

Steakhouses in Phloenchit, Bangkok, Thailand

Jirasak Ji

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1. Introduction

Novotel hotel in Ploenchit, Bangkok, Thailand is considered to be one of the most popular hotels in Bangkok. Thai cuisine is known to be one of the most famous cuisine in the world. Most tourists in Thailand would have Thai food almost every day during their stay, but can occasionally desire some western cuisine. In this problem, it is assumed that a tourist is staying in the famous Novotel and has an appetite for steaks. Nearby steakhouses are found in this project for the tourist.

2. Data acquisition and cleaning

Data from Foursquare is used to find restaurants in Bangkok that many users have searched in the website. As the tourist is assumed to have no knowledge about Bangkok, a visual map is shown to guide the tourist and shows the available options he/she may choose. Data that are acquired from Foursquare are in JSON format (Figure 1) and must be transformed into a DataFrame (Figure 2) for the ease of analysis. Pandas library is used to clean and transform data into the desired format.

```
{'meta': {'code': 200, 'requestId': '5d7f5fb1d69ed0002c24bbec'},
 'response': {'venues': [{'id': '4d65f2a56d86224b98d78d81',
  'name': 'TN Steak House',
  'location': {'address': 'Sindhorn Bldg',
  'crossStreet': 'B Fl',
  'lat': 13.735842050335101,
  'lng': 100.54490212638468,
  'labeledLatLngs': [{'label': 'display',
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  'lng': 100.54490212638468}],
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  'postalCode': '10330',
  'cc': 'TH',
  'city': 'ปทุมวัน',
  'state': 'กรุงเทพมหานคร',
  'country': 'ประเทศไทย',
  'formattedAddress': ['Sindhorn Bldg (B Fl)',
  'ปทุมวัน',
  'กรุงเทพมหานคร 10330',
```

Figure 1. Data from Foursquare in JSON format

name	categories	address	cc	city	country
TN Steak House	Steakhouse	Sindhorn Bldg	TH	ปทุมวัน	ประเทศไทย
New York Steakhouse	Steakhouse	4 Soi Sukhumvit 2	TH	คลองเตย	ประเทศไทย
Jeffer Steak	Steakhouse	J. B. Place	TH	NaN	ประเทศไทย
Santa Fe' Steak (ซานตา เฟ สเด็ก)	Steakhouse	Big C Ratchadamri	TH	ปทุมวัน	ประเทศไทย

Figure 2. DataFrame format after transformation and cleaning

3. Analysis

After the data has been formatted into a DataFrame, Folium is used to plot the restaurants. The codes used can be found in the IBM Watson Studio.

4. Result

The origin (Novotel) is represented in green and available steakhouses are represented in purple. The map is represented in Figure 1.

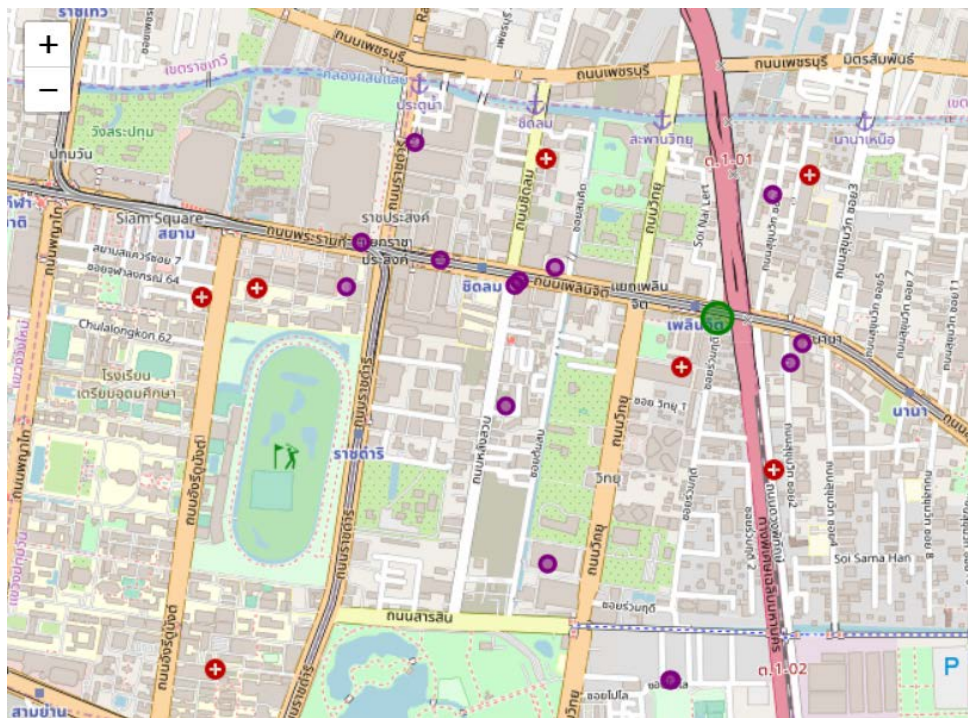


Figure 1. Map of Novotel (in green) and available steakhouses (purple)

5. Conclusion

With the help of data obtained from Foursquare and visualization from Folium, I was able to find the available steakhouse near Novotel hotel in Bangkok. For further potential applications, different places specified by the user can be found such as cinemas and museums. Slicers or filtering may be introduced to help with the ease of navigation.