Exploratory Data Analysis Report - Books Dataset

This report summarizes the key insights and findings from the Exploratory Data Analysis (EDA) performed on the Books dataset. The analysis covers basic statistics, data cleaning, visualizations, and detection of important trends and issues.

# Dataset Overview

Number of rows (books): 1000

Number of columns (features): 5

Columns and types:

- Title: object

- Price: float64

- Availability: object

- Rate: int64

- ImgUrl: object

# Missing Values and Duplicates

- Title: 0 missing values

- Price: 0 missing values

- Availability: 0 missing values

- Rate: 0 missing values

- ImgUrl: 0 missing values

Total duplicate rows found: 0

# Price Summary

- Average Price: £35.07

- Median Price: £35.98

- Minimum Price: £10.00

- Maximum Price: £59.99

# Rating Summary

- Rating 1 stars: 226 books

- Rating 2 stars: 196 books

- Rating 3 stars: 203 books

- Rating 4 stars: 179 books

- Rating 5 stars: 196 books

# Availability

- In stock: 1000 books

# Outliers in Price

Number of detected outliers in price based on IQR method: 0

Examples of outliers (Title, Price, Rating):

# Correlations and Relationships

Correlation between Price and Rating: 0.03

Insight: There is a positive correlation, suggesting higher-rated books tend to be more expensive.

# Top Books

Top 5 Most Expensive Books:

- The Perfect Play (Play by Play #1) (£59.99), Rating: 3

- Last One Home (New Beginnings #1) (£59.98), Rating: 3

- Civilization and Its Discontents (£59.95), Rating: 2

- The Barefoot Contessa Cookbook (£59.92), Rating: 5

- The Diary of a Young Girl (£59.90), Rating: 3

Top 5 Cheapest Books:

- An Abundance of Katherines (£10.00), Rating: 5

- The Origin of Species (£10.01), Rating: 4

- The Tipping Point: How Little Things Can Make a Big Difference (£10.02), Rating: 2

- Patience (£10.16), Rating: 3

- Greek Mythic History (£10.23), Rating: 5