Student Career Guidance System Using Dynamic Facet

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***Abstract*- Nationwide, students are facing difficulties while pursuing their education because lack of proper guidance and better decisions. Realizing the scale of the problem, a new system is proposed for the sake of student which will be one stop solution for seeking information to the student and provides credible information for them. In this work, a common platform has been created as a small size social networking site for students, professors and parents to share their opinions, guidance, suggestions and feedback with one another regarding education.**

The proposed system uses "Dynamic Facet" and "Skyline query" to improve the efficiency of suggestions and guidance generated by the application.

Dynamic Facet generates facets related to reputed institutions, quality of teaching, infrastructure, mentoring qualities, learning environment etc., whatever related to learning in this work.

In addition to that, Skyline query is used to partition the dataset instead of entire dataset to maintain the data credibility.

***Index Terms*-Dynamic Facet, skyline query, student career.**

I. INTRODUCTION

Facet is nothing but property. It is also known as "faceted search" and also "faceted navigation". Faceted search is used to filter the results using dynamic facets. It is a technique for accessing particular facet from a group of information. Facets are based on the properties of related information. Faceted navigation is more flexible, useful and powerful for different types of filters.

The Skyline query is used to filter the results from the text instead of entire data. During the past decades, it received great attention in the database community. To process the skyline query, several algorithms were proposed window based, index-based, distributed, divide and conquer. But in the proposed system divide and conquer technique is used.

II.RELATED WORK

Faceted browsing is mostly used in E-Commerce websites, shops a. In E-Commerce website, a user can search a particular product based on his/her requirement. At that time faceted search is very useful. In these cases, a fixed ordered list of facets is maintained which is based on product brands or price ranges or categories. The faceted search focuses on both textual and structured content. It may searches the product using a keyword or it may find some interesting attributes, which is based on how surprising the aggregated value is, given the expectation.

In the proposed system, dynamic facet search is happened based on the key word, with the aim to maximize the rank promotion of desired search. So, mainly consider the first thing the faceting search is initiating based on the keyword and the second thing is ranking is calculated based on the facet.

Skyline queries are useful in case of applications like customer information services, decision making system. It can also be applied in economics where can support micro economic data mining or even in continuous data stream environments such as stock exchange systems. Additionally, it can be used in Location Based System in order to identify the shortest route to a destination or the closest point of interest among many.

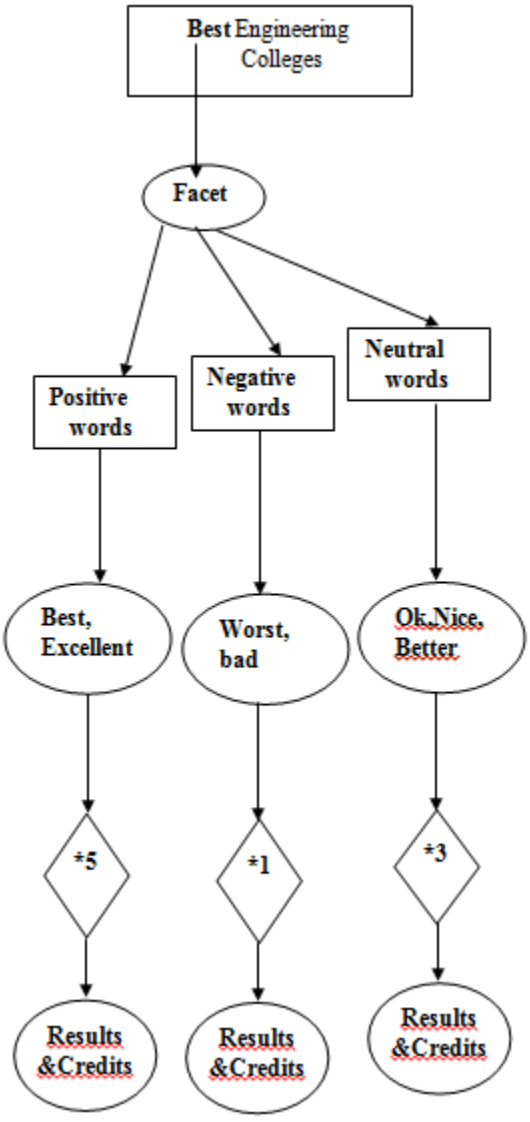
But in the proposed system, skyline query is used based on divide and conquer technique. First it partition the search data and then compares the data with existing data and then merge and then retrieves the results which is related to search.

III.DYNAMIC FACET

Dynamic Facet is a technique for accessing particular facet from a group of information. The facet can be accessed in multiple conditions. At the time of search to create selections automatically dynamic facet is used. Faceted search is resulted through doing

multiple filters. Facet is derived by making analysis of text. To improve the efficiency of decision making dynamic facet is used in the proposed system. It can efficiently track with the number of facets without placing a limit. So the student, who wants to seek guidance and suggestions, can make a search on different facets.

It will mine the information provided by the user and produce searching results, which could be considered credible because of the individual authentication process and all users are registered and each time they posted their opinion, suggestion are recorded time wise. So, we ensure that the credibility of information, opinions and suggestions are generated.



Usually, the facet value depends upon the measure of specificity and dispersion of values. So, in the proposed system the search is based on colleges regarding the qualities, infrastructure, mentoring qualities etc., In the search text, finding the facet, then it is compared with Positive or Negative or Neutral words.

If the facet is recognized as a positive word means,
Number of positive words*5=credits;
If the facet is recognized as a negative word means,
Number of negative words*1=credits;
If the facet is recognized as a neutral word means,
Number of neutral words*3=credits;

Based on the facet, credits can be calculated and the related search result will be found. In the proposed system, positive words or negative words or neutral words are treated as a facet. If your account has large number of facets, it enhances search performance to use dynamic facets instead of always selecting the entire set of possible facets for every search. The fully automated algorithm ranks those properties and facets on top that lead to a quick drill-down for any possible target data.

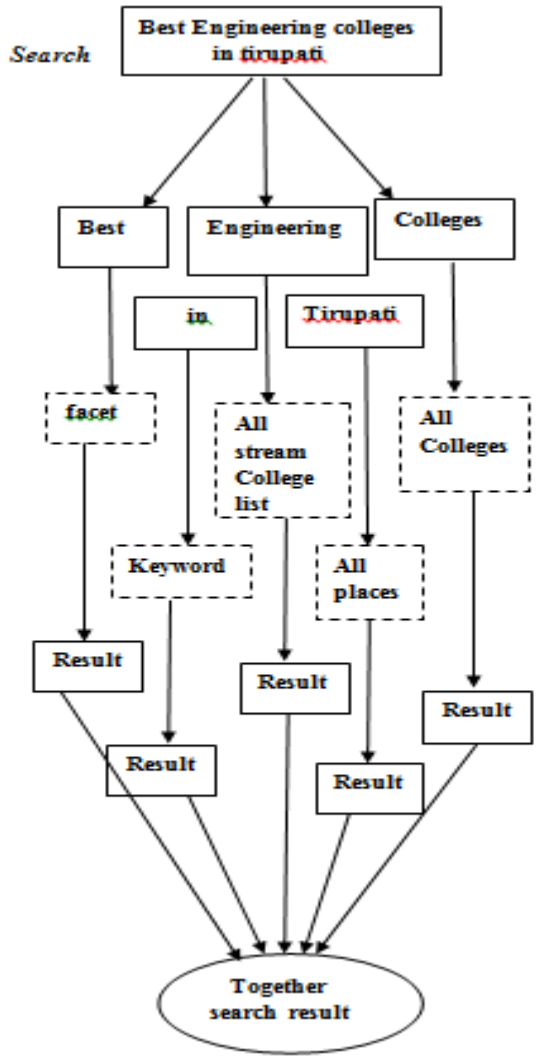
3.1. Drill Down:

Drill-down refers to the process of viewing data at a level of increased detail. The drill down model rely on five key assumptions, (1) Rationality: the user will end the session once target data is found, (2) Practicality: the user will use no more than a fixed number of clicks when looking for target data, (3) feasibility: the user will perform a roll-up when the target data disappears from the result set, (4) omniscience: once presented with the facets, the user knows which ones belong to the target data and (5) linearity: the user scans the properties of the data from top to bottom.

IV.SKYLINE QUERY

The skyline technique is used to filter the records or information from the dataset instead of entire dataset. The skyline query is more important in the area of database. Here the proposed system uses divide and conquer algorithm. It is used mainly as a user preference query for decision making. Skyline queries are responsible for finding a set of interesting points according to the user search from a large set of data, these points are skyline points. The skyline points may be dynamic or static points. These points are not dominated by any other point in all

dimensions. The impact of skyline leads to the development of database community.



The skyline queries are also called as "User-Preference" queries because they determine the output according to some specific preferences.

4.1. Divide and Conquer

This is one of the algorithms of skyline which is used to partition the input data set. Then finally it exists equal subsets. Each partitioned data will compare with the existing data and related results will be drawn. Finally merge of the input data and related search results will be shown as output.

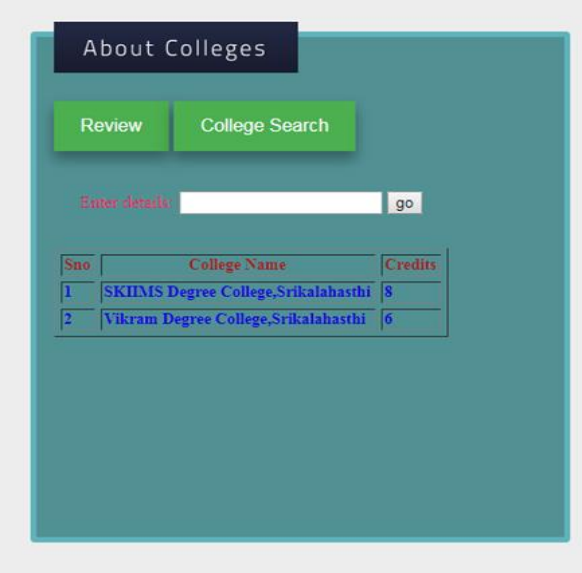
Eg. If a student searches for tirupati related colleges then he will be provided that information not be shown all other information because information is precise.

In this technique the partition datasets will be compared with the existing dataset that means, if the dataset engineering is taken it will compared with all the streams and return the result regarding that. If the dataset tirupati is taken it will be compared by all the places and return the places which are only related to tirupati. So, all the results are drawn and merged and give together as a result.

V.PROPOSED RESULTS

In the proposed system, based on dynamic facet and skyline query is used to retrieve the results. Based on dynamic facet credits are calculated. Based on skyline query results are filtered on multiple conditions.

Based on the search, the facet can be derived and credits can be calculated.



Based on the credit results, student can make a decision.

VI.ADVANTAGES

The advantages of the proposed system are as follows:

- By using dynamic facet, credits can be calculated.
- Based on the credits, user can easily make a decision.
- By using skyline, the search dataset can be filtered from multiple conditions.
- It saves our time.
- At a time we can view our filtered results and credits regarding that.

VII.CONCLUSION

The proposed application would search the data by partitioning the dataset not the entire dataset and it also maintains credits regarding dynamic facet. So, it increases the efficiency and productivity of search result. Thus, the proposed system produces credible information to the user.

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