

WEBSITE DEVELOPMENT & ANALYTICS: Engineering College Prospective

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I. Abstract

The goal was to create a website for Galway Art Festival which is a hypothetical client. This was done in order to get better understanding of the skills that are needed in the area of website design and development. There were many things that were taken in order to submit a successful project such as Market Research, identifying audiences.

We take a deep dive into the world of web analytics, and the importance of spotting trends and patterns that will help you with your metrics and improve engagement. If you're a developer who runs their own site, or you have a blog hosted on a blogging platform, it's likely that you'll be well aware of web analytics. And while awareness of this extremely useful tool is good, many people don't quite know how to fully harness the power of web analytics.

The first thing that springs to mind when starting a website is how many visitors you will get. And the next step involves how these visitors might be converted into paying customers. At the end of the day, you want to understand the people who are coming to your site, and anticipate their needs and desires.

Web analytics is a powerful tool for any business with a website or an online presence. By monitoring how prospective customers and visitors interact with your online resources, you can move on to tailoring these experiences with the aim of increasing your sales, clicks, and conversions.

On the surface, it can seem like a really daunting world to negotiate and explore. However, there are many different resources out there that can help you make sense of web analytics. We take a look at the different ways you can customise and understand web analytics, and use this tool to improve your online presence and performance.

Keywords: *website Development, Web analytics, performance, Engagement*

II. Introduction

Internet usage has increased tremendously and rapidly in the past decade (“Internet Use Over Time,” 2014). Websites have become the most important public communication portal for most, if not all, businesses and organizations. As of 2014, 87% of American adults aged 18 or older are Internet users (“Internet User Demographics,” 2013). Because business-to-consumer interactions mainly occur online, website design is critical in engaging users (Flavián, Guinalíu, & Gurrea, 2006; Lee & Kozar, 2012; Petre, Minocha, & Roberts, 2006). Poorly designed websites may frustrate users and result in a high “bounce rate”, or people visiting the entrance page without exploring other pages within the site (Google.com, 2015). On the other hand, a well-designed website with high usability has been found to positively influence visitor retention (revisit rates) and purchasing behavior (Avouris, Tselios, Fidas, & Papachristos, 2003; Flavián et al., 2006; Lee & Kozar, 2012).

The internet has dramatically evolved. Starting as merely an idea to store and exchange data wirelessly, it took almost a century to turn this idea into action. After the first successful dialogue, however, everything changed — fast. In the span of just a few years, the internet innovated away from something only computer scientists could use and towards a resource available to billions of people.

Approx. 600 websites were online. Web trends, known as one of the first web-analytics providers, goes to market. This was made possible largely by the development of log-file analysis a few years after Berners-Lee invented the internet. Stephen Turner creates Analog, the first log-file analyzer to show you the “usage patterns on your web server.” In this year, Amazon.com, Craigslist, Match.com and eBay go live. Over the course of the decade after hit counting is invented, the internet continues to evolve quickly. JavaScript tags replace hit counting as the best means of determining website performance.

The number of websites grows, resulting in more web analytics companies entering the market. Among these is Urchin, which is acquired by Google in 2005 and eventually becomes what we know as Google Analytics.

The early, highest-tech web-analytics solutions were programs that helped you interpret every entry in the server log. A good log analysis software could help you pick out the requests made by bots and crawlers from those made by human visitors in the log that’s good if you’re worried about being crawled and if you want accurate data on the people who view your site. The log could also tell you who drove the most traffic to your site, or if somebody new was linking to you.

III. LITERATURE SURVEY

We searched for articles relating to website design on Google Scholar (scholar.google.com) because Google Scholar consolidates papers across research databases (e.g., PubMed) and research on design is listed in multiple databases. We used the following combination of keywords: design, usability, and websites. Google Scholar yielded 115,000 total hits. However, due to the large list of studies generated, we decided to only review the top 100 listed research studies for this exploratory study. Our

inclusion criteria for the studies were: (1) publication in a peer-reviewed academic journal, (2) publication in English, and (3) publication in or after 2000. Year of publication was chosen as a limiting factor so that we would have enough years of research to identify relevant studies but also have results that relate to similar styles of websites after the year 2000. We included studies that were experimental or theoretical (review papers and commentaries) in nature. Resulting studies represented a diverse range of disciplines, including human-computer interaction, marketing, e-commerce, interface design, cognitive science, and library science. Based on these selection criteria, thirty-five unique studies remained and were included in this review.

IV. PROBLEM STATEMENT AND OBJECTIVE

1. Problem Statement

To develop a website to a problem, the first step is to understand the problem. The problem here is to develop a way so that people can visualize their things on internet for that we have created a website, many people lack their presence in internet and invest a lot in their physical presence, they forget that their virtual presence can boost their revenue and customer acquisition a lot, also can save a lot of time and money.

Another problem is faced is people forget the website after it is created, they don't think it is important to analyze the website. To improve the website, to get the desirable customers, the website is needed to improve in every span of time, we should check all the insights of the website like online traffic, bounce rate etc.

So, the final decision is to create website and connect it to the Google analytics to get the insights of the website and to improve it accordingly.

2. Objectives

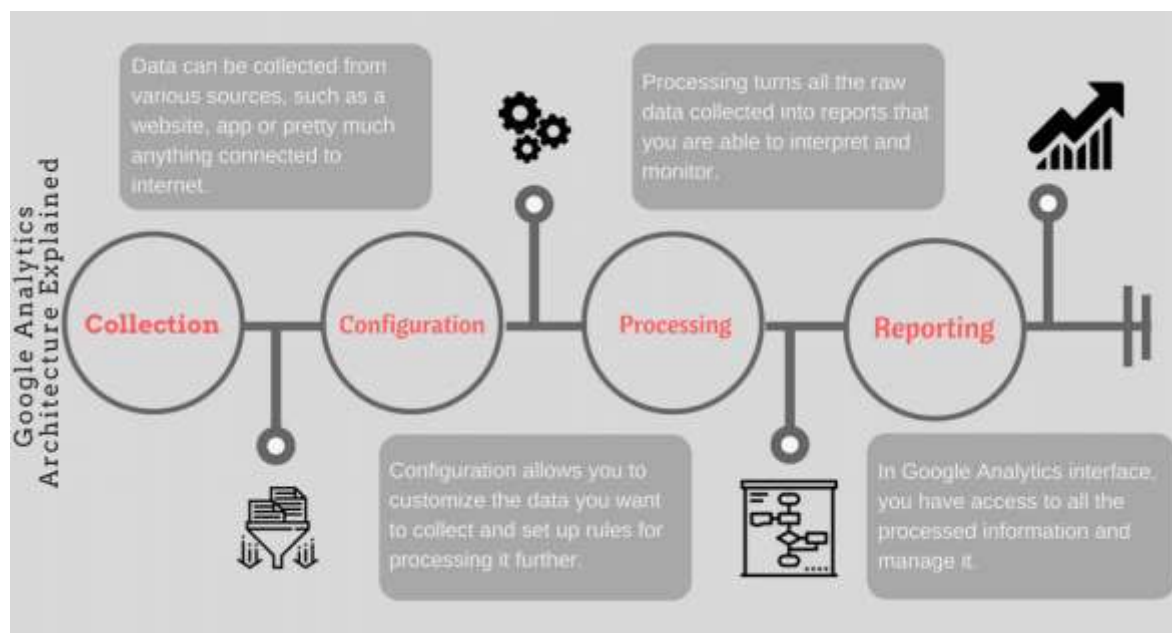
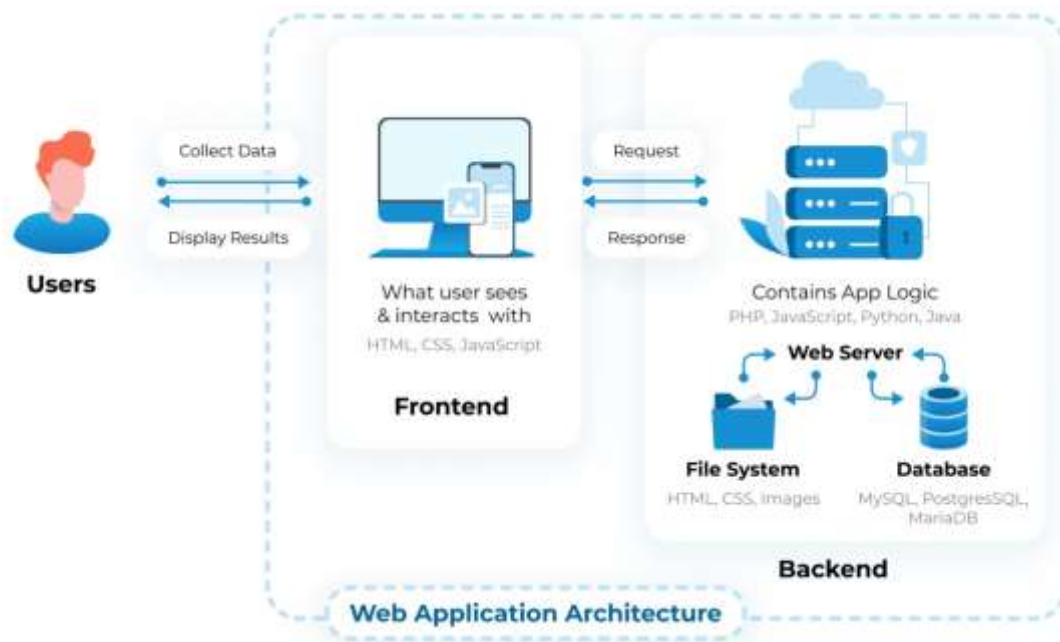
1. Create such a website people can visualize their products on Internet.
2. When user visits they can easily get what they want.
3. Vendors can show their virtual presence.
4. To get the report of the website, what are the things happening around our website.
5. By getting the report of the website, we will improve it.
6. To get a good number of visitors in the website, what they are viewing in our website, what are the things they need in website.

V. PROPOSED SYSTEM

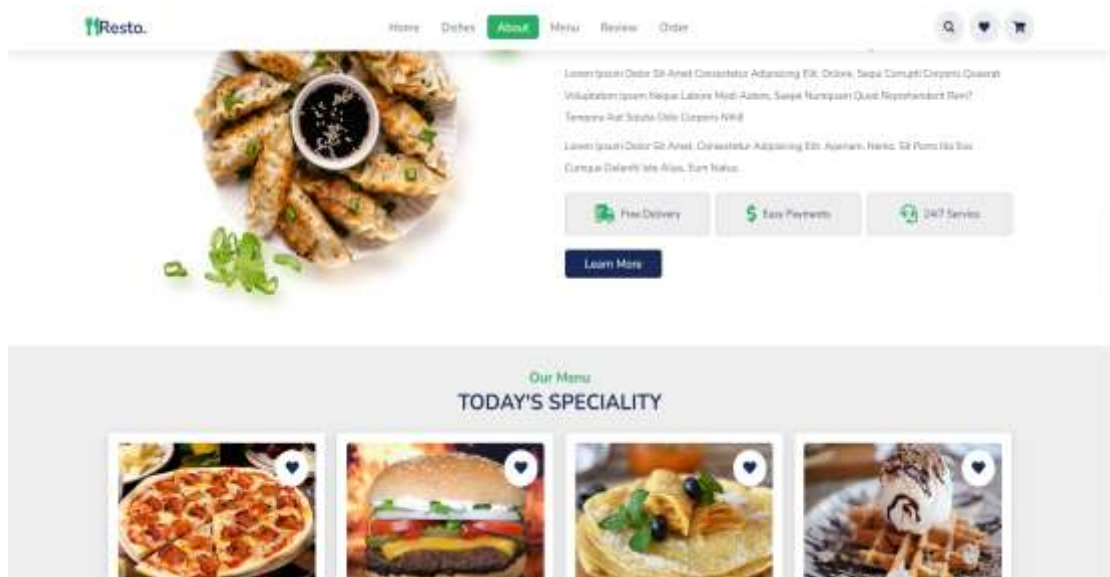
- We have used HTML, CSS, JS to design a food website.
- After creating the website, we have created a GitHub account.
- Then we have uploaded all the source code of our website on GitHub, after that we have hosted our website on GitHub.

- After that for analytics purpose, we have used Google analytics and created an account on it.
- After creating the account, Google analytics provide unique tracking code to analyze our website.
- Then we have linked our website to Google analytics through unique tracking code by putting it in our HTML header tag.

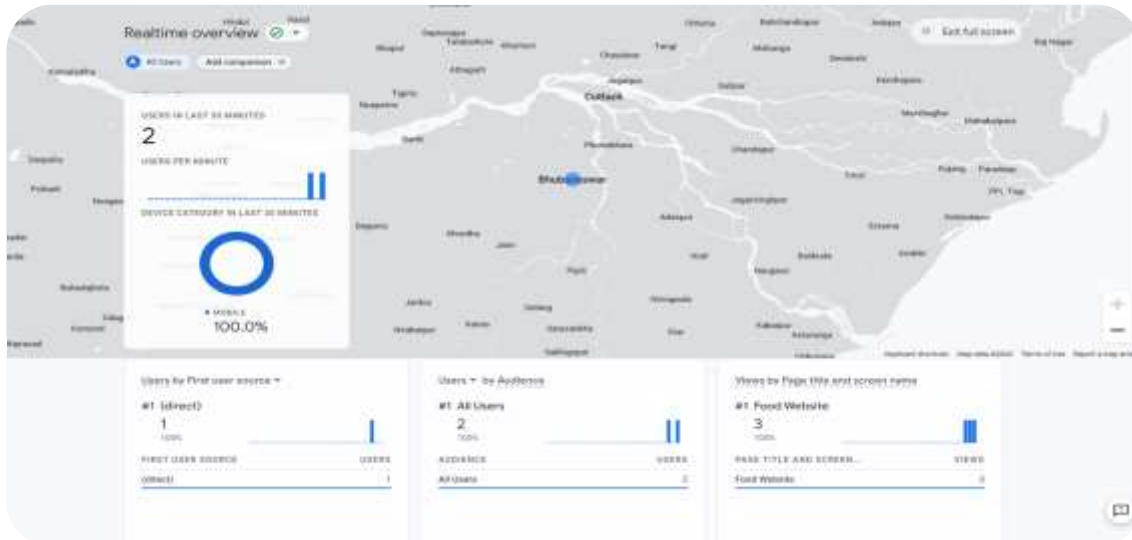
VI. ARCHITECTURE DIAGRAM



VII. INPUT & OUTPUT



Our food website



Results of Google analytics

VIII. CONCLUSION

A lot of things are currently coming on to the internet for that website is needed, many people don't do this and lacks an opportunity to meet a large amount of customer that they can reach, a website can promote your products and also saves money.

A lot of people run their websites without keeping an eye on their metrics. That approach might work. However, since you have so many great analytics tools at your disposal, it's a waste if you don't use them. For example, keeping an eye on your traffic alone can tell you if your content strategy is paying off (or if you need to try something new).

There are a lot of numbers you should pay attention to when it comes to web analytics. However, here are four of the most important metrics for you to keep an eye on:

1. Overall traffic
2. Bounce rate
3. Traffic sources
4. Desktop vs. mobile visits

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