Data Analysis Summary

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Goal: The primary objective of this analysis is to identify differences in usage behavior between members and casual users of the Cyclistic bicycle system, in order to provide information that can guide customer conversion and retention strategies.

1. Users Profiles

The data used in this project shows the following insights about the service usage by user

- Members
    - Intensive and constant use throughout the week.
    - Greater concentration of trips during workdays.
    - Shorter and more regular durations (≈12.3 minutes average).
    - Probable use oriented to daily transport.
- Casual
    - Greater activity during weekends and warmer months.
    - Longer travel times (≈21.3 minutes average).
    - Seasonal and recreational use, possibly by tourists or local visitors.

2. Observed Temporal Patterns

- Seasonal
    - Casual users show a sharp increase in usage between April and October.
    - Members maintain a stable pattern throughout the year.
    - Both categories show a significant drop in the cold months (winter).
- Weekly
    - Members: constant use from Monday to Friday.
    - Casual: peaks on Saturday and Sunday, with slight declines during the week.

3. Trip Duration

Standardized fields after cleaning include:

Members	Casual
12.3 minutes	21.3 minutes

This behavior reinforces the hypothesis that members use bicycles for functional and regular trips, while casual users use them for leisure or sightseeing.

4. Relevant Findings

- Although members travel more in number, casual travelers contribute significantly to travel volume during specific seasons.
- The difference in trip volume does not exceed 55% on average, indicating that casual trips remain an active source of revenue for the company.
- Differences in duration and usage patterns offer a clear opportunity for segmentation and personalization of marketing campaigns.

5. Recommendations

- Seasonal campaigns aimed at casual wear during spring-summer.
- Temporary membership incentives to convert returning casual users.
- Optimization of stations in tourist or event areas between April and October.
- Loyalty and service improvement to maintain consistent use by members.
- Climate assessment and its relationship to resource use to adjust resources in real time.

6. Conclusion

This analysis demonstrates that there are clear and exploitable differences between members and casual customers. With a well-targeted strategy, Cyclistic can increase its member base without neglecting casual customers, who represent a key component of seasonal revenue.

7. Exported Files

- cyclistic_summary.xlsx: duration and frequency summaries.
- clean_database_cyclistic.xlsx: clean database ready for further analysis.
- HTML and PDF document with this complete report.