INTRODUCTION

In 2019, the global tourism industry was worth over $5 Trillion dollars according to the United Nations World Tourism Organization (UNTWO), with the United States contributing a whopping $580 Billion (>11%).

UNTWO defines a tourist as someone who travels atleast 80km from his or her home for atleast 24 hours for business, leisure and/or other reasons. From the regal streets of Grand Bazaar in Istanbul to Nakamise street of Sensoji Temple in Tokyo, over 1.5 billion people thronged to different travel destinations in 2019.

Tourism is a great economic contributor and its impact can be felt across the following industries:

1. Accommodation
2. Food and Beverage Services
3. Recreation and Entertainment
4. Transportation
5. Travel Services
6. Retail Trade (souvenirs and the like)

For the aforementioned reasons, developing countries are looking to standardize their current tourism sites in order to attract international, continental and local tourists.

BUSINESS PROBLEM

My client is a West African country with breathtaking rainforests and a vast variety of wildlife in its savannah alongside other historical sites. The objective of this project is to investigate the ancillary infrastructure surrounding the best tourist sites in the world with the view of strategically replicating such infrastructure to ensure the best experience for potential tourists in order to maximize the impact on the local economy.

This objective will be achieved by randomly selecting 10 popular tourist attractions across 5 continents, exploring existing outlets within 600 metres radius of the tourist site by using Foursquare location API and clustering similar outlets using K-Means (an effective machine learning algorithm).

The table below contains the biggest tourist spenders of 2018;

Country	Amount Spent ($)
China	277 billion
United States	144 billion
Germany	94 billion
United Kingdom	76 billion

France	48 billion
Australia	37 billion
Russia	35 billion
Canada	33 billion
South Korea	32 billion
Italy	30 billion

How does this West African country build its tourism infrastructure to attract these billions of dollars?

DATA

The core data required are in two segments;

- Longitude and Latitude of the 10 tourist locations
- Location exploration using the above data points

The longitude and latitude will be obtained manually because of the randomness of the locations while the location exploration will be obtained using Foursquare API