Streaming Data Analytics Individual Project

Dataset used: Traveler-trip dataset

Description of the dataset

This dataset provides a basis for understanding travel preferences, cost patterns, and demographic trends, supporting the creation of targeted travel packages and marketing strategies.

- Traveler Demographics: Information on traveler gender and age, allowing for analysis of demographic preferences in destinations, transportation, and accommodations.
- **Destinations**: Various travel destinations are represented, with data indicating their popularity and associated travel costs.
- **Accommodation Details**: Data on preferred accommodation types (e.g., hotels, budget stays, homestays) by destination, specifically highlighting preferences in destinations like Bali and Paris.
- **Trip Duration**: Information on trip length, which varies by destination and transportation mode, allows for insights into common travel durations for each location.
- **Transportation Mode and Costs**: Details on the types of transportation used (e.g., flights, trains, cars) with associated costs, including specific data for Indian travelers' transportation spending.
- Travel Costs: Information on total travel costs and breakdowns, such as accommodation vs. transportation costs, helps identify cost distribution across destinations like London.

<u>Objectives</u>

- Understand Destination Preferences: Identify popular travel destinations based on demographic factors, like gender, to tailor destination-specific promotions.
- Analyze Accommodation and Transportation Choices: Determine accommodation and transportation preferences to refine travel package offerings for diverse traveler needs.
- Assess Trip Duration Patterns: Examine how trip durations vary by destination and transportation mode to inform the design of short- and long-stay travel packages.

- Evaluate Cost Distribution by Destination: Analyze total travel costs across destinations to create budget-friendly and premium package options.
- **Identify Key Traveler Demographics**: Study the age and gender distribution of travelers to customize marketing efforts for different demographic groups.

<u>Insights</u>

- Certain destinations appeal more to specific demographics (e.g., Bali may attract more females), allowing targeted marketing to boost travel interest among these groups.
- **Accommodation Preferences**: Preferences for accommodation types vary, with budget stays or homestays often favored in specific destinations, indicating a trend towards affordable and immersive travel experiences.
- **Cost Trends by Destination**: Expensive destinations like Paris attract premium travelers, while budget-friendly spots like Bangkok appeal to cost-conscious travelers, guiding pricing and promotion strategies.
- **Trip Duration and Transportation**: Shorter trips align with air travel, while longer trips suit trains or cars, suggesting package themes based on quick getaways or leisurely journeys.
- **Traveler Demographics**: Younger age groups often prefer adventurous or budget-friendly options, while older travelers might favor comfort, guiding the focus of experience-based packages for each group.