashboard.
- Combines frontend, backend, and AI components for real-time insights.
- Streamlines recruitment processes and enhances user experience.
- Ensures data security and compliance.
- Integrates features like resume analysis and sentiment analysis for enhanced functionality.



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