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Automatic Evaluation of Website for Search Engine Optimization

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ABSTRACT
The website has a foundation known as web analytics that is helpful in web intelligence. In the web intelligence the user will be made so busy that website will be engaged by the user and also helps in the collection of data. The user uses the website and the user requires the optimization of the website. Automation is an innovative thing that has some standard SEO parameters that is compared with the website parameters.
Keywords:- SEO, URL

I.   INTRODUCTION

Each website has a home address and the home address has an unique ID. The unique ID is not repeated for any of the website. In SEO there are two types of techniques one is the white hat and other is the black hat technique. The white hat technique is helpful in searching the web pages and it follows the rules and regulations of the search engine. Nowadays white hat technique is used more. The black hat technique is not permanent hence it is not used more. Here we have taken six parameters that is title. Image SEO page description, anchor tag SEO, H1 tags, meta keywords. These six parameters are compared with the standard parameters of the search engine then the values are obtained. With the help of these values the owner of the website can optimize the website parameter.

A. SYSTEM DESIGN
The system design tells the description of the system. The system design includes the input, server and the website. The client gives the input which is taken by the server. The input given is the URL. The server has the libraries like beautiful soup and minidom. The beautiful soup is used to parse the HTML tags. The tags that we used to compare with the standard Search Engine Optimization parameters are title, image SEO, page description, Anchor tag Search Engine Optimization, H1 tags and meta keywords. From the server the HTTP gets the URL and then the HTTP response is sent to the server. Then the segregation process is done. During the segregation process it separates the tag and the compares with the standard search engine optimization parameters. The parameters are separated here. Then the web page is given as the output to the user. The figure shows the system design for the Search Engine Optimization.
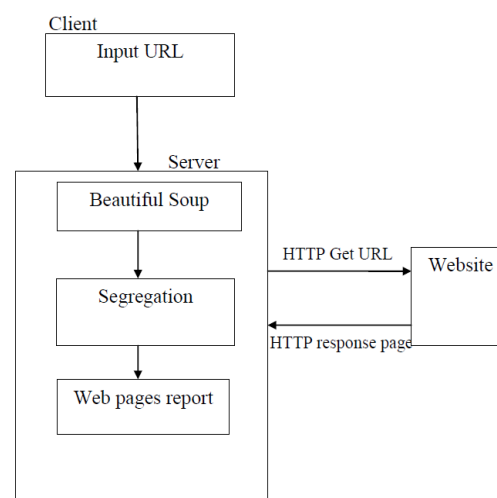

Figure 1 System design for Search Engine Optimization

The remaining part of the paper is organised into three schemes. Section 2 gives the implementation details, results are discussed in section 3 and the paper is concluded in section 4. Names of the website and there code are given in Appendix.

II.   IMPLEMENTATIONS

The implementation a proposed Automatic evaluation of website for Search Engine Optimization is carried out by mainly four phases that is ,Provide URL to the user, Parsing the parameter or tag, Information stored in Data structure, Webpage result

i) Provide URL to the user: In the first stage the server starts, the user provides the URL to the server. When the URL is entered the URL is checked whether the entered URL is

correct or no. if it is not correct then the URL is made to re-enter again, if it is correct then the next step is perform that is passing of parameter or tag

ii) Parsing the parameter or tag: The http get queries is sent to the URL then the URL is parsed. If any SEO complaint is there then the check for SEO complaint is made if it is present again the URL is parsed, if it is not then the storing of the information is made.

iii)Information stored in Data structure: Here the information is stored in the data structure known as hash table. The information is stored here, the web page is viewed using the data structures.
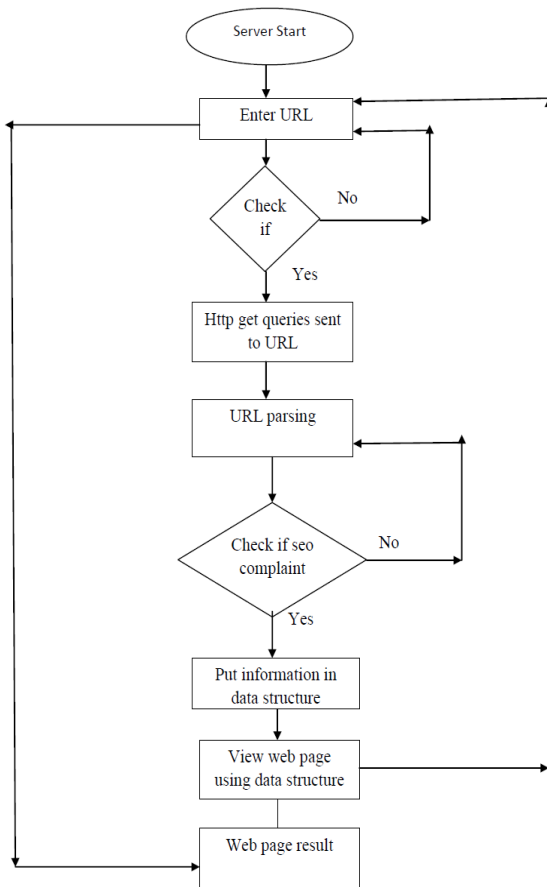

Figure:2 Website Scraping

iv) Webpage result: After viewing the web page with the help of data structure the URL entered before opens the web page result then the user views the result of the website parameter that is compared with the standard SEO parameter

III. RESULTS AND DISCUSSIONS

In results and discussion the six parameters are listed. When the user enters, the six parameters in comparison with the standard SEO parameters are listed. Here we have taken 30 websites for each of the parameters. The websites are of some companies colleges health care accessories technology business etc. here are the results

i)Title tag: Here we consider the Title parameter for the 30 websites of the colleges and companies and title parameter is recommended with 10-70 characters and and it considers, URL, correctness of the title and the length of the title in the bar graph it shows the no of websites and how many are correct and how many are incorrect.
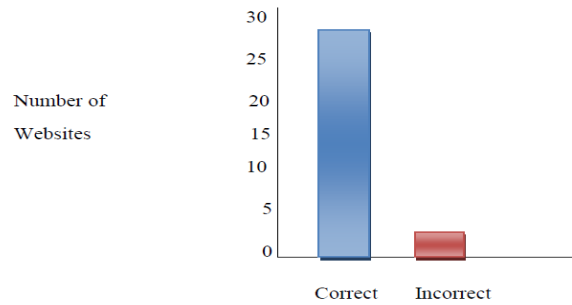

Figure 3 Title parameter

ii) Image SEO parameter: Here we consider the Image SEO parameter for the 30 websites of the colleges and companies with the Serial Number, URL, Total images, alt attribute missing count, title attribute missing count.

Table -1: Image SEO parameter

Serial Number	Code	Total images	Alt attribute missing count	Title attribute missing count
1	sas	29	21	29
2	kle	45	0	16
3	tat	5	2	4
4	tce	31	31	31
5	msr	8	8	8
6	wal	34	0	29
7	app	0	0	-
8	mck	15	5	14
9	uni	16	1	16
10	ge	5	1	4

iii)Page description parameter: Here we consider the Page Description for the 30 websites of the colleges and companies and title parameter is recommended with 140-255 characters and it considers, URL, correctness of the Page Description and the length of the Page Description in the bar graph it shows the no of websites and how many are correct and how many are incorrect.
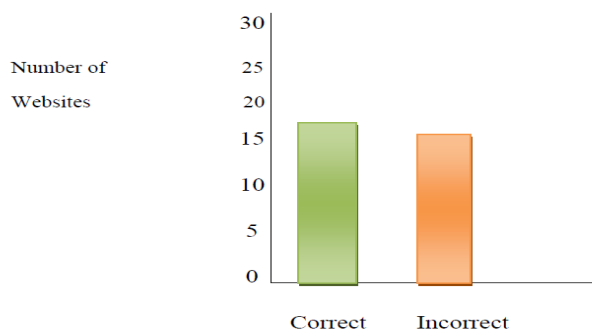
Figure 4 Page Description parameter

iv)Anchor tag parameter: Here we consider the Anchor tag parameter for the 30 websites of the colleges and companies with the Serial Number, URL, Total Anchor tag, Title attribute missing count .

Table -2: Anchor tag parameter

Serial Number	URL	Total Anchor tag	Title attribute missing count
1	http://www.sasken.com	103	101
2	http://www.kleit.ac.in	120	102
3	http://tattvalabs.com	28	25
4	http://www.tce.ac.in	88	28
5	http://www.msrit.edu	29	29
6	http://www.walmart.com	1178	1084
7	http://www.apple.com	88	87
8	http://www.mckesson.com	173	157
9	http://www.unitedhealthgroup.com	103	103
10	http://www.ge.com	104	86

v)H1 tag parameter: Here we consider the H1 tag parameter for the 30 websites of the colleges and companies with the Serial Number, URL, Total H1 tag parameter.

Table -3: H1 tag parameter

Serial Number	URL	Total H1 tag
1	http://www.sasken.com	2
2	http://www.kleit.ac.in	5
3	http://tattvalabs.com	9
4	http://www.tce.ac.in	Absent
5	http://www.msrit.edu	Absent
6	http://www.walmart.com	Absent
7	http://www.apple.com	1
8	http://www.mckesson.com	Absent
9	http://www.unitedhealthgroup.com	1
10	http://www.ge.com	1

vi)Meta Keywords parameter: Here we consider the Meta Keywords parameter for the 30 websites of the colleges and companies with the Serial Number, URL, Meta Keywords present, Meta Keywords list

Table -4: H1 tag parameter

Serial Number	URL	Meta Keywords present	Meta Keywords list
1	http://www.sasken.com	Present	[PE, DT, iot solutions, in-vehicle infotainment,iiot']
2	http://www.kleit.ac.in	Present	KLECOLL,KLEEC,CH,BECH, kleit, coll']
3	http://tattvalabs.com	Present	DMH,DMD,DMB,DMSBEL
4	http://www.tce.ac.in	Present	[TCE,TCEG,, gadag, betgeri, gadag betgeri, karnataka, college, engineering, tontadarya']
5	http://www.msrit.edu	Absent	Absent
6	http://www.walmart.com	Present	[OS,SO,HF,VG,WAL.COM

IV. CONCLUSION

We have consider 3 objectives namely i)To Identify and classify Search Engine Optimization parameters
ii)to Compare observed Search Engine Optimization parameters with standard Search Engine Optimization parameters and generate report
iii)to Provide visual representation of website evaluation report.ere the objectives are fulfilled after the comparison of the web site parameters with the SEO parameters values. When the values are matched with the standard SEO parameters, user can view the website and due to this the user visitation of the website will increase the publicity of the website. Thus the optimization of the website is made by comparing the parameters of the website with the standard SEO parameters. Here the optimization is done online. In future it can be optimized offline. We can add few more parameters here. Here we have used google search engine but in future we can use different search engines like bing yahoo etc. Optimization of the website can help in increasing the performance of the website the results are obtained. Here the owner of the website can change there parameter when it does not match the standard SEO parameter paper

Appendix

SL.no	Name of the Website	code
1	www.sasken.com	sas
2	www.kleit.ac.in	kle
3	tattvalabs.com	tat
4	www.tce.ac.in	tce
5	www.msrit.edu	msr
6	www.walmart.com	wal
7	www.apple.com	app
8	www.mckesson.com	mck
9	www.unitedhealthgroup.com	uni
10	www.ge.com	ge

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