

Project Understanding and Business Context

1. The project demonstrates a clear understanding of the insurance domain and business objectives.
2. The problem statements are well framed around real-world insurance decision-making.
3. Each analytical question is directly linked to a practical policy or pricing concern.
4. The student shows awareness of how data insights influence premium design and discounts.
5. The transition from raw data to business recommendations is logical and purposeful.

Data Understanding and Preparation

6. The dataset is well understood, with key variables like age, gender, BMI, region, dependents, and smoking status clearly identified.
7. Data appears clean and structured properly before analysis begins.
8. Appropriate grouping and categorization are applied, such as age ranges and BMI ranges.
9. Aggregations like average cost and total claimed amount are correctly calculated.
10. There is consistency between values shown in charts and those explained in text.

Exploratory Data Analysis (EDA)

11. The EDA covers all major dimensions relevant to insurance risk analysis.
12. Gender-based analysis is clear and correctly interpreted.
13. Regional comparison is thoughtfully done using averages and distributions.
14. Dependents-based analysis highlights non-linear trends, which is a good observation.
15. BMI-based segmentation is meaningful and aligned with insurance logic.

Overall score out of 20	17
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Visualization Quality

16. A wide variety of charts are used, including bar charts, pie charts, box plots, scatter plots, and line plots.
17. Visuals are generally clear and support the written explanations well.
18. Axes labels and titles make the charts understandable even without narration.
19. Comparative visuals, especially for smokers vs non-smokers, are very effective.
20. The consistency of color usage improves readability across charts.

Statistical Logic and Interpretation

21. Average cost calculations are used appropriately to compare groups.
22. Percentage comparisons are correctly applied, especially in smoker analysis.
23. The observation that smokers contribute disproportionately to claims is well justified.
24. The relationship between BMI and claim amount is logically explained.
25. Age-based cost escalation is identified correctly using grouped analysis.

Coding Quality and Structure (Notebook)

26. The notebook follows a logical flow from question to analysis to conclusion.
27. Code appears readable and aligned with standard data analysis practices.
28. Variable naming is mostly clear and meaningful.
29. Repetitive logic is handled consistently across questions.
30. Visual generation code aligns with the outputs shown in the report.

Use of Business Recommendations

Overall score out of 20	17
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31. The project does not stop at analysis but moves toward actionable insights.
32. Suggestions for premium increase are backed by numerical evidence.
33. Discount recommendations are logically derived from lower-risk groups.
34. The pricing logic reflects an understanding of risk-based insurance models.
35. The final suggestions section effectively summarizes key outcomes.

Video Explanation and Communication

36. The video explanation complements the written and coded analysis well.
37. The explains charts in a structured and understandable manner.
38. Key findings are verbally reinforced, improving clarity for non-technical viewers.
39. The explanation follows the same order as the analysis, avoiding confusion.
40. The video adds value rather than repeating content blindly.

Presentation and Reporting

41. The PDF report is organized question-wise, which improves readability.
42. Headings and subheadings guide the reader clearly through the analysis.
43. Numerical values are highlighted properly to support conclusions.
44. The final summary aligns with insights discussed earlier in the project.
45. Overall presentation looks professional and suitable for business stakeholders.

Areas Where Improvement Is Needed

46. The project relies heavily on averages; inclusion of variance or median could strengthen insights.

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47. Some conclusions could be supported with brief statistical justification.
48. The notebook could benefit from short markdown explanations before major code blocks.
49. Visual consistency could be improved by standardizing chart sizes and fonts.
50. Handling of outliers is not clearly discussed and could be explored further.
51. A brief dataset overview section at the start would improve clarity.
52. The pricing recommendation logic could include a simple simulation or scenario analysis.
53. Code comments could be slightly more descriptive for future readers.
54. The video pace could be slightly slower during complex charts for better understanding.
55. Adding a final business impact section would further strengthen the project.

Overall Assessment

56. This is a strong end-to-end data analysis project with clear business relevance.
57. The student demonstrates good analytical thinking and domain understanding.
58. The integration of code, visuals, report, and video is commendable.
59. With minor improvements in depth and statistical rigor, the project can reach an advanced level.
60. Overall, the work reflects solid effort, clarity of thought, and practical data science skills.