**Comprehensive Student-Faculty**

**Performance Evaluation with**

**Sentiment Analysis**

A Project Capstone Presented to the

College of Computer Studies Department

Lyceum of Alabang, Muntinlupa, Metro Manila

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December 2024

**Approval Sheet**

**Executive Summary**

**Table of Contents**

Chapter 1: INTRODUCTION

Project Context - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 7

Purpose and Description - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 8

Objectives - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 9

Significance of the Study\* - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 10

Scope and Limitation - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 10

Chapter 1: REVIEW OF RELATED LITERATURE AND SYSTEMS

Related Literature - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 11-15

Related Systems - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 16-18

Conceptual Model

Of the Study - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 19

Definition of Terms - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 20

Chapter 1: DESIGN AND METHODOLOGY

Software Development

Methodology - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 22-24

Requirements Analysis

(Data Modelling) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 25

Requirements

Documentation - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 26-27

Project Design - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 28

Evaluation Procedures

Instrument - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 29

Respondents

of the Study - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

Statistical

Treatment of Data - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

Testing Procedures - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

Implementation Plan - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**List of Figures**

**Chapter I**

**INTRODUCTION**

**Project Context**

Faculty performance evaluation is a cornerstone of academic institutions, ensuring the upkeep of high standards in teaching and research. In response to the evolving need for more effective and efficient evaluation procedures, the demand arises to meet the changing requirements for educational quality assurance. Our project proposes creating and implementing the faculty evaluation with sentiment analysis web-based system for faculty performance reviews. This system uses artificial intelligence and natural language processing to improve feedback accuracy, expedite the evaluation process, and offer actionable insights into faculty development.

The student-faculty performance evaluation with sentiment analysis will transform and change the traditional way of handling and gathering comments or feedback. The system will automatically evaluate and classify comments from peers, supervisors, and students using sophisticated algorithms, eliminating the need for human sorting and interpretation. The system will turn massive amounts of feedback into insightful insights by utilizing sentiment analysis, topic modeling, and keyword extraction techniques.

The system's adoption aligns with the institution's mission to promote instructional excellence and a culture of continual development. The sentiment analysis will serve as a fast and relevant feedback, enabling them to make well-informed decisions regarding their teaching tactics and professional development objectives. Additionally, the method makes the evaluation process more transparent and accountable, which fosters justice and confidence among stakeholders.

**Purpose and Description**

The Lyceum of Alabang's student-faculty performance evaluation system with sentiment analysis is intended to simplify the process of evaluating and improving the work of our distinguished academic members. This creative solution minimizes prejudices and administrative costs while ensuring a thorough and honest review process through the integration of cutting-edge technology.

This system's purposes are to improve the caliber of instruction, foster professional development, and, ultimately, raise the standard of our students' entire educational experience. Faculty members receive a constructive evaluation of their classroom performance, research contributions, and service to the institution and community through quantitative indicators and qualitative assessment.

The sentiment analysis feature will ensure that comments or feedback given by students are analyzed and categorized by determining the percentage of it as positive and negative. This will not only be relevant and meaningful but also free from inappropriate or irrelevant words and content. Thus, faculty members can better understand their strengths and areas for improvement.

**Objectives**

**General Objective:**

The general objective of this study is to develop a comprehensive student-faculty evaluation system with sentiment analysis that is aimed at efficiently analyzing the student’s feedback on college professors’ performance and enhancing the evaluation procedure by automatically recognizing relevant comments and categorizing them based on topic and delivering feedback to academic members to further enhance in teaching and student contentment.

**Specific Objective:**

The system will incorporate sophisticated filtering methods to efficiently assess and categorize comments and allow students to provide structured feedback on faculty performance. The system will give the total or percentage result of all the positive and negative comments for every professor. The project will design an intuitive user interface for students to submit evaluations, integrate natural language processing algorithms to parse and analyze comments, and execute filtering mechanisms to identify and categorize feedback based on relevance, sentiment, and specific evaluation criteria.

**Significance of the Study**

The study on Faculty Evaluation performance system with Sentiment Analysis is designed by automating the categorization of comments, it ensures accuracy and objectivity in evaluating faculty performance, the system promotes continuous professional development for the faculty members that can contribute to enhanced their teaching quality. Thereby this study contributes to the advancement of educational evaluation systems for improving the feedback mechanism and enhance the quality of education in academic institutions.

**Scope and Limitation**

The faculty evaluation performance system with sentiment analysis is proposed for the Lyceum of Alabang. College students from different departments can use the system. The system will include features such as user identification, safe data storage, and data analysis tools to produce valuable insights for faculty development. The system would pinpoint areas where the faculty excels and areas for improvement based on both positive and negative sentiment. Administrators will also have access to aggregated evaluation data for use in making decisions about professional development programs and faculty promotions, among other things.

Sentiment analysis is a developing field, and the accuracy of the system might be affected by ongoing advancements and limitations. Even though the system will have procedures for filtering offensive or inappropriate comments, it may not be entirely successful in preventing all instances of inappropriate content. The system will also require an internet connection.