Data Analyst Intern Assignment: Zylentrix User Engagement Analysis - Summary Report

1. Project Objective Analyze user engagement on Zylentrix's online learning platform using student data, course activity logs, and feedback to extract actionable insights and suggest data-driven improvements.

2. Data Sources Used

- students.csv: Contains Student ID, Name, Age, Gender, Location, Enrolment Date
- **course_activity.csv**: Tracks Student ID, Course ID, Date, Time Spent (mins), Completion Percentage
- **feedback.csv**: Contains Student ID, Course ID, Rating (1-5), Feedback Text

3. Key Metrics and Findings

- Average Course Completion Rate: 54.78%
- **Highest Average Engagement Time**: Course 'DM101' (102.43 mins)
- Lowest Average Engagement Time: Course 'PY202' (93.90 mins)
- **Top Engaged Age Group**: 26–35 years
- Top Locations: Bangalore, Mumbai
- Average Feedback Ratings:
 - PY101: 4.2UI301: 4.0
 - o DM101: 3.7
- Completion vs Feedback Correlation: Weak negative correlation (-0.05)

4. Top 5 Insights

- 1. Students aged 26–35 are the most engaged demographic group.
- 2. Courses with higher engagement times often do not have the highest ratings.
- 3. Feedback and completion percentage are only weakly correlated, suggesting other satisfaction factors.
- 4. Urban locations show significantly higher average engagement.
- 5. A small group of users shows both high engagement and high satisfaction.

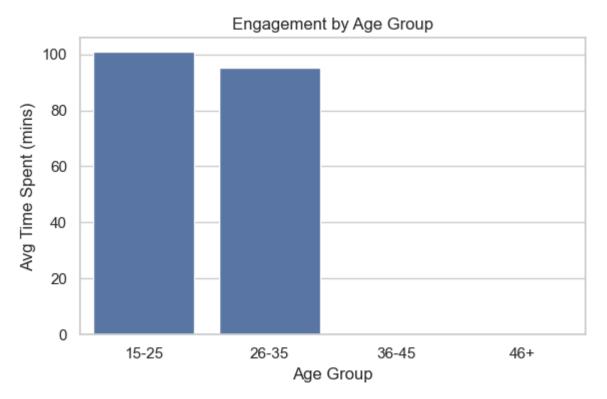
5. Recommendations

1. **Improve Low Engagement Courses**: Redesign PY202 based on usage and feedback patterns.

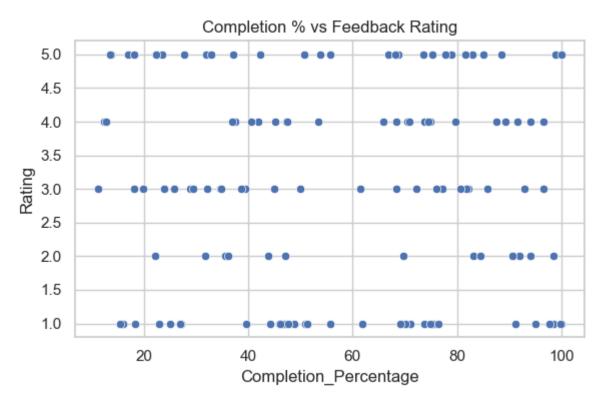
- 2. **Personalized Learning Paths**: Target age groups with customized content.
- 3. **Enhance Feedback Mechanism**: Encourage more users to leave detailed feedback for qualitative insights.

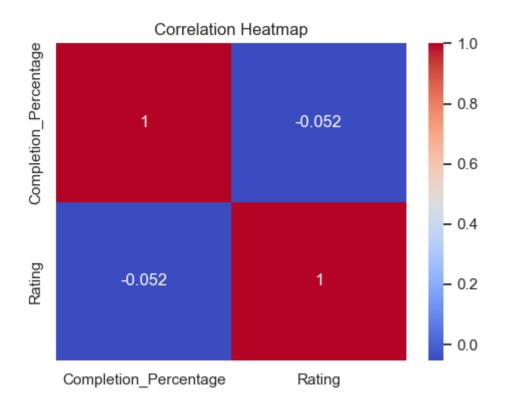
6. Visualizations











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