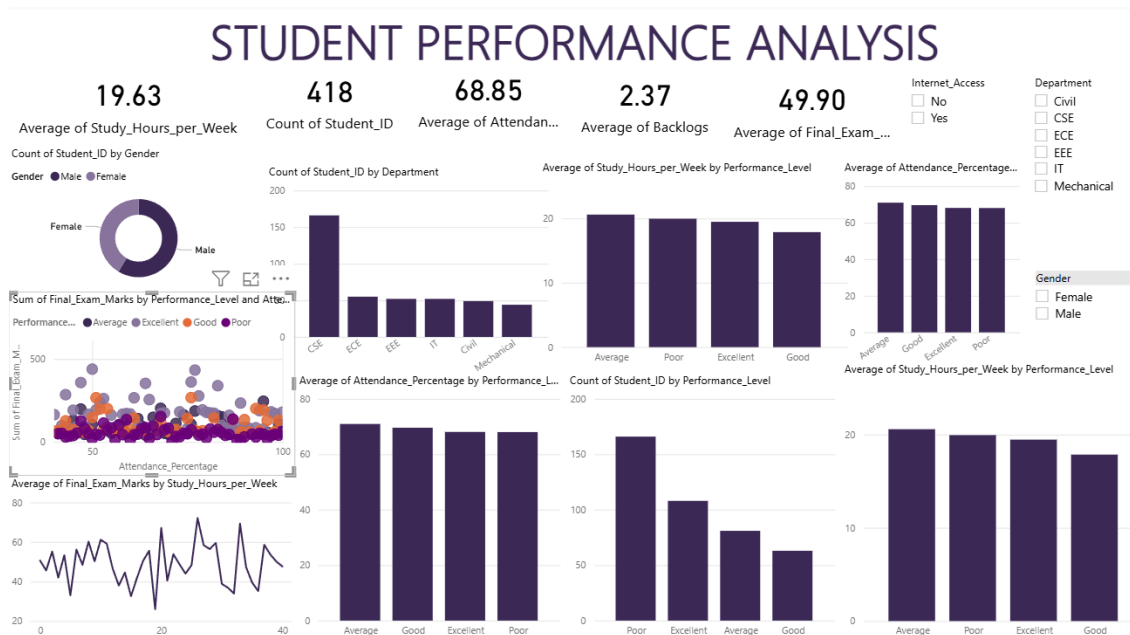


Project Title: Student Performance Analysis

DASHBOARD:



Summary:

- Most students score within the average range, which shows that overall academic performance is moderate.
- Attendance and study hours clearly play an important role in how well students perform.
- Student performance differs across departments and also changes as students move through different years of study.
- EEE students generally perform better, while a higher number of CSE students fall into the poor performance category.
- Internet access is not evenly available to all students and may impact learning outcomes.

Insights:

1. Key Trends:

- Final exam marks are mainly clustered in the middle range, indicating that most students achieve average results.
 - Students with higher attendance levels consistently show better academic performance.
 - As performance improves from poor to excellent, study hours increase in a steady manner.
 - Second-year students tend to perform better academically than final-year students.
 - Excellent students show more discipline and consistency in both attendance and study habits.
 - Departments with a larger number of students display wider performance variation.
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2. Anomalies:

- Some students manage to perform well even with moderate study hours, suggesting individual strengths or learning differences.
 - A few students attend classes regularly but still perform poorly, indicating possible academic or personal challenges.
 - Final-year students show a drop in performance despite having more academic experience.
 - Poor-performing students are present in every department, not just in one specific stream.
 - Attendance and study hours vary widely among poor-performing students.
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3. Correlations:

- There is a strong positive relationship between attendance percentage and final exam marks.
 - Study hours per week are positively linked to better academic performance.
 - Midterm marks and internal assessments have a noticeable influence on final exam results.
 - Students with lower performance levels tend to have a higher number of backlogs.
 - Overall performance is influenced by a combination of attendance, study effort, and assessment scores rather than a single factor.
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Recommendations:

- Regular attendance should be encouraged through monitoring and early academic support.
- CSE students and final-year students should receive focused academic guidance.
- Students should be guided to follow structured and consistent study routines.
- Remedial classes and academic counseling should be provided for students with backlogs.
- Internet access and digital learning resources should be improved for students who lack connectivity.
- Continuous tracking of student performance can help identify and support at-risk students early.

Final Story from the Dashboard:

- Overall student performance remains average, with noticeable differences across departments and academic years.
- Attendance and study hours emerge as the strongest factors affecting academic success.
- Excellent students maintain consistent academic discipline and carry fewer backlogs.
- Departments with more students show greater variation in performance levels.
- Final-year students require additional academic focus and support.
- In conclusion, improving attendance consistency, study habits, and access to learning resources can significantly enhance student academic outcomes.