OPENING A NEW CAMPGROUND IN ARDÈCHE, FRANCE

Coursera Capstone Project
IBM Applied Data Science Capstone

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Background

- Ardèche Department in France is a popular place for summer holidays

- A lot of campgrounds that flourish

- Where is the best place to open a new campground in this department?

Data

- Data required
  - *List of communities of the Ardèche Department*
  - *Latitude and longitude coordinates of the communities*
  - *Venue data, particularly data related to camping grounds*

- Sources of data
  - *Wikipedia page for communities*
  - *Geocoder package for latitude and longitude coordinates*
  - *Foursquare API for venue data*

Methodology

- Web scraping Wikipedia page for community list

- Get latitude and longitude coordinates with Geocoder

- Use Foursquare API to get venue data

- Perform clustering on the data using k-means clustering

- Visualize the clusters in a map using Folium

Results

- Cluster 0 (red): moderate number of campgrounds

- Cluster 1 (purple): high number of campgrounds

- Cluster 2 (mint): low number of campgrounds
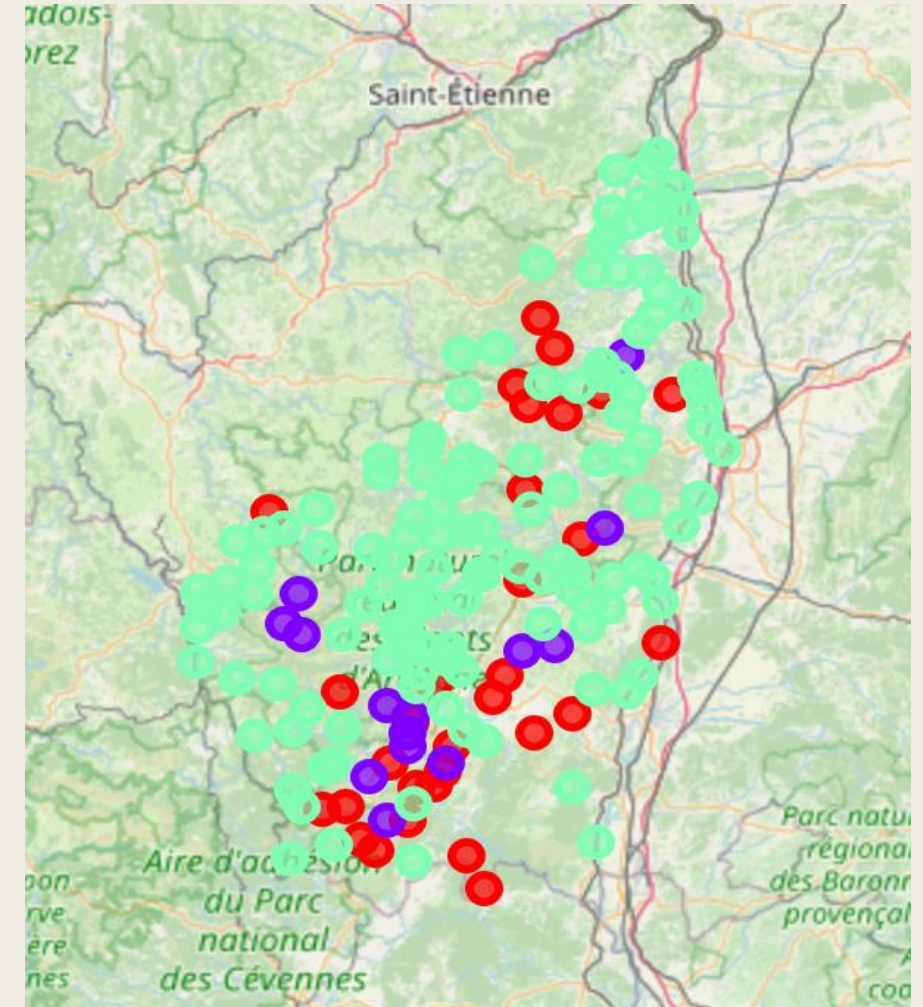
Recommendations

- Open a new campground in the communities in Cluster 2 with little to no commpetition

- Open a new campground in the communities in Cluster 0 with moderate competition if you have unique selling propositions to stand out from the competition

- Avoid communities in Cluster 1, as there is already a high concentration of camping grounds