

Name:

Date:

Analyzing Data for Ethical AI

Scenario:

Recently, at Sunshine Elementary School, there was a competition to select students for a special science camp. The selection process was supposed to be fair and based on students' science quiz scores. However, some parents and students believe that favoritism played a role in the selection. Your task is to analyze the data to find out if the selection was truly fair.

Here is the data of students' quiz scores and whether they were selected for the camp:

Student Name	Quiz Score	Selected (Yes/No)
Alice	95	Yes
Bob	85	No
Charlie	90	Yes
David	80	No
Eva	70	Yes
Fiona	60	No
George	85	No
Hannah	95	Yes
Ian	75	No
Jane	90	Yes

Instructions:

1. Calculate the average quiz score for students who were selected and those who were not.
2. Calculate the median and mode of the quiz scores.
3. Compare the averages to see if there is a significant difference.
4. Create a bar graph to visualize the quiz scores and selection results.
5. Did students with higher scores get selected more often?

Date:

Title: Analysis of fairness in science camp selection

Data Analysis

The average quiz score for not selected students is _.

The median of the quiz scores is _.

Draw a bar graph of all the students showing their scores. For students that were selected, color the bar orange, and use the blue color for students that were not selected.

Name:

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Pie Chart

Draw a pie chart showing the percentage of students that were selected and those that were not.



Conclusion

Based on your analysis, was the selection fair or showed favoritism?

Discussion Questions

- Do you think the selection process was fair based on the data? Why or why not?
- How could the selection process be improved to ensure fairness?
- Why is it important for AI and other systems to make fair decisions?