Plagiarism Scan Report

Summary	
Report Genrated Date	21 Apr, 2018
Plagiarism Status	**100% Unique**
Total Words	882
Total Characters	5153
Any Ignore Url Used	

Content Checked For Plagiarism:

Index Page

Fig 5: Index Page

This is the landing page , from where navigation to the list of users and the list of products is possible.

B. Products Index Page

Fig 6: Products Index Page

This page showcases a list of all the products along with their title and id . Search option is available by using product id as the search field .Clicking on one product takes us to the page specific to that product.

C. Products Page

Fig 7: Products Page

Here an individual product is showcased along with its image , tile , category it belongs to and also its description

Fig 8: Products Reviews

All the reviews given for a product are displayed one after the other along with the details of the reviewer with the display of how many people found it useful and how many did not with the help of ‘thumbs-up’ and ‘thumbs-down’ glyphicons respectively.

Fig 9: Write review for products

Under every product is the provision given to provide a review for it.

Fig 10: Product analysis with aspect wise rating pie chart

Here for every product , the each aspect is scaled from a scale of 0-5 to a percentage scale

which in essence is the average sentiment of each aspect for each product.

B. User Index Page

Fig 11: User Index Page

This is a list of all the users with their names and id along with a search option given which uses user-id as the search field.Clicking on one user takes us to the page specific to that user.

B. User Page

Fig 12: User page

This page is specific to a user giving details like the user name , user id and a list of all the reviews he/she has given beside the product image for which that particular review is given.

Fig 13: Aspect Rating of Product

This graph is specific to each review given by the user which gives the user an idea of the overall sentiment of each aspect he/she has talked about in that particular review.

Fig14: Recommendation page for users

Each user is given recommendations for various products where clicking on the image of the recommended product takes the user to the page specific to that product.
The user is also given information such as the product recommended to him/her is recommended exactly on the basis of his/her review for which product and which aspect of that product that he/she has talked about.

Fig 15: Aspect wise Product Recommendation

The graphs give information about the average sentiment rating for each aspect for each product that is recommended to the user by the system.

V. Conclusion

The project aims at implementing a novel approach in recommendation systems to make them more precise and specific. The system essentially considers a broader set of perspectives which can form the basis for judging whether a person will like a certain product or not and if he/she will, to what extent. If the users of this system who follow the recommendations will rate the product the same or better, it is evident that these users conformed to the recommendations the system provided. The businesses will have a clear picture of the opinion not only about their products, but about specific aspects of their products in the state-of-the-art e-market. This will assist the business in improving the very particular areas where the customers are unhappy. It makes the overall business process more efficient and objective. This system is a state-of-the-art system wherein the recommendations are personalized which add to their value.

The rule set is constructed by exploiting the typed dependencies of the Stanford CoreNLP Dependency Parser. For doing this and gain the extent of accuracy that we did, we required

to study the Stanford Dependency Manual in depth. The meaning of each typed dependency is explained in this document along with the variety of conditions which trigger for that dependency to show up on the output of the parser. As we constructed direct rules one by one, which were applicable only when certain criteria were met with respect to POS tags and dependencies, we discovered some anomalies, which were relevant to all direct rules. Thus we made the universal rules and associated them with each direct dependency rule. Some other improvements were made like replacing all pronouns with the relevant nouns using the coreference resolver.

This system provides a variety of data in graphical format, which gives different insights to both, buyers and vendors. The buyers are given an output which shows them an aspect-wise comparison for the products best-suited for them. The vendors get an overview of the sentiment of various aspects relevant to a certain product so as to make business plans based on the approach or inclination of the users to a particular aspect. The recommendation system uses the buyer’s reviews on various products and which feature of the product the user most frequently mentions in all his/her reviews. This gives the vendors a perspective to focus on targeted advertising and recommendations. The overall sentiment of aspects over a variety of products is also useful so as to give a view of which aspect is considered the most while an average user buying a product and giving the industry a perspective about the universal sentiment.