

Process Book, Data Bites

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1 Motivation

The motivation for this project was very simple. Everyone loves food, and most people use food delivery apps. However, sometimes we find it rather difficult to find a good restaurant serving the kind of food we want to eat. It takes some time tinkering around with the search filters, and even when we do get a list of restaurants in the app, we struggle to make a decision. With "Data-Bites", we intend to present data from around 100K restaurants in India, and make it easy for users to find out what restaurant they fancy. Our intention is to make it easier for people to make food related decisions. The users will be able to filter results based on various factors, such as:

1. The location of the restaurant
2. The type of cuisine
3. The ratings the restaurant received, and
4. The cost of eating at that restaurant

2 Related Work

Throughout our research, we were unable to find a visualization which attempts to do what we are doing. There was a lack of restaurant related visualizations, and this can be due to the lack of good datasets, and lack of datasets which can be used to answer insightful questions. For instance, if a dataset has the location of a restaurant, it only has the city name and not the full address. This becomes an issue if we want to give the exact location to the user. We believe because of such a scarcity of usable datasets, this idea hasn't been picked up before. We have found ourselves a reasonably good dataset which still has some of the above mentioned limitations, but we believe we can build a meaningful visualization out of it. Our dataset can be found [here](#).

3 Exploratory Data Analysis

Our data was available as a CSV file, and after initial analysis we found that several rows had missing data. After removing such rows, we reduced approximately 50% of rows from our dataset.

4 Questions To Be Answered

Our visualizations aims to answer questions such as:

- How many restaurants of such cuisine are present?
- What is the breakdown of restaurants by price, ratings, etc.
- How does price vary by cuisine?

and so on.

5 Design Evolution

Our first drawing of our visualization looked like this: In this figure, we wanted

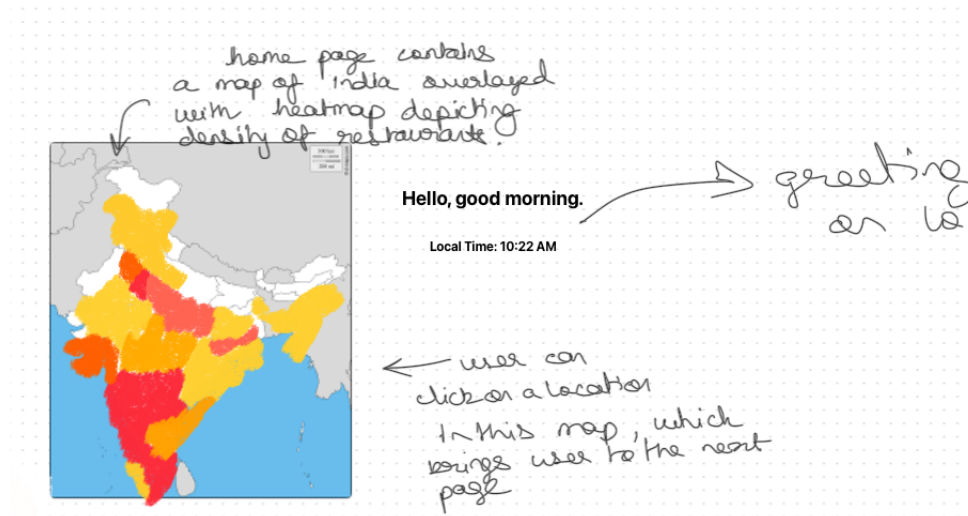


Figure 1: Sketch 1

to describe the user's initial view of the website.

Then, we wanted to describe the interactions that the user would have in a chronological manner. The next few sketches show that. We then sketched out some possible visualization ideas. They look as follows.

Next, our initial implementation of the home page looked like this.



Figure 2: Interactions

We used an SVG for our map and made it interactive as well.
We spend some time changing the CSS, and improved drastically.
We also changed the landing page design.



Figure 3: Sketch 3

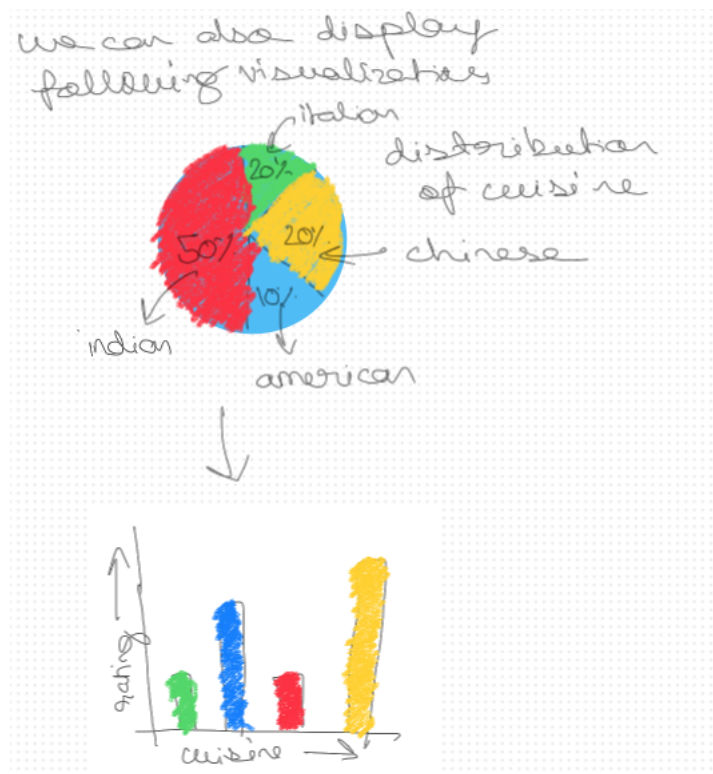


Figure 4: Sketch 4



Figure 5: Implementation Of Home Page



Figure 6: Dark Mode

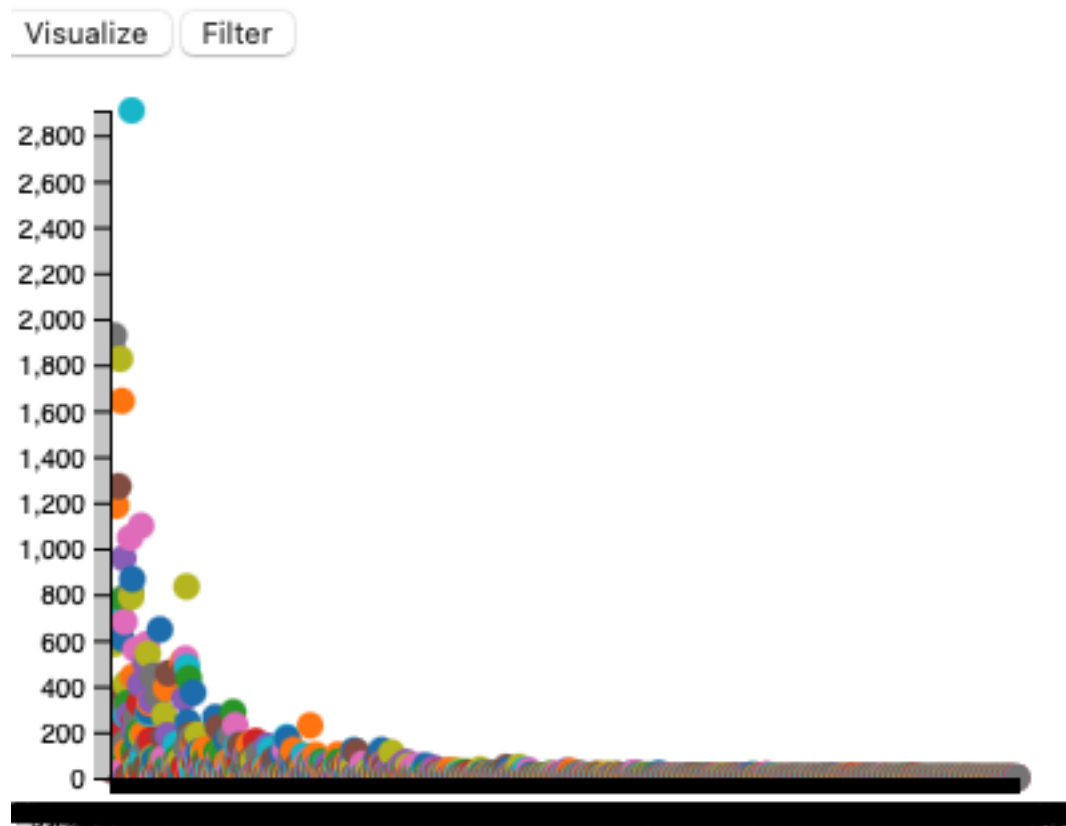


Figure 7: Initial visualizations, not very good!

Restaurants in each state of India



Figure 8: A Bar Graph

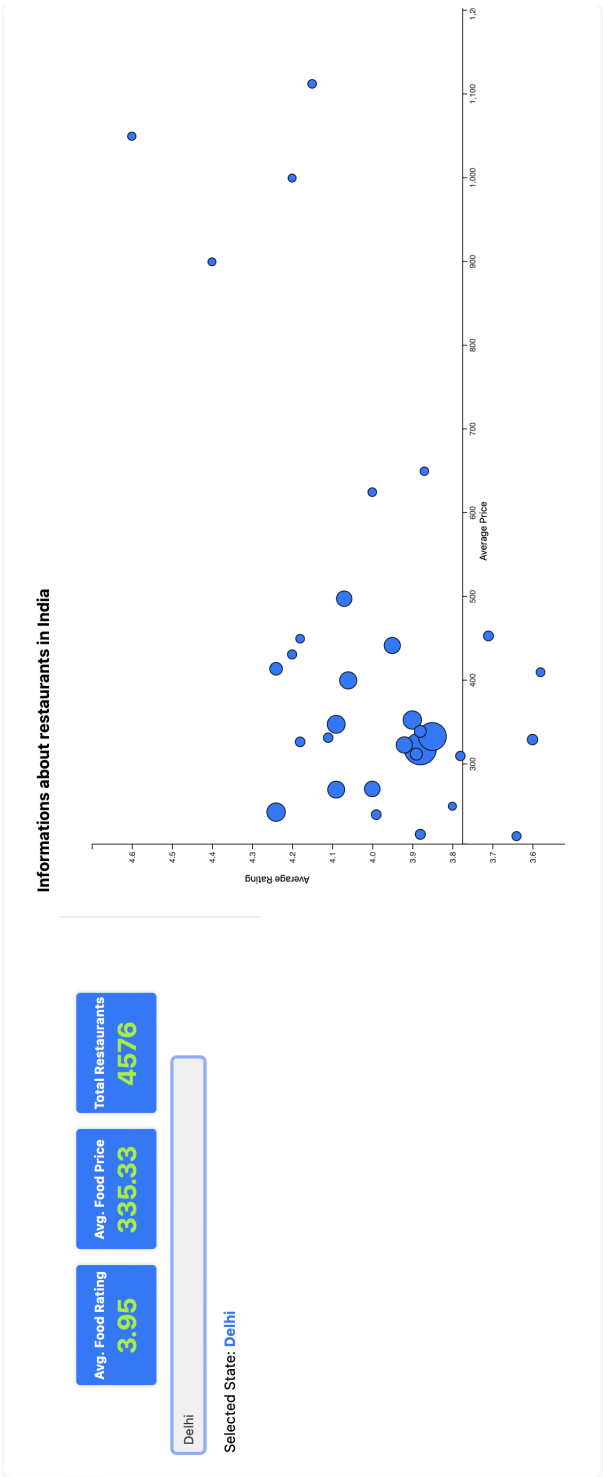


Figure 9: Scatterplot

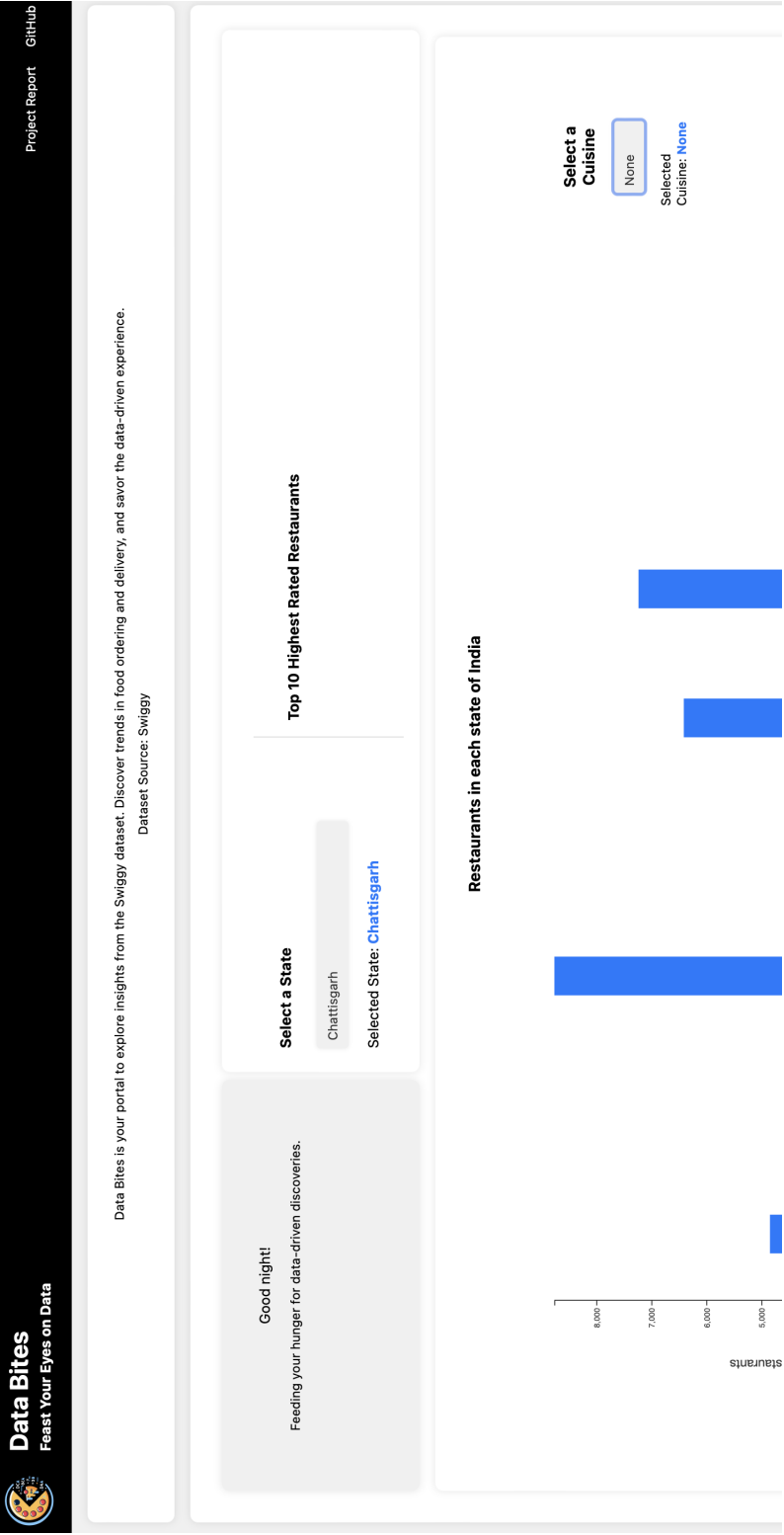


Figure 10: Landing View