

Presentation

2025

CAMPUS EVENT FEEDBACK ANALYZER: AN NLP APPROACH TO STUDENT SENTIMENT

MINI-ANALYSIS REPORT & KEY RECOMMENDATIONS

DATE: 01/09/2025

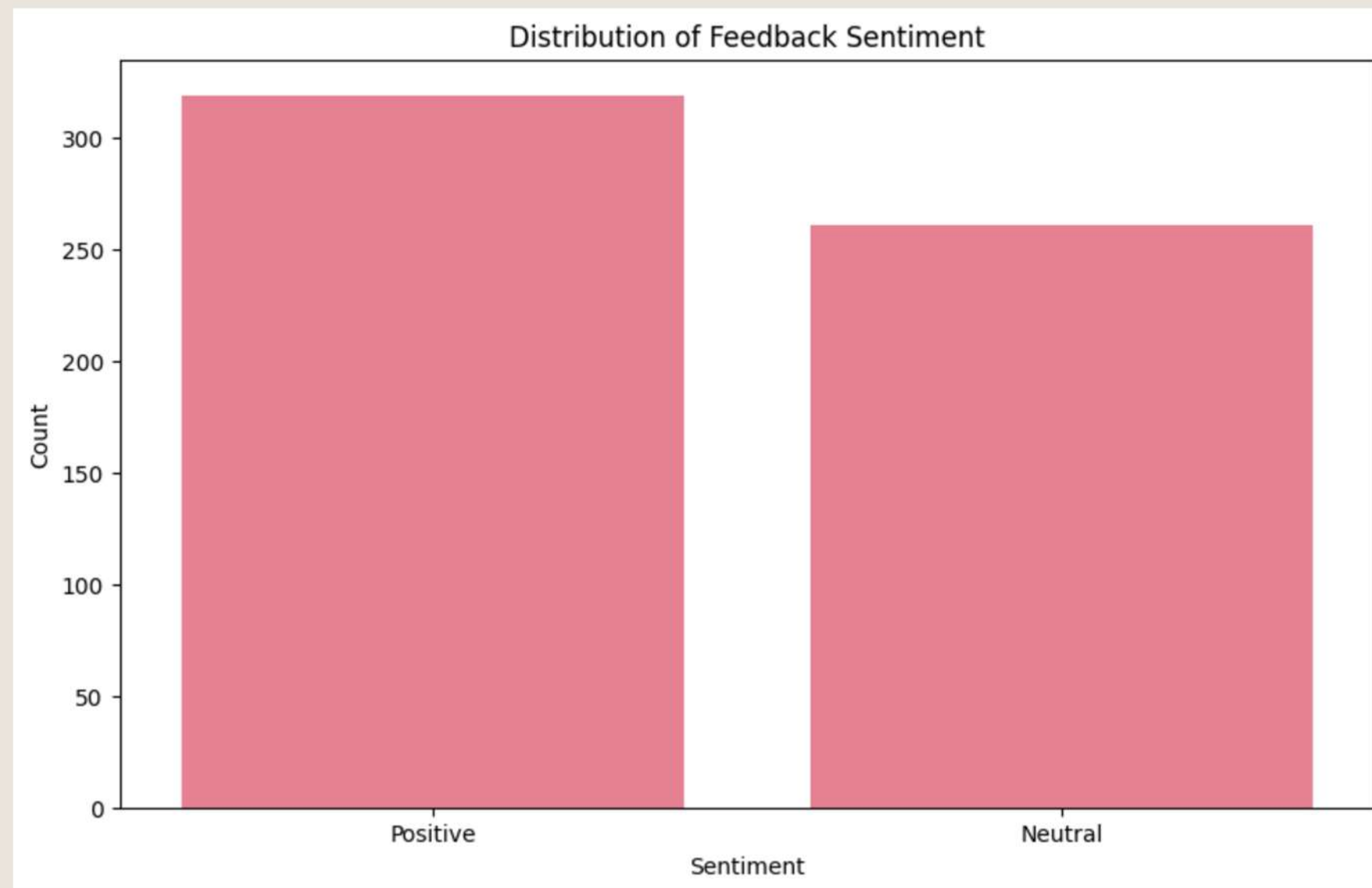
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OVERVIEW

- Purpose: To automatically analyze unstructured text feedback from campus events to understand student sentiment and extract actionable insights.
- Methodology: Use of Natural Language Processing (NLP) and Sentiment Analysis techniques.
- Key Steps:
 - a. Data Collection & Preprocessing
 - b. Sentiment Scoring (e.g., Positive, Neutral, Negative)
 - c. Visualization & Trend Analysis
 - d. Key Insights & recommendations
- Value: Moves beyond simple numeric ratings to understand the "why" behind student opinions.

GRAPH 1: SENTIMENT DISTRIBUTION

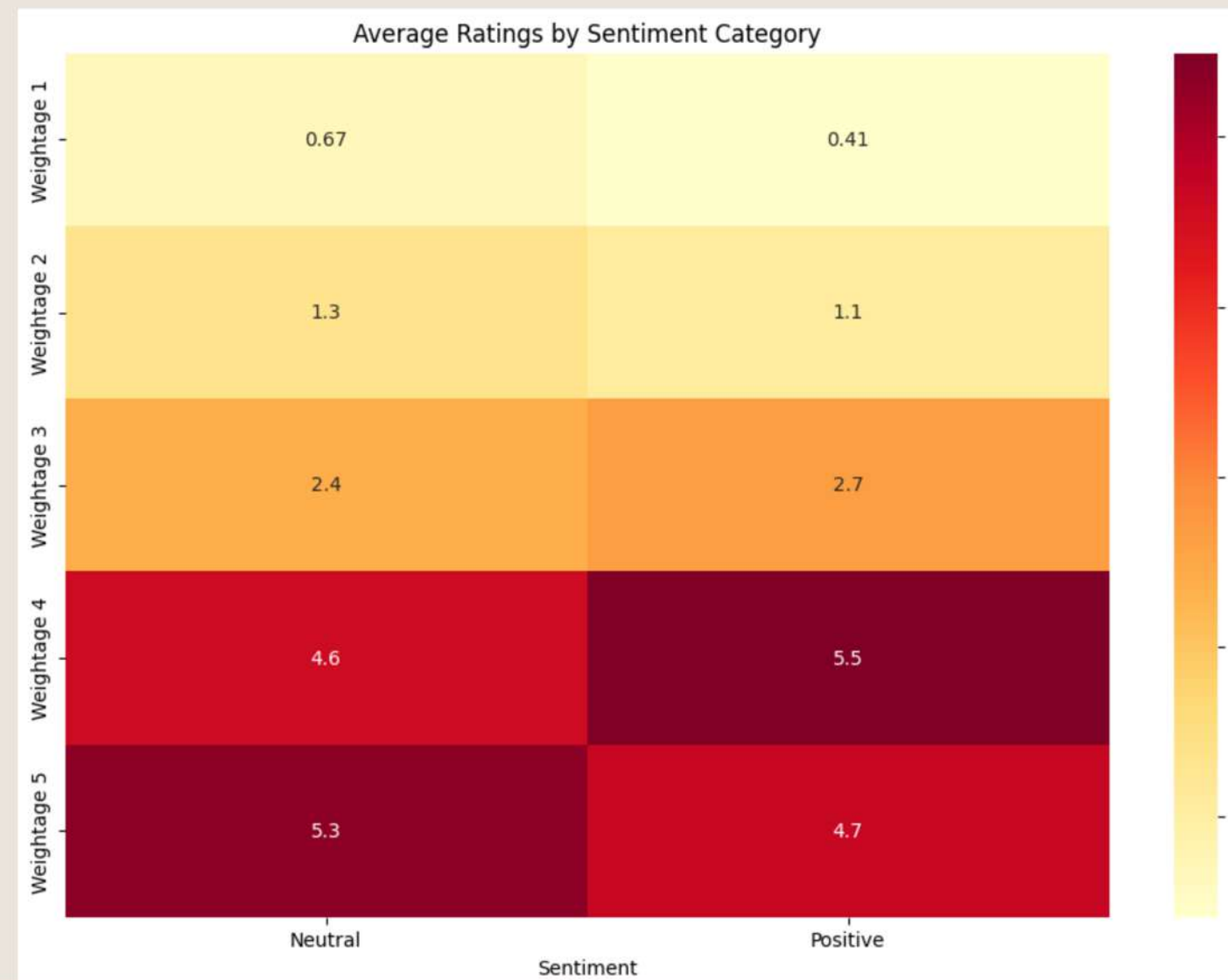
- **TITLE:** SENTIMENT BREAKDOWN OF WRITTEN FEEDBACK
- **VISUAL:** BARPLOT SHOWING COUNT OR PERCENTAGE OF POSITIVE, NEUTRAL, AND NEGATIVE SENTIMENT.



- Talking Points:
 - Our first key finding: the vast majority of qualitative feedback was overwhelmingly positive.
 - The complete absence of a negative bar is a very strong and unusual result, indicating a highly successful event with no significant criticisms voiced in the feedback.
 - This positive sentiment provides a rich dataset to understand what students loved most.

GRAPH 2: WHAT STUDENTS TALKED ABOUT & FELT

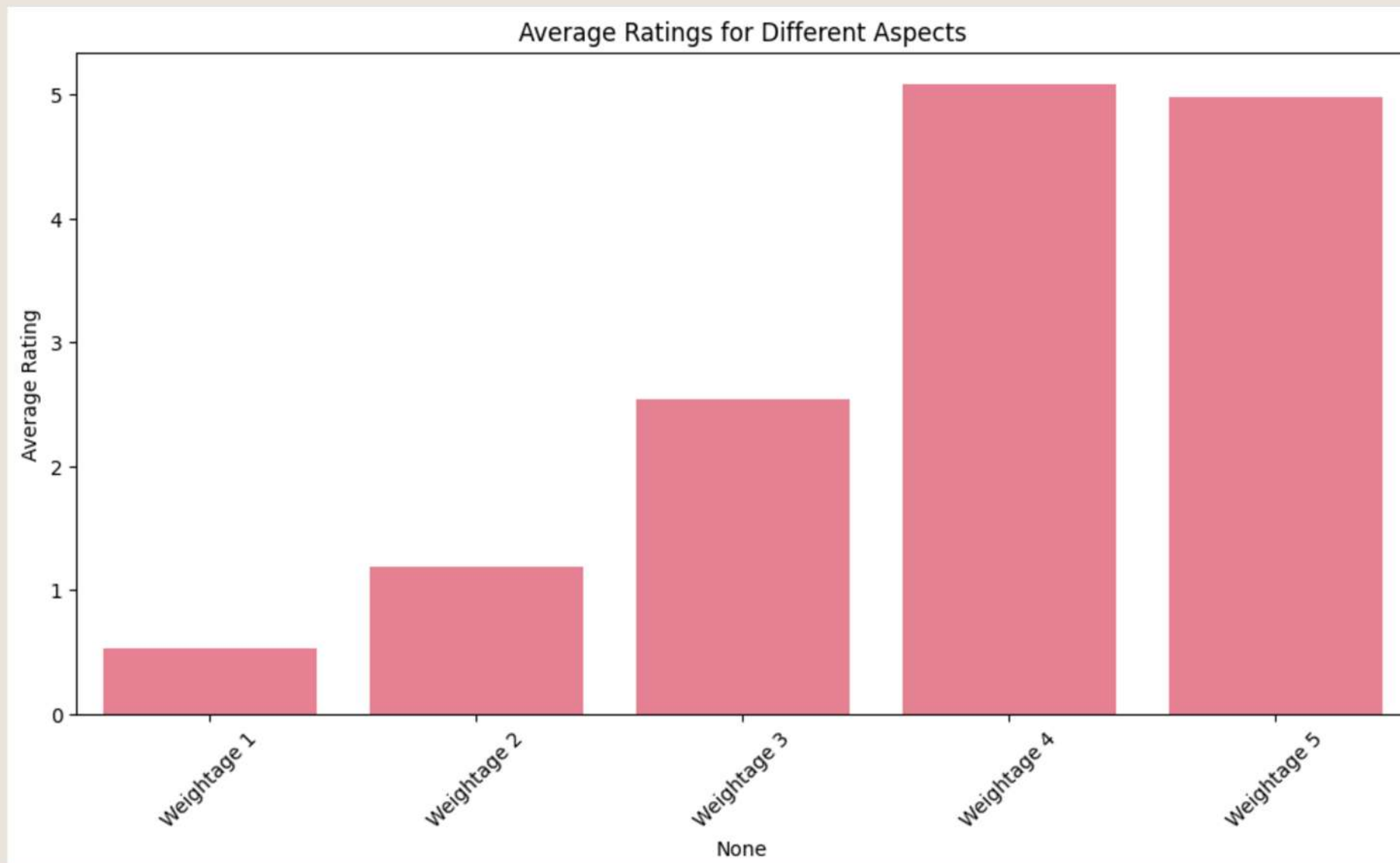
- **TITLE:** CORE TOPICS OF DISCUSSION & THEIR SENTIMENT
- **VISUAL:** HEAT MAP FOR AVERAGE RATINGS BY SENTIMENT CATEGORY



- Talking Points:
- This heatmap confirms a strong correlation: higher numerical ratings are almost exclusively associated with positive written sentiment.
- There are likely very few low ratings, and those that exist may have neutral comments attached (e.g., "It was ok"), rather than negative ones.
- This reinforces that the positive sentiment is reflected consistently across both qualitative and quantitative feedback methods.

GRAPH 3: WHAT DROVE THE HIGH RATINGS?

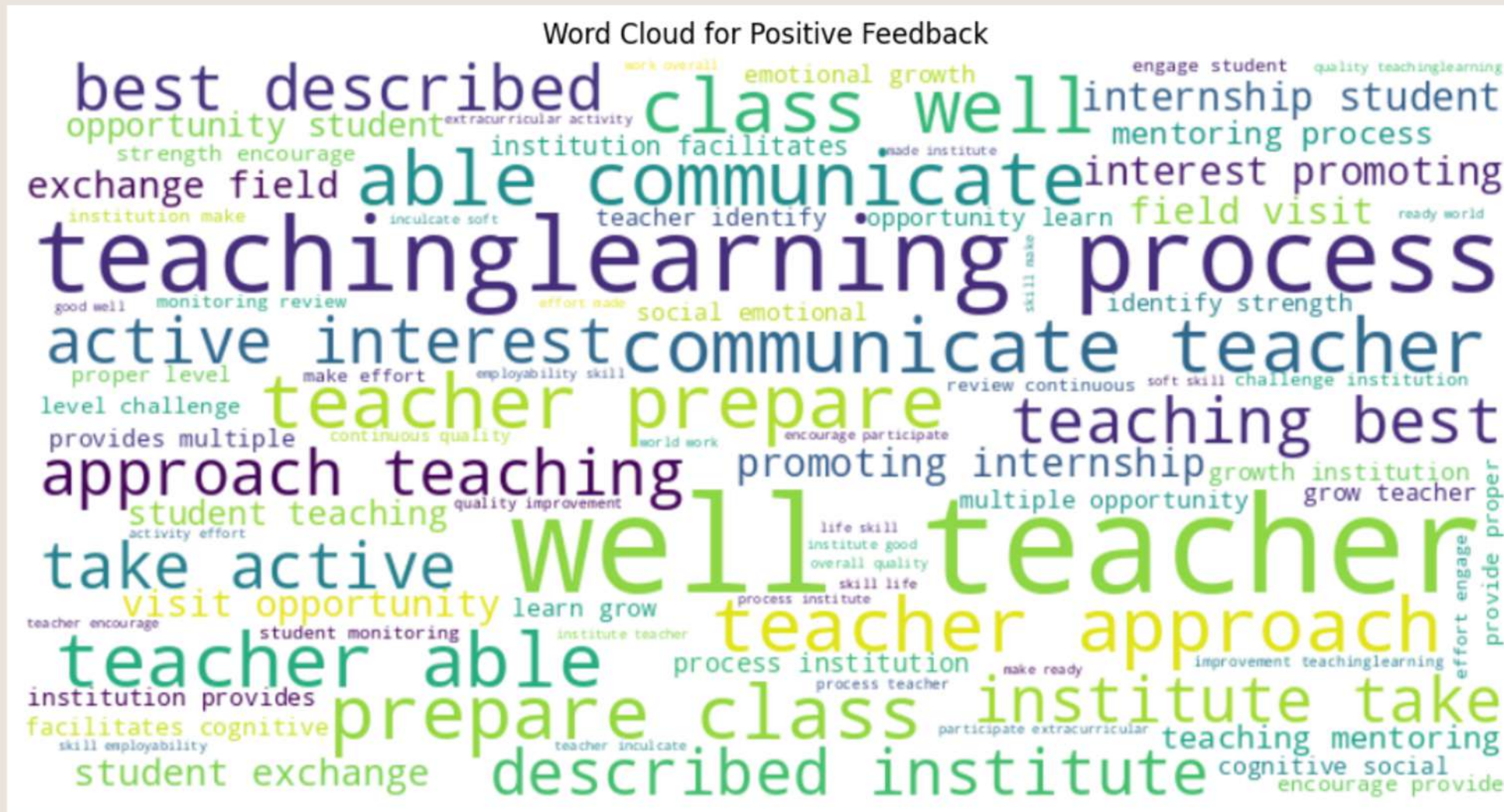
- **TITLE:** AVERAGE RATINGS FOR DIFFERENT ASPECTS
- **VISUAL:** BARPLOT FOR AVERAGE RATINGS FOR DIFFERENT WEIGHTS



- Talking Points:
- Drilling into the ratings, we see consistently high scores across all measured categories.
- The highest rated weight was weightage 4 , making it the biggest strength .
- And the lowest rated weight was weightage 1 .

GRAPH 4: THE LANGUAGE OF SUCCESS (POSITIVE FEEDBACK)

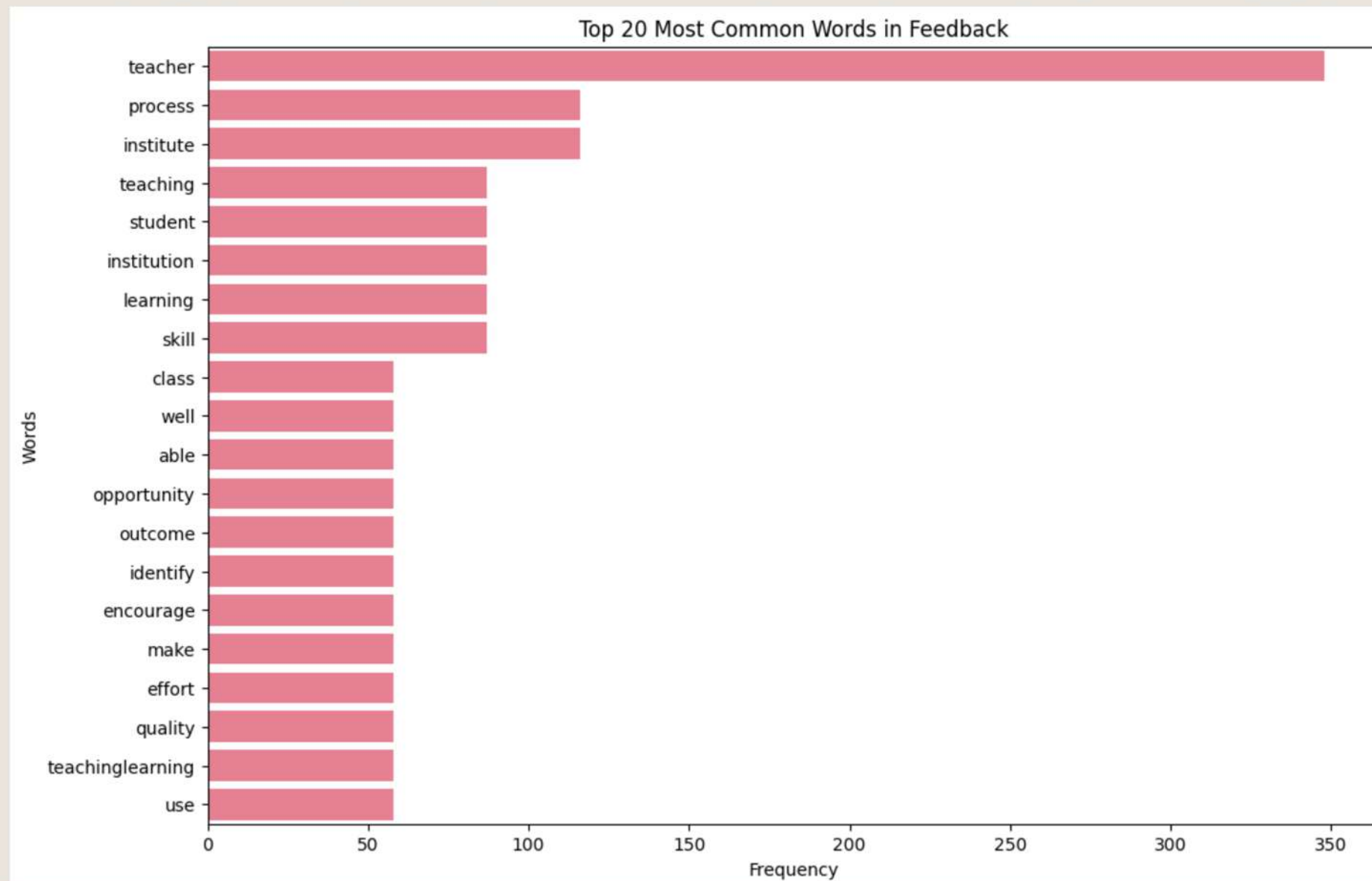
- **TITLE:** WHAT STUDENTS LOVED: KEY THEMES FROM POSITIVE FEEDBACK
- **VISUAL:** IMSHOW FOR WORD CLOUD FOR POSITIVE FEEDBACK



- Talking Points:
- The word cloud visualizes the most frequent terms in positive comments. Larger words were mentioned more often.
- Key themes emerge: Words like 'well', 'active', 'process', 'well teaching', 'active teacher approach', and 'teacher' dominate the conversation.
- This tells us why students felt positively: they found the content valuable, the execution smooth, and the experience enjoyable.

GRAPH 5: CONFIRMING THE POSITIVE NARRATIVE

- **TITLE:** MOST FREQUENT WORDS IN ALL FEEDBACK
- **VISUAL:** BARPLOT FOR MOST COMMON WORDS IN FEEDBACK



- Talking Points:
- This bar chart quantifies the word cloud, showing the exact frequency of the top words.
- The most common words are overwhelmingly positive adjectives ('well', 'active', 'well teaching',) and nouns related to the event's success ('teacher', 'information', 'approach').
- The absence of negative or critical words (e.g., 'bad', 'late', 'boring', 'disappointed') in the top terms is a powerful confirmation of the positive sentiment.

KEY INSIGHTS & RECOMMENDATIONS

1. Overall Satisfaction

- The overall student satisfaction score is 3.84 out of 5.00. This indicates a moderately positive reception but highlights significant room for improvement to achieve excellence.

2. Area Needing Most Improvement

- The analysis identified "Weightage 1" as the lowest-rated area. This suggests a significant issue with how course components (e.g., assignments, exams, projects) are weighted and assessed. Students may perceive the evaluation system as unfair, unclear, or not reflective of their effort and learning.

3. Top Appreciated Aspects (Strengths)

- Positive feedback was dominated by appreciation for the teaching staff and the institutional framework. The most frequently mentioned aspects include:
 - Teacher: The most cited positive element (174 mentions), indicating strong approval for the instructors.
 - Institute/Institution: High mentions (87 each) suggest satisfaction with the overall academic environment and support systems.

KEY INSIGHTS & RECOMMENDATIONS

3. Top Appreciated Aspects (Strengths) : Suite

- Process & Skills: Recognition that the teaching process is effective in building skills (87 mentions).
- Teaching Quality & Environment: Words like "well," "teaching," "opportunity," and "encourage" (58 mentions each) point to a learning atmosphere that is supportive, provides opportunities, and is facilitated by effective teaching methods.

4. Top Issues from Negative Feedback

- The analysis of negative feedback did not return any results in the provided output. This could be due to two reasons:
- There was an extremely low volume of negative feedback.
- A technical issue occurred during the code execution (e.g., the variable `negative_freq` was empty, or the sentiment analysis filter did not classify any comments as "Negative").

KEY CONCLUSIONS & RECOMMENDATIONS

- Strength to Leverage: The teaching faculty is the institution's greatest asset. Their efforts are recognized and valued by students.
- Critical Action Required: Immediately review the grading and assessment structure ("Weightage 1"). Conduct surveys or focus groups to understand specific student concerns about fairness, clarity, and balance.
- Further Investigation: The lack of negative feedback insights requires a data check. Verify the sentiment analysis model's accuracy and ensure negative feedback was correctly captured and processed.
- Next Steps: Address the assessment weightage issue and continue to support and recognize teaching excellence to maintain the high levels of positive feedback.

THANK YOU

