

# Bali Indonesia Regency Recommendation for Food Lover Tourist

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# Background



Bali have several recommended traditional Food Spread Across Island



Food Lover love to stay near the food venue so they can easily get access to find food places

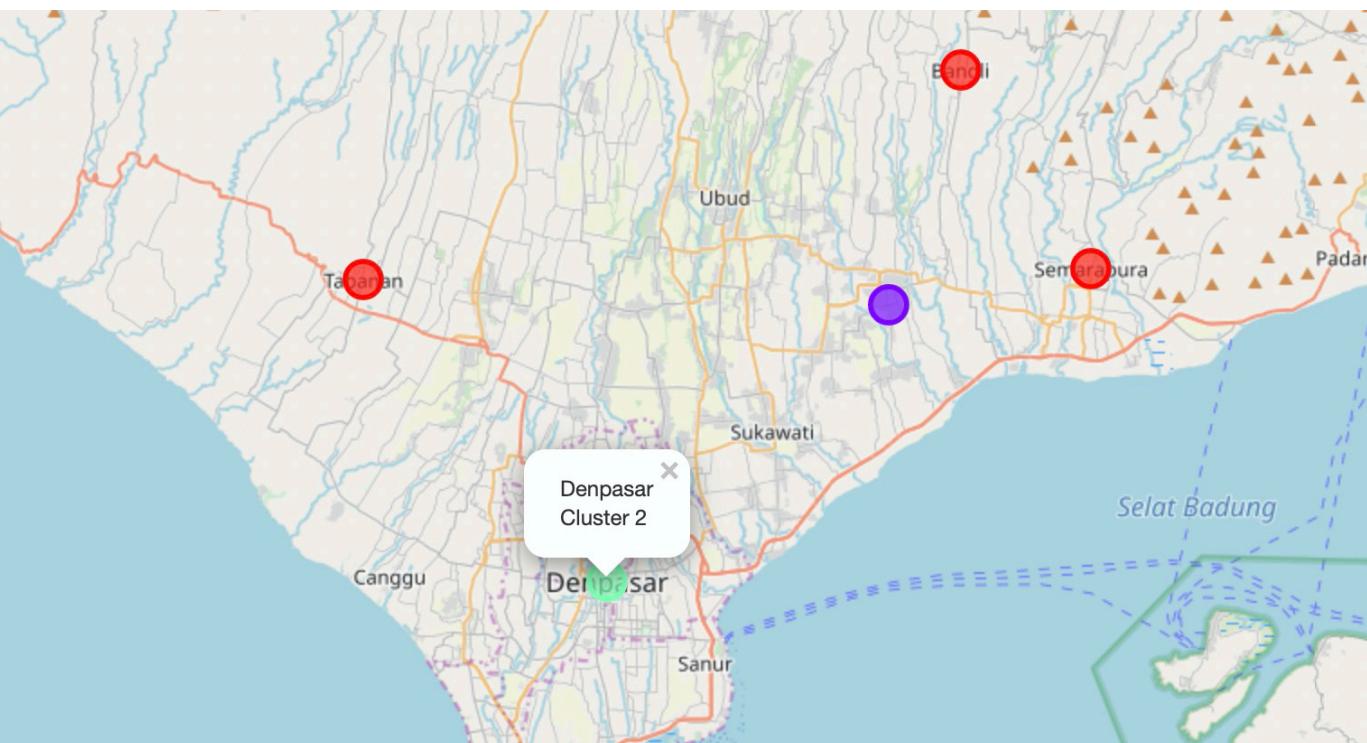
Purpose

**Find a best regency  
for food lover tourist  
to stay in Bali**

# Methodology: Modelling

## K-means Clustering with k = 3

	Regency	Lat	Long	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue
0	Denpasar	-8.652497	115.219117	2	Indonesian Restaurant	Coffee Shop	Noodle House
1	Tabanan	-8.539231	115.126568	0	Bakery	Breakfast Spot	Chinese Restaurant
2	Gianyar	-8.548236	115.326054	1	Convenience Store	Park	Video Game Store
3	Klungkung	-8.535017	115.403276	0	History Museum	Historic Site	Night Market
4	Bangli	-8.460312	115.353520	0	Gym	Flea Market	Snack Place



# DATASET



5 MOST POPULAR BALI REGENCIES  
DENPASAR, TABANAN, GIANYAR,  
KLUNGKUNG, AND BANGLI.



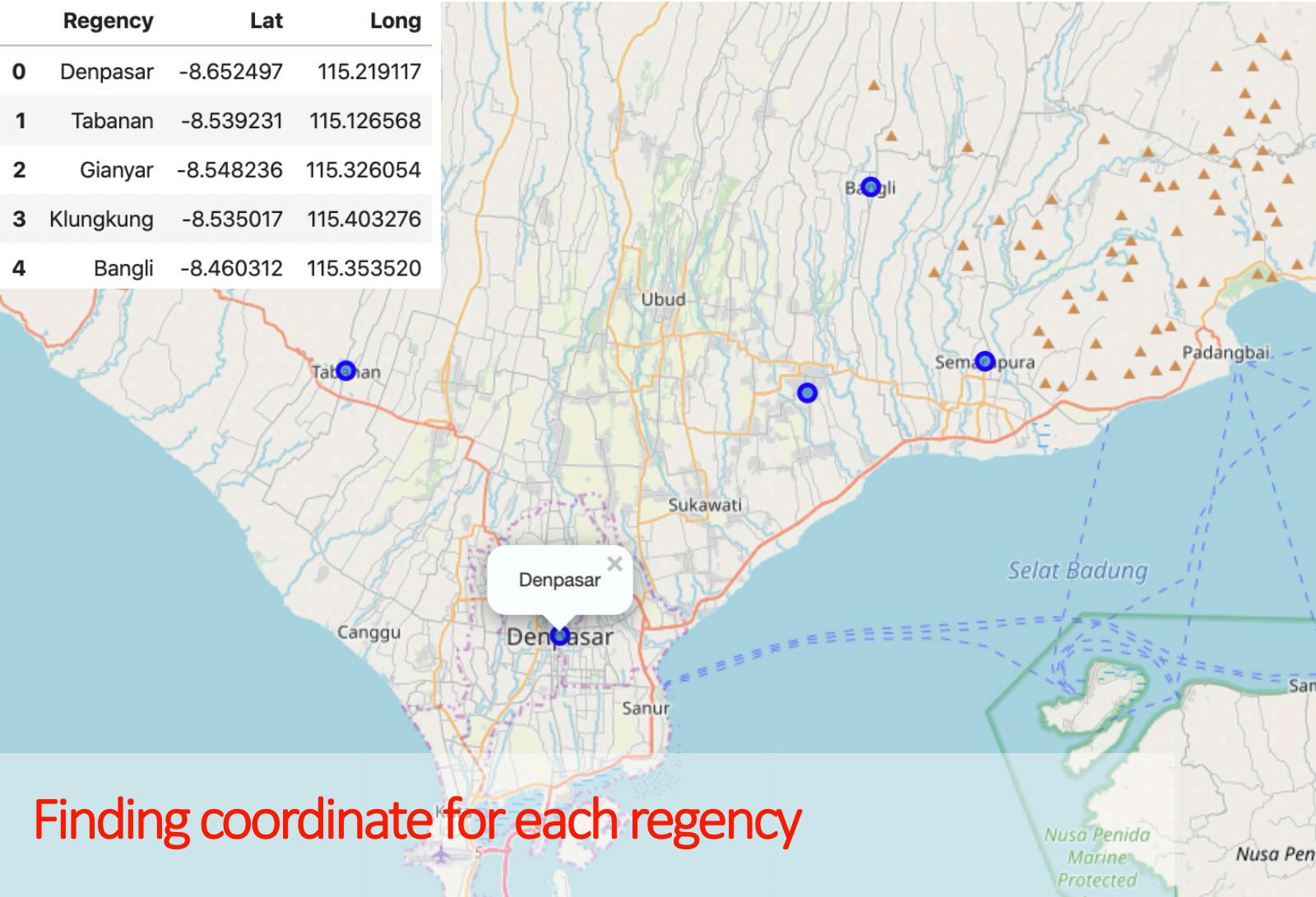
OPENSTREETMAP DATA TO GET  
COORDINATE EACH REGENCY



FOURSQUARE DATA TO GET THE  
VENUE AROUND REGENCIES

# Methodology: Data Preparation

	Regency	Lat	Long
0	Denpasar	-8.652497	115.219117
1	Tabanan	-8.539231	115.126568
2	Gianyar	-8.548236	115.326054
3	Klungkung	-8.535017	115.403276
4	Bangli	-8.460312	115.353520



# Methodology: Data Preparation

Get Venue around using foursquare API

	Regency	Regency Latitude	Regency Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Denpasar	-8.652497	115.219117	Dapoer Pemuda	-8.653717	115.217061	Indonesian Restaurant
1	Denpasar	-8.652497	115.219117	Kober Mie Setan Kaliasem	-8.655080	115.218596	Noodle House
2	Denpasar	-8.652497	115.219117	Voltvet Eatery & Coffee	-8.653594	115.217020	Café
3	Denpasar	-8.652497	115.219117	Warung Wardani	-8.651159	115.215957	Indonesian Restaurant
4	Denpasar	-8.652497	115.219117	Patung Catur Muka	-8.656036	115.216993	Monument / Landmark

One Hot Encoding for each categories

	Regency	Asian Restaurant	BBQ Joint	Bakery	Bike Shop	Breakfast Spot	Café	Chinese Restaurant	Coffee Shop	Convenience Store	...	Monument / Landmark	Night Market	Noodle House	Park	Pet Store	Pizza Place
0	Bangli	0.000000	0.000000	0.000000	0.000000	0.00	0.000000	0.00	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	Denpasar	0.035714	0.035714	0.035714	0.035714	0.00	0.035714	0.00	0.107143	0.035714	...	0.035714	0.000000	0.107143	0.000000	0.035714	0.035714
2	Gianyar	0.000000	0.000000	0.000000	0.000000	0.00	0.000000	0.00	0.000000	0.666667	...	0.000000	0.000000	0.000000	0.333333	0.000000	0.000000
3	Klungkung	0.000000	0.000000	0.000000	0.000000	0.00	0.090909	0.00	0.000000	0.000000	...	0.000000	0.090909	0.000000	0.000000	0.000000	0.000000
4	Tabanan	0.000000	0.000000	0.250000	0.000000	0.25	0.000000	0.25	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5 rows × 35 columns

## Analysis

- Cluster 2 is the best place to stay for tourist.
- Cluster 2 have Most Indonesian Food in the area.

## Conclusion

Based on the K-Means clustering method we can give recommendation to tourist that love food to stay in Denpasar (Cluster 2). This is due to Denpasar have more food venue compared to other Regency.