Michelin Star Restaurant Locations According to Economic and Demographic Factors

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1 Introduction

The restaurant industry is a difficult one to enter, much less excel in. There are numerous variables that affect much of a restaurant's success. Those that are able to surpass their competitors and provide an exceptional dining experience may be awarded with a Michelin star. This badge of honor is presented to restaurants that are judged to be of high-caliber, which may be awarded up to three stars.

It is also interesting to look into the average housing cost, gross disposable household income, and population density surrounding these Michelin restaurants. They are typically rather expensive during their selection process and are able to drive their prices up once they are given the star. Looking at those components may help a new aspiring restaurant owner make a better judgement about where to open up a new location.

In this project, we will be presenting all the Michelin starred restaurants in the United Kingdom. The country will be split up into counties and the user will be able to click into them to see more details about the average housing cost, gross disposable household income, and population density. By selecting a country, the user will also be indicating that they wish to open a restaurant in that region and will be told what the chances of it being selected as a Michelin star restaurant based on those factors is.

2 One-sentence description

Given a set of numerical data spanning each location of a given map, we will display all data simultaneously as well as predict and present possible and current Michelin star restaurant locations.

3 Project Type

Viewer / Application

4 Audience

This project will be useful for anyone who wants to start a restaurant, but is unsure of where the best location would be. Given the current locations and ratings of Michelin star restaurants, this application would allow the user to see potential estimated Michelin ratings in any new location.

This project would also allow for anyone just curious about how current or past Michelin star ratings relate to outside factors in their communities. The visualization created would allow for interactive analysis of various economic and demographic data relating to region and time.

5 Approach

5.1 Details

- We collect multiple data sets that can be mapped to locations on a globe which can potentially be correlated to Michelin star locations and/or frequency.
- 2. Create an intuitive and interactive online viewer for the data that allows for the comparison of our (or potentially user supplied) data.
- 3. Allow for the user to review potential correlations in data relating to Michelin star restaurants not only according to location but over time as well.

5.2 Evidence for Success

1. This project will be successful if any viewer is able to discern between the various data displayed. The viewer should be able to recognize parallels between the data and roughly understand how the predicted Michelin star rating is created.

6 Best-case Impact Statement

The best case scenario would be that we develop a visually appealing and useful tool (online viewer) that allows new restaurant owners to predict which location is the best suited for a new restaurant and how many Michelin starts it could potentially get.

7 Major Milestones

- Creating a viewer that is flexible and easy to use with user provided data.
- Creatively display different data variables in a map in a way that is easy to interpret which locations are best suited.

8 Obstacles

8.1 Major obstacles

- Compiling the data from different years about the Michelin star restaurants.
- Combining multiple sets of data regarding similar regions

8.2 Minor obstacles

- Formatting the data correctly to display visualize it on a map format.
- Setting up the server to host the viewer.
- Lack of variation in Michelin star restaurant data.

9 Resources Needed

- A server to host the visualization
- Time to complete the project
- Michelin star restaurant geo-location from the UK
- Average Housing cost by local authorities
- Average household income by local authorities
- Population density by local authorities

10 5 Related Publications

- Overview of effective map visualization [2].
- Visualizing abstract data with multiple dimensions on a map [3].
- How to display complex data on one map as well as many small charts [5].
- Making maps interactive and easy to use [4].
- Displaying population density of urban areas [1].

11 Define Success

Our project will be successful if it allows a user with no previous experience with our project to upload their own location based data and use our tool to reach new conclusions about how different locations are effected by selected factors.

References

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