ML MINI PROJECT

INTRODUCTION:

OUR PROJECT ANALYZES TWITTER COMMENTS TO UNDERSTAND USER BEHAVIOR AND PREFERENCES.

OBJECTIVE:

EXTRACT, ANALYZE, AND VISUALIZE COMMENTS TO UNCOVER PATTERNS AND SENTIMENTS.

TECHNOLOGIES USES:

PYTHON: MAIN PROGRAMMING LANGUAGE.
NTSCRAPER: FOR TWITTER DATA EXTRACTION.
TEXTBLOB: FOR SENTIMENT ANALYSIS.
SCIKIT-LEARN: FOR CLUSTERING ANALYSIS.
MATPLOTLIB AND SEABORN: FOR VISUALIZATION.

METHODOLOGY FOLLOWED:

DATA COLLECTION: EXTRACTED COMMENTS FROM TWITTER USING NTSCRAPER.

PREPROCESSING: TOKENIZATION, STOP-WORD REMOVAL, AND LEMMATIZATION.

SENTIMENT ANALYSIS: TEXTBLOB USED TO DETERMINE SENTIMENT POLARITY.

CLUSTERING ANALYSIS: K-MEANS CLUSTERING APPLIED TO GROUP SIMILAR COMMENTS.

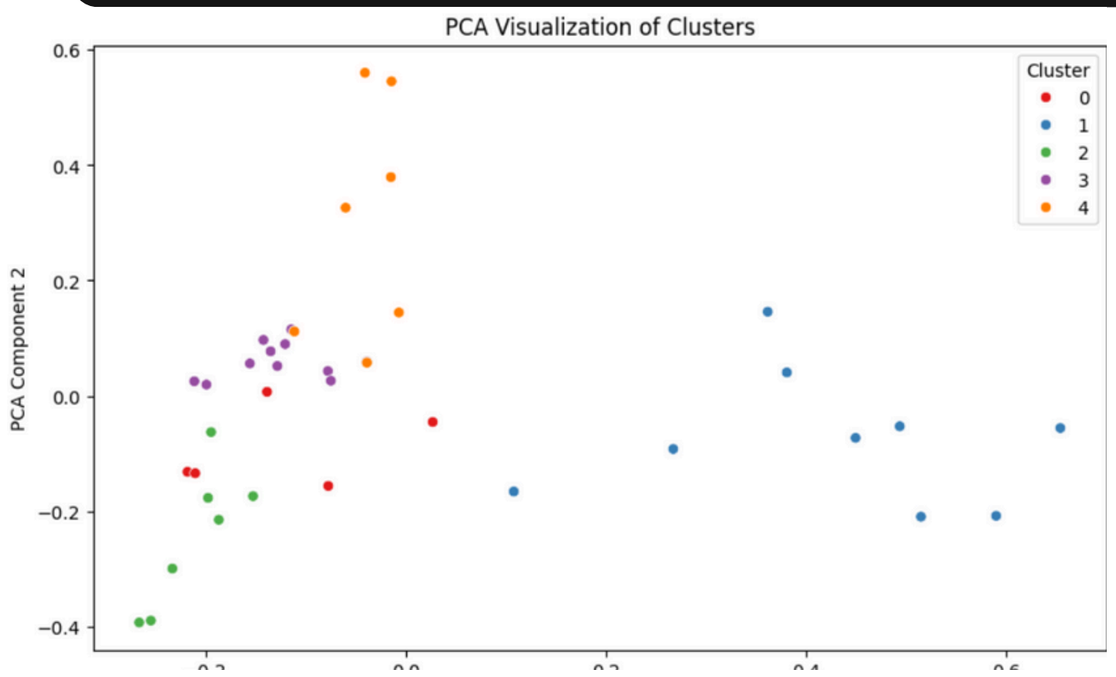
VISUALIZATION: PLOTS AND CHARTS USED TO PRESENT RESULTS.

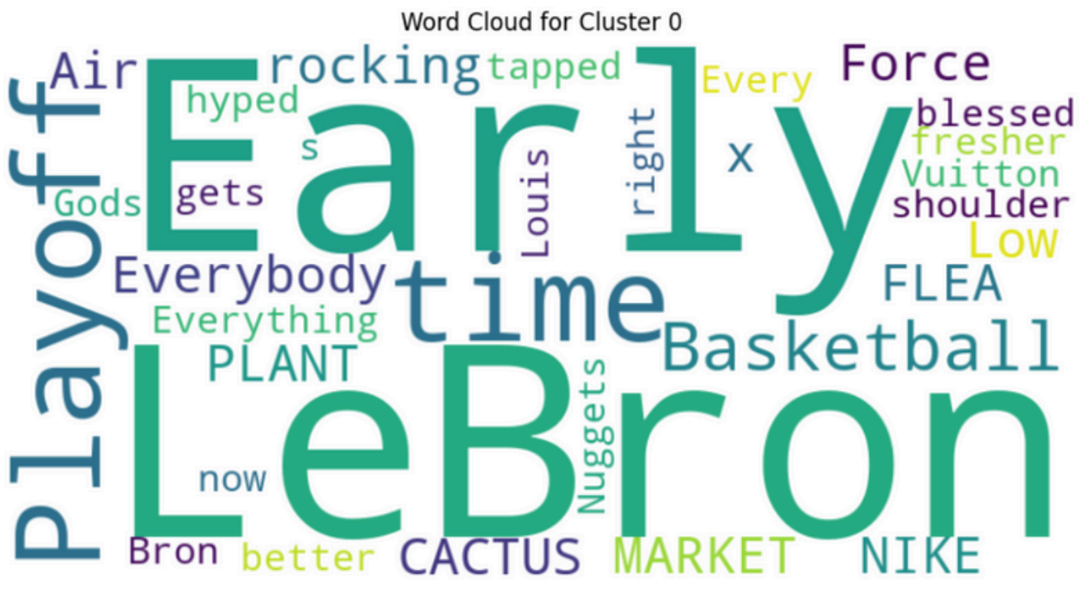
RESULT ANALYSIS:

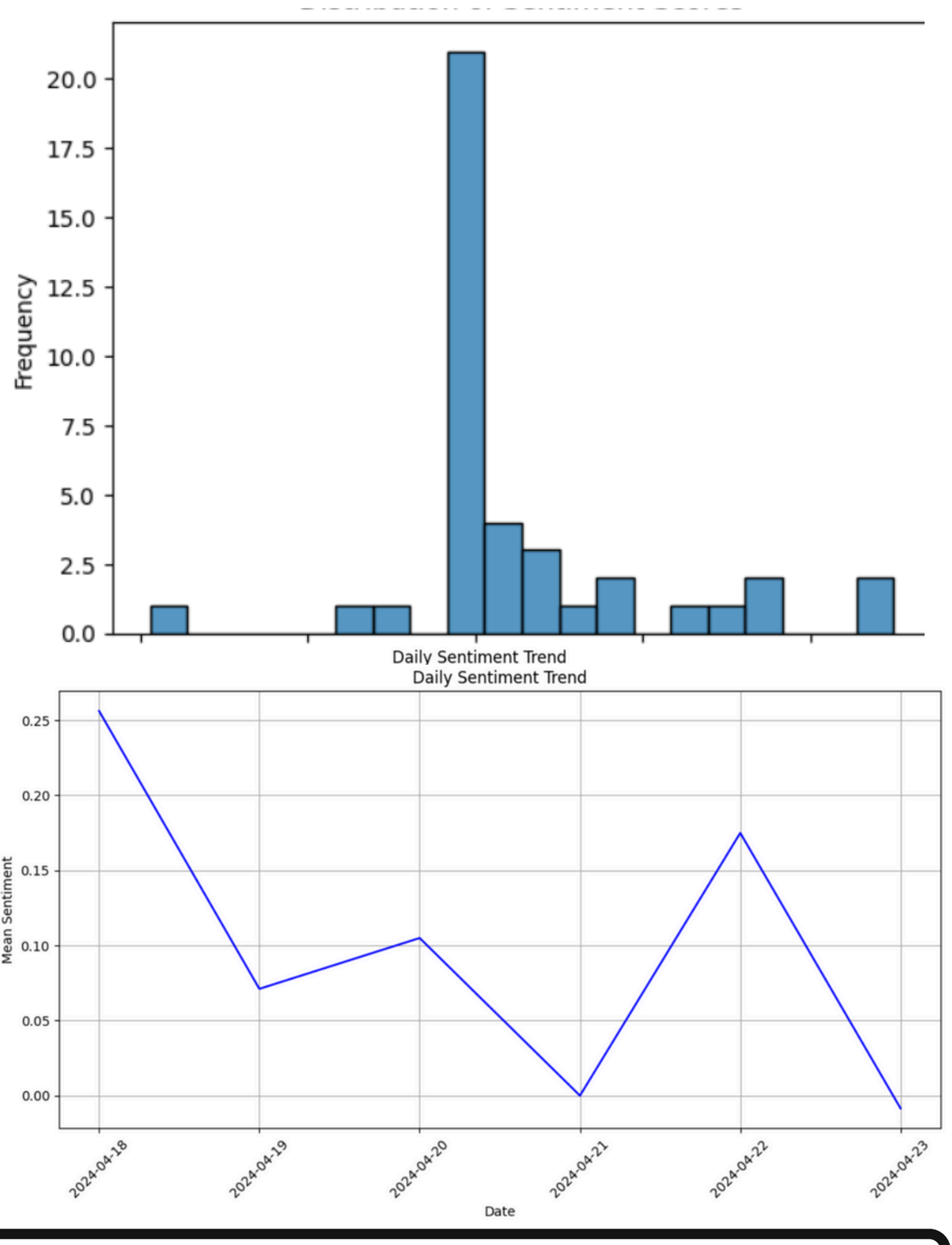
SENTIMENT ANALYSIS: MAJORITY OF COMMENTS EXHIBIT NEUTRAL OR POSITIVE SENTIMENT.

CLUSTERING ANALYSIS: COMMENTS GROUPED INTO DISTINCT CLUSTERS REPRESENTING DIFFERENT TOPICS OR THEMES.

VISUALIZATION: SCATTER PLOTS, BAR CHARTS, AND WORD CLOUDS VISUALIZE SENTIMENT AND CLUSTERING RESULTS.







CONCLUSION:

SUCCESSFUL ANALYSIS OF TWITTER COMMENTS TO EXTRACT INSIGHTS INTO USER BEHAVIOR.
APPLICATIONS: MARKET RESEARCH, SENTIMENT ANALYSIS, TREND PREDICTION.
DEMONSTRATES EFFECTIVENESS OF MACHINE LEARNING IN SOCIAL MEDIA ANALYSIS.

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