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A Product Review Using Rule Base And Fuzzy Logic Approach

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Abstract: ***Nowadays, internet has become used for various working in life. And it is helpful for the great development in resources, communications, online resources, blogs, discussion, conference forums etc. And it is used for getting a new ideas for the identify and exact information get through the internet with help of data, texting subjects. Opinion mining is used for the get perfect data /information. And while shopping people opinion is more helpful for choosing any product. This will be get the product reviews and comments .And getting this comments and reviews determines the polarity of sentiments. And also determine the smiley. And it is product reviews and comments it compares the two and more different products, and choice the which product is best as comparison one of it. Sentiwords and smiley's using it finding the source word. And sentiment word includes the positive review, negative review, objective .Rule base and fuzzy logic approach to giving the outputs for products . A facts expressed keywords from opinions. It is helping for the getting exact reviews, comments, opinions etc.***
Keywords: my sql, java, data mining, windows xp etc.

I. INTRODUCTION

Internet is important of in every day or in daily life Because it is get the many ideas, information , solutions for any difficulties, communications systems etc therefore, internet has need in day to day life .Internet includes very different online resources , groups, formats ,sites etc . And people cannot get the proper information's using same topics in different websites. Sometimes it is very difficult to arrange the information rather than to access its sequential manner. It take a large time for gain information properly. Organize text in a proper way to hard. Facts and opinion two types of data. Facts express the data transmission and opinion express the sentiments. It is need a new system because Cannot calculate the exact opinion. Opinions cannot be categorized in well-structured manner. To overcome the existing problem.

Sentiment analysis: Opinion mining means the data mining or sentiments analysis it is useful for the identification. and checking the reviews ,advice of persons, and communications. And also contents of the documents are positive, negative, neural etc .and accepts the smiley's of product reviews directly identify and main purpose is that to get best product while comparisons between two or more products.

Rule base: store and manipulate the knowledge are used in rule base system for interpret data rule based is used for the lexical analysis , natural language processing, artificial intelligence research etc.

Fuzzy logic approach: fuzzy logic is used for the solving the mathematical logic problems. It include the Boolean logic approach to computer based on degrees of truth. It also works the binary logic for the finding truth values to simply a special case. The works sentimental analysis and opinion mining from social media.

II. PURPOSE

The purpose of testing is to discover errors. It is used for check functional components, sub-assemblies. It is process of exercising software. There are various types of test addresses a specific testing. Unit testing , functional testing, system testing, performance testing are includes in testing.

Unit testing: It is design of test that internal program logic is functional properly. And get proper output. It is software units of applications. It is a structural testing, that relies on knowledge of its constructions.

Functional testing: It is provide the systematic demonstrations. It is specifies the business and technical requirements user manuals etc.

Functional testing include items:

Valid input: identified classes of valid input.

Invalid input: identified the classes of invalid input.

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Functions: identified the functions be exercised.
Output: identified the classes of output.
Systems: interfacing system.
System testing: system testing ensures that the entire software system. It is shows the predictable results . It is based on processes of flows , integration points.
Performance testing: it is performance output produced within the time.

III. EASE OF USE

Sentiment analyasis or opinion analyaser: the main purpose of the to get the online reviews of the products. Determine the fast reviews for opinions whether the positive, negative or neural. And also shows the expressions using smiley.
Example - we want to buy some products (electronics product, mobile, computer etc) form the electronics market. But we get confuse and arising a questions on our mind which product should buy?? Which product is better for used??Etc. Then we asking a friends, relatives. Refers the opinions from blogs, e commerce site, customers reports, discussion forum etc. And we get the different ideas or opinions. Sentiment analysis we get the emotions from text. Fast opinion identify which is better using reviews. And also get the positive, negative reviews a fuzzy set has a graphical description that expresses how the transition from one to another takes place.
Abstraction of the problems: Opinion mining and sentimental analysis it has multiple reviews. The abstraction provide a determining the exact value. It provide online opinion or ideas.
The purpose task are: The feature are evaluated by people.
Determine the features are positive, negative or neural.
Shows the exact reviews.
*fuzzy intensity finder: fuzzy intensity finder is finding the objectives adverb. Just like a good, bad, very good, very bad etc.there are few adverb very, really, extremely which is maybe used the positively or negatively.
Abstraction of the problem: fuzzy intensity finder is calculated the which is exactly better . And calculated the weight of exact opinion.
The purpose task are: the feature are determine the exact review.

And also shows the product weight using smiley. 1

Good	0.625	Very good	0.7906
Bad	0.25	Very bad	0.0625
Awesome	0.875	Simply Awesome	0.9354
Pathetic	0.375	Highly Pathetic	0.1406

Rule based approach: rule based is divided into a numbers of sentence.
Certain rule organised the depending on those rule.it helps the stop words are remove automatically.
Abstraction of the problem: it is based approach the lexical analysis.
It gives the sufficient accurate analysis.
The purpose task are: the feature are detected stopping word.
*Comparision of product: the comparison express the relation of two or more sets. Comparisons of multiple product of same category on the basis of sentiment score.
Abstraction of the problem: identify the sentence from the text.
Gives the exact comparative solution.
*Data sets: it is a collection of related sets of data or information. It is managed as a whole entity. It is include customer review , additional review ,sentiment analysis, comparison review etc.

IV. SYSTEM ARCHITECTURE

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It is the basic sentiment analyasis structure of system architecture. Sentiment analyasis it has different structure. Includes a word, sentance and documents level. Data collection and identification process is measure the data fom different resources. data shows the input sysem. Pre-processing is used for the removing unwanted wastages words from the customer opinion. part of speech tagging of each word whether the noun, verb, adjective,adverb etc. it identifies the smple noun and verb group. and also identifies the simple feedback. negation detection it is used for the implementing the sentiment analyasis . stop word removal is used for the removing the digits, prepositions, articles,proper nounetc. it gives the better extraction of opinion from tagged file. Rule based approach defined the relation and result. a consequent represent the review is positive , negative. It is used it find the which is best product which is not. and calculate the score sentiment.

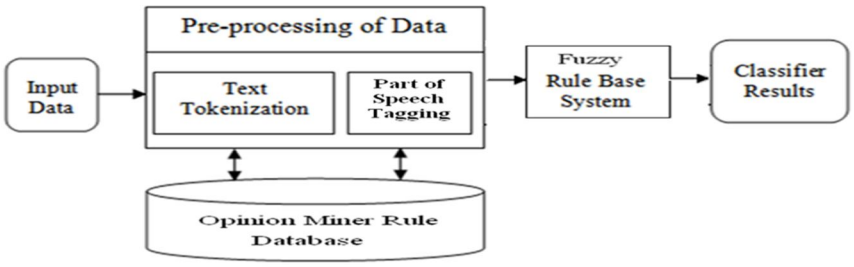

fig 1 : basic structure of sentiment analysis

V. METHODOLOGY

Customer review contains the facts and review. And the sentence are divide into subjective and objective . It is based on the dictionary. subjective is categorize as positive , negative, neutral opinions. A rule based method is used for subjective and objective method.

Sentiwordnet: It is lexical resources. used for the opinion mining. positive, negative, objectivity are sentiment score.

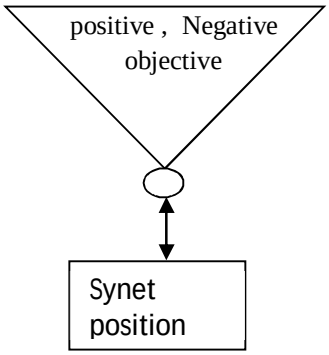

fig 2: Graphical representation of sentiwordnet.

The diagram shows the graphical representation of the sentiworsNet. it is represent the opinion of particular word.

SentiwordNet Example:

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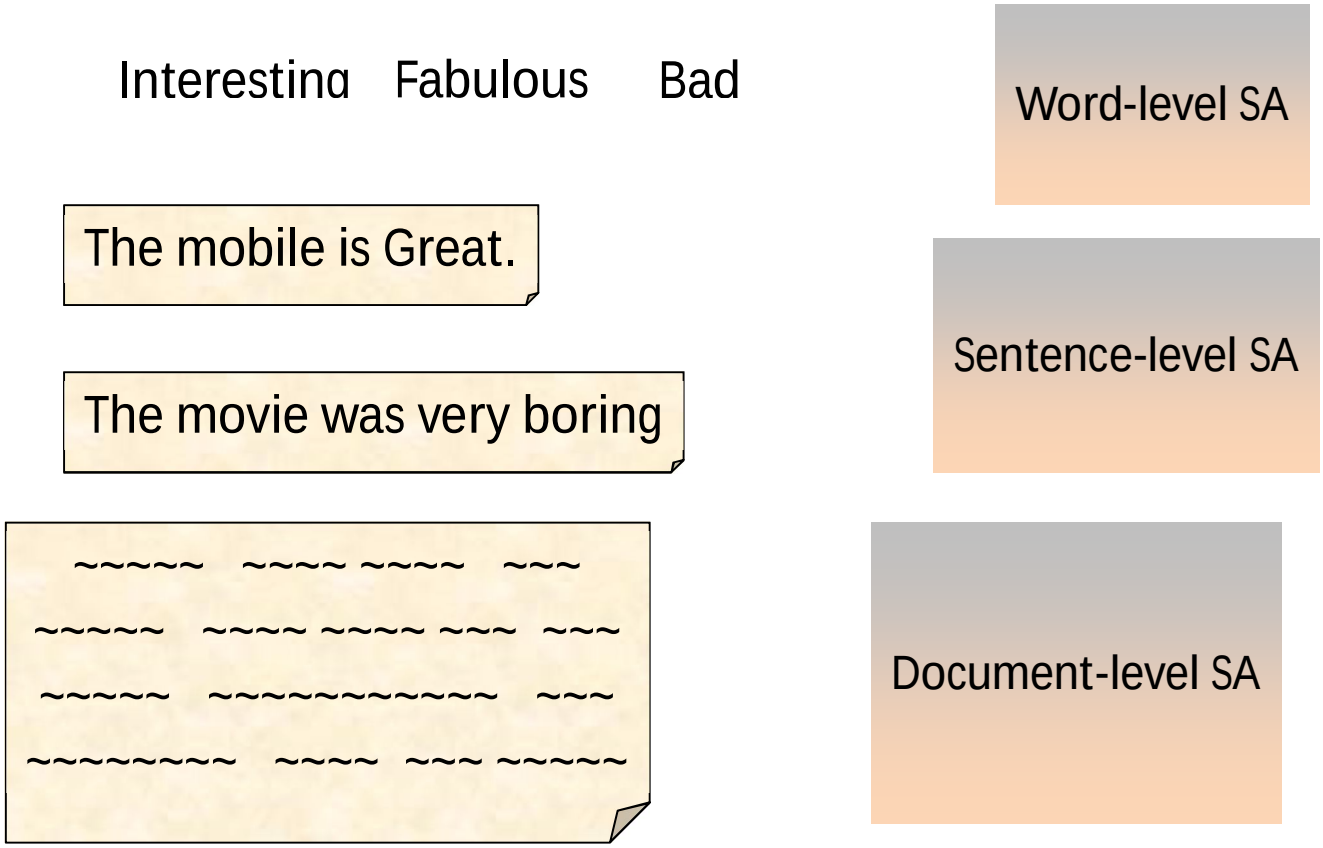
A. Sentiment Analysis at Different Levels

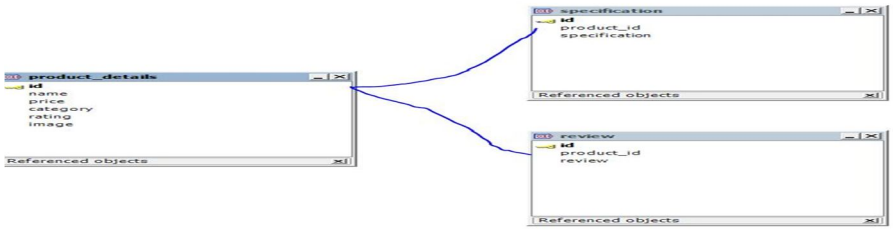


VI. MODULES

Modules includes:

Creating a structure of database
Insertion of product
Display of product
Display of specification and review of product
Add reviews on product
Calculating individual score of product
Categorization of keywords of reviews on the basis of grammar
Comparison of multiple product of same category on the basis of sentiment score
Displaying the graph of comparison

A. Creating a Structure of Database



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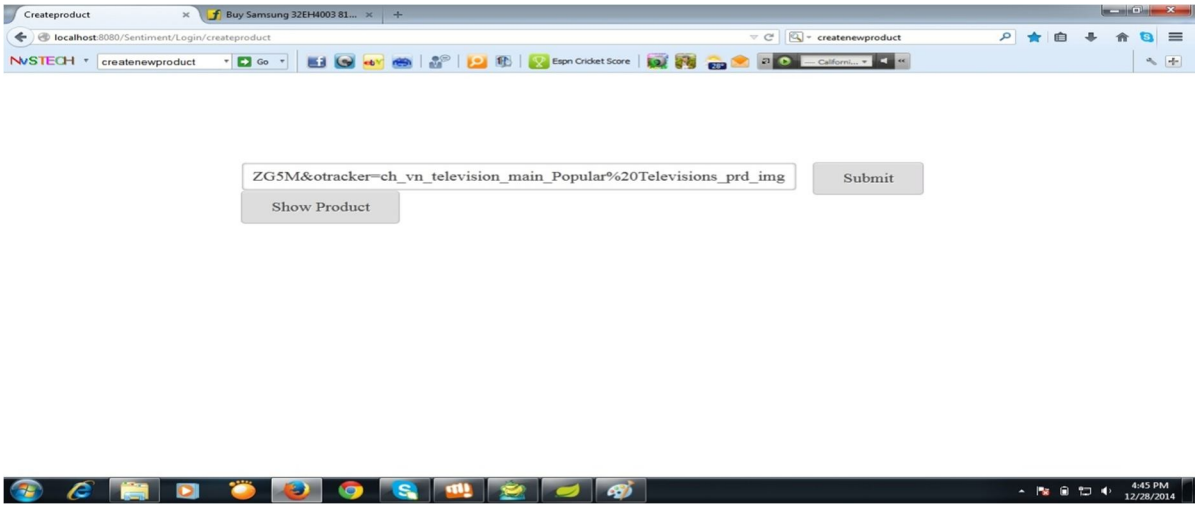
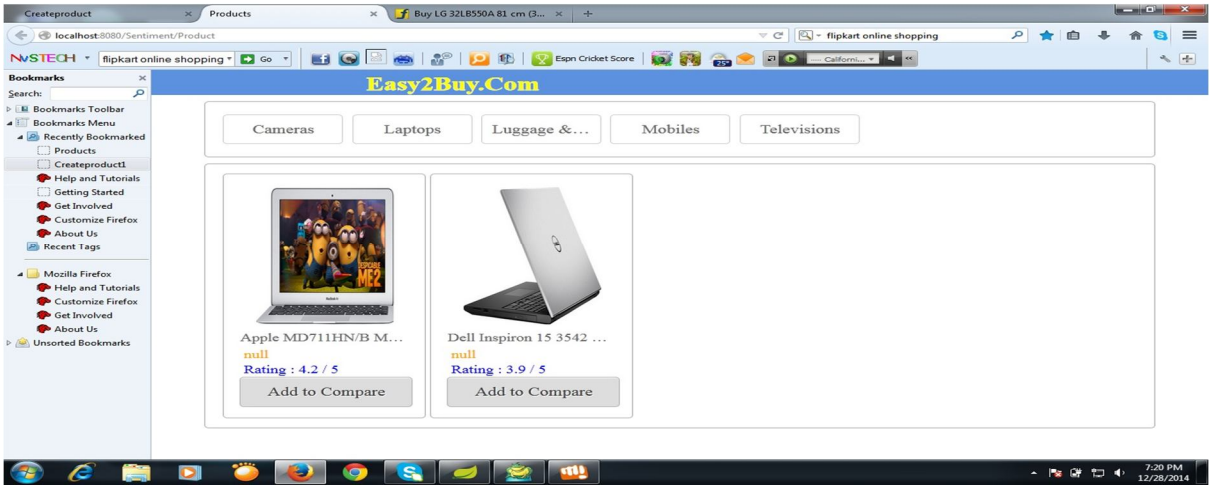
B. Insertion of Product



C. Display a product



D. Display a Specification and Review of Product

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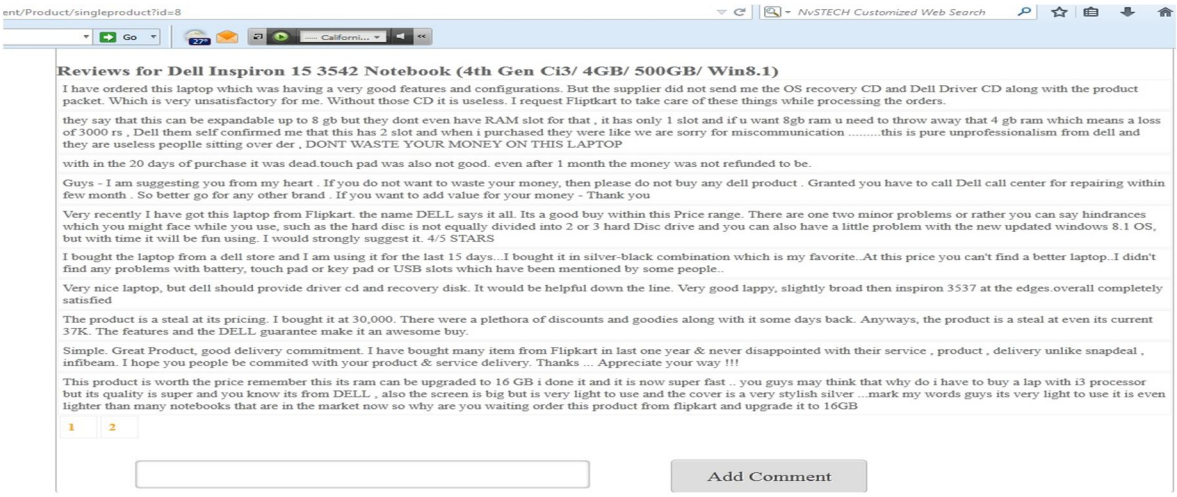
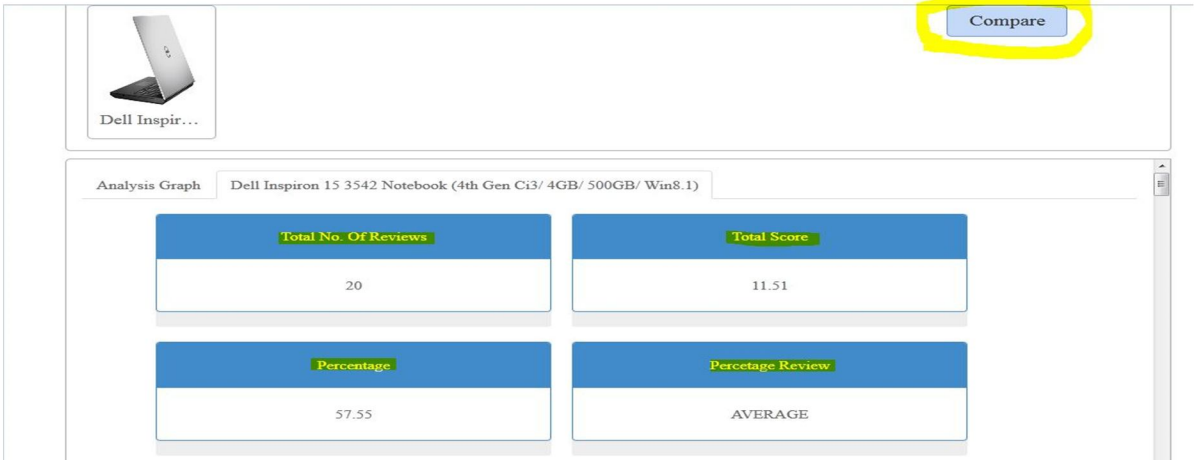
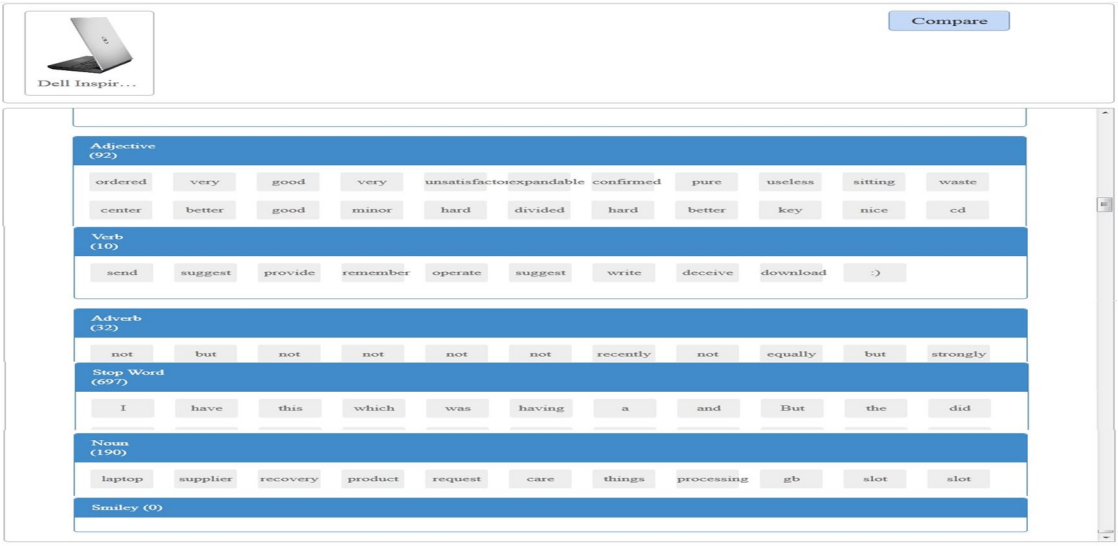
E. Add Reviews on Product



F. Calculating the Individual Score on Product



G. Categorization of Keywords of Reviews on the Basis on Grammar



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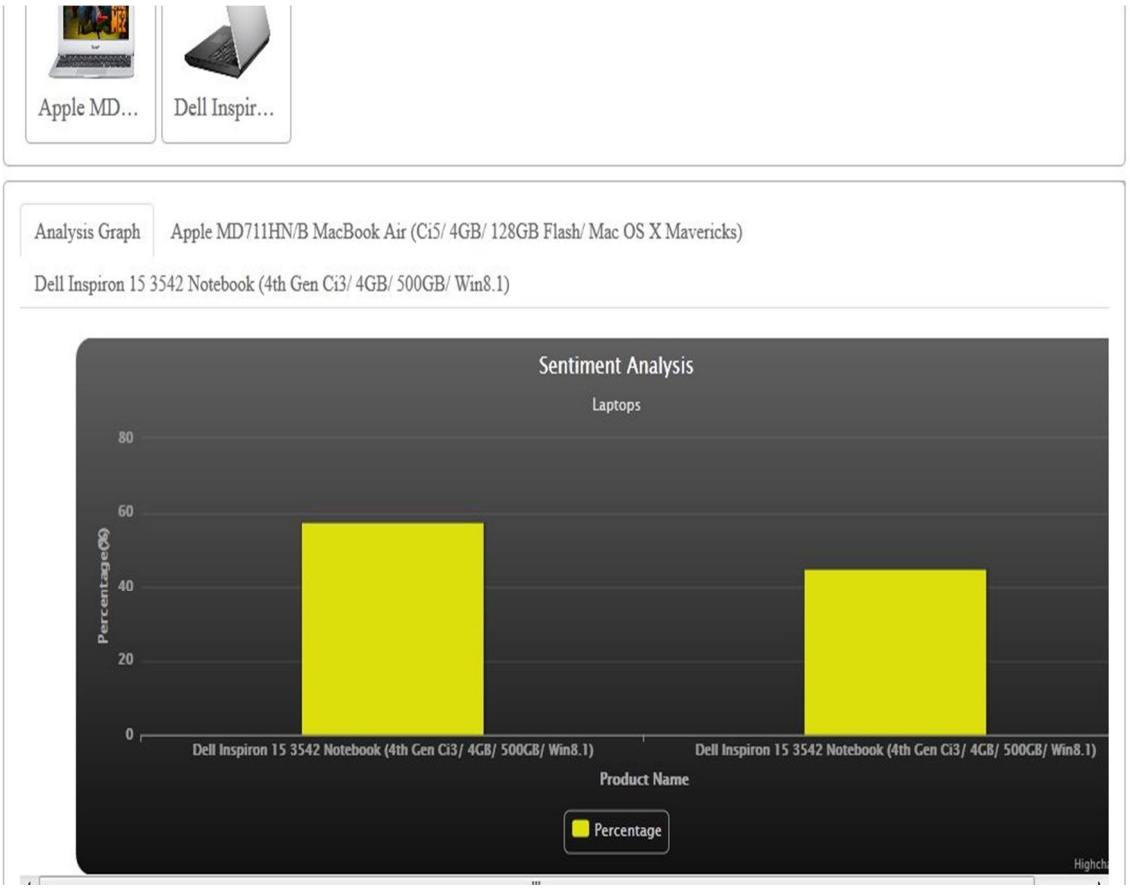
H. Comparison of Multiple Product of Same Category on the Bias of Sentiment Score

I. Display the Graph Comparison



VII. ADVANTAGES

Unlimited ,unfiltered, unbiased
Real-time opinions of users.
Cost effective approach.
Actionable market intelligence based on direct user feedback.

VIII. CONCLUSION

It will gives all numbers of reviews for products, and gives the product is good, bad, poor best etc.It is web based application. and it is access for anywhere. System can be used in company for the better developing product. and flipkart.com take a review. n get review different online resource.

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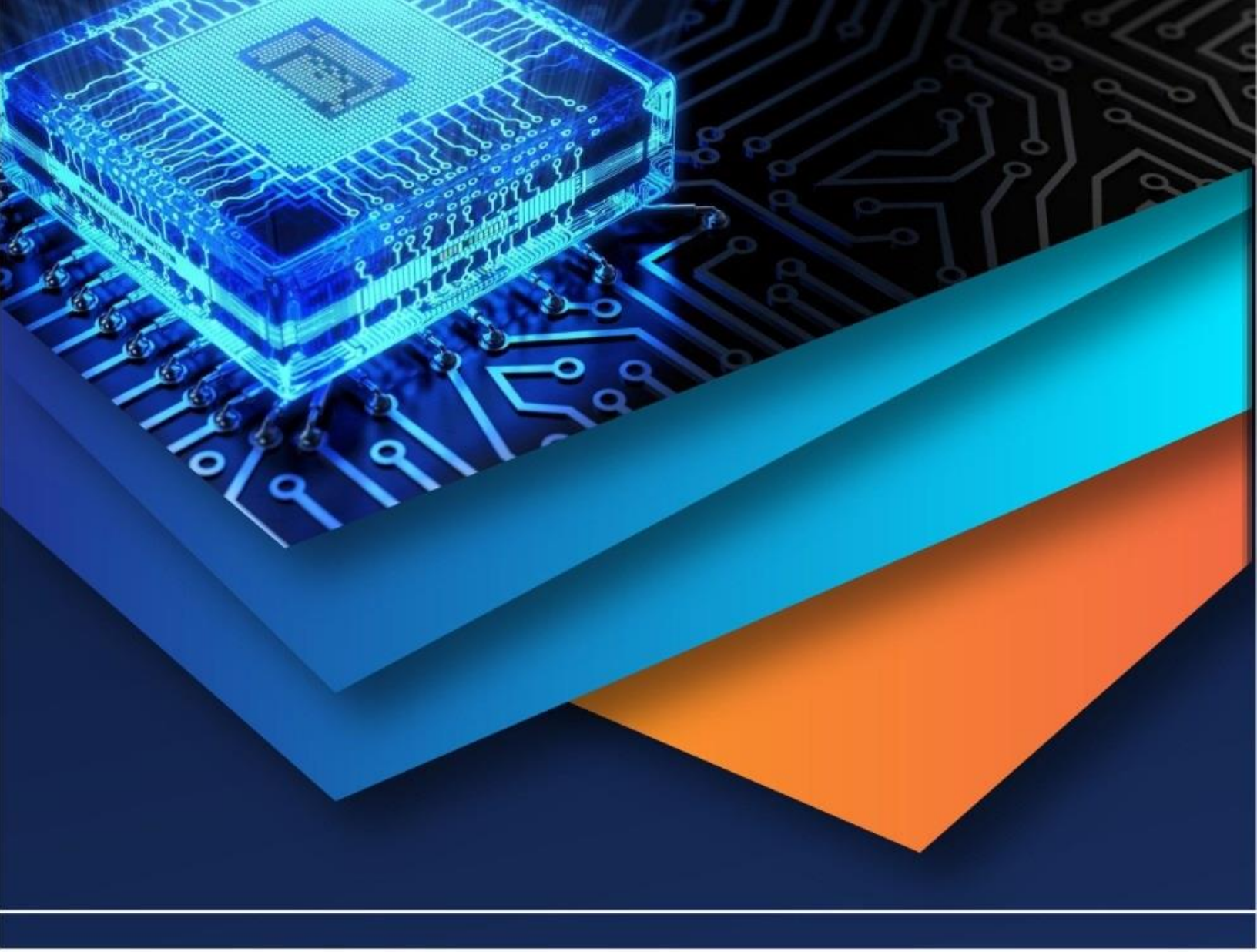

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