cognify-l2-t1

January 20, 2024

```
[1]: import pandas as pd
     import numpy as np
     import matplotlib.pyplot as plt
     import seaborn as sns
[3]: df = pd.read_csv("./L1T2_Dataset.csv")
     df.head()
[3]:
               Restaurant Name
                                 Country Code
                                                            City \
     0
              Le Petit Souffle
                                                     Makati City
                                          162
              Izakaya Kikufuji
                                                     Makati City
                                          162
                                               Mandaluyong City
       Heat - Edsa Shangri-La
                                          162
     3
                           Ooma
                                          162
                                               Mandaluyong City
     4
                   Sambo Kojin
                                          162
                                               Mandaluyong City
                                                    Address
                                                              Longitude
                                                                           Latitude \
     O Third Floor, Century City Mall, Kalayaan Avenu...
                                                           121.027535
                                                                        14.565443
     1 Little Tokyo, 2277 Chino Roces Avenue, Legaspi...
                                                           121.014101
                                                                        14.553708
     2 Edsa Shangri-La, 1 Garden Way, Ortigas, Mandal...
                                                           121.056831
                                                                        14.581404
     3 Third Floor, Mega Fashion Hall, SM Megamall, O...
                                                           121.056475
                                                                        14.585318
     4 Third Floor, Mega Atrium, SM Megamall, Ortigas...
                                                           121.057508
                                                                        14.584450
                                 Cuisines
                                           Average Cost for two
                                                                           Currency
     0
              French, Japanese, Desserts
                                                            1100
                                                                  Botswana Pula(P)
     1
                                 Japanese
                                                            1200
                                                                 Botswana Pula(P)
     2
        Seafood, Asian, Filipino, Indian
                                                            4000 Botswana Pula(P)
     3
                          Japanese, Sushi
                                                            1500
                                                                  Botswana Pula(P)
                                                            1500 Botswana Pula(P)
     4
                         Japanese, Korean
        Has Table booking Has Online delivery
                                                 Is delivering now
                                                                     Price range
     0
                         1
                                               0
                                                                                3
     1
                         1
                                              0
                                                                  0
                                                                                3
     2
                                               0
                                                                  0
                         1
                                                                                4
     3
                         0
                                               0
                                                                   0
                                                                                4
     4
                                               0
                                                                                4
```

Aggregate rating Rating color Rating text Votes

```
0
                  4.8
                                     0
                                                           314
                                                     1
                  4.5
                                     0
                                                           591
1
                                                     1
                  4.4
2
                                     1
                                                     5
                                                           270
                  4.9
3
                                     0
                                                           365
                                                     1
4
                  4.8
                                                           229
```

```
[25]: print("{:.0f}% of restaurants have table booking facility.".format((df["Has_\] \times Table booking"].value_counts()[1]/df["Has Table booking"].shape[0])*100))
```

12% of restaurants have table booking facility.

```
[46]: sum_rating_booking = 0

for i in range(0, len(df)):
    if df["Has Table booking"][i] == 1:
        sum_rating_booking += df["Aggregate rating"][i]
    else:
        pass

print("Average rating of Restaurants with table booking facility is {:.2f}/5.".
    oformat(sum_rating_booking/df["Has Table booking"].value_counts()[1]))
```

Average rating of Restaurants with table booking facility is 3.44/5.

```
[27]: print("{:.0f}% of restaurants have Online Delivery facility.".format((df["Has_\( \) \odots Online delivery"].value_counts()[1]/df["Has Online delivery"].shape[0])*100))
```

26% of restaurants have Online Delivery facility.

```
[47]: sum_rating_delivery = 0

for i in range(0, len(df)):
   if df["Has Online delivery"][i] == 1:
        sum_rating_delivery += df["Aggregate rating"][i]
   else:
        pass

print("Average rating of Restaurants with online delivery facility is {:.2f}/5.
        \[
        \]".format(sum_rating_delivery/df["Has Online delivery"].value_counts()[1]))
```

Average rating of Restaurants with online delivery facility is 3.25/5.

```
[36]: count = 0
for i in range(0, len(df)):
   if df["Has Table booking"][i] == 1 & df["Has Online delivery"][i] == 1:
      count += 1
   else:
      pass
```

```
print("{:.0f}% of restaurants have facilty of both Table Booking and Online

→Delivery.".format((count/len(df))*100))
```

5% of restaurants have facilty of both Table Booking and Online Delivery.

```
[48]: sum_rating_delivery_booking = 0

for i in range(0, len(df)):
   if df["Has Online delivery"][i] == 1 & df["Has Table booking"][i] == 1:
      sum_rating_delivery_booking += df["Aggregate rating"][i]
   else:
      pass

print("Average rating of Restaurants with both table booking and online___
      delivery facility is {:.2f}/5.".format(sum_rating_delivery_booking/count))
```

Average rating of Restaurants with both table booking and online delivery facility is 3.60/5.

```
[56]: price_range = int(input("Please share preferred price range (1-5) --> "))
    availble_restaurant_list = []

for i in range(0, len(df)):
    if df["Price range"][i] == price_range:
        if df["Has Online delivery"][i] == 1:
            availble_restaurant_list.append(df['Restaurant Name'][i])
        else:
            pass
    else:
        pass

if len(availble_restaurant_list) > 0:
    for j in range(0, len(availble_restaurant_list)):
        print("{}. {}".format(j+1, availble_restaurant_list[j]))
    else:
        print("NO RESTAURANT AVAILBLE")
```

Please share preferred price range (1-5) --> 4

- 1. Famous Dave's Barbecue
- 2. Cho Gao Crowne Plaza Abu Dhabi
- 3. Applebee's
- 4. Gazebo
- 5. Zaroob
- 6. Nayaab Haandi
- 7. Nando's
- 8. Peking Chinese Restaurant
- 9. TGI Friday's

- 10. Applebee's
- 11. The Fatty Bao Asian Gastro Bar
- 12. Punjab Grill
- 13. California Pizza Kitchen
- 14. Raasta
- 15. Dhaba By Claridges
- 16. 7 Barrel Brew Pub
- 17. 56 Ristorante Italiano
- 18. Side Wok
- 19. TGI Friday's
- 20. 21 Gun Salute
- 21. Gung The Palace
- 22. Bernardo's
- 23. Olive Bistro
- 24. Zolocrust Hotel Clarks Amer
- 25. Pebble Street
- 26. Embassy
- 27. Ardor 2.1
- 28. Caffe 9
- 29. Fuji Japanese Restaurant
- 30. Moets Stone
- 31. TGI Friday's
- 32. Cafe Diva
- 33. Side Wok
- 34. Diva The Italian Restaurant
- 35. Uber Lounge
- 36. Raasta
- 37. Cafe Illuminatii
- 38. Side Wok
- 39. Wok In The Clouds
- 40. Smokey's BBQ and Grill
- 41. Elma's Brasserie
- 42. Lodi The Garden Restaurant
- 43. Buzz
- 44. The Great Kabab Factory
- 45. Spaghetti Kitchen
- 46. Sufiaana
- 47. Dirty Apron
- 48. Punjabi By Nature
- 49. TFK The Flaming Kick
- 50. Eden Kitchen & Bar
- 51. TGI Friday's
- 52. Effingut Brewerkz
- 53. 18 Degrees Resto Lounge