



ONLINE BUSINESS RECOMMENDATION SYSTEM

AGENDA

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UNDERSTANDING

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Business Understanding

Problem Statement

Online retail business faces several challenges and issues such as customer engagement, product discovery, personalization, and inventory management. These processes can be tedious as they have to collect information on customer preferences, cost of items, quality of products, and durability among other factors.

Business Understanding

Overview

A non-store online retail business represents an e-commerce venture that conducts all its business in the digital realm and doesn't have a physical location.

Data Understanding



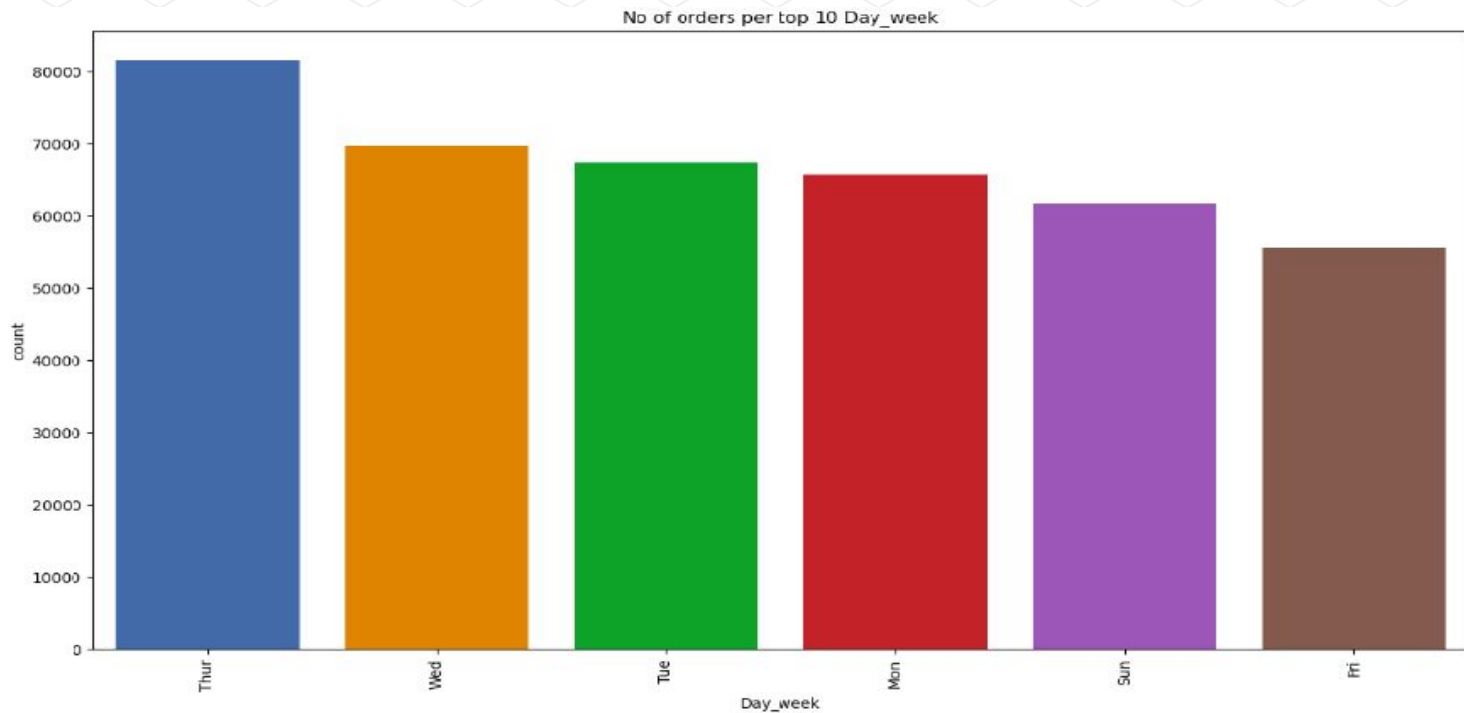
- ❑ Data set is from UCI Machine Learning Repository
- ❑ From a UK based non-store online shop that sells unique gifts
- ❑ For the period between year 2010 and 2011



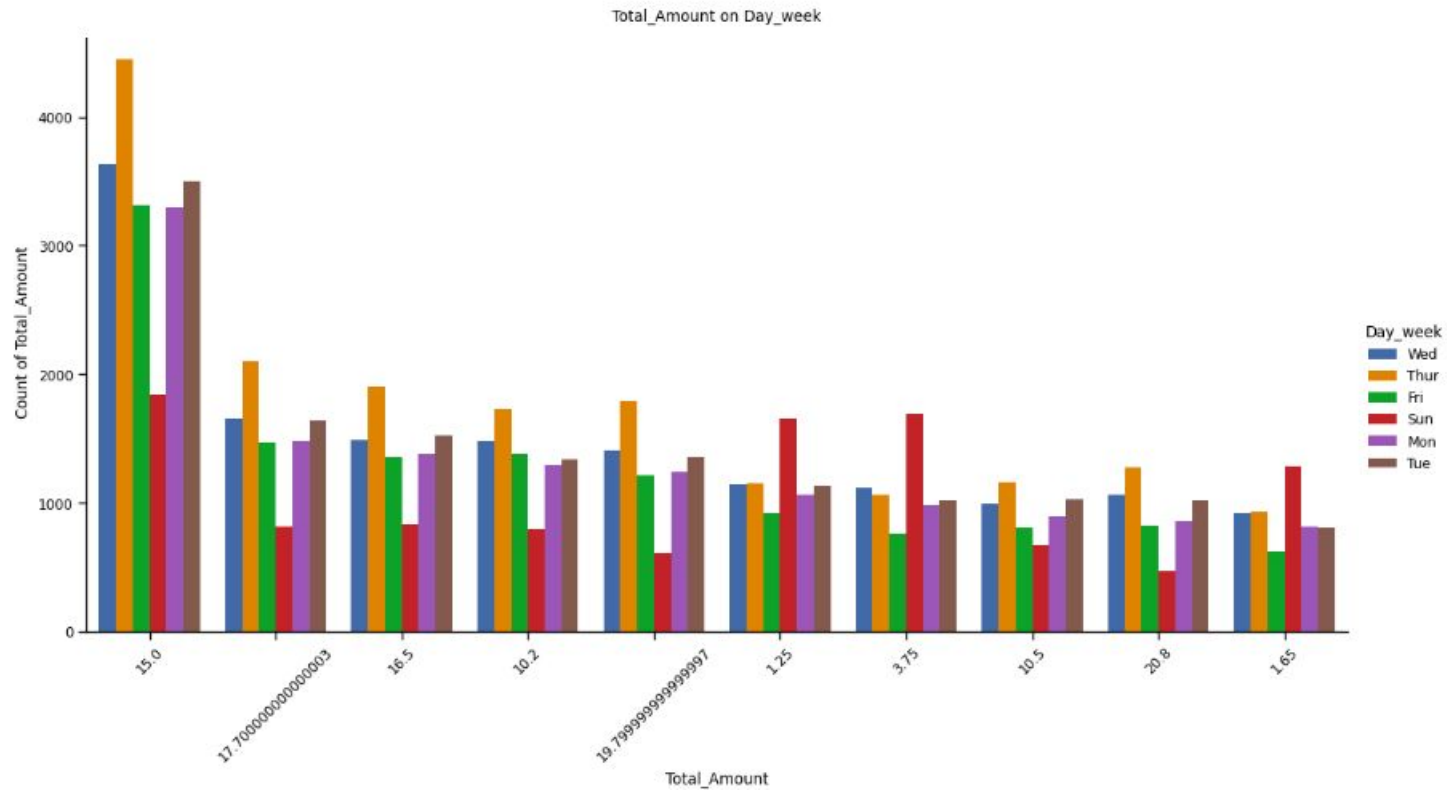
Data Preparation

- ❏ Data Cleaning
- ❏ Exploratory Data Analysis(EDA)

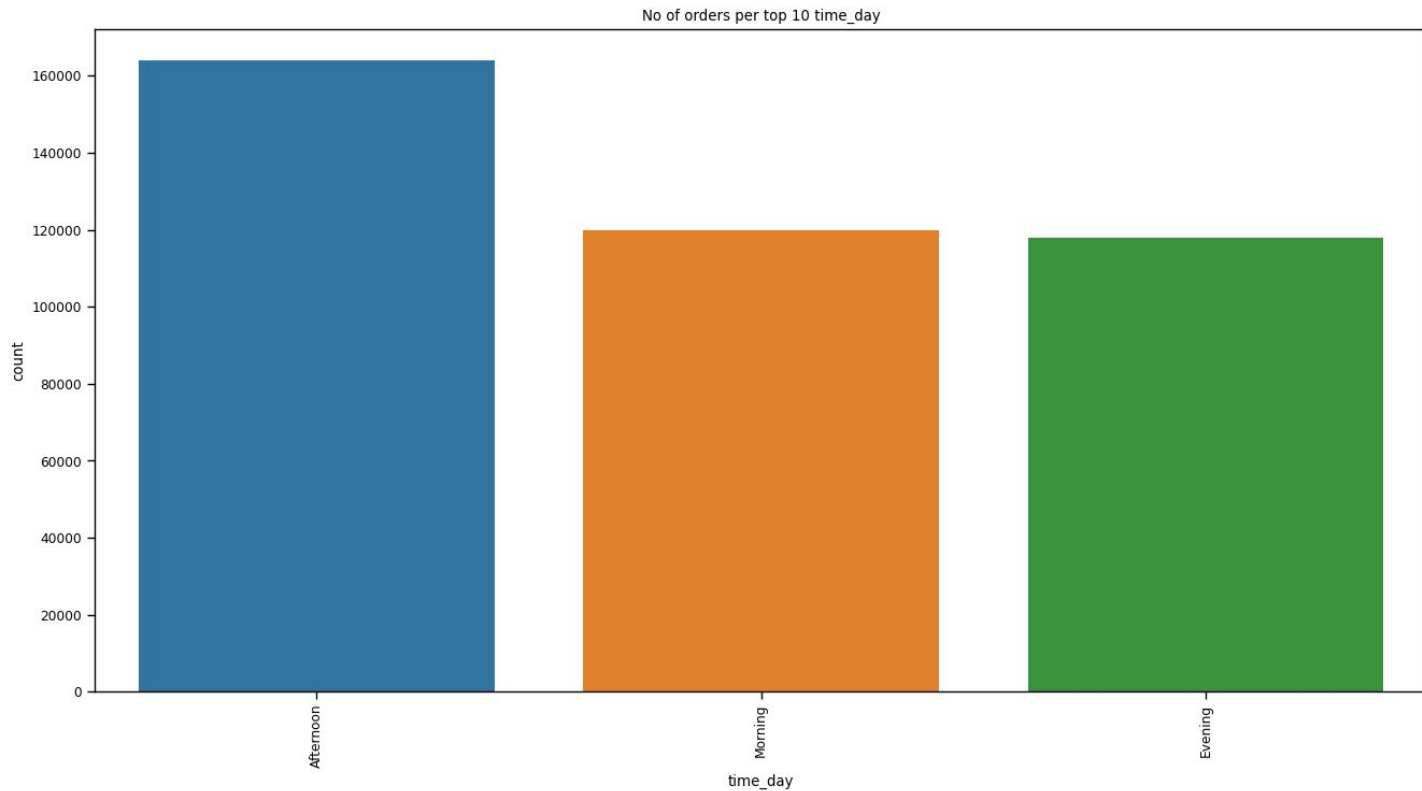
Univariate Analysis



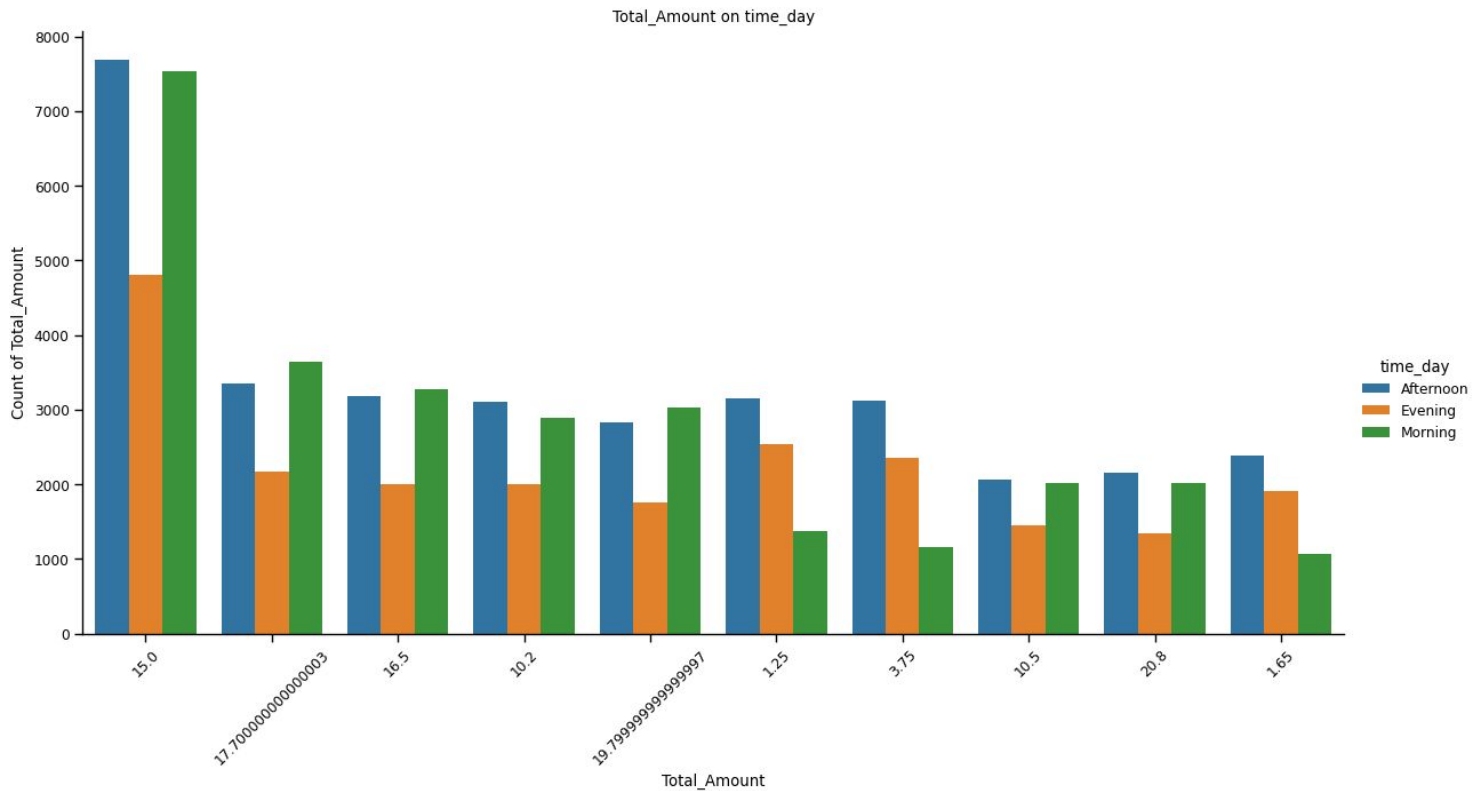
Bivariate Analysis



Time of Day

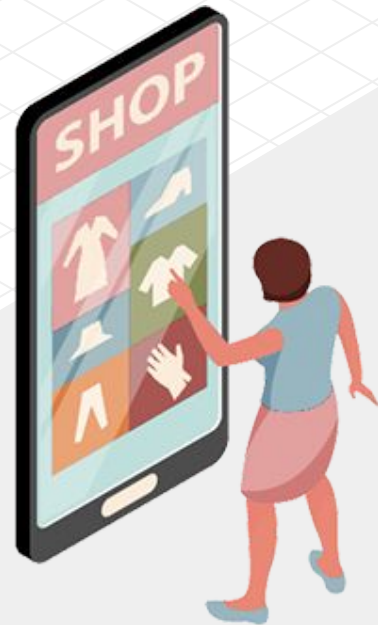


Amount vs Time of Day



Modeling


- ❑ Memory_Based Model using Cosine and Pearson Similarity
- ❑ Collaborative Filtering - Using Surprise Library
- ❑ Evaluation RMSE





OUR COMPANY

Mercury is the closest planet to the Sun and the smallest one in the Solar System. The planet's name has nothing to do with the liquid metal, since Mercury was named after the Roman messenger god



Recommendation

- ❑ Offer personalized product recommendation based on user preference and purchase history.
- ❑ Mitigate the product discovery challenge by highlighting relevant items, making the shopping experience more enjoyable and efficient.



Deployment of the Model



THANK YOU

