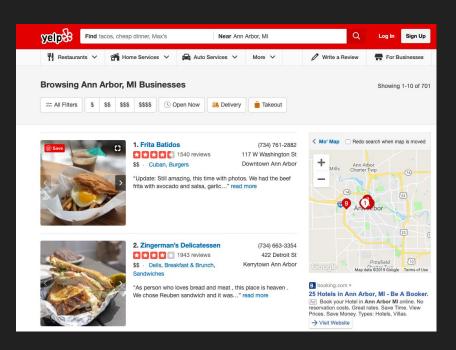
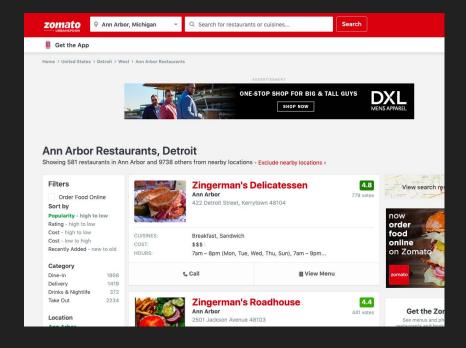
Yelp vs Zomato

Emmi Carr, Madeline Richards

https://www.yelp.com/search?find_desc =&find_loc=Ann+Arbor%2C+MI&n



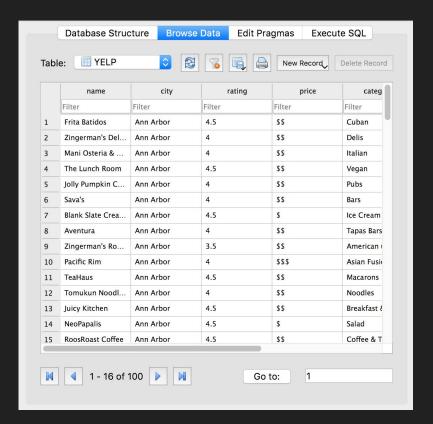
https://www.zomato.com/detroit/annarbor-restaurants

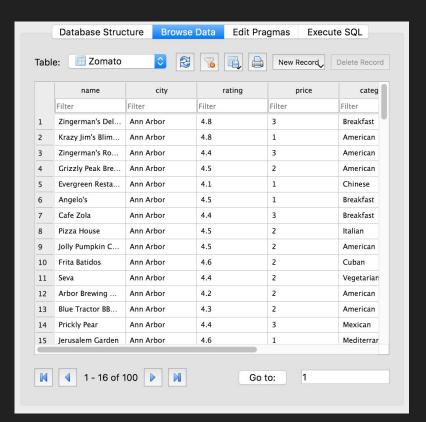


Goals:

- Number of restaurants in each restaurant category
- Category with the most restaurants
- Restaurant category with the highest average star rating
- Price range with the highest average star rating
- Overall average star rating and price range for all restaurants in the database

Database





Calculations

Calculated number of restaurants in each restaurant category

Category with the most restaurants:

- Yelp: "Coffee & Tea" (7)
- Zomato: "American" (28)

```
#function to get the number of restaurants in each category
#takes the column of categories as input
def get_num_of_rests_by_cat(category_data):
   categories = dict()
   for row in cur:
        cat = row[0]
        categories[cat] = categories.get(cat, 0) + 1
    return categories
#YELP
categories_yelp = get_num_of_rests_by_cat(cur.execute("SELECT category FROM Yelp"))
categories yelp = {"Yelp Restaurant Category Counts" : categories yelp}
#70MATO
categories_zomato = get_num_of_rests_by_cat(cur.execute("SELECT category FROM Zomato"))
categories_zomato = {"Zomato Restaurant Category Counts" : categories_zomato}
```

Calculated average star rating based on restaurant category

Restaurant category with the highest average star rating:

- Yelp: "Breakfast & Brunch" (4.75/5.0)
- Zomato: "Cuban" (4.6/5.0)

```
#Average Star Rating by Category
#takes the category and rating columns from the database as input
def get_rating_by_cat(data):
    rating by cat = {}
    for row in cur:
        cat = row[0]
        rating = row[1]
        if cat in rating_by_cat:
            rating_by_cat[cat].append(rating)
            rating by cat[cat] = [rating]
    averages = {}
    for cat in rating by cat:
        avg = round(sum(rating by cat[cat])/len(rating by cat[cat]),2)
        averages[cat] = avg
    return averages
rating by cat yelp = get_rating by cat(cur.execute("SELECT category, rating FROM Yelp"))
rating by cat yelp = {"Yelp Average Star Rating by Restaurant Category" : rating by cat yelp}
rating by cat zomato = get rating by cat(cur.execute("SELECT category, rating FROM Zomato"))
rating_by_cat_zomato = {"Zomato Average Star Rating by Restaurant Category" : rating_by_cat_zomato}
```

Calculated average star rating based on price range

Price range with the highest average star rating:

- Yelp: 1 out of 4 / \$ out of \$\$\$\$
- Zomato: 4 out of 4 / \$\$\$\$ out of \$\$\$\$

```
#Average star rating based on price range
#takes the star rating and price range columns from the database as input
def get_rating_by_price(data):
   rating_by_price = dict()
    for row in cur:
        rating = row[0]
        price = row[1]
       if price in rating_by_price:
            rating_by_price[price].append(rating)
            rating_by_price[price] = [rating]
    averages = {}
    for price in rating_by_price:
        ratings = rating_by_price[price]
        avg = sum(ratings)/len(ratings)
        averages[price] = round(avg, 2)
    return averages
rating_by_price_yelp = get_rating_by_price(cur.execute("SELECT rating, price FROM Yelp"))
rating by price yelp = {"Yelp Average Star Rating by Price Range" : rating by price yelp}
rating_by_price_zomato = get_rating_by_price(cur.execute("SELECT rating, price FROM Zomato"))
rating by price zomato = {"Zomato Average Star Rating by Price Range" : rating by price zomato}
```

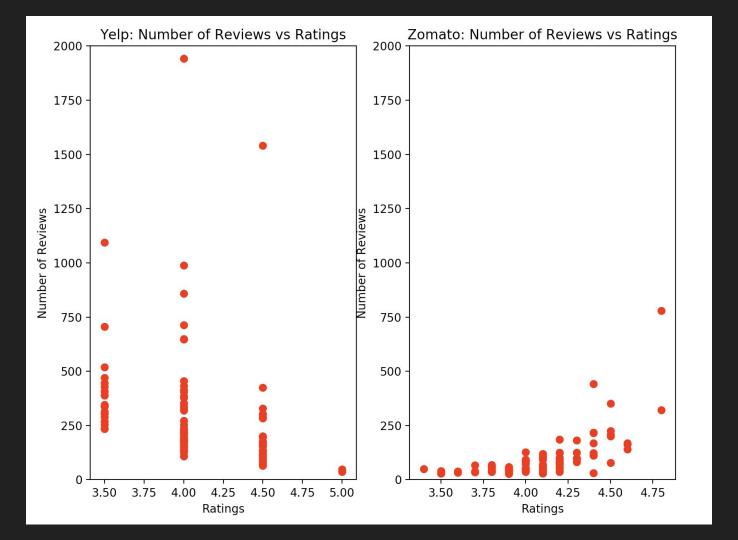
Calculated overall average star rating

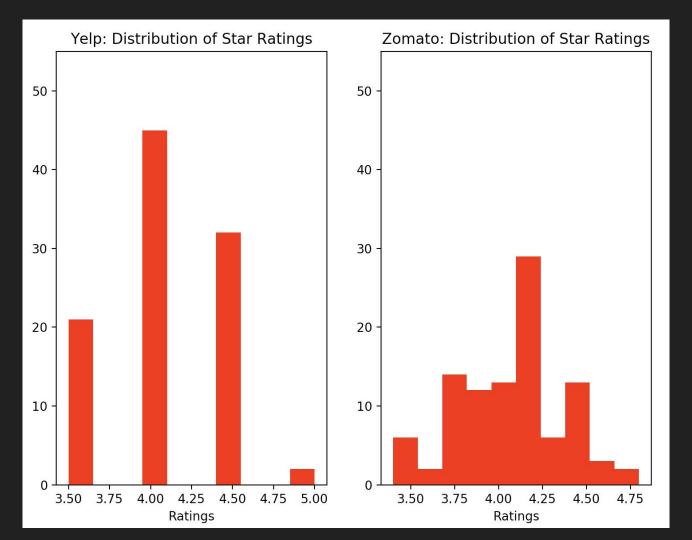
Yelp: 4.075 / 5

Zomato: 4.071 / 5

```
#Overall average star rating for all restaurants
def get overall average rating(ratings):
    ratings = list()
    for row in cur:
        ratings.append(row[0])
    avg rating = round(sum(ratings)/len(ratings),4)
    return avg rating
#YFIP
overall avg rating yelp = get overall average rating(cur.execute("SELECT rating FROM Yelp"))
overall avg rating yelp = {"Yelp Overall Average Star Rating for All Restaurants" : overall avg rating yelp}
#70MATO
overall_avg_rating_zomato = get_overall_average_rating(cur.execute("SELECT rating FROM Zomato"))
overall avg rating zomato = {"Zomato Overall Average Star Rating for All Restaurants" : overall avg rating zomato}
```

Visualizations





Questions?