Proposal for Springboard Capstone 3

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Project Summary

Project: Ecommerce Shopping Recommendation

Goal: Model customer shopping intentions

Data:

https://www.aicrowd.com/challenges/amazon-kdd-cup-23-multilingual-recommendation-challenge

Problem statement

Understanding customer shopping intentions is important for e-commerce stores. It directly impacts user experience and engagement. We want a better contextual understanding of what a customer is searching for, such as whether they are looking for electronics or groceries with the search query "apple".

Goal

The goal of this project is to utilize machine learning to classify shopping queries to provide suggestions and directions to improve the customer experience.

Data

As a part of an Alcrowd () KDD challenge, Amazon Search has provided a shopping queries dataset. I'm going to stick with the Amazon dataset as an MVP. (minimum viable product) for the initial release. It is specifically made for this challenge and will be the quickest way to make some noticeable progress right away.

Criteria for Success

Any new ML project is really an experiment, we can't or perhaps shouldn't try to predict a business criteria without working with the data first. So the criteria for success here is simply to get a model up and running, making good EDA and feature choices about what the data conveys or does not convey, and evaluate the outcome, especially in the realm of over and underfitting.

Constraints

Any problem can be re-thought or perfected over time. In a business context, most problems worth solving should take time to understand how well the solution affects stakeholders and customers. In this case we have limited time and therefore we should treat this problem as we would a competition – with a limited timeframe for submission. In this case we want the MVP (minimum viable product) within weeks, not months.

Stakeholders

Springboard review