

# Techpoint X-tern(DS)

Sunday, October 18, 2020 12:39 PM

## Situation

Where are my foodies at? 😊

In order to make FoodieX the best delivery service in town, the data science team is focusing its efforts on analyzing the data set to provide useful insights into the business.

You can find a data set below with restaurant information. The data set contains Restaurant ID, Latitude, Longitude, Cuisines, Average Cost, Minimum Order, Rating, Votes, Reviews, and Cook Time.

## Your Task

Review the data and draw four conclusions you can find from the data set. Some ideas of conclusions could include: trying to identify the trending restaurants with your own scoring algorithm (can be as simple as the best rating or most votes or both!), clustering restaurant locations to figure out the optimized FoodieX pick up zones, estimating cook time based on restaurant info, and demonstrating your findings using a data visualization tool. As an important member of the FoodieX team, you get to come up with your own analysis! So try your best to dig out any useful information out of this data set. The sky's the limit! 🙌

## FAQ

What if I cannot download the data file?

If switching browsers does not resolve the issue, please reach out to x@techpoint.org and we will email you a direct copy of the file at our earliest convenience.

Is there a required tool for the data analysis?

There is no required tool for the analysis, however, some tools may be better suited for the type of file and work needed.

Where should I submit my solution?

Your research and conclusions should be submitted as a link to a GitHub repository or Google Colab. It is encouraged that your repository hosts a Jupyter (formerly iPython) notebook.

## Submission Directions

Prepare your conclusions from the data set, including the components described above. Your research and conclusions should be submitted as a link to a github repository. It is encouraged that your repository hosts a Jupyter (formerly iPython) notebook.

To reduce bias in the process, please do not add your name or other identifying information to the responses that you give on the work sample. This will help ensure students are evaluated based on their work and experience. We understand that your username may include some of this information such as a variation of you name and that is okay.

Four conclusions:

- 1) Find a centerpoint and a radius with the highest concentration of restaurants with above 3.5

stars

- a. FoodieX should open up with a radius of .1 in the GPS units: 39.499, -85.503. This circle of restaurants is the most densely populated area in the database.
- 2) Find the top 5 fastest, best tasting, and cheapest restaurants.
  - a. I created a list of cheapFood restaurants inside the radius. These restaurants have a rating above 3.5, and an average cost of <\$25. It's crazy how the average cost is less than the minimum order. That doesn't make sense, and there are only 7 restaurants with \$0.00 Minimum Order.
  - b. There are 3 new restaurants in the radius
- 3) Find the average price of a meal in the circle of #1
  - a. The average price for an order in the Radius is \$20.79
- 4) Find the best rated Italian restaurant and make sure they have chicken parm.
  - a. The highest rated Restaurant that serves Italian cuisine is: ID\_1432. This is a very important conclusion, even though I cannot see if this restaurant sells chicken parmesan. Also, very odd that it sell Chinese food, but I'm not opposed to that power combo.