

# Capstone Project - The Battle of Neighbourhoods - London Restaurant

## 1. Introduction

### 1.1 Background

Being an ex-chef I've always wanted to open a gluten-free restaurant in a major city long before 'free from' food became easily available in supermarkets. Being a Coeliac it's always been difficult to find a venue you can 'guarantee' the food produced is totally free from gluten. This same problem also follows for anyone that has nut allergy or is lactose intolerant etc.

***Estimated at £934 million in 2019, the UK free-from food and drink retail market has enjoyed stellar growth over the past five years, more than doubling in value, supported by a raft of factors. The dairy-/lactose-free segment continued to outpace gluten-/ wheat-free in 2019, with sales estimated to reach £517 million and £416 million respectively. (source UK Free-From Foods Market Report <https://store.mintel.com/uk-free-from-foods-market-report>)***

### 1.2 Problem

The project will look at London, but avoiding central London as rent and rates will be too high, trying to find an area where there are food venues already, but none that specifically cater for the free from market. Areas with existing food venues tend to become 'the area to go to' rather than being located in an obscure place just because there are no existing venues.

I will also look at the property rental market for that area intending to show where the rents are more reasonable and cross reference this data with good locations.

## 2. Data retrieval

Based on the problem, data needs to be sourced for:

- postcode data for the London area excluding central London scraped from Wikipedia
- number of existing restaurants and locations using Foursquare API
- location of existing 'free-from' exclusive or 'free-from' serving venues using Foursquare API
- property rental data using Beautiful Soup taken from Zoopla or similar source

2.1 Finding the data for the postcodes was not available from Wikipedia. So I scraped from the website [milesfaster.co.uk](https://milesfaster.co.uk) using Beautiful soup. After retrieving a full set of London postcodes I removed the central London postcodes as planned.

2.2 Using Foursquare I created two databases, one for the 'free from' food venues and one for general food venues so I was able to show them separately on maps. Unfortunately the Foursquare data though adequate for the project may not have been as comprehensive as I would have liked. As it relies on a venue being solely registered under 'free from' where as some venues will no doubt offer 'free from' options but not be categorised in that way on Foursquare.

2.3 Scraping the property information was more problematic. Most sites produce the information dynamically and are not structured in rigid table format. Eventually I found a site [shopproperty.co.uk](http://shopproperty.co.uk) that I could reliably scrape the data from.

### 3. Data Cleaning

3.1 Cleaning and preparing the postcode data was relatively simple, just dropping any unassigned postcodes and blank rows

3.2 The retail property data on the other hand was not ready instantly. Some of the properties did not have a price and the price text was not in a format that would be useful for display and needed to be worked on before using on the maps.

3.3 After analysis I decided to focus on the area around Notting Hill, so a separate dataframe was created to speed up processing to show retail properties for that area only (see appendix A)

### 4. Data Analysis

4.1 Plotting the food venues in blue and the 'free from' in red we can see where there are areas to look at (Figure 4.11). The intention was to find an area that there are already food venues as they would be known as destinations to eat. Also more likely there is parking and a reasonable resident population to capitalise on.

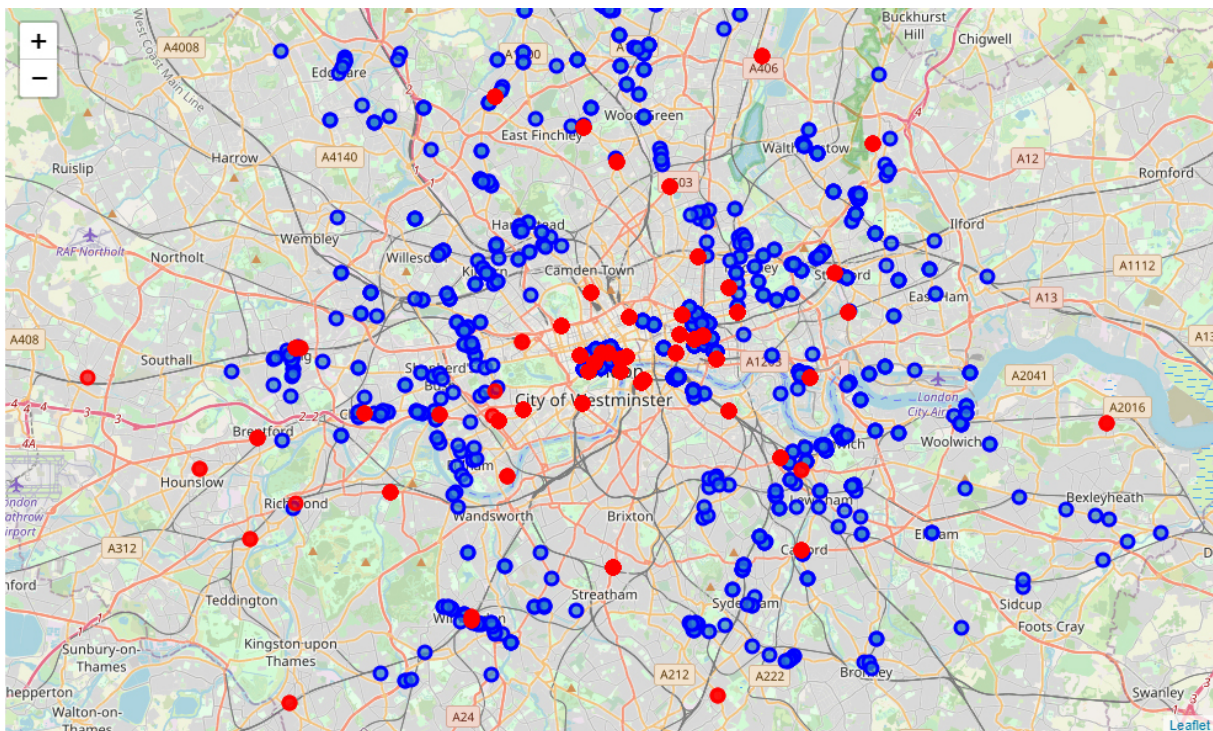


Figure (4.11)

4.2 With the first map it was difficult to easily see where the concentration of food venues against 'free from' venues are, so I decided to produce a heatmap (Figure 4.2.1), which produced a clearer understanding. There is quite a clear area which I the needed to compare against the property available to rent.

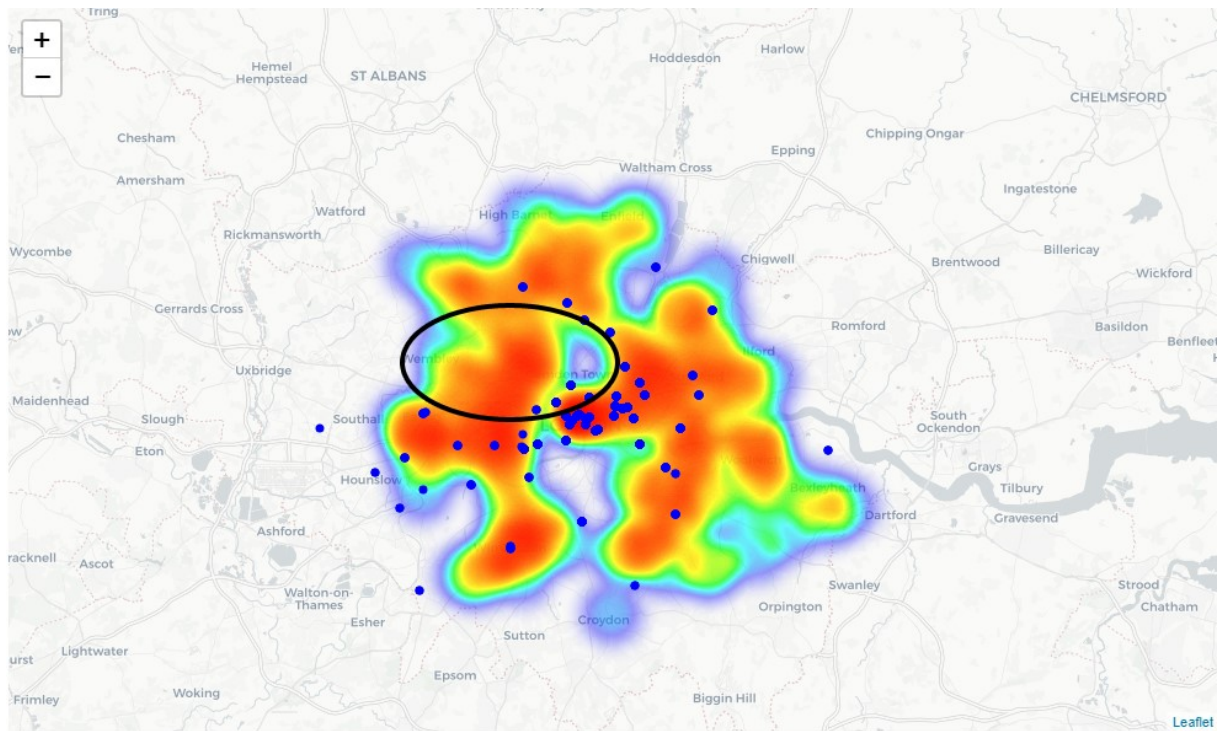


Figure 4.21

4.3 Now I need to find what properties are available in this area. After scraping the [shopproperty.co.uk](http://shopproperty.co.uk) website I was able to create a heatmap (Figure 4.3.1) showing where properties are available and a enough offerings for there to be choice on size and budget.

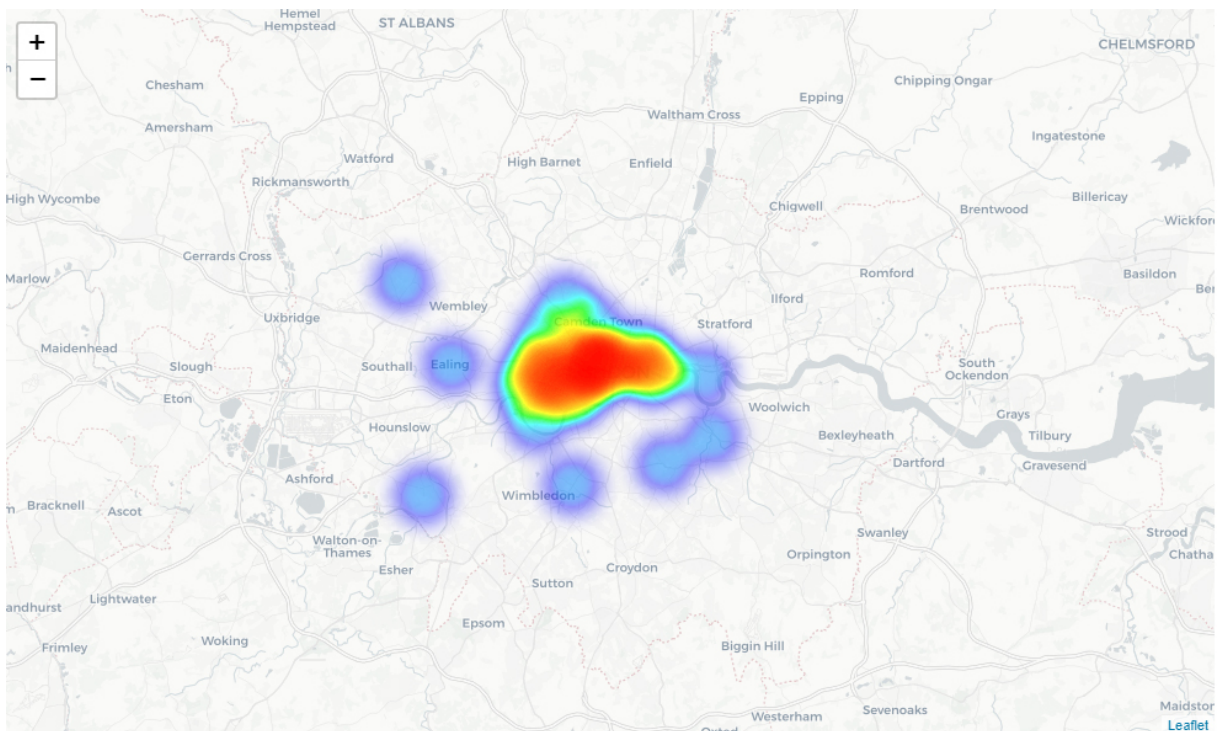


Figure 4.3.1

So we can better understand where these properties are available in relation to the food venues I overlaid the food venues as well (Figure 4.3.2). With this heatmap I was able to ascertain that there is a section where property is available and though there are food venues none are specifically catering for the 'free from' customer.



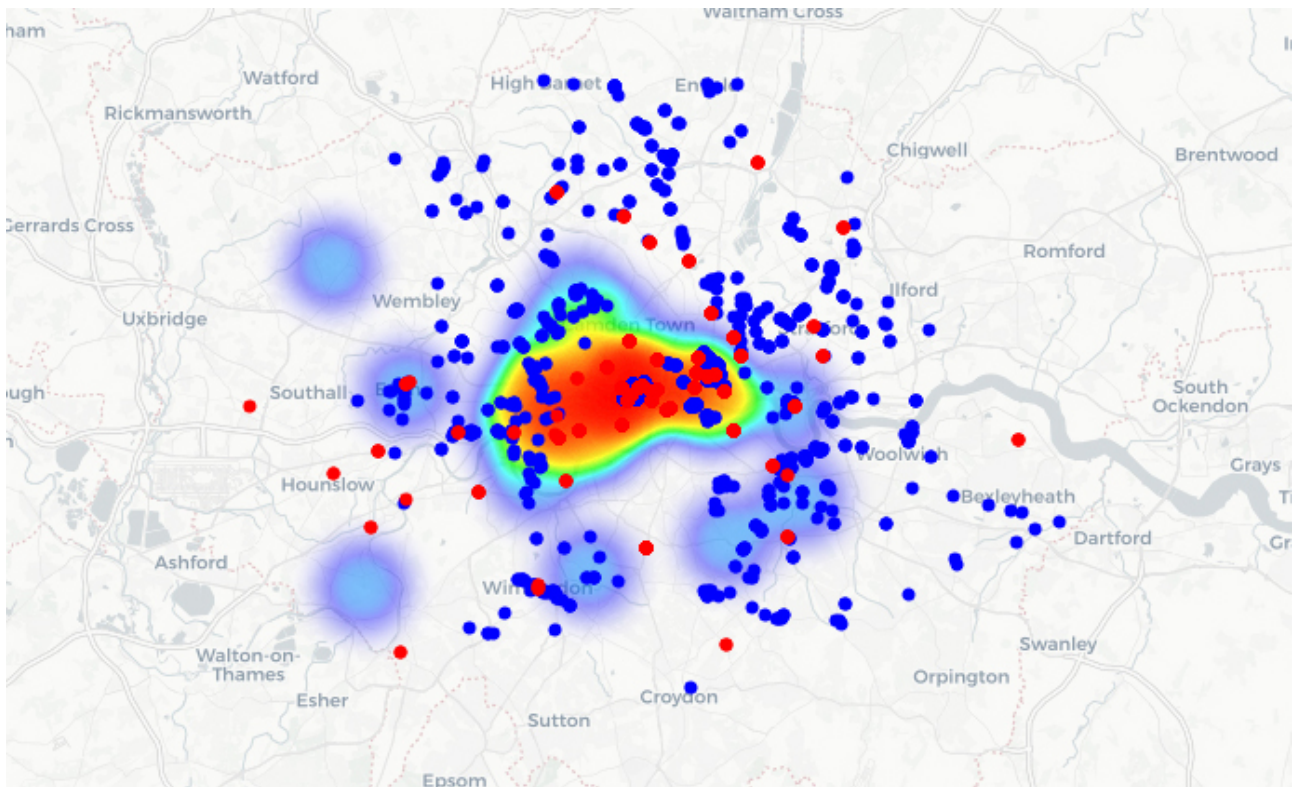
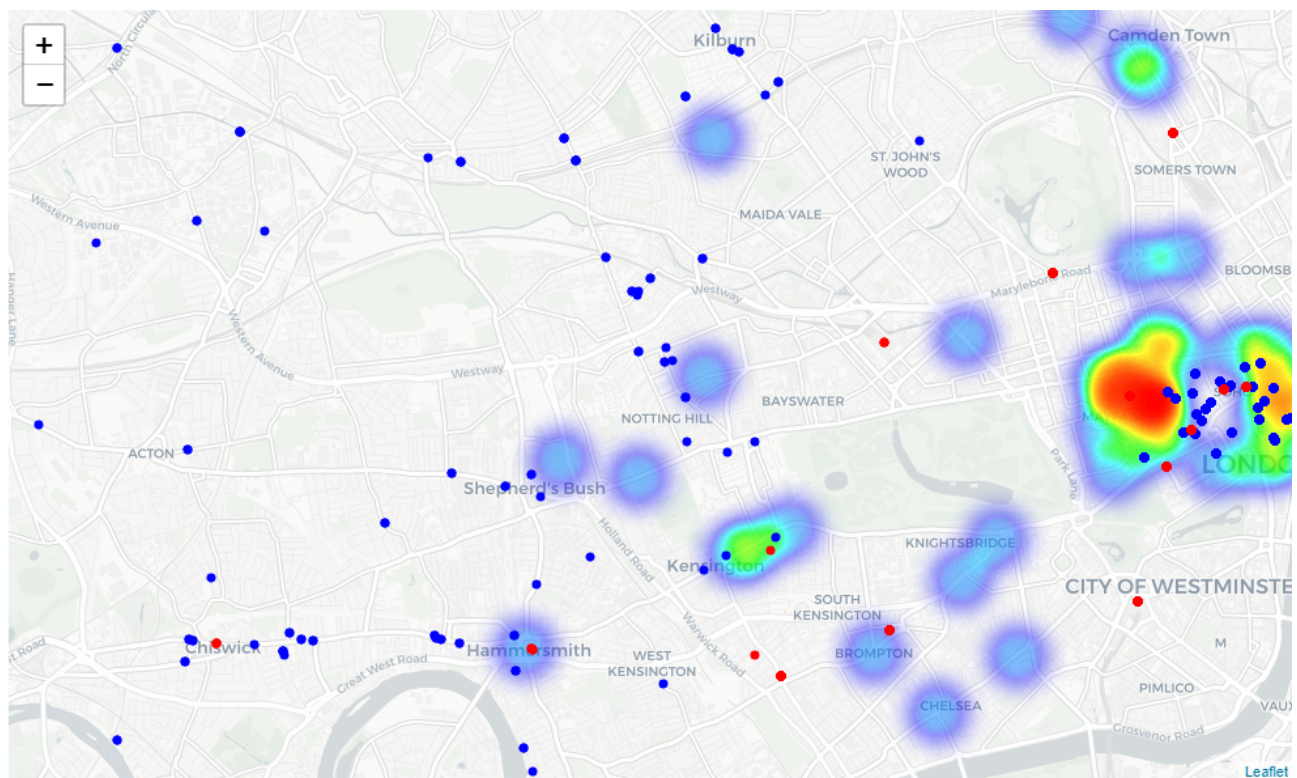


Figure 4.3.2

4.4 On closer analysis I decided to focus on the Notting Hill area. After creating the heatmap (Figure 4.4.1) I can see there are two 'free from' venues to the east and south but none in Notting Hill at all. However there are a couple of clusters of existing food venues and seems an ideal place to look at.



4.5 Running a new map (Figure 4.5.1) with the rental prices included I can see there is a property in Notting Hill with a rental of £1,160,000, however there is a property just off Holland Road for £237,000 PA. I also supplied a report of all 68 venues in that area that could all be looked at as potential sites, depending on the budget.

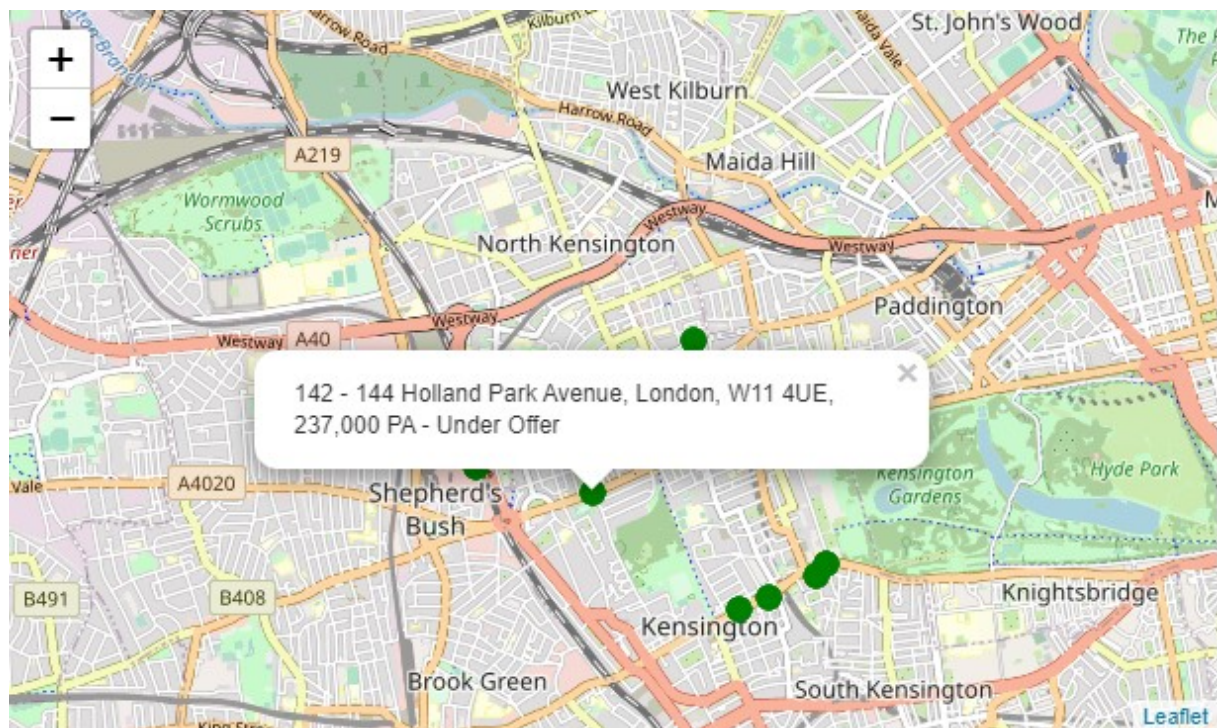


Figure 4.5.1

## 5. Conclusion

I honed in on Notting Hill after analysing where the existing venues were. Though I noticed that Foursquare may be incomplete in some parts of London so may need more investigation. Despite that I think Notting Hill is a good area to look at, it's a residential area with a good selection of existing food venues and without a specific 'free from' venue.

Some of the data scraping was problematic trying to find a website that I was able to scrape the data required, but I feel satisfied that the area that I analysed has potential and more than fits the brief I set.

## APPENDIX A - List of potential properties in Notting Hill

Address	Rental Price
Unit 3, Barkers, Kensington High Street, London, W8 5SE	£463,770 PA
Unit 4, Barkers, Kensington High Street, London, W8 5SE	£237,000 PA - Under Offer
Unit 2091, Westfield London Shopping Centre, London, W12 7GF	£230,930 PA
Unit 5, Barkers, Kensington High Street/Derry St, London, W8 5SE	£210,000 PA
Unit 1, Barkers, Kensington High Street, London, W8 5SE	£190,000 PA
Unit 1113, Westfield London Shopping Centre, London, W12 7GD	£185,000 PA
Unit 6, Embassy Gardens - Legacy 3, London, SW8 5BL	£172,500 PA - Under Offer
38A Kensington High Street, London, W8 4PF	£152,000 PA
188 Westbourne Grove, London, W11 2RH	£1,160,000 PA
184 Kensington High Street, London, W8 7RG	£517,500 PA
142 - 144 Holland Park Avenue, London, W11 4UE	£237,000 PA - Under Offer
Westfield Shopping Centre, London, W12	£230,930 PA
143 Kensington High Street, London, W8 6SU	£195,000 PA
9 Young Street, London, W8 5EH	£147,500 PA
Unit 8, Embassy Gardens - Legacy 3, London, SW8 5BL	£145,000 PA
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