Web-Based Tool for Website Checker(Web Evaluator)

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Abstract— ***Web is winding up increasingly critical each day for business, training, sharing data and for correspondence. Each passing day the quantity of organizations, associations and people distributing their sites is expanding. Everybody needs their site is of good quality. Some quality measurements may influence in a roundabout way on the fame through their impact on the execution or the convenience of sites. So it is important to assess a site with the goal that it can fulfill the clients. Principle motivation behind site assessment is to guarantee the nature of the site. Assessment of sites can be done in various ways. This work centers around execution of a mechanized instrument for site availability assessment. Right off the bat, site assessment apparatuses are explored and analyzed. At that point an improved computerized assessment device, named as WEBSITE EVALUATOR is created. Created apparatus is fit for taking every necessary step of HTML validator and in addition it can be assess different substance, for example, dead connections, shrouded documents, java contents, CSS, additional remarks in the HTML code and code to content proportion in a web site Using quantitative measures of the informational, navigational, and graphical aspects of a Web site, a quality checker aims to help nonprofessional designers improve their Web sites.***

Index Terms— **Website accessibility, website usability, automated evaluation, web metrics, crawling, website evaluation website accessibility web site evaluation tool.**

I. INTRODUCTION

Now web and world wide web have turned out to be more prevalent with in brief period. It has been developed quickly in their extension and degree of utilization influencing all parts of our lives. Each passing day the quantity of organizations, associations also, people distributing their sites is expanding [1].

Organizations need to comprehend what their rivals do and what items they offer utilizing the web. By the assistance of this data organizations can change and enhance their sites to build their aggressiveness and fame.

Likewise, building up a site does not end with putting vital data, media and programming. In the wake of outlining of the site, we need to test and assess the site for consumer loyalty. Assessment gives the great quality to our site. We can draw in more clients if our site is of great quality. Contrasted and the conventional programming, the Web applications have numerous exceptional properties : right off the bat, in light of the fact that of the simple openness to data, the Web applications have a gigantic client populace, in this way propose a appeal to the server's execution and the capacity of managing simultaneous exchanges, also, the design requires the Web applications to fit for the heterogeneous and self-governing situations, thirdly, Web applications principally center around the data look and list, so they have weaker capacities however snappier refreshing rates in their substance and systems, contrasting and the customary ones. In this manner, extra endeavors are required for assessing the site.

To discover mistakes, customary testing strategies are utilized i.e. by executing certain experiment. In experiment determination there are numerous conceivable qualities and their mixes. Be that as it may, by utilizing these strategies, it is a hard undertaking to discover all the potential blunders. Since Web applications are dispersed, heterogeneous, simultaneous, and free-of-stage, Web testing is considerably more mind boggling than conventional programming testing. [11]. So we should give careful consideration for site testing. The creating cycle of a site is shorter than its life cycle. At present, specialists have done much research in inquiring about web testing and proposed a few techniques [5], [6], [7], [[11], [12]. In this paper I present another computerized instrument for site assessment. In area II and III site assessment and assessment composes are talked about. In Area IV, existing instruments are audited and thought about .in area V proposed approach is talked about. Ends and future work are given in Section VI.

II. WEBSITE EVALUATION

Assessment intends to analyze and judge painstakingly. In site assessment we check the availability and ease of use of a site to guarantee its quality. Point of assessment is to guarantee the

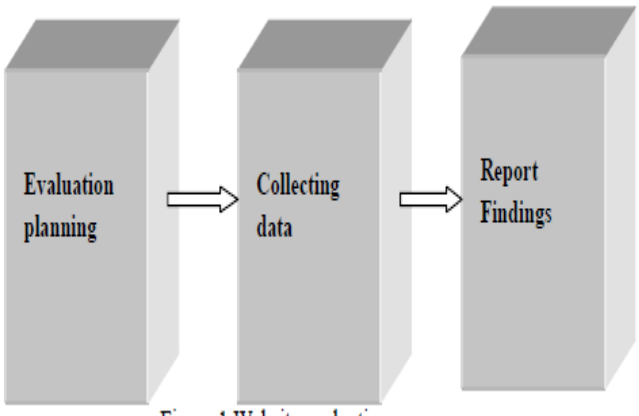

Figure 1 Website evaluation process

nature of the site or application. For the assessment of a site the primary thing or, in other words the nature of the site. Measurements of value [17] are estimated in web assessment: auspiciousness, auxiliary quality, content exactness and consistency, reaction time and idleness and execution

III. EVALUATING WEBSITE

"Automatic tools examine source code of web pages to determine the compatibility of web pages with specified guidelines. These guidelines may cover universally accepted guidelines or guidelines accepted in a specific society. This approach is depends on the characteristics of HTML. In these tools test engineers are responsible for writing and executing test scripts. Figure 1 shows the process for website evaluation. Accessibility means every can easily access the website, also the people having some disabilities can be able to access the website. Visitors can access not only single page of the website but must be able to visit to whole website. The Web Content Accessibility Guidelines Working Group of WAI (Web Accessibility Initiative) in the W3C [17] Consortium provides an advanced body of guidelines for the accessibility of sites. [13] There are checkpoints for accessibility evaluation of a website.

IV.WEBSITE EVALUATION TOOLS

There are numerous advancement apparatuses for Web applications, current designers don't have adequate and intense apparatuses to troubleshoot or test their Web applications. Existing Web testing instruments, for example, HTML/XML validators and hyperlink checkers, can be utilized to approve the sentence structure of HTML/XML archives or to check the openness of hyperlinks in an arrangement of HTML/XML archives [25]. There are numerous availability assessment devices [1] are accessible from which some are skilled to check CSS, some are able to check broken connections, pictures and so on. These apparatuses naturally assess the sites. Availability assessment instruments audited in this examination are: WebXM, Bobby, AChecker, and WAVE. A. Examination of Tools WebXM is site availability and additionally site ease of use assessment device. It is utilized to computerize examination of some page deserts (broken connections, spelling mistakes, moderate stacking pages, poor pursuit and route) to help make strides the convenience of the site. Openness assessment incorporates check for fitting content and foundation shading differentiate or the nearness of content proportionate .alt. labels on pictures. Bobby gathers all pages of a site and assesses them at a period. It implies Bobby assesses the entire site at a time. It assesses the HTML code and availability of a site page. WAVE and AChecker assess just single page of a site at once. Both WAVE and AChecker assess the availability of the page. AChecker additionally has alternatives of HTML validator and CSS validator. These choices are definitely not present in WAVE. B .Drawbacks of Existing Tools Above devices have a few downsides: 1. Bobby can't assess the java contents utilized in the code. 2. WAVE and AChecker assess just a single page at any given moment. 3. WebXM can assess ease of use also openness of a site. Be that as it may, in availability assessment it can as it were assess content and foundation shading contrast. 4. Above apparatuses can't discover dead connections and additional remarks in the code. 5. Above instruments can't have the capacity to compute code to content proportion.

IV. PROPOSED TOOL

There are numerous advancement apparatuses for Web applications, current designers don't have adequate and intense apparatuses to troubleshoot or test their Web applications. Existing Web testing instruments, for example, HTML/XML validators and hyperlink checkers, can be utilized to approve the sentence structure of HTML/XML archives or to check the openness of hyperlinks in an arrangement of HTML/XML archives [25]. There are numerous availability assessment devices [1] are accessible from which some are skilled to check CSS, some are able to check broken connections, pictures and so on. These apparatuses naturally assess the sites. Availability assessment instruments audited in this examination are: WebXM, Bobby, AChecker, and WAVE. A. Examination of Tools WebXM is site availability and additionally site ease of use assessment device. It is utilized to computerize examination of some page deserts (broken connections, spelling mistakes, moderate stacking pages, poor pursuit and route) to help make strides the convenience of the site. Openness assessment incorporates check for fitting content and foundation shading differentiate or the nearness of content proportionate .alt. labels on pictures. Bobby gathers all pages of a site and assesses them at a period. It implies Bobby assesses the entire site at a time. It assesses the HTML code and availability of a site page. WAVE and AChecker assess just single page of a site at once. Both WAVE and AChecker assess the availability of the page. AChecker additionally has alternatives of HTML validator and CSS validator. These choices are definitely not present in WAVE. B .Drawbacks of Existing Tools Above devices have a few downsides: 1. Bobby can't assess the java contents utilized in the code. 2. WAVE and AChecker assess just a single page at any given moment. 3. WebXM can assess ease of use also openness of a site. Be that as it may, in availability assessment it can as it were assess content and foundation shading contrast. 4. Above apparatuses can't discover dead connections and additional remarks in the code. 5. Above instruments can't have the capacity to compute code to content proportion learning.

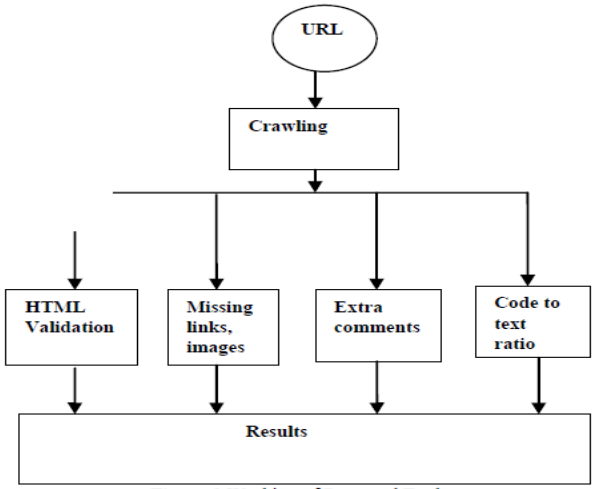

Figure 2 Working of Proposed Tool

For the implementation of proposed tool C#.NET with ASP.NET is used. ASP.NET is a Web application framework that helps us create standards-based Web solutions. ASP.NET is a server side scripting technology that enables scripts to be executed by an Internet server.

A. Results

There are three links incudling index page on the evaluation tool's window as shown below:
HOME, SITE EVALUATION and ABOUT .

V. IMPLEMENTATION

Inimplementation of proposed tool C#.NET with ASP.NET is used. ASP.NET is a Web application framework that helps us create standards-based Web solutions. ASP.NET is a server side scripting technology that enables scripts to be executed by an Internet server. HOME, SITE EVALUATION and ABOUT First is home page, when we open the tool window this page will open it will give brief introductions about the functions of the tool. Next page is SITE EVALUATOR. This is the actual page which evaluates the websites. When we click on SITE EVALUATOR link on the home page this page will be opened. It includes a text box for entering the URL of the website which we want to evaluate and a scan button. Put URL on text button and click on scan button for evaluation. After evaluating each page of the website, a list of nevaluation report will be generated and display on the screen and last page is ABOUT in the tool window.
These outcomes demonstrate that instrument is fit for assessing any site. Anybody can utilize this instrument to assess the site. It does not require a specialist for assessment. This instrument can be utilized by any individual who has a little learning about the web.

VI. CONCLUSION

As Web becomes very important in all fields, it is necessary that developed web applications can satisfy the users. If we want our website give good response to users, we have to ensure its quality. Developing a website does not end with putting necessary information, media and software. Users want a good quality in website so it is necessary to evaluate a website to usability and accessibility problems. Usability is the ease of use of a website and accessibility means website can be accessible for all people also for the people having some disabilities. A website is considered as best if it can be easily used by all type of users. So it should be of good quality. There are many tools for website evaluation. But these tools have some limitations. I reviewed and compared these tools and developed a tool which can overcomes some limitations of existing tools. By using this tool we can find validation errors, java scripts errors and code to text ratio of a website. Tool gives the error list along with their descriptions. It will help developers to remove that coding errors. As a result quality of the website can be improved.In future we can add some other accessibility features to the tool e.g CSS validator, color combination validator we can create more website to check validation ,funcationlity of website, workingness of website and much more things. Also we can create web sites to assess students performance, automated ticktes,learing. By using just web many web based application is avalble in arket , but in future we can improve them and enhace the procedure anf wrking.

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4313