Worldwide Travel Analysis

Team C: Anisa, Bhavita, Kanyinsola and Lola


1. Objectives/ Motivation
2. Roles
3. ETL
4. Hypothesis 1
5. Hypothesis 2
6. Dashboarding
7. Outcomes
8. Next steps

Objectives

- Analyse global travel destinations to understand how factors like budget level, climate and other attributed influence trip choices.
- Explore pattern in travel ratings, duration preferences, and climate characteristics across 560 cities.

Motivation

- Inform travel industry and understand travel patterns to provide better travel choices to its customer and provide a bespoke experience to their needs.
- Identify any growth opportunities and justify investment to tourism infrastructure.

Lola

- Data Analyst
- EDA
- Documentation

Anisa

- Data Analyst
- Dashboard Developer
- Power BI dashboarding

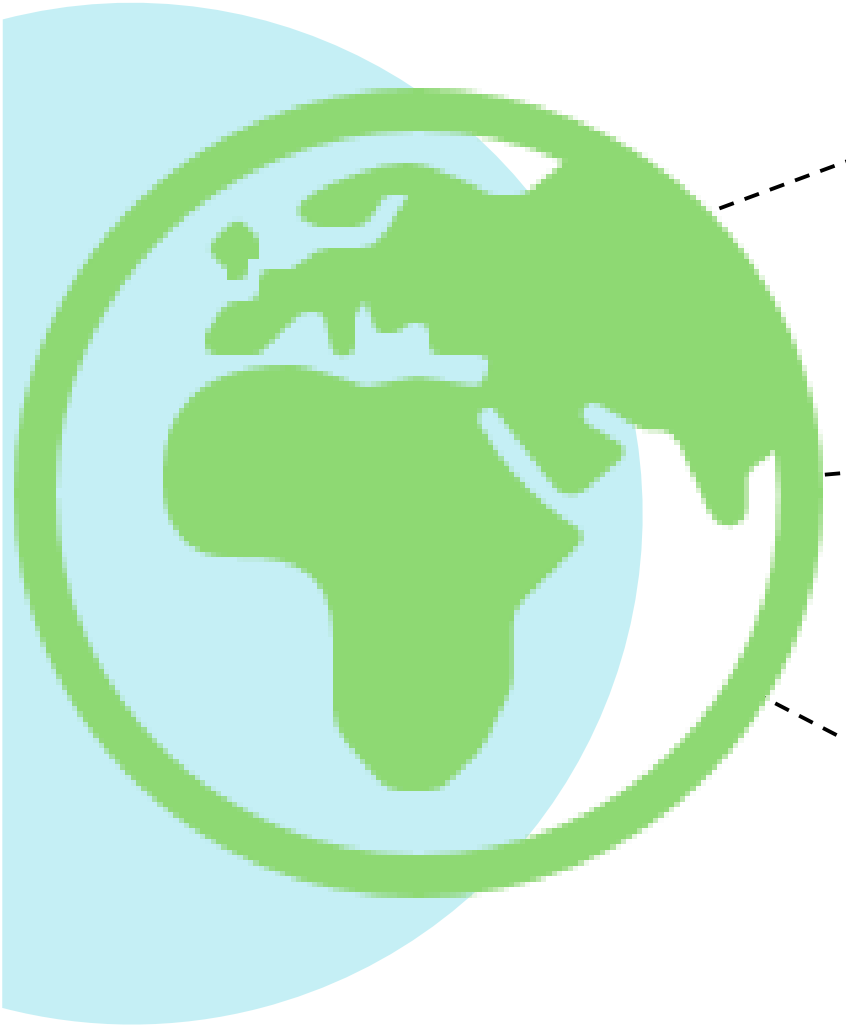
Bhavita

- Data Analyst
- EDA
- Documentation

Kanyinsola

- Data Architect
- ETL
- Streamlit App

Data



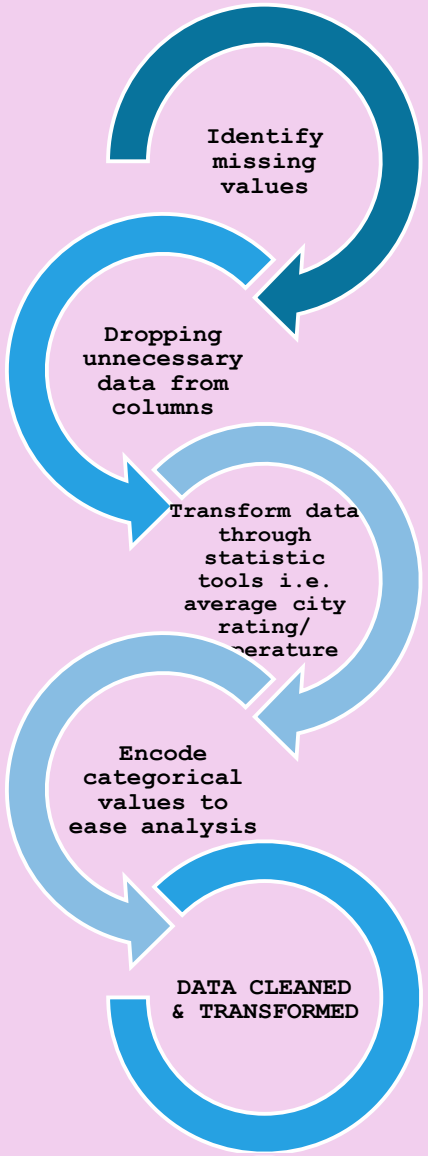
This dataset contains curated travel information for 560 cities across the globe

Key features:
Country, region, co-ordinates, short description, ideal duration, Budget level, thematic ratings

Supports travel recommendation systems, climate analysis, tourism research, and trip planning.

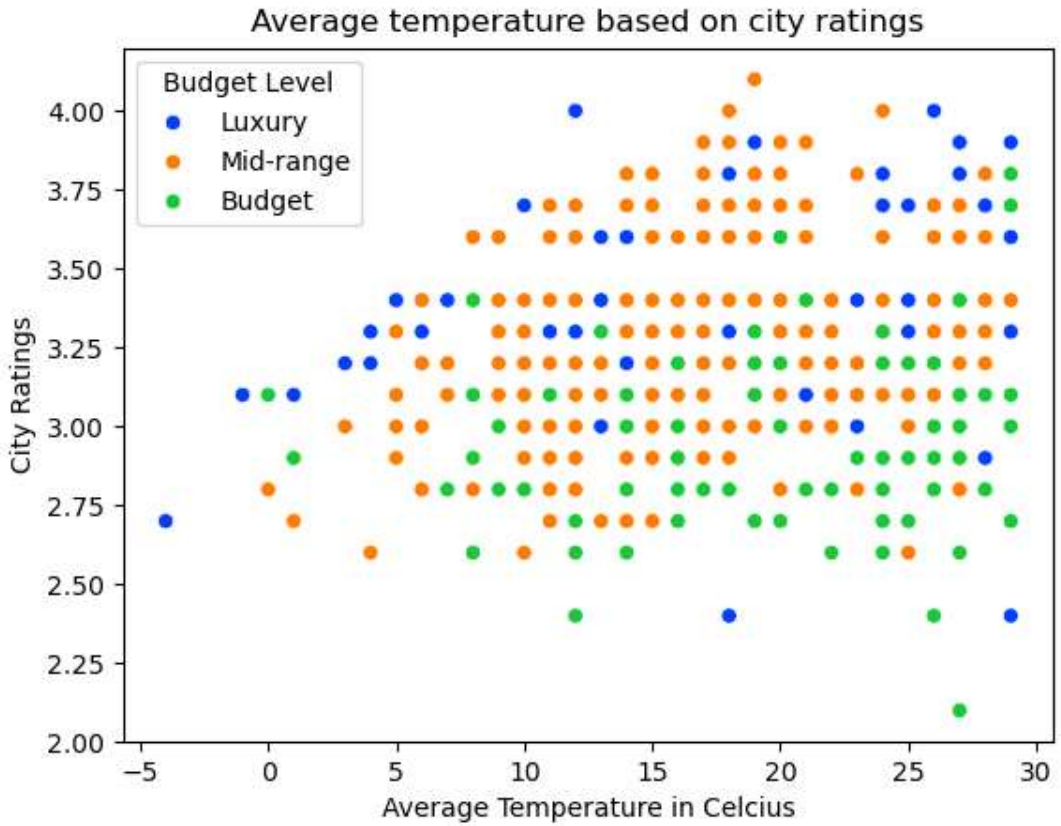
Source: Kaggle

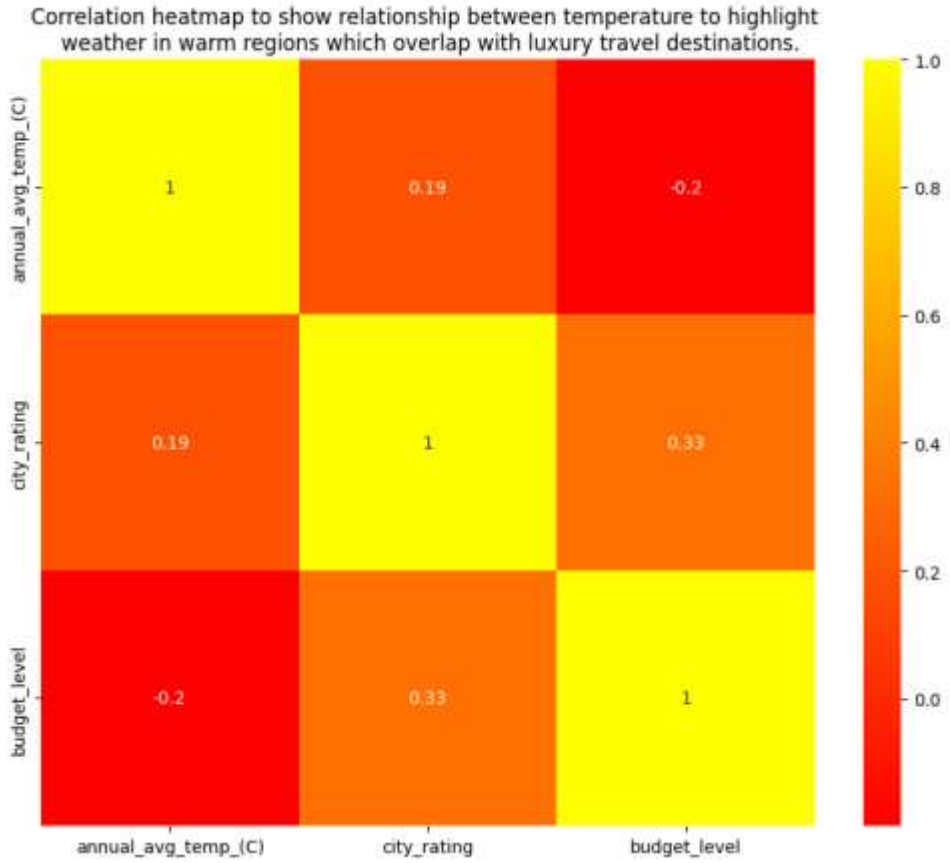
ETL



Are luxury travel destinations associated with higher temperatures?

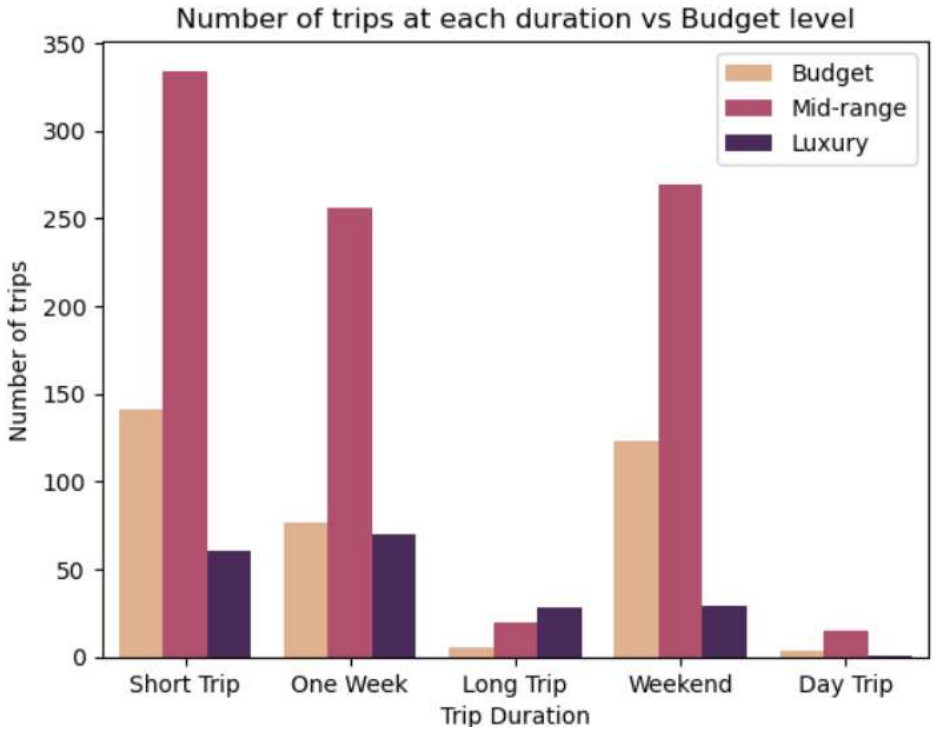
- *Hypothesis: Luxury destinations will be located in cities that have higher average temperatures compared to mid-range and budget destinations*

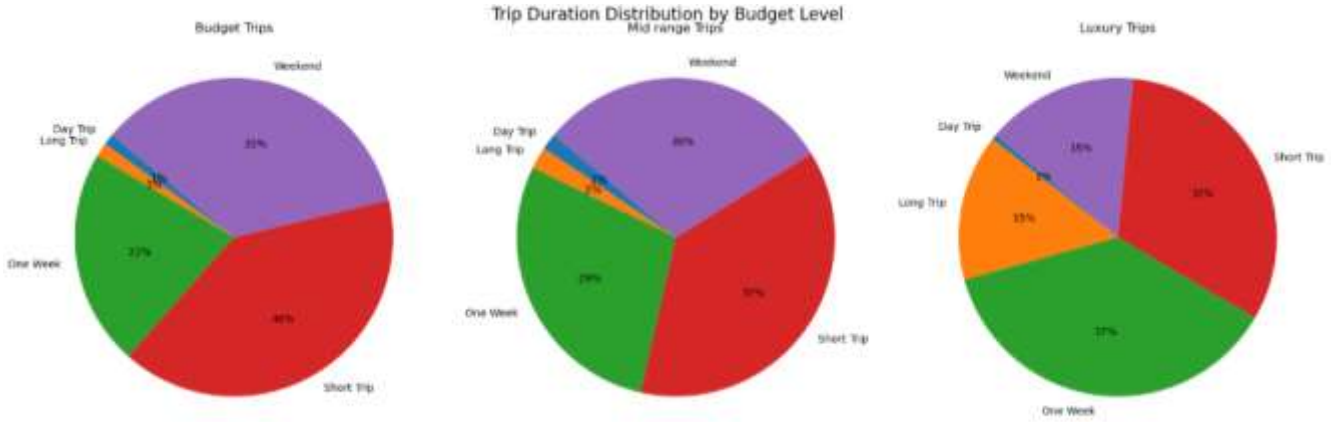


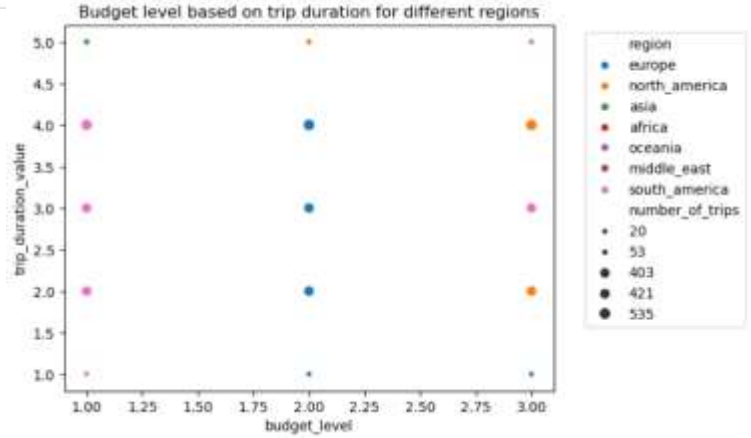


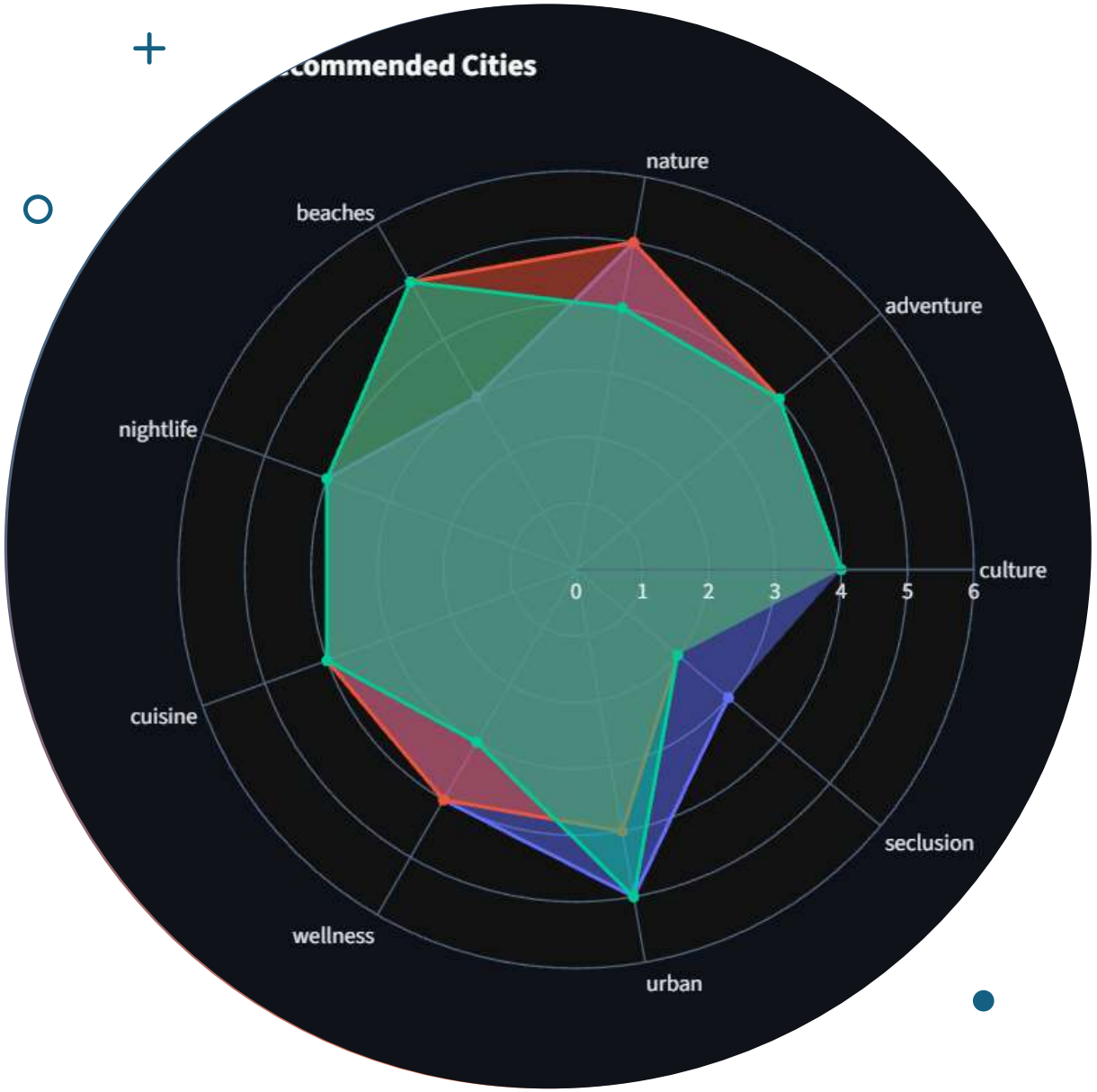
Does budget levels influence trip duration?

- *Hypothesis: Budget friendly destinations will be associated with shorter recommended trip durations compared to mid-range and luxury trips*









Wotrav – Streamlit App

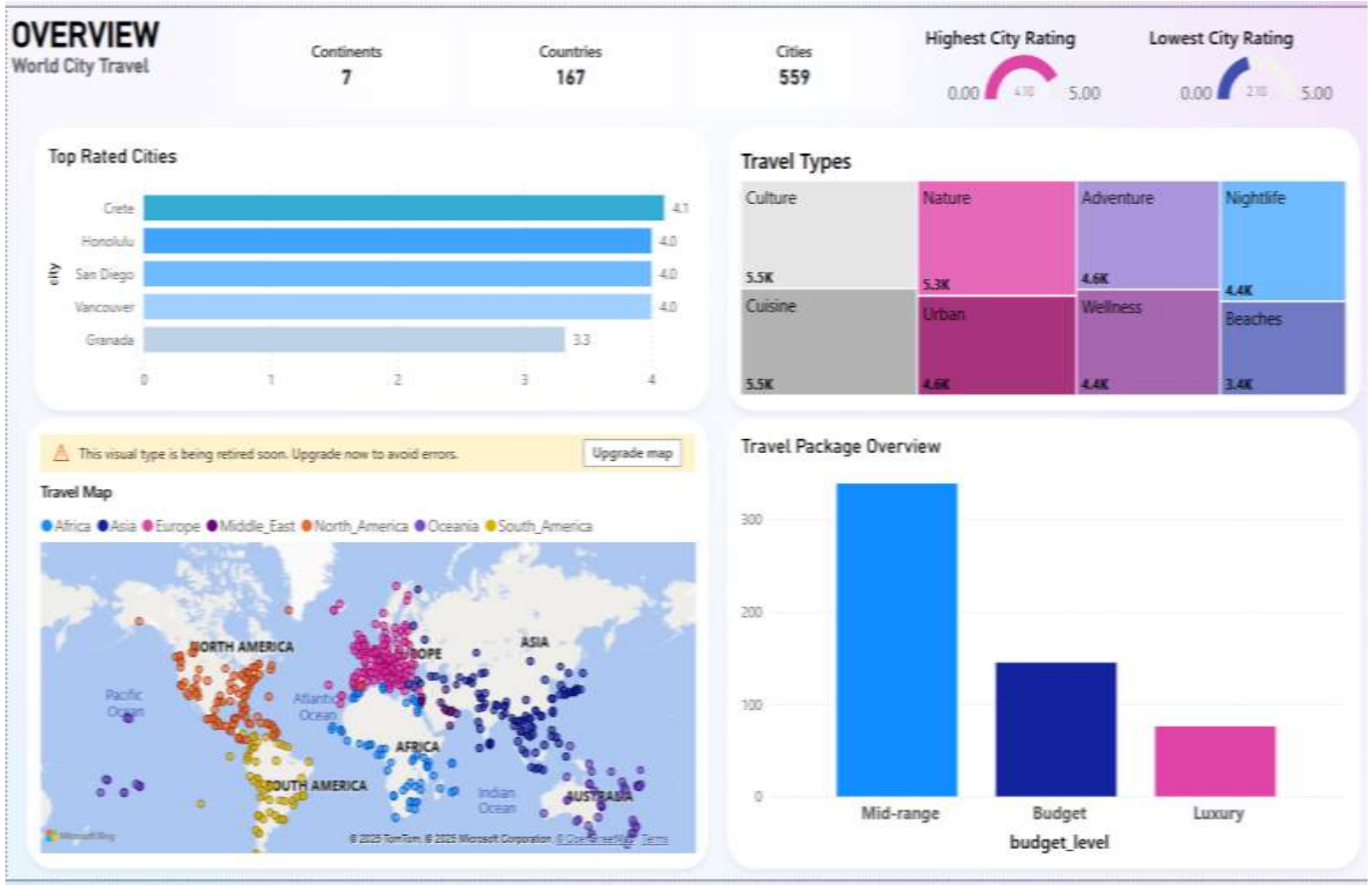
This app was designed around the idea of acting like a digital travel agent, helping travellers or travel-focused businesses explore destination options based on their personal needs.

The goal was to create a simple but effective tool that could recommend suitable cities using a few key user inputs.

Each suggested city is displayed with a short, meaningful description and a radar chart that highlights several important features of the destination.

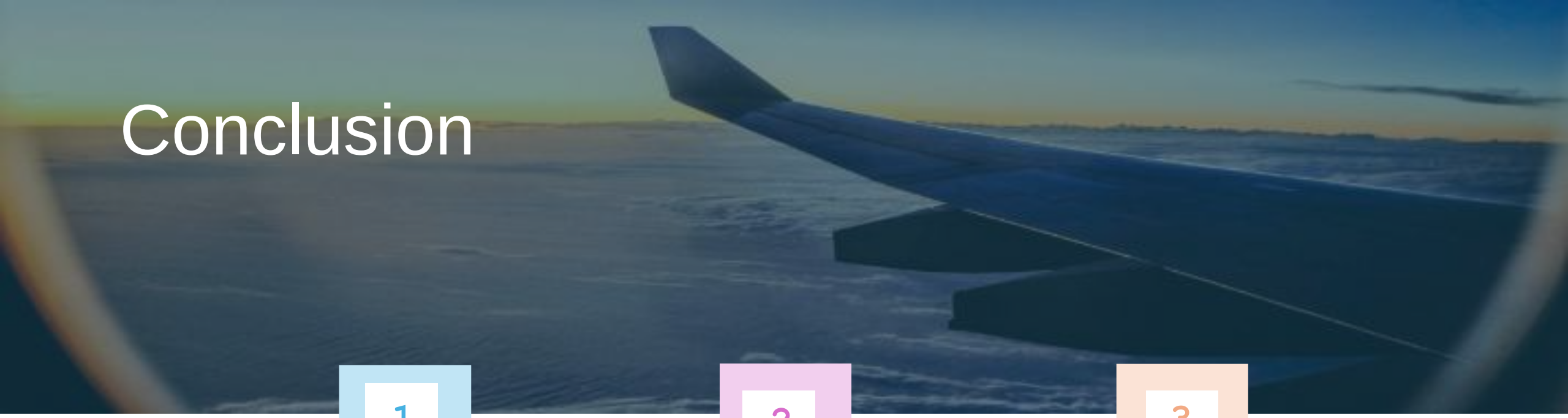
Overall, the tool offers a practical, interactive way to explore destinations without overwhelming users.

Dashboarding- Power BI



This dashboard was created using Power BI. We wanted to highlight the key metrics including top cities, travel activities and visualise insights from our hypotheses.

We wanted to ensure the dashboard was clear, concise, interactive and easy to navigate.



Conclusion

1

Luxury travel is not dependent on high temperatures

2

The most popular budget level was Mid-range except for long trips where Luxury budgets were favored.

3

Budget trips peak strongly in short trips and weekend trips compared to more expensive trips

Next Steps

Improvements and Future Work

Broader Use of the Dataset -

- Investigate additional parts of the dataset that we didn't have time to explore, especially variables like annual average temperature and trip duration categories.

Enhancing Wotrav's Functionality -

- Introduce more advanced visualisations, such as an interactive global map, to help users understand and compare destinations visually.
- Expand the recommendations by incorporating more personalised factors, such as preferred weather.

Predictive modelling and Forecasting (Power BI)

- Analyse trend of monthly temperature and whether it may influence type of travel and duration.
- Apply analytics to visuals, make suggestion on where to visit based on ratings, duration and preferred temperature.