A decorative graphic on the left side of the slide, consisting of a network of thin, light blue lines and small circles, resembling a circuit board or a stylized tree structure.

DETERMINING THE BEST LONDON BOROUGH IN WHICH TO OPEN A KOREAN BBQ RESTAURANT

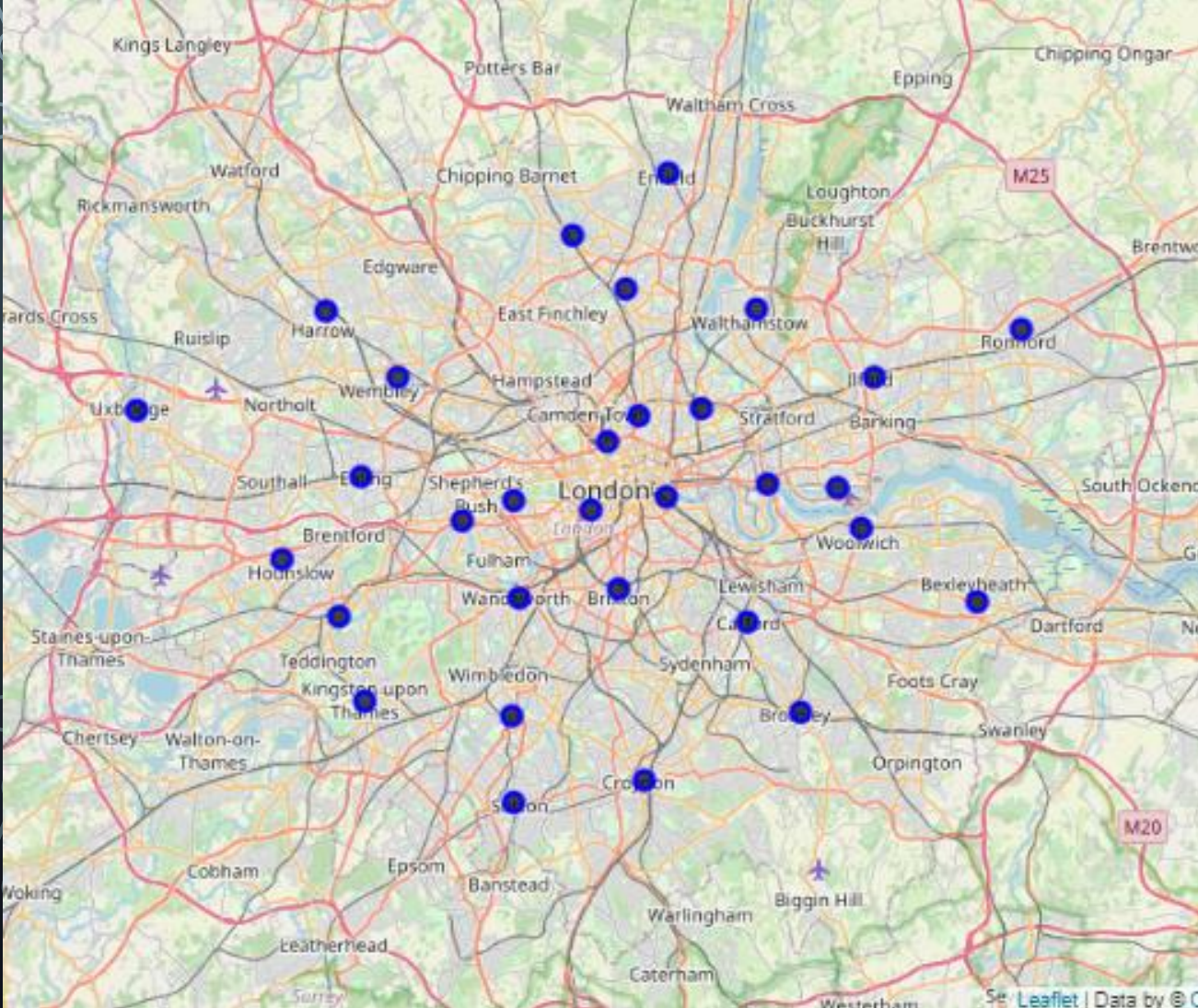
WHY BUILD A KOREAN BBQ RESTAURANT?

- Korean culture has had an increasing level of interest in the past few years
 - Largely due to the explosion of K-pop in Western media
- As a result of this, the interest in Korean-themed restaurants has also grown
- Why London?
 - The capital of the UK
 - A large and diverse city

DATA ACQUISITION AND CLEANING

- Data on London boroughs were taken from the Wikipedia page 'List of London boroughs' (https://en.wikipedia.org/wiki/List_of_London_boroughs)
- Only the information on the borough names and geographical co-ordinates were used
- The co-ordinate data were cleaned to make sure they were the correct format for the analysis

MAP OF LONDON BOROUGHS



- The map of London boroughs was generated by Folium using the geographical co-ordinates of London and each of the boroughs
- Each marker on the map represents one of the boroughs

USING THE FOURSQUARE LOCATION DATA

- The Foursquare location data was used to gather information on the types of venues within each borough

	Borough	Borough Latitude	Borough Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Barnet	51.6252	-0.1517	The Cavalier	51.629646	-0.157798	Pub
1	Barnet	51.6252	-0.1517	The Atrium	51.624726	-0.151933	Café
2	Barnet	51.6252	-0.1517	Beaconsfield Road (BF)	51.622827	-0.151466	Bus Stop
3	Barnet	51.6252	-0.1517	The Osidge Arms	51.631986	-0.143123	Pub
4	Barnet	51.6252	-0.1517	Tesco Express	51.625944	-0.160032	Grocery Store
...
2188	Westminster	51.4973	-0.1372	The Queens Arms	51.492567	-0.139297	Pub
2189	Westminster	51.4973	-0.1372	Upper Grosvenor Gardens	51.497802	-0.147046	Park
2190	Westminster	51.4973	-0.1372	Grays of Westminster	51.491336	-0.138983	Camera Store
2191	Westminster	51.4973	-0.1372	Winston Churchill Statue	51.500799	-0.126267	Outdoor Sculpture
2192	Westminster	51.4973	-0.1372	Rosa's Thai Cafe	51.493732	-0.141673	Thai Restaurant

ONE HOT ENCODING AND MEAN OF FREQUENCY

- One hot encoding was used for each venue type in each borough
- The mean of the frequency was then calculated

	Borough	Afghan Restaurant	African Restaurant	Airport	Airport Lounge	Airport Service	Airport Ticket Counter	American Restaurant	Argentinian Restaurant	Art Gallery	...	Turkish Restaurant	Vegetarian / Vegan Restaurant	Video Game Store	Vietnamese Restaurant
0	Barnet	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000
1	Bexley	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.042553	0.000000	0.000000	...	0.000000	0.000000	0.021277	0.000000
2	Brent	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.022222	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000
3	Bromley	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.016129	0.000000	0.000000	0.000000
4	Camden	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.020000	...	0.010000	0.010000	0.000000	0.000000
5	Croydon	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.010417	0.000000
6	Ealing	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010000	...	0.010000	0.000000	0.010000	0.020000
7	Enfield	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.015873	0.000000	0.015873	0.000000
8	Greenwich	0.00000	0.017241	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.017241
9	Hackney	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.012658	0.000000	...	0.000000	0.012658	0.000000	0.012658

EAST ASIAN STYLE RESTAURANTS

- The data were then filtered to only contain information on East Asian style restaurants
 - Cuisines similar to South Korean (China, Hong Kong, Japan, Macau, Mongolia, North Korea, South Korea and Taiwan)

	Borough	Asian Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Hunan Restaurant	Japanese Restaurant	Korean Restaurant	Noodle House	Okonomiyaki Restaurant	Ramen Restaurant	Sushi Restaurant	Taiwanese Restaurant
0	Barnet	0.000000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.000000	0.000000
1	Bexley	0.000000	0.00	0.021277	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.000000	0.000000
2	Brent	0.011111	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.000000	0.000000
3	Bromley	0.016129	0.00	0.016129	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.016129	0.000000
4	Camden	0.010000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.010000	0.000000
5	Croydon	0.020833	0.00	0.010417	0.00	0.00	0.00	0.000000	0.020833	0.00	0.00	0.000000	0.010417	0.000000
6	Ealing	0.010000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.01	0.00	0.010000	0.010000	0.000000
7	Enfield	0.000000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.000000	0.000000
8	Greenwich	0.017241	0.00	0.017241	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000	0.000000	0.000000
9	Hackney	0.000000	0.00	0.000000	0.00	0.00	0.00	0.012658	0.000000	0.00	0.00	0.012658	0.000000	0.012658

SORTING BY TOTAL EAST ASIAN RESTAURANTS

- The frequency values were summed and sorted in order of highest to lowest frequency value to get the boroughs with the highest proportion of East Asian restaurants

	Borough	Asian Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Hunan Restaurant	Japanese Restaurant	Korean Restaurant	Noodle House	Okonomiyaki Restaurant	Ramen Restaurant
0	Lambeth	0.000000	0.01	0.000000	0.01	0.01	0.00	0.020000	0.000000	0.00	0.01	0.010000
1	Kingston upon Thames	0.010000	0.00	0.010000	0.00	0.00	0.00	0.020000	0.000000	0.00	0.00	0.000000
2	Croydon	0.020833	0.00	0.010417	0.00	0.00	0.00	0.000000	0.020833	0.00	0.00	0.000000
3	Lewisham	0.000000	0.00	0.025641	0.00	0.00	0.00	0.025641	0.000000	0.00	0.00	0.000000
4	Hammersmith and Fulham	0.010000	0.00	0.000000	0.00	0.00	0.00	0.030000	0.000000	0.00	0.00	0.000000
5	Kensington and Chelsea	0.010000	0.00	0.020000	0.00	0.00	0.00	0.010000	0.000000	0.00	0.00	0.000000
6	Bromley	0.016129	0.00	0.016129	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
7	Haringey	0.000000	0.00	0.044118	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
8	Tower Hamlets	0.000000	0.00	0.013699	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.013699
9	Westminster	0.000000	0.00	0.010000	0.00	0.00	0.00	0.000000	0.010000	0.00	0.00	0.000000

SORTING BY KOREAN RESTAURANTS

- The data were then sorted by the proportion of Korean restaurants

	Borough	Asian Restaurant	Cantonese Restaurant	Chinese Restaurant	Dim Sum Restaurant	Dumpling Restaurant	Hunan Restaurant	Japanese Restaurant	Korean Restaurant	Noodle House	Okonomiyaki Restaurant	Ramen Restaurant
0	Croydon	0.020833	0.00	0.010417	0.00	0.00	0.00	0.000000	0.020833	0.00	0.00	0.000000
1	Westminster	0.000000	0.00	0.010000	0.00	0.00	0.00	0.000000	0.010000	0.00	0.00	0.000000
2	Islington	0.000000	0.00	0.000000	0.00	0.00	0.01	0.010000	0.000000	0.00	0.00	0.000000
3	Wandsworth	0.026667	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
4	Waltham Forest	0.000000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
5	Tower Hamlets	0.000000	0.00	0.013699	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.013699
6	Sutton	0.000000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
7	Southwark	0.010000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000
8	Richmond upon Thames	0.000000	0.00	0.012987	0.00	0.00	0.00	0.012987	0.000000	0.00	0.00	0.000000
9	Redbridge	0.000000	0.00	0.000000	0.00	0.00	0.00	0.000000	0.000000	0.00	0.00	0.000000

RESULTS AND DISCUSSION

- Only two boroughs (Croydon & Westminster) have Korean restaurants in the area examined by Foursquare
- A much higher number of boroughs (24) have East Asian style restaurants, with Lambeth and Kingston upon Thames having the highest proportion
- However, Croydon has the highest proportion of Korean restaurants and the third highest proportion of East Asian style restaurants

CONCLUSION

- With the highest proportion of Korean restaurants and the third highest proportion of East Asian style restaurants, the recommended borough to open a Korean BBQ restaurant is Croydon