

1. Project Name and Team Members

Title: Black Friday Season Sephora Beauty Trends

Team Member:

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2. Problem I'm trying to solve

Black Friday is the biggest shopping event each year, with discounts on many beauty products. Since I've been looking at which skincare products are reasonably priced, I want to address this as my final project. Consumers often struggle to determine which products are worth buying, considering factors such as price fluctuations, discrepancies between product descriptions and actual products. I want to analyze real user reviews from Sephora to understand beauty consumption trends, identify popular brands, study the relationship between price and ratings, and determine which factors determine whether a product is worth to buy.

3. Data collection

I will collect data through web scraping from public Sephora.com product pages.

Based on:

- Product name, brand, price
- Star rating, number of reviews
- Review text and review rating

4. Analysis and Visualizations

Analysis:

- Brand popularity ranking
- Price vs rating correlation and regression
- Top 10 trending beauty products
- Keyword extraction for positive vs negative reviews

Visualizations:

- Brand review count bar chart
- Rating vs price scatter plot
- Top 10 products bar chart
- Word clouds for positive and negative reviews

This project will identify meaningful consumer behavior patterns and trends leading into Black Friday.