

Customer Product Search Analysis in E-Commerce by using Genetic Algorithm

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Abstract— The product takes review of various users, based on the review, Based on the review, it produces a variety of customer reviews, specifying that products and services offered by e-commerce activities are reviews and rating. We use reaction-based keywords based on these response keywords that are drawn on user review and ranking along with compatibility or negative weight in the database. This system allows consumers to buy different products and online products can review and ratings.

Key words: Web Content Mining, Genetic Algorithm

I. INTRODUCTION

Web content mining is mining, becoming a member of extraction and rewarding data, statistics and web page act as content material. The form and failure to provide an excellent part of the license to everyone. For example, the Hypertext Information, Robotized Disclosure, Affiliation, Hunting and Internet Tools, and Lycos, Alta Vista, Web Crawler, ALIWEB, Meta Crawler and Others offer some convenience to clients, but they are Maximum divisions do not deliver crucial measurements or codes, channel or interpretations. By the end of this period, these add-ons have motivated the development of more effective objections to realities, for example, creating subtle net specialists, and large databases and records, making mining frameworks, and creating flexible ideas at the net.

The administrator has a fairly honest approach to dealing with net mining, developing current AI structures that present independently or partially-independent with the current client's enthusiasm, identifying and addressing online facts. Using web mining material measurements using internet mining, there are four general advancements.

- 1) Assemble - Get the ingredient from the web
- 2) Apply - Different Useful Facts from Realists (HTML, PDF, and so on)
- 3) 3.Research - tokenize, fee, installation, foundation, channel, kind, and many others.
- 4) Provide - Change the final results of a look into the profitable (record, look record, and much more) Web mining absolutely committed net and net based on commitment websites.
 - a) Problems / Challenges Data / Information Extraction: Insights of insights made from web pages, for example, protests and record records are a troublesome effort. The separation of such certificates encourages one of the organizations to give. Two first methods, gadget aging and modified modification are linked to the problem.
 - b) Web Information Integration and Scheme Matching: Without a doubt, the web is a generous step of certificates, addressing each website (or maybe a website page) statistics. Identifying or maintaining semantic

related records is a fundamental issue with many traditional applications.

- c) Feedback extraction from online resources: There are many online conceptual resources, e.g. Customer reviews go to articles, social affairs, internet diaries and rooms. Exciting importance for mining emotions (especially customer ends) is the skill and development of bench marking.
- d) d. Knowledge synthesis: Thought chains of important or theory are very much in many packages. Regardless, they have a unique degree of physiology. Two or three advanced systems examine that the web provides additional information. Containing and acting on the web to provide the user with a practical picture of that area.

II. LITERATURE SURVEY

A Survey on Web Mining: Overview, Techniques, Tools, and Applications

Web Mining has moved the World Wide Web into a more useful environment in which users find quick and easy information. It uses document content, hyperlink construction and utility statistics to help consumers meet their required information. Automatically detect information from web-related data sources such as documents, logs, services and user profiles. Although standard data mining techniques have been implemented for mining on the web, several specialized algorithms need to be developed and applied for different purposes of many web resources web based information processing, efficient and efficient. The word web mines is used in two different ways. First, web content mining is the process of information innovation from sources across the World Wide Web. The second, called Web usage mining, is the process of mining for user browsing and access patterns. In this paper, we are trying to give a brief idea regarding web mining concerned with its techniques, tools, applications, and future directions.

Web excavations have adopted web mines technology for automatic uncovering and revival of information from web documents and services. In this paper, we discussed web mining. We are primarily one of the web mining centers focused on web content mining and its various functions. We propose a six-step web content mining system in our work. Several tools for web mining have been discussed and their relevant merits and demerits are displayed.

Web content mining confronts this problem gathering explicit information from different web sites for its access and knowledge discovery. Basically, web mining is concerned with the use of data mining techniques to automatically discover and extract information from World Wide Web documents and services. The data used for web content mining includes both text and graphical data. Based

on the searching content mining is divided into two types. These are Web Page Content Mining and Search Result Mining. Web page content mining is the technique of searching the web via content. Search result content mining further searches the pages from a previous search. Evolutionary approaches have been used for web content mining.

Web content mining is the most challenging area in the field of web mining. A lot of work has been done still the search engines lack in their efficiency and accuracy in responding the user queries. Evolutionary approaches can play a critical role in the mining of web content data. In the authors proposed an algorithm for content mining. They have considered web search as a general problem of function optimization. Using the fact that the web is a graph in which nodes are web pages and edges are the links between these web pages. The search space in the optimization problem is a set of web pages.

The proposed approach uses different technique using Genetic Algorithm for web content mining. GA is a branch of Artificial intelligence which was inspired by Darwin's theory of living organisms in which successful organisms were produced as a result of evolution So GA is search algorithm based on the natural selection and natural genetics. The main significance of GA is the survival of the fittest which is also known as natural selection. It is different from other search methods in that it searches among population of points and works with coding of parameter set rather than parameter values themselves. There are problems which we cannot determine a priority to the sequence of steps leading to a solution. Search is a best method for such problems. There are two methods to perform search. These are blind strategies and heuristic strategies.

III. PROPOSED ALGORITHM

GAs are used in different sectors of web mining to get optimized solutions for better performance of data to be able to summarize decisively and accurate outcome of a fixed outcome. Genetic algorithm for mining techniques is a comprehensive identification classification rule, if the uniform population method and the uniform population employed by the unified demographic method are employed. The early population is created by removing randomness through integrated uniformity

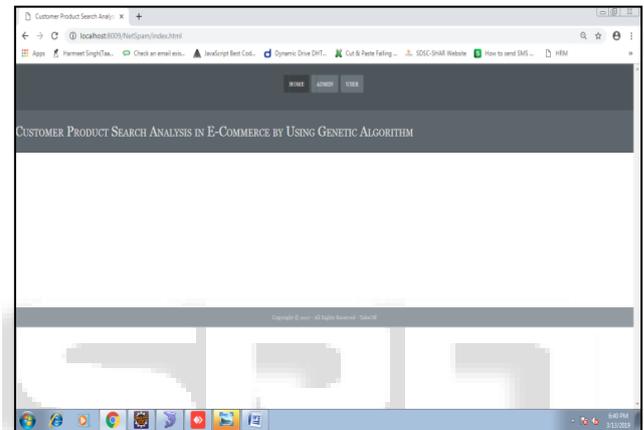
A. Genetic Algorithm

Genetic algorithms provide a comprehensive search method for machine learning and optimization. The algorithm begins with a set of solutions named (population represented by chromosomes). Solutions are taken from a population and form a new population. This is an expectant inspiration, the new population is much better than the old one. Solutions to selected new solutions (child) are chosen according to their fitness - are more suitable. In which we can take a group of population solution represented by a population from chromosomes and hope that it will be used to create a new population and a new generation is better than the previous one. This can be repeated until some conditions (for example the population or the development of the best solution) are satisfied. The main steps are

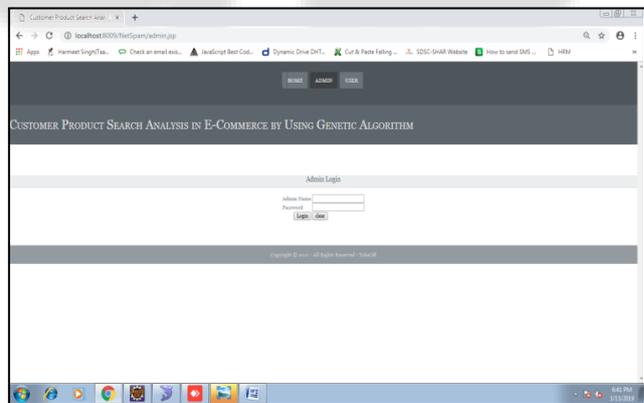
- 1) Start with a randomly generated population of n chromosomes
- 2) Calculate the fitness $f(x)$ of each chromosomes x in the population.
- 3) Repeat the steps until n offspring have been created.
 - a) Randomly select a pair of parent chromosomes from the current population
 - b) cross the pair at a randomly chosen point to form two offspring
 - c) randomly mutate the two offspring and add the resulting chromosomes to the population
 - d) calculate the fitness of the resulting chromosomes
- 4) Let the n finest chromosomes survive to next generation
- 5) Go to step 3

IV. RESULT & ANALYSIS

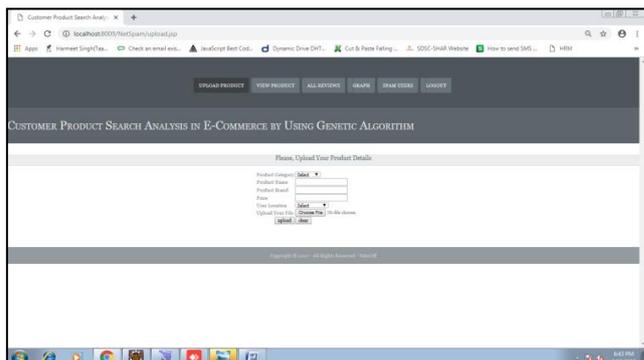
A. Home



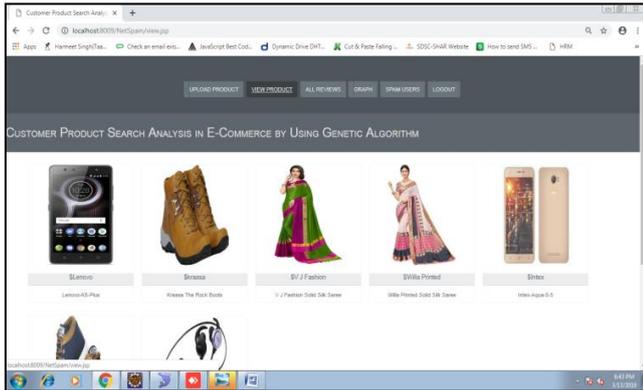
B. Admin Log in



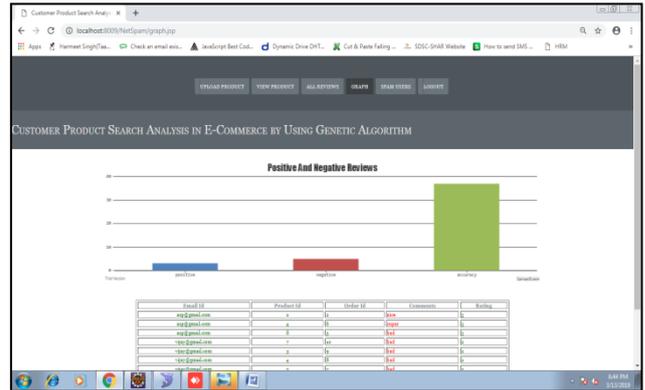
C. Upload product



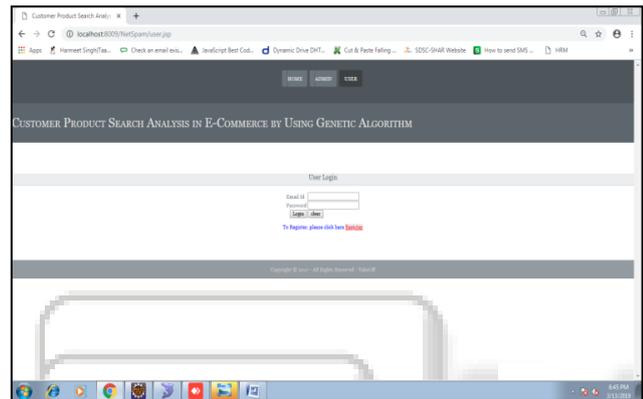
D. View Product



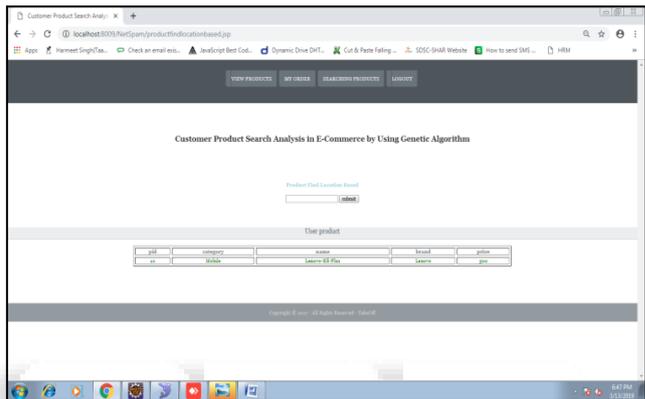
H. Graph



E. User Log In



I. Product find location Based



F. My Order



V. CONCLUSION

Customer product service provides rating for every product which is used by every customer elegantly. Getting customer reviews is the best way of marketing every online business. It provides reviews on monthly basis for each and every product. Reviews are good for every business and customer service. By using these strategies business members can improve quality of their products. Rating is considered by every single customer and using it we provide rating for every product. Rating is provided to every product making it convenient to customers System developed which will fetch user comments and perform analysis on them

G. All Review

Order ID	Product ID	User Email	Comments	Rating
1	1	apple@gmail.com	Good	5
2	1	apple@gmail.com	Bad	1
3	1	apple@gmail.com	Good	5
4	1	apple@gmail.com	Bad	1
5	1	apple@gmail.com	Good	5
6	1	apple@gmail.com	Bad	1
7	1	apple@gmail.com	Good	5
8	1	apple@gmail.com	Bad	1
9	1	apple@gmail.com	Good	5
10	1	apple@gmail.com	Bad	1

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