# Introduction and business problem

A client is looking to set up a new bakery business located close to St Stephen's Green in Dublin, a popular park and walking destination for locals and tourists within the city. They would like to gather information about the type and location of some existing food/ drink venues in the local area to see whether their bakery would be in a niche location or if they might suffer direct competition.

#### Data

Current bakery venues with a 1000 radius of St Stephens green will be explored to determine where the best location for a new business might be

To investigate this business problem, a few types of data will be required:

- Use of Foresquare to find the latitude and longitude coordinates of St Stephen's Green
- List of venues within 1000meters of the POI
- Data analysis of location and number bakeries in this area
- Visualisation of venues on a map

# Methodology

Firstly the latitude and longitude of St Stephen's Green (as the POI) needed to be found using Foresquare API, so that a subsequent search of venues using this data could then be performed. The GET request venues within 1000 meters of this POI could then be queried. A maximum search for 150 venues was set, however only 100 were returned within this radius.

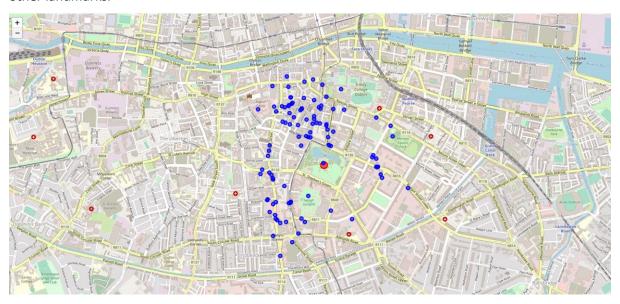
The venues were there sorted into categories based on the type of food/ place of interest. A count of the number of each venue type/ category was also taken. Here, within the 100 venues returned we could analyse how many were classed as bakeries and therefore might provide direct competition with our client's prospective business proposal.

Finally, this information was visualised on a map. Here we could see the location existing bakeries in relation to the POI, to determine if the proposed location would be suitable.

### Results

The data returned shows that only 2 of the 100 returned venues within 1000 meters of St Stephen's Green are bakeries

In addition the map can be used as a visual aid to show the food and drink venues in and surrounding the location of interest, showing venue density and potential locations in relation to other landmarks.



### Discussion

As only 2 of the 100 venues returned were classed as being in the bakery category, it seems that this might be a good business to open in the area as there are not too many other competitors. This presents a good opportunity for the client to draw new customers to this area.

The results from the map also show that there is not another food or drink venue in St Stephen's Park itself- this might therefore be an ideal place to place the bakery as it will attract tourists or locals passing by on foot in the area, rather than them having to go further into the city center.

### Conclusion

In conclusion, we have successfully collected and displayed data about venues surrounding a given area of interest using the Foresquare API application. This information has helped to inform the client on the suitability of this area for opening a potential business. By looking at the existing venue categories and visualising where they are in relation to the park, the client is able to consider the competition they might face. The collection and subsequent analysis of this relevant data will help to inform relevant stakeholders invested in the initial business problem.