Fashion Recommendation System

A fashion recommendation system is an application that recommends the most trending fashion based on the user's search query. For example, if a customer or user is looking for a Kurti, the recommendation system will recommend the most trending or highly rated Kurtis on their platform.

To build a fashion recommendation system, we need a dataset based on fashion products. I have uploaded the dataset in the repository.

The Code:

We would start by importing the necessary Python libraries and the dataset.

After looking at the data we see that the data contains:

Brand name, URL of the product, image of the product, image url of the product, ratings of the product on myntra, total number of ratings, information about the product, selling price and original price of the product, and discount on the product.

When we check for null values in the dataset wee that there are some null values, but there are 467 null values in the Image column, where the total number of rows in the data is 600. So, the wise decision would be to delete them.

We then look for the popular brands. So, brands like Anubhutee, Malhaar, Now, Tissu and Pistaa are the most popular ones. Then looking for the highest rated ones we find them – Indyes, Sangria, Malhaar, Fabindia, Paramount Chikan, Biba and Sanjh were among the highest rated ones.

Now, Recommending Products

To recommend the trending fashion, we cannot use the content-based filtering strategy. The content-based filtering strategy is good to use when a user is looking at a fashion product, and your application wants to recommend something similar.

To recommend the trending fashion, we can find the weighted average of all ratings and recommend the products based on the weighted average ratings. To count the weighted score of all ratings of Kurtis, we need:

1. Mean rating (mr): the mean rating of all the products
2. Minimum ratings (m): minimum number of ratings
3. Number of ratings(n): total number of ratings of product
4. Average ratings(a): Average rating of product

Now the formula which I used is :
$score = (n/(n+m) * a) + (m/(m+n) * mr)$