# 📊 Sentiment and Feedback Analysis Dashboard

## 📝 About Project

This project focuses on analyzing non-teaching staff feedback to uncover insights about work satisfaction, infrastructure, workload, recognition, salary, safety, and overall well-being. The aim is to transform subjective survey opinions into structured, visual insights that can support management in making data-driven decisions for a healthier and more productive workplace.

## 🎯 Objectives

* Measure Infrastructure Satisfaction – Identify how staff rate workplace facilities and areas needing improvement.
* Evaluate Recognition & Appreciation – Determine if employees feel valued and acknowledged.
* Assess Workload & Hours – Compare working hours with perceptions of workload manageability.
* Review Salary & Benefits Satisfaction – Understand alignment of pay and benefits with expectations.
* Examine Workplace Safety & Respect – Evaluate employee confidence in workplace safety and respect.
* Sentimental Analysis of Non-Teaching Staff – Collect suggestions, requests, and comments to better understand staff concerns and needs.

## 📂 Dataset Explanation

1. Responses – Total number of survey entries.
2. Gender – Male/Female respondents.
3. Role/Category – Cleaning Staff, Mess Workers, Drivers, Security Guards.
4. Infra\_Satisfaction – Staff rating of infrastructure provided for work.
5. Recognition – Whether staff feel their contributions are valued.
6. WorkHours\_Group – Categorization of working hours (e.g., >10, 7–8, 9–10).
7. WorkHours\_Opinion – Perception of hours (Good, Better, Average, Decrease).
8. Salary\_Satisfaction – Satisfaction with salary/benefits (Positive/Neutral/Negative).
9. Safety & Respect – Perception of safety and respect in the workplace.
10. Sentiment\_Score – Average score derived from positive/neutral/negative comments.
11. Additional\_Comments – Open-ended responses for suggestions (used for word cloud).

## 🔗 Links / Hyperlinks

Dataset & Project Files (Google Drive): <https://docs.google.com/spreadsheets/d/1RQ3OtzkhpdQJClQnwz_Yo7ZXsPHXeB8s/edit?usp=drive_link&ouid=109578460487543640818&rtpof=true&sd=true>

<https://drive.google.com/drive/folders/1N6XHvr21jPA3XsRbve5TfRlGzTxCR--P?usp=drive_link>

## 🖼️ Picture Explanation

* Photo 1 (Drivers): Shared positive responses on infrastructure, with some unsatisfactory feedback.
* Photo 2 (Security Guards): Generally satisfied but requested a waiting room for visitors.
* Photo 3 (Cleaning Staff): Not satisfied with salary; requested more staff support, more holidays, but feel safe and respected.
* Photo 4 (Mess Workers): Happy with recognition and environment, but want shorter working hours.

## 📈 Flow Chart – Storyline

Survey Responses → Data Cleaning & Preprocessing → Categorization (Gender, Role, Hours, Sentiment) → Visualization (Charts & Word Cloud) → Insights (Infra, Salary, Recognition, Safety) → Recommendations & Action Plan

## 🖥️ Layout

- Top Section: Key KPIs (Responses, Gender, Average Infra Satisfaction, Recognition %, Salary %, Safety %).  
- Middle Section: Working Hours analysis, Word Cloud, Salary Satisfaction, Sentiment Donut Chart.  
- Bottom Section: Sentiment Scores, Infra Satisfaction split by Male/Female.

## ✅ Conclusion

The dashboard highlights important insights:  
- Safety levels (88%) are high, but salary satisfaction (17%) is a key area of concern.  
- Recognition (21%) is low, signaling a need for stronger appreciation initiatives.  
- Working hours remain a recurring issue, with many requesting reductions.  
- Additional feedback emphasizes salary increase, resting rooms, better facilities, and holidays.  
  
This project demonstrates how survey feedback can be visualized to provide actionable insights for HR and organizational planning, ensuring better well-being and productivity across the workforce.