TravelTide Customer Segmentation

This project was undertaken to develop a customer segmentation strategy for TravelTide, aimed at enhancing its email marketing with targeted perks. The project leverages a database with session-level granularity; we specifically selected a cohort consisting of sessions starting after January 4, 2023 and users with more than 7 sessions. Our approach combined a rule-based segmentation with hierarchical clustering.

Initially, three rule-based segments were defined:

- **High-Spending Customers** were identified by high total trip expenses and were targeted with VIP-Lounge perks.
- **Inactive or Canceled Customers** were those who either canceled or did not book trips, and they received Free Cancellation perks.
- **Discount-Oriented Customers**—typically operating on a smaller budget and frequently using discounts—were assigned Exclusive Discounts.

For the remaining customers, we applied hierarchical clustering using key features such as total trip cost, trip length, age, and average costs per trip. Although the initial clustering yielded five clusters, two clusters sharing similar characteristics were merged, resulting in four additional segments with the following assigned perks:

- **Cluster 1:** Customers with longer trips were given the Free Night perk.
- **Cluster 2:** Average-spending customers received the Free Meal perk.
- **Cluster 3:** Younger, budget-conscious travelers were offered Free Breakfast.
- **Cluster 4:** Older customers, who tend to travel with more luggage, were assigned the Free Bag perk.

While the hierarchical clustering provided actionable segments, the separation between groups remains moderate. Further validation through customer response is necessary, and additional information—such as distinguishing between business and private travelers—could refine the segmentation further.