Recommend Products To Instacart Customers

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Overview

Online Shopping is a boon to many people. No more makeup, no more worries about the bad hair day and no more looking for a parking spot - The entire Retail World is just a click away. Receiving all your groceries at your doorstep on the same day is Fun. **Instacart** is the name who offers this service.

So, how does that actually work?

Customers place orders online through a Mobile app or using the website to be fulfilled from one of their grocery retail partners. A personal shopper engaged by Instacart picks the items in the store and delivers them in as little as an hour or at

the time the customer selects. Sounds really Simple right? But in the back end, lots of algorithms and calculation makes the process happen.

Problem

Our options are limitless and browsing through those endless choices are tiresome. Recommendation helps customers to find products without putting much efforts.

What to eat, which movie to watch, what book to read or which product to buy are the questions that we find ourselves to answer all the time. Traditionally, these questions are answered with peer recommendations(friends, family, forums, blog posts or reviews) . But these traditional methods are limited and biased. So, how about getting an unbiased answer?

In this project I will build a Recommendation Engine to suggest some products according to customer's taste.

Data

For this project, I am using the Dataset from "The Instacart Online Grocery Shopping Dataset 2017", Accessed from https://www.instacart.com/datasets/grocery-shopping-2017 on 07/10/2019.

This anonymized dataset contains a sample of over 3 million grocery orders from more than 200,000 Instacart users. For each user, the dataset provides between 4 and 100 of their orders, with the sequence of products purchased in each order. It also provides the week and hour of day the order was placed, and a relative measure of time between the orders.

Client

Recommendation Engine is getting popular with any Retail or Entertainment Business.

The most widely known recommender system could be attributed to Amazon. Using the purchase history, browser history and user history, they provide recommendations to the user for a variety selection of goods and products.

Netflix is another example which recommends Movies Based on user's browsing History or Ratings and thus taste.

Currently, many companies that sell a selection of products and have access to user information, employ a recommender system that promotes further purchases to the user.

Approach

The data that we are using here are **Implicit** Data. We only have the user's information and the item purchase history. But we do not have any Ratings or Feedback for any products.

I will use **Collaborative Filtering** approach for recommendations.

Deliverables

My deliverables will include code on Github along with Jupyter Notebooks and a deck presentation.