Website Development and Search Engine Optimization

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Abstract – *MVC is one of the technique to devlop MVC is one of the technique to develop web application in such a way that if in future you required to change the design of web application then you do not need to change the database schema and visa-versa. And Search Engine Optimization(SEO) is a methodology of techniques that are used to increase traffic in your site and rank up site in google search page indexing. The main purpose of the MVC and SEO is making your web application mode adaptive and generate a higher amount of traffic on the website by various techniques of SEO.*

***Key Words*: Volunteer, Volunteering Abroad, On Page Optimization, Off Page optimization**

1.INTRODUCTION

In this paper, It will cover website development from scratch to host it and search engine optimization. This website is about the volunteering work in a local/foreign organization or country. This website is hosted (not hosted yet it still in the development stage) and indexed for Search Engine Optimization. The website is purely focused on the organic search result, it also included various logics to provide user better and accurate result. The main aim of the website is to host it on the server and indexed the website on google. Various technologies are used to improve performance and achieve a goal.

1.1 About The Website

This is an Indian website. This website is proving a list of various organizations and project in which users can apply and can do various kind of volunteer work and through that, they can help a developing country. A user can choose an area of work like in local or foreign region so it's also in a great opportunity for the user to explore a foreign country. This website is providing a platform to organization and users to connect with each other and help each other in growth.

2. TECHNOLOGIES FOR DEVELOPMENT

The Model-View-Controller (MVC) is a building design that isolates an application into three primary coherent parts: the model, the view, and the controller.
Every one of these segments is worked to deal with explicit advancement parts of an application.
MVC is a standout amongst the most as often as possible utilized industry-standard web improvement system to make adaptable and extensible activities.
ASP.NET underpins MVC (Model View Controller) improvement model.ASP.NET MVC system is a lightweight, exceptionally testable introduction structure that is incorporated with the current ASP.NET highlights.
The Model part compares to every one of the information related rationale that the client works with.
This can speak to either the information that is being exchanged between the View and Controller parts or some other business rationale related data.
The View segment is utilized for all the UI rationale of the application. Controllers go about as an interface among Model and View segments to process all the business rationale and approaching solicitations, control information utilizing the Model segment and collaborate with the Views to render the last yield.

3. SEARCH ENGINEE OPTIMIZATION

3.1 Keywords and Meta tags

Adding keywords to your website helps search engines understand what your website can offer someone searching, and ultimately bring you more qualified traffic. Without Keywords on your website pages there is no way for a search engine to categorize your website and show it to the right people searching. It's about matching the language on your site to the language that your customers use when they search for you. In this website, the keyword is Volunteer Overseas. When people search for this keyword your website is indexed. The website that is indexed contains Meta tag description. Meta tag contains a short description of the website that is readable by the people.

3.2 Link Building

Link building is the process of acquiring hyperlinks from other websites to your own. A hyperlink (usually just called a link) is a way for users to navigate between pages on the internet. Once search engines have crawled pages on the web, they can extract the content of those pages and add it to their indexes. In this way, they can decide if they feel a page is of sufficient quality to be ranked well for relevant keywords. When they are deciding this, the search engines do not just look at the content of the page; they also look at the number of links pointing to that page from external websites and the quality of those external websites. Generally speaking, the more high-quality websites that link to you, the more likely you are to rank well in search results. Internal links are

huge for link building because you can control everything about them, from the location on the page to the anchor text. In this website we have steer content in the direction of other posts or pages.

More link building means more traffic from relevant website, And it is one of the major factor of google algorithem that improves ranking in google indexing and we can generate higher traffic by getting large amount of backlinks

3.3 User Interface(UI) / User Experience(UX)

SEO and UI/UX play a significant role together, where the path (SEO) leads to the destination (UI/UX). What happens on the web page is our real goal or concern. Graphics makes your website more Attractive. It's the image and graphics support along with content that makes the visitors more interactive on the website and react positively to the information provided. Make your website responsive that provides users with the option to search for required information on any devices becomes all the more imperative. As in this website in home page it contains the listing of projects based on the views, location and money so user can easily find the best projects for them and also website is responsive.

3.4 301/404 Redirection

Google count all your 404 errors and that through some magic the number of errors on your site affect your site's overall ability to rank. The solution, that really isn't a solution, that is to start 301 redirecting all error pages to your homepage. A 301 redirect is a permanent redirect which passes between 90-99% of link equity (ranking power) to the redirected page. 301 refer to the HTTP status code for this type of redirect. In most instances, the 301 redirect is the best method for implementing redirects on a website.

3.5 URL Optimization

URL is just a unique finger print that holds the unique location of a web page on the internet. To an SEO expert, it holds much more information than a web page's location. It provides informative signals that help search engines understand the content of a page, its purpose, and its target market. In this website we use some method to improve URL Optimization. This are the some methods that can be used

    a.   Make URLs readable
    b.   No capital letters in URL
    c.   Use Hyphens, Not Underscores
    d.   Top Content in Top Folders
    e.   Add Mobile URLs to a Sitemap

3.6 Website Indexing In Google

When Google visits your website for tracking purposes. This process is done by Google's Spider crawler. After crawling has been done, the results get put onto Google's index.

Indexing is the process of adding web pages into Google search. Depending upon which Meta tag you used, Google will crawl and index your pages. A good idea for ranking higher in search engines is to let only vital parts of your website be indexed. This Website is indexed for the following keywords.

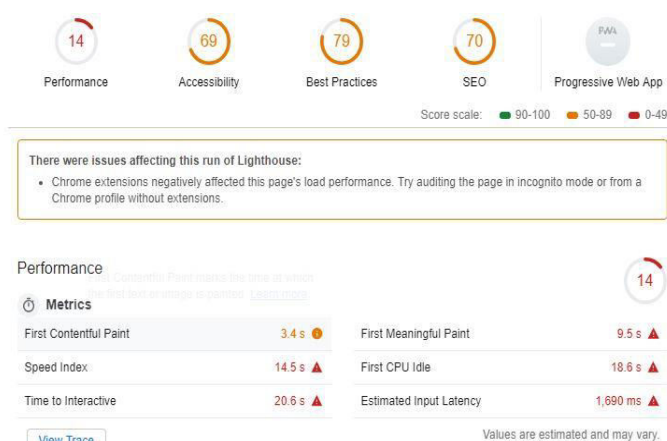   a.   Volunteering Abroad
    b.   Working Abroad

3.7 Analytics tool

For analytics Google Analytics is the best tool. Google Analytics is a web analytics tool that provides statistics regarding your website's visitors. It measures things like site visits, page views, bounce rates, traffic, and more. For this website it is viewed in different countries so using Google Analytics it give the count of visitors based on country so it can help in ranking of website. It is also used to count the number of visitor visits from Desktop, Mobile Phone, and Tablet. So it can help to improve the performance.

3.8 Website Optimization

When your web site is not found by search engines, business is lost. skilled SEO services will assist you increase your site's connectedness and, in turn, move it higher within the rankings – golf stroke your merchandise and services nearer to potential customers. With its ability to get a lot of quality traffic to your web site at a comparatively low value, programmed optimization is a necessary a part of your on-line selling strategy.

Search engine visibility may be achieved by victimization machine-driven programmed submission tools, which may often submit your web site address to national and native search engines and directories. Victimization these tools in conjunction with web site optimization will dramatically impact the quantity of traffic to your site.

Fig -1: Audit Of Website

4. CONCLUSIONS

This paper covers the basics of MVC methodology of website development and Search Engine Optimization methods for getting relevant traffic and getting higher ranking in google search page by increasing backlinks and adding relevant keywords in meta tags in your site.

REFERENCES

[1] CONTENT AND USER CLICK BASED PAGE RANKING FOR IMPROVED WEB INFORMATION RETRIEVAL IJCSA Vol .5,No.6, December 2015.

[2] G.Kumar, N.Duhan, A.K.Sharma "Page Ranking Based on Number of visits of links of the Web Page" Computer and Communication Technology (ICCCT) 2nd Conference on IEEE, 2011R. Nicole, "Title of paper with only first word capitalized," J. Name Stand. Abbrev., in press.

[3] PROFESSIONAL ASP.NET MVC 5 By Jon Galloway Brad Wilson K. Scott Allen David Matson 2014.

[4] Search Engine Optimization Research for Website Promotion By Meng Cui and Songyun Hu 2013.

[5] SEO Techniques for a Website and its Effectiveness in Context of Google Search Engine Vol.-2, Issue-4 Apr 2014

[6] Website Development and Search Engine Optimization Vol.-7, Issue-2, Feb 2019