Student Attendance Alerting System

Abstract:

Maintaining regular attendance is crucial for students' academic success and overall performance. Recognizing the importance of attendance, attempts to solve the problem of poor punctuality by offering a solution for students who have a rate of attendance that are under the required minimum. The objective is to determine the number of lectures a student should attend to achieve a minimum attendance percentage of 75%.

Regular attendance not only ensures that students receive the necessary educational content but also fosters a sense of discipline and commitment. Falling below the 75% attendance requirement can have consequences, such as academic probation or even exclusion from courses. By identifying defaulters and providing them with a clear roadmap to improve their attendance, this project seeks to support students in meeting the attendance expectations and maximizing their educational opportunities.

To accomplish this, the project adopts a methodology that involves collecting attendance data, calculating individual attendance percentages, identifying defaulters, and determining the number of additional lectures each defaulter should attend to reach the desired 75% threshold. The project aims to provide personalized recommendations to each student, acknowledging their unique attendance situation.

By implementing this project, educational institutions can encourage and guide students to maintain satisfactory attendance levels. Regular monitoring and evaluation will ensure the effectiveness of the project, allowing for adjustments and improvements as needed. Ultimately, this project strives to promote responsible attendance behavior among students, enhancing their academic achievements and overall educational experience.

Objectives:

The objective of the project is to determine the number of lectures a student should attend to achieve a minimum attendance percentage of 75%. This calculation will help identify the required number of lectures for students who have fallen below the desired attendance threshold.

Methodology/ Working Model:

o **Data Collection**:

Gather attendance data for each student, including the total number of lectures held and the number of lectures attended by each student.

o **Attendance Calculation:** Calculate the attendance percentage for each student using the formula: (Number of lectures attended / Total number of lectures) * 100.

o **Defaulter Identification:**

Identify students whose attendance percentage is below 75% as defaulters.

o **Calculation of Required Lectures:**

For each defaulter, apply the formula mentioned earlier to determine the number of lectures they need to attend in order to reach a 75% attendance percentage.

o **Recommendation and Reporting:**

Provide personalized recommendations to each defaulter, specifying the number of lectures they should attend. Generate reports summarizing the defaulter list and the corresponding lecture requirements.

o **Monitoring and Evaluation:**

Regularly monitor the attendance of students and update the calculations as attendance records change. Assess the effectiveness of the project by comparing the percentage of defaulters and their progress over time.

By following this methodology, the project aims to help students maintain the desired attendance percentage and provide them with clear targets to improve their attendance.

Major Factors:

o Attendance Requirement: The project focuses on maintaining a minimum attendance percentage of 75% for students.

o Defaulter Identification: Students with attendance below 75% are identified as defaulters.

- o Calculation Method: The project utilizes a formula to calculate the number of lectures a student needs to attend in order to raise their attendance percentage to the desired threshold.

- o Individualized Calculation: The calculation is based on the student's current attendance percentage, allowing for personalized recommendations for each defaulter.

Calculation of Attendance:

- o To calculate the number of lectures a student should attend No. of lectures to achieve a 75% attendance, we need to know the current attendance percentage of the student. Let's assume the student's current attendance percentage is x.

The formula to calculate the number of lectures the student should attend (y) can be derived as follows:

Total number of lectures $= x + y$

$$\text{Attendance percentage} = \frac{x+y}{Total\ number\ of\ lectures} * 100$$

- o Since the desired attendance percentage is 75%, we can set up the equation as follows:

$$75 = \frac{x+y}{Total\ number\ of\ lectures} * 100$$

- o To solve for y, we rearrange the equation:

$$y = \frac{75 * Total\ number\ of\ lectures - 100}{100} * x$$

Using this formula, we can calculate the number of lectures (y) the student needs to attend to achieve a 75% attendance rate, given their current attendance percentage (x).

Important Factor to be consider All of this processing will done in a sequence because calculation is present in the program.

Conclusion:

This model will help for generate information of attendance using mathematical formula in a program because of this it will alert a student abouthis/her attendance & it will avoid the further problems for students and save the time of class faculty to check attendance of each student.

This technology help to easily calculate the attendance of whole class atour figure tip.

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