

A large, white airplane wing is shown from a low angle, extending from the right side of the frame towards the left. The wing is set against a light blue sky with soft, white clouds. The wing's surface is detailed with various panels and lines.

Customer Reviews Analysis

By Avani Sharma

Introduction

- For this task, I analyzed customer reviews about British Airways collected from Skytrax, a leading review platform for airlines.
- The primary objective was to understand customer sentiment, identify common themes in feedback, and uncover actionable insights to enhance customer experience.
- Using Python, I scraped, cleaned, and analyzed textual data from customer reviews.
- The results provide a comprehensive understanding of customer perspectives, highlighting areas of excellence and opportunities for improvement.

Data Scraping through Python

Web Scraping to Get Customer Reviews

```
[3]: import requests
      from bs4 import BeautifulSoup
      import pandas as pd
```

```
[4]: import requests
      from bs4 import BeautifulSoup
      base_url = "https://www.airlinequality.com/airline-reviews/british-airways"
      pages = 10
      page_size = 100

      reviews = []

      # for i in range(1, pages + 1):
      for i in range(1, pages + 1):

          print(f"Scraping page {i}")

          # Create URL to collect links from paginated data
          url = f"{base_url}/page/{i}?sortby=post_date%3ADesc&pagesize={page_size}"

          # Collect HTML data from this page
          response = requests.get(url)

          # Parse content
          content = response.content
          parsed_content = BeautifulSoup(content, 'html.parser')
          for para in parsed_content.find_all("div", {"class": "text_content"}):
              reviews.append(para.get_text())

          print(f" ---> {len(reviews)} total reviews")
```

```
Scraping page 1
---> 100 total reviews
Scraping page 2
---> 200 total reviews
Scraping page 3
---> 300 total reviews
```

```
[5]: import pandas as pd
      df = pd.DataFrame()
      df["reviews"] = reviews
      df.head(20)
```

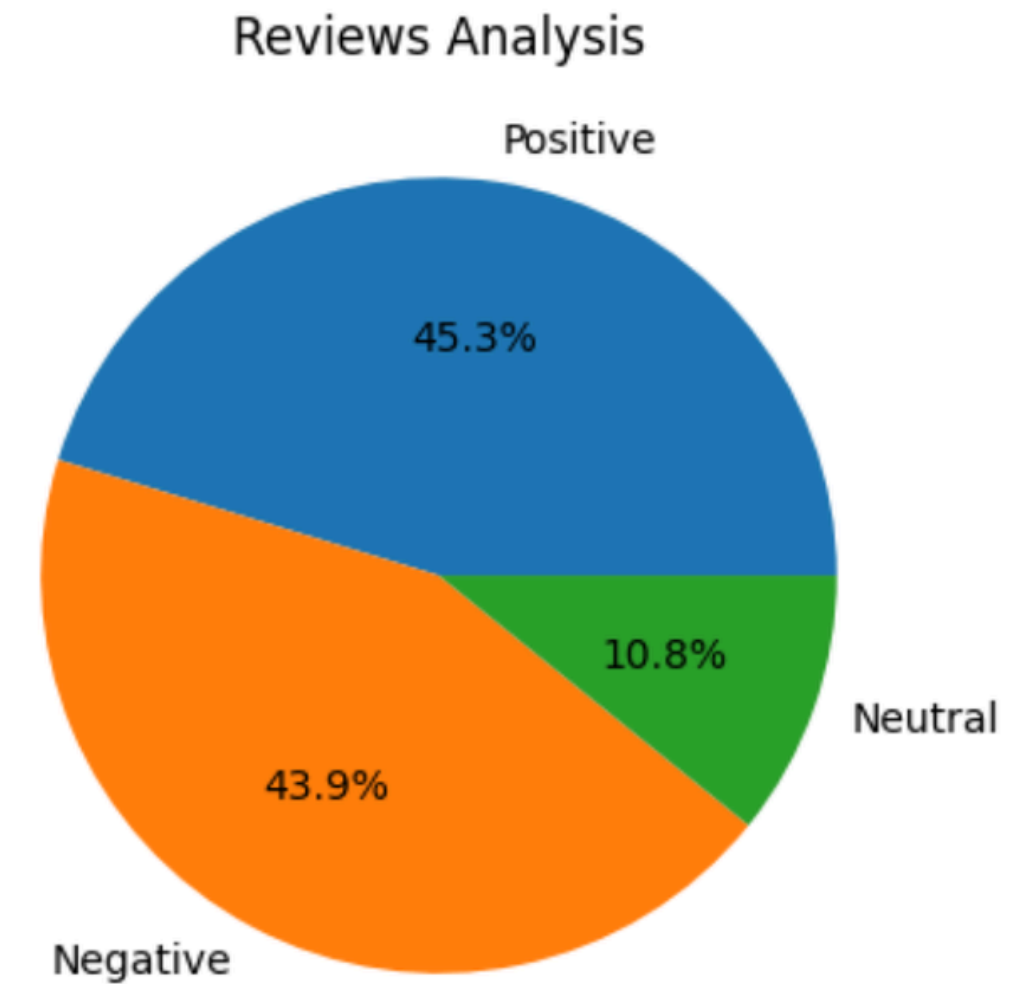
```
[5]:
```

	reviews
0	✓ Trip Verified British airways lost bags ...
1	✓ Trip Verified The check in process and rew...
2	✓ Trip Verified We flew in November 2023, ...
3	✓ Trip Verified I left for London from Johan...
4	✓ Trip Verified After an excellent flight ...
5	✓ Trip Verified On a recent flight from Cy...

Sentiment Analysis Result

```
[33]: vader_counts = df['Analysis'].value_counts()  
vader_counts
```

```
[33]: Analysis  
Positive      453  
Negative      439  
Neutral       108  
Name: count, dtype: int64
```



Visualization using WordCloud

