Interactive Restaurant Shiny Application

Title:

Capstone Final Project

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Introduction

In 2015, Yelp released a series of datasets as part of the Yelp Dataset Challenge contest. These datasets included anonymized information regarding business reviews, Yelp reviewers, check-in information and tips. The objective was to make this data available to (budding) data scientists and see what can be learned about reviews and business behaviors involving of businesses reviewed on Yelp.

For this capstone project, a Shiny application was developed that allows users to work with an interactive map and see restaurants that match a users-specified selection of criteria. In developing the interactive application, the data was analyzed, cleaned and saved in advance for quick rendering and use of the map. Details of this process alogn with some summary metrics are provided in this paper.

Methods and Data

There is a large amount of data in the Yelp Dataset Challenge. There are five JSON files that contain different types of information regarding the businesses reviewed on Yelp. For this project, the businesses file was used. The data was read into R and then filtered to identify the categories of businesses and extract restaurants

Reading JSON Data

Filtering Business Information

Rebuilding Dataset

Map Rendering with Leaflet

Shiny Application with User Input

Results

Discussion

```r
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
```

```
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```