Rating And Reviewing Websites On Internet On The Basis Of User’s Opinion

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Abstract:
We present here a time efficient and Well Planned Information Architecture for users who usually waste their much time in looking for the valuable content which they need related with any domain. As we be clear about there is very great amount of facts present in World Wide net structure (the net) and it’s a chief hard question to get best facts about our question from the net and it becomes really important to get out the most on the point knowledge as per users needed knowledge in a very less time. Normally, the way of valuing the quality information and a website of what is in present in the net is based on position on scale or ranking and facts. The main purpose of this offered idea is to present best information or websites on a single place from the net when user look for any website related to any domain. The offered map is based upon users likes, dislikes comments and rating on a website and give the position on scale to those websites in the net. The most important point of view of this map is to provide the user with best website related to their search and prevent users to clicking or viewing many places in the net for any needed knowledge. The offered design will give people with many websites in the net related to their look for on one place and get best out of them as per their requirement. The result are more in the net for any single query and to get out top result in the net which is reviewed on the bases of different factors like users goes over again, likes, dislikes and ratings. The system will also facilitated any user to give suggestions about any website in the net or they can in touch us and request us for any website or subcategory to any new or having existence categories also to add new category for which they required information. We offer a good at producing an effect of way to discover the best place in the net without wasting much time in looking for.

Keywords— Websites, rating, reviews, users, efficient, fast searching.

I. INTRODUCTION
The assessment of quality of a website is dependent upon various approaches that differ on the basis of contents, facts and knowledge used to generate ranking. It is very important that whatever information that is provided on a website, satisfies a user’s requirements. If someone searches for something, there may be a situation where a website might contain a large number of most frequently searched keywords only to increase the number of visits on their website.

Generally, everyone searches for suitable websites to watch or download movies or music or to learn something within the field of programming languages, and other purposes. But most of the times we end up wasting time, browsing websites which do not have the proper content.

In this paper, we provide a solution that will enable end users to quickly search for the best websites for finding information regarding any category.

According to the Nielsen Norman group, most users browse a website for less than 59 seconds before jumping to another website. So basically, if a website is not able to capture a user’s attention and generate interest in less than a minute, it probably isn’t going to.

One approach to tackle this issue is to provide ratings on websites. This will prove to be beneficial to the users in many ways:

1. This will help the users to directly refer the best websites in less time without actually investing time in searching.
2. Independent reviews provide credibility to the content.
3. Users will thus have access to trusted sources of information on the internet.

For example, if someone is searching for best websites to learn python programming language, the standard Google search engine will output many results relating to the keywords in the search query. Out of these

- Some host quite complicated content, which may not be helpful to a person wanting to start from the basics and,
- Some of them only discuss code snippets, which is more useful for people developing projects.

Overall time/cost of searching is therefore increased in the process.

Here, we discuss about the implementation of a model, Website Review System, which overcomes this issue and provides the users with the best websites for the category they want in very less time. The website review system reviews websites according to the following criteria:

- Likes
- Dislikes
- Comments
- Ratings

Users or sponsors also have the facility to suggest the addition of new categories to be covered, or subcategories or websites within them.

II. RELATED WORK

Now society is deeply affected by internet and web contents and rapidly increasing amount of online data circulating in the World Wide Web. A website related to any category, can provide or not for users their needs. It is necessary to have process of analyzing and accessing the quality of the content, via some criteria. Several assessment solutions have emerged. In the field of web assessment, evaluating the quality of web sites is a key to filtering interesting sites to reduce search time. Additionally by reviewing the websites or web contents the user will have the fastest access to the best websites restated to their query or search.

There are several methods implemented to assess the quality of website. Some of them are discussed below:

One of the methods implemented is Knowledge-Based Trust which analyses how much amount of truth and facts a website contains and create a probability for the correct value of that fact.

They proposed using Knowledge-Based Trust to estimate source trustworthiness as follows. They get out much number of plurality of facts from many pages using information extraction techniques. Using inference in a probabilistic model they jointly calculate the correctness of these facts and the preciseness of the sources. Inference is an iterative process, since they believe a source is accurate if its facts are correct, and they believe the facts are correct if they are extracted from an accurate source.

The main advantage of this system is that it works on the basis of believable. Also it treats the websites with more facts and the website with fewer facts equally.

The cons of this approach is that it had nothing to do with users take-back and it only believes on the rightness of the facts and nothing more.

2. Semantic Product Ranking Model

Semantic Product Ranking Model is based upon the hybridized approach, which is based upon the dual-stage rank preparation.

The first stage rank preparation is entirely based upon the content-based ranking model, which evaluates the similarity between the search query arguments and the product ranking data. The product ranking data is prepared by using the various factors associated with the product popularity and accessibility against the search query arguments. The product suggestions are calculated to show the product rankings on the search page to the users. Once the user browsed the specific product, the collaborative classification is used for the higher order product suggestions on the product page.

The collaborative approach analyses the user similarity and produces the product rank lists according to the top listed users in the ranking evaluation.

The main pros of this system is that it uses two step procedures to rank a product. It ranks the product to suggest it to the users.

The cons are that it takes lot of time to rank a product and it doesn’t take user reviews into consideration.

3. DNS-based ranking of domain names
The DNS data is processed to obtain multiple metric values for each of the domain names. The metric values can include a query count (QC), a client count (CC), and a network count (NC). The method proceeds with calculating a score for each of the domain names based on the metric values. The calculation can be performed using the following equation:

\[ \text{Score} = NC \cdot CC \cdot (1 + \log(QC)). \]

Furthermore, the method ranks the domain names based on the score for each of the domain names. The ranking can be based on normalization of the scores or based on converting the scores into respective percentile ranks.

The advantages of this system are it takes three important factors i.e. query count, client count and network count into consideration. It also generates fast and accurate results. The disadvantage is that it doesn’t take the user intervention into consideration. The score is every time converted into percentile so it takes more time. Also it doesn’t take the trustworthiness of a website into consideration.

4. Method, server, and system for automatically rating reputation of a web site.

In this method when a web address of the web site is triggered and intercepted, detecting whether the web address of the website is a malicious web address or a non-malicious web address; making statistics of the number of malicious and non-malicious visits to the web addresses under the web site during a predefined time period and saving the statistics to a database; and reading records from the database and calculating an average reputation of the website by weighting the statistics of visiting the web site during the predefined time period and history statistics. The present disclosure is able to mark the reputation of a web site in time and efficiently, thus improving the security of using the network.

The advantage of this system is that it generates the result on the basis of the reputation of a website and also it saves the time and provides the security of the network.

The disadvantages are that it has to store lots of data to generate results and it also doesn’t take the human intervention into consideration. It takes a lot of time for the search.

IV.PROBLEM STATEMENT

There are many websites in the net ready (to be used) in the net and it also increases day by day in World Wide net structure. Today, everyone uses the net and look for whatever knowledge they needed. To get useful knowledge as per users need they have to click on or view many websites in the net related to their question which is time taking in or waste of time and still what knowledge they get is not completely useful, so it is greatly important to get the most on the point knowledge within the shortest time period.

It is the case in the internet where to increase the number of hits on websites many websites may have within very greatly sized number of generally looked for keywords. Have you ever been looked for a best place in the net to learn any technology or to watch on-line and to download movies for free or to listen music and so on? So here is a system that will give the best website in the net related to your look for in very less interval of time. The Website Review System has number of categories related websites which is reviewed on the basis of three parameter which are like, dislike, comments and rating and it will show a list of websites related to user's query. Suppose for an example, one is searching for a website to learn JAVA language and he is new in programming and the websites which are showcased to him are some of them are too advanced for novice and some of them have not contain examples or proper description which will just increase the searching time and price.

V.SOLUTION

The Website Review System follows the most efficient approach to show the best results without wasting time in searching to user's search which is based on likes, dislikes, comments and rating given by the user on that website. Without wasting time in searching for a website in internet the proposed approach will give effective results and user will have the best content from the internet. Here the system has many categories and subcategories under their category and in each subcategory or category there are number of websites available which give detailed and concise description about that website in well format. Categories are like Information Technologies, Movies, Music, Programming Languages, Shows and Games etc.

The system reviews the websites by number of likes, dislikes and number of hits on that website and rating given by users. The system also has the feature to interact with admin to suggest or to request for any website or category.

The system has following features:

- Site shows the popularly or most visited websites on the basis of hit count.
The user has the capability to interact with admin. The user can suggest any category, subcategory or a website.

User can contact us and request a query which they have related to any domain.

User will have the best content from huge internet which is on the point to their need or thing needed.

III. SYSTEM MODEL

Fig [A]: “System Architecture”

This figure shows the architecture of the implemented system. This is basically a three tier client-server architecture that consists of the Web layer, Server layer, and Database layer, implemented and maintained as individual modules. The major feature of this model is that it enables the developers to create flexible and reusable applications. By modularizing an application, developers can choose to remodel or add an additional layer, instead of implementing the entire application from scratch.

The functionality of each layer is discussed below:

Web Layer [also known as Presentation Layer/User Interface]: This is the topmost layer of the architecture and displays information regarding the services that are provided by the website. This layer communicates with other layers by passing results to the browser and other layers in the network. This is the layer to which users have direct access.

Server layer [also known as Functional Process Logic Layer/Application Layer]:

The Server Layer controls the functionality of the application by performing detailed processing on requests received from the Presentation Layer. This layer acts as a mediator between the User Interface and the Database Layer.

Database Layer [also known as Data Tier]:

The Database Layer consists of a file system, in which information is stored or extracted from. This information is then relayed to the Server Layer for computation and is eventually forwarded to the user. The languages used for implementing the system described above include HTML5, CSS3, JavaScript and React.js in the Web Layer, Node.js in Server Layer and MongoDB in the Database Layer.

The operation starts from the Web Layer, which the users can access directly via a web browser. The user makes a request which is encapsulated in a JSON [JavaScript Object Notation] object and passed on to the Logical Layer with the help of the HTTPS app server. Once the object is received by the second tier, it is processed using the Node.js libraries, one of them being Express.js and responds to the request. If the response requires interaction with the database, a query is fired which is processed by the Mongoose library. Upon receipt of request by the database layer, data is either stored into or retrieved from the MongoDB database and the requested output is returned in the form of a JSON object. As soon as this is received by the mongoose library in the logical layer, the layer computes the data and replies to the request of the user. Now the web layer contains the requested information enclosed in a JSON object which is displayed on the webpage after processing the JSON object.
VI. DATA FLOW DIAGRAM

Fig. [B]: “Data Flow Diagram”

This data flow diagram graphically represents the flow of data within the system. It illustrates how information is provided by and delivered to anyone who partakes in the system processes, the information required for completion of processes and the data that is stored or accessed. It views the system as a procedure that transforms input into a desired output. This diagram describes the flow of data between the user and the admin. A user visits the website and searches for a category->subcategory->website, then reads and reviews the website. If the user does not find the desired category, subcategory or website then the user can suggest addition of these items by filling a form and sending it to the admin.

The user’s suggestion, once received by the admin, is validated and accepted if its found to be correct. Upon acceptance, the user who made the suggestion is notified via email or SMS. If in any case the suggestion is found to be invalid, no notification is sent to the user and the suggestion is discarded.

VII. ANALYSIS

For calculating rating on each websites and to review the website by assigning rank on a website the proposed plan uses the concept of weighted mean.

A weighted mean is a kind of average calculation. Instead of each data point contributing equally to the final mean, some data points contribute more “weight” than others. If all the weights are equal, then the weighted mean equals the arithmetic mean (the regular “average” which we have used). Weighted means are very useful while rating. The technical formula for the weighted mean.

In simple terms, the formula can be written as:

\[
\text{Weighted mean} = \frac{\Sigma r \times c}{\Sigma tc}
\]

\(\Sigma\) = the sum.

\(c\) = the count on that particular rating\((r)\).

\(r\) = the value.

\(tc\) = total number of ratings

To calculate overall rating the weighted mean formula is work as follow- the sum of each star rate multiply by total number of count of that rate divide by total number of rating on that website. For example one star has 75, two star has 105, three star has 200 ,four star has 125 and five star has 59 count then

\[
(1\times75+2\times105+3\times200+4\times125+5\times59)/(75+105+200+125+59)
\]

will get rating on that website is 2.9. It’s the best approach to find out best website among many websites of the same category.

VIII. CONCLUSION AND FUTURE SCOPE

The proposed plan presented here is a new approach in to which it will help in finding the best websites in the net related to many domain like programming languages, music, movies, social, games and so on, based upon various factors likes reviews, likes and comments in a very less searching timespan. Website review system helps the user to reduce the search time.

Independent review provide instant credibility and trust. User will get the appropriate content and user can also review the website they visit and can get the top most website in the net. The proposed model facilitate users or sponsors to give suggestions to add some new categories, subcategories or websites within them and to request for a new websites and category. It will also let users to give their upright, true take-back on websites in the net and it will get well the rating.

The future enhancement for facilitating the users with more features like adding the user login system, favourite and bookmark. Another enhancement would be to provide expertcommittee panel committee for each category and scraping the comments from the website and would perform sentimental analysis on the comments.
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