Restaurant Pricing and Consumer Perception
Adaire Burnsed for DS4002 Spring 2025

Imagine you and your friends are planning a weekend trip to a city you've never visited before. It's somewhere buzzing with culture, flavor, and hidden gems and you can't wait to explore the vibrant cityscape. After a long day of sightseeing and exploring the town, you and your friends are hungry for dinner and determined to not only eat something delicious, but to get your money's worth as prices in the city aren't cheap. Where do you turn to investigate the multitude of restaurants each trying to claim your business? Yelp.

As you scroll through Yelp, two restaurants catch your eye: one boasts an upscale menu with $30 entrées and glowing five-star reviews, the other is a small neighborhood joint with mismatched chairs, bargain prices, and an equally loyal following. Which do you choose? That decision, made by thousands of users every day, lies at the heart of this project. By diving into the data, you'll uncover the hidden patterns behind user sentiment and help decode what truly drives a positive dining experience. Like millions of users each month, you rely on ratings and reviews to decide where to eat. More than 74 million people visit Yelp each month, which allows the platform to collect large amounts of reviews from users [1]. While Yelps is not the only review service available, it is a key player in this market, and Yelp ratings and reviews can be valuable sources for the consumer, offering insight into quality, value, price, and overall experience.

Yelp collects a massive amount of user-generated content: reviews that reflect customer expectations, experiences, and satisfaction. While it's easy to assume that expensive restaurants earn better reviews, is that actually true? Could it be that people are more critical when they spend more, or that a hole-in-the-wall spot with cheap eats earns surprisingly high praise? You are the lead data analyst on a mission to uncover how restaurant pricing influences consumer sentiment. You'll work with real Yelp review data to test the relationship between restaurant cost and review positivity. You'll use VADER sentiment analysis of restaurant reviews, statistical testing, and compelling visuals to bring your insights to life. You'll be expected to deliver a polished case study presentation that clearly communicates your findings and how you got there.

References:
[1] Yelp for Business, "Study shows high intent consumers are contacting businesses quickly on Yelp," *Yelp*. [Online]. Available:
https://business.yelp.com/resources/articles/study-shows-high-intent-consumers-are-contacting-businesses-quickly-on-yelp/?domain=local-business
[2] Geeks for Geeks, "Sentiment Analysis Using VADER – Using Python," *Geeks for Geeks*, Dec. 11, 2024. [Online]. Available:
https://www.geeksforgeeks.org/python-sentiment-analysis-using-vader/
[1] Tessa Zuluaga, Toast, "Should you focus on your restaurant website? 32% of diners check restaurant websites before visiting," *Toast*. [Online].
Available:https://pos.toasttab.com/blog/on-the-line/restaurant-reviews-and-ratings-data?srsltid=AfmBOoo89shWoH0aEGAJ2BMY1AGnx1dgQgrgRkyJmBNZsExe_w78DU4R