Faculty Evaluation Rating Calculation & Verification

1. Introduction

This document provides a step-by-step breakdown of how faculty evaluation ratings are calculated, verified, and displayed within the system. The process ensures accurate evaluation based on student responses.

2. Data Extraction

Student responses are retrieved via an AJAX request. The response includes the total students evaluated and percentage responses for each rating level (1-5).

3. Computing Individual Question Ratings

Each question's weighted average rating is computed as:

$$\text{Question Rating} = \frac{(1 \times \%) + (2 \times \%) + (3 \times \%) + (4 \times \%) + (5 \times \%)}{\text{Total Percentage Responses}}$$

Example Calculation for Question 1

Given Ratings (% of Students):

 1 - 10%, 2 - 20%, 3 - 30%, 4 - 20%, 5 - 20%

Calculation:

 $(1 \times 10) + (2 \times 20) + (3 \times 30) + (4 \times 20) + (5 \times 20) = 320$

 Total Responses: 100%

 Final Rating: 320 / 100 = 3.2

4. Computing Overall Rating Per Criterion

Each criterion groups multiple questions. The final score per criterion is:

 Criteria Rating = (Sum of Question Ratings) / (Total Questions in Criterion)

Example Calculation for a Criterion

 Q1 Rating: 3.2

 Q2 Rating: 3.45

Criterion Rating: (3.2 + 3.45) / 2 = 3.325

5. Computing the Grand Overall Rating

The final faculty score is the average of all criteria ratings:

Grand Overall Rating = (Sum of Criteria Ratings) / (Total Criteria Count)

Example Calculation for Final Rating

Criterion 1: 3.32

Criterion 2: 3.50

Criterion 3: 3.80

Grand Overall Score: (3.32 + 3.50 + 3.80) / 3 = 3.54

6. Validation in Application

The calculated ratings must match the displayed values in the system. AJAX and PHP scripts update the scores dynamically:

- JavaScript updates ratings on UI.

- PHP updates final faculty score.

Ensure that the computed values match the expected results.

7. Conclusion

By following these steps, the faculty evaluation rating can be accurately calculated and verified to ensure correctness and transparency in the evaluation process.