

MINI REPORT & DASHBOARD

College Event Feedback Analysis

Turning Student Feedback into Actionable Insights

Data Science & Analytics – Task 3

LIPIKA PARIDA
Future Interns





Overview



Objective

The objective of this project is to convert student feedback into clear, actionable insights that support better decision-making for college event planning. By combining satisfaction ratings with sentiment analysis, the project identifies what drives student engagement and where targeted improvements are needed.

Dataset

The analysis is based on a simulated Google Forms feedback dataset containing student responses submitted after attending various college events.

Each response includes event details, a satisfaction rating on a 1–5 scale, and a written feedback comment.





What Was Analyzed

- Student satisfaction ratings (1–5 scale)
- Event-wise and category-wise rating patterns
- Sentiment of feedback comments (Positive / Neutral / Negative)
- Common themes in student feedback

Tools & Techniques Used

Python & Google Colab for analysis

Pandas for data cleaning and manipulation

TextBlob (NLP) for sentiment analysis

Matplotlib for charts and visualizations





Outcome

This analysis transforms raw feedback into decision-ready insights on student satisfaction, engagement patterns, and recurring issues. The findings enable event organizers to prioritize improvements that directly enhance student experience and event effectiveness.

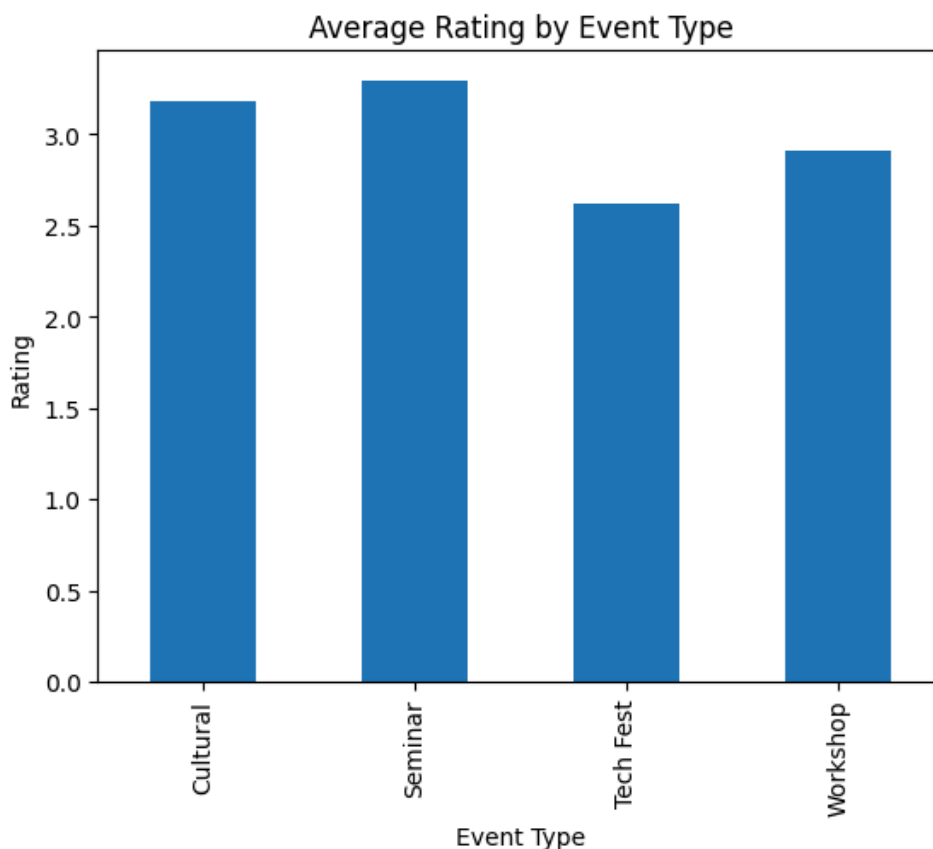


Graphs of Ratings & Key Insights

Rating Analysis Overview

Student satisfaction ratings (on a 1–5 scale) were analyzed to understand how different types of college events performed and to identify patterns in student preferences.

Average Rating by Event Type



The bar chart above shows the average ratings received by different event categories.



Average Rating by Event Type

Key Insights:

- **Workshops** received the highest average ratings, indicating strong student engagement.
- **Seminars** showed comparatively lower ratings, suggesting scope for improvement.
- Interactive and hands-on events tend to generate higher satisfaction levels.

Top-Rated Events


Based on average ratings, certain events consistently performed better than others.

Observations:

- Events with practical learning components were rated more positively.
- Well-organized events with clear objectives received higher feedback scores.

Key Insight

Student satisfaction is strongly driven by interactivity and structure. Events that actively involve participants consistently outperform passive formats, making engagement design a critical success factor.



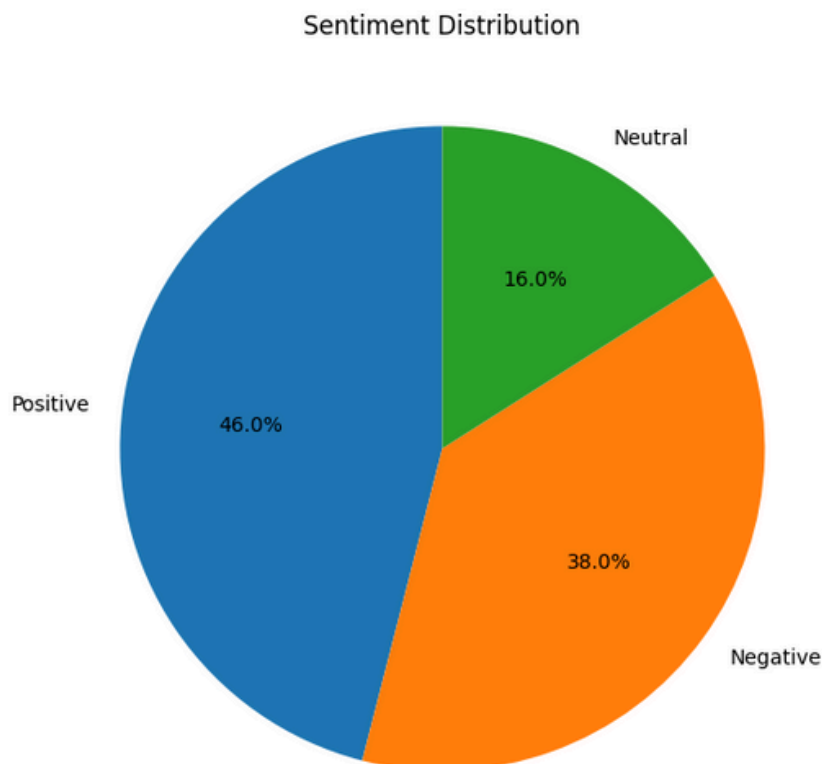
Sentiment Analysis Summary

What Was Done

Natural Language Processing (NLP) techniques were applied to student feedback comments to understand the overall emotional tone of responses. Each comment was classified as Positive, Neutral, or Negative based on sentiment polarity.

Sentiment Distribution

The pie chart below represents the proportion of sentiment types observed in student feedback.





Sentiment Distribution

Key Insights:

- A majority of feedback is positive, indicating overall student satisfaction.
- Neutral feedback highlights areas where expectations were met but not exceeded.
- Negative feedback points to specific concerns such as time management, venue issues, or session length.

Common Feedback Themes


A word cloud was generated to identify frequently mentioned terms in feedback comments.

Observations:

- Words related to learning, experience, session, interactive, and engaging appear frequently.
- Repeated terms help identify both strengths and improvement areas.

Key Insight

Sentiment analysis explains the reasons behind ratings, revealing specific pain points such as scheduling and logistics. This makes it an essential complement to numerical scores for understanding student expectations.





Recommendations for Event Organizers

Based on the analysis of ratings and student feedback, the following improvements are recommended:

- **Increase interactive workshops**

Hands-on and participatory events received higher satisfaction ratings.

- **Improve time management**

Several neutral and negative comments were related to long or poorly scheduled sessions.

- **Enhance venue and audio arrangements**

Proper infrastructure significantly impacts the overall event experience.

- **Collect structured feedback consistently**


Regular feedback collection helps track improvements and identify issues early.

- **Use high-performing events as benchmarks**

Successful events can serve as models for planning future programs.

Final Insight

When analyzed systematically, student feedback becomes a strategic asset rather than a formality. This project demonstrates how data science and NLP can guide student-centric, evidence-based decisions in campus event planning.





The End

Thank You

Detailed analysis and code are available in the accompanying Google Colab notebook.



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