



Michelin Restaurants

Enhancement Project - Manav Bhatia



Base Code

<https://bl.ocks.org/mapio/53fed7d84cd1812d6a6639ed7aa83868>

- Adapted from Massimo Santini
- Force Layout Graph Diagram
- Uses forces to align elements for visual clarity and symmetry
- (overviewed in Assignment 9 slides)



Major Changes and Additions

- Data File Changed and edited with links by zip code
- Change forces to group by location
- Color nodes by star rating and add legend
- Add hover tooltip
- Add weblinks for clicking on nodes and links
- Add zip code search functionality
- Stylistic changes (UI/UX and visual design is not my strong suit)



Data File

- Utilized a new data file (3 files for each star rating) found on Kaggle
- Converted from csv to json
- Wrote a python script to edit files and add star rating and location group elements
- Combined into one file and used another python function to loop through nodes and create json link elements for restaurants with the same zip code and chain them together in links section of file
- Render with base js code



Force Changes

- Adjust the original forceX and forceY elements to recenter nodes in a different position on the screen based on their “group” tag (location : SF NY LA)
- Adjust strengths to get them to be a certain distance apart
- Add labels for each group in their initial positions and append to container to make them move with the pan drag and zoom functionality



Node Color and Legend

- Add scale for 3 colors for each star rating and when creating nodes on screen add color based on “star” element value
- Create a legend for the three colors and using michelin star pngs to represent color-rating value in a legend at the top of the svg



Hover Tooltip

- Append a div to the DOM and on mousein event on a node, show a tooltip in bottom left with important restaurant information like price location cuisine and zip code
- On mouseout set opacity to 0



Click Changes

- Using the michelin guide link in json file for each restaurant, on a node click open a new tab and navigate to the site
- Using google maps upon clicking on a zip code link open a map of that zip code area the link is associated with in google maps in a new tab



Zip Code Search

- Repurpose the `focus()` and `unfocus()` functions to take user input from a bar at the top of the svg and when the user clicks the enter key get the zip code entered and blur out all restaurants not in that zip code
- Using a timer, after 1500 milliseconds reset graph elements to opacity 1



That's It

Thanks