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Analysis and Implementation of Domain Hosting and WHOIS Data Web Application

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Abstract:

Millions of citizens, companies, organizations, and governments register domain names every year. Name, address, email, phone number, and administrative and technical contacts are all needed.This data is generally referred to as "WHOIS data." The WHOIS programme, on the other hand, is not a single, unified database. Instead, autonomous bodies such as "registrars" and "registries" handle the records. ICANN accreditation is required for any organization seeking to become a registrar. Similarly, ICANN has contracted with registries to run a common top level domain, such as.COM, .ORG, or one of the latest ones that will be introduced soon. The "WHOIS lookup app" is a tool that provides WHOIS details. We use a method to include WHOIS and hosting information in this article. There is no need to use another tool or run several searches since the tool contains all information with one search.

Keywords **—WHOIS, Lookup Tool, Hosting Checker, Domain Checker, HTML, DNS, WWW.**
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I. INTRODUCTION

WHOIS (pronounced "who is") is a question and answer protocol commonly used for querying databases that store the registered users or assignees of an Internet resource, such as a domain name, an IP address block, or an autonomous device, but it is often used for a wider range of details. The protocol uses a human-readable format to store and distribute database information.In RFC 3912, the WHOIS protocol is defined. Your domain name registrar is allowed by ICANN to send your personal contact details to the WHOIS database when you register a domain. Anyone who uses the WHOIS search service to scan domain names will be able to see the listing until it appears in this web domain WHOIS directory. What is WHOIS? WHOIS is a mechanism for gathering information about an internet resource like a domain name, an IP address block, or an autonomous device. If you're on the lookout for cybercriminals, investigating domains for your own use, keeping eyes on your rivals, or some other task, your quest typically starts with domain resources.

A WHOIS lookup is the method of extracting WHOIS information for a domain, IP block, or other entity from a database. In addition, our tool provides hosting information. What is the concept of web hosting? Web hosting is a programme that helps individuals and organisations to upload a website or web page on the internet.A web server, also known as a web hosting service provider, is an organisation that offers the technologies and facilities needed to access a website or webpage on the internet. In the hosting section of the tool,

define the server position, ISP, and ASN number.The WHOIS service is an easy way to see if a domain name is available. If a domain name is open, you can register it with a registrar. If the domain name is already claimed, you can check at who has registered it.

ICANN shall "implement steps to ensure timely, free, and public access to correct and full WHOIS information," according to the Affirmation of Commitments. The WHOIS service is a private, publicly accessible list of registered domain name holders' contact and technical records (referred to as "registrants").Anyone who wants to figure out who owns a website domain name will use WHOIS to get the details. In the terms of their arrangements with ICANN, registrars and registries gather and make data accessible.

WHOIS is not a centralised database that is centrally maintained. Instead, registration data is processed in a variety of ways and handled by a range of registries and registrars. They developed their own WHOIS service conventions in compliance with the ICANN contracts' minimum requirements.

Beyond domain names, protocols, facilities, and data types associated with Internet naming and numbering resources, such as Internet Protocol (IP) addresses and Autonomous Device Numbers, are referred to as "WHOIS" (ASNs). WHOIS customers, WHOIS servers, WHOIS data repositories, and WHOIS data are also part of the WHOIS programme (domain name registration records). WHOIS may be used to refer to any of the following:

The details gathered at the time of domain name or IP numbering resource registration and made available by the WHOIS Program, as well as theoretically modified over the resource's lifespan.

WHOIS Services are software that incorporate the WHOIS protocol or a web-based interface that offer public access to domain name registry information.

II. OBJECTIVES AND SCOPE OF THE STUDY

The objective of this study is to develop a complete a tool that is very convenient to utilize that it does not need any installation. When you utilize the tool, you won't need to spend time in installing any other software just to utilize it. The basic intention is that the tool is a free online tool that allows you to check any website URL and see its hosting and WHOIS data in an instant time. This web application will be useful as information tool for any person. The web application will improve as per feedback received from users.

III.   XAMPP

AllXAMPP is an abbreviation where X stands for Cross-Platform, A stands for Apache, M stands for MYSQL, and the Ps stand for PHP and Perl, respectively.XAMPP is a popular cross-platform web server that allows programmers to build and test their code on a local web server. It was created by the Apache Buddies, and the audience may revise or change its native source code. It includes Apache HTTP Server, MariaDB, and interpreters for PHP and Perl, among other programming languages.It's available in 11 languages and runs on a range of platforms, including Windows' IA-32 package, Mac OS X's x64 package, and Linux's x64 package.

Until releasing a website or client to the main server, XAMPP allows a local host or server to test it on computers and laptops. It is a platform that provides a suitable environment for checking and verifying the functionality of projects based on Apache, Perl, MySQL, and PHP using the host's framework.Perl is a web development programming language, PHP is a backend scripting language, and MariaDB is MySQL's most commonly used database. The following is a detailed overview of these components.

As previously mentioned, XAMPP is used to describe the classification of solutions for various technologies. It provides a forum for testing projects using various technologies through a personal server. - of the major components of

XAMPP is represented by an abbreviated version of each alphabet.

IV. EXISTING SYSTEMS

1) Advantages

- Now many website already having all tools like domain tools, website management tools and many more but separate tools.
- Because of having separate tools that specific tools execute only one query at a time so that give little bit fast response.
- Many website need registration for using them. In advantages overview that good for secure your API and get data for improve that tool more and more.

2) Disadvantages

- Many website need to download there application/software for execute that query. Also having limited search per day or per hour.
- Most website having different tool for different information response. Like WHOIS lookup tool, hosting data checker and IP lookup tool.
- In disadvantages overview registration not good for many users. Because they not need to waste time on registration process they can go to other website.

V. PROPOSED SYSTEMS

3) Advantages

- Tool is very convenient to utilize that it does not need any installation. When you utilize the tool, you won't need to spend time in installing any other software just to utilize it.
- User get all information in just one search. Like IP address, WHOIS details, hosting data.

- User not require to register and there is no payment needed. Tool is free online tool that you can use anytime you want.

4) Disadvantages

- Because of giving all data in one search that little bit slow compare to giving only specific data.

5) Technology

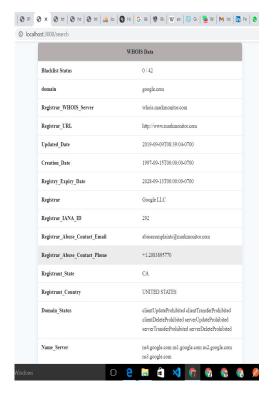- MySQL
- NodeJS
- Express
- XAMPP

VI. RESULT

1) Home Page
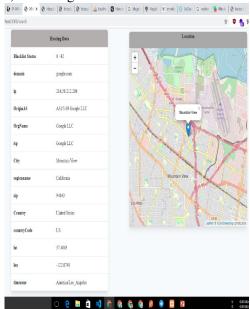

2) WHOIS Search

3) Hosting Search

5) XAMPP

4) MySQL Database

6) Code

CONCLUSIONS

As a conclusion, every project have different methodologies that will used to make the project successful and working well. In this paper methodologies are divided into three parts, there are planning, implementing and analysis. In planning phase there are including with reading activity and some job of requirements of software to be used. In reading activity I do research through such as textbooks, journal and paper references.The next stage is the implementation process, in which we will begin with the fundamentals and work our way Up to the more complicated aspects. After that, checking is an essential aspect of the web app creation process. We mostly concentrate on security checking to ensure that the tool is safe against unauthorized user.Finally, analysis is the method of collecting and comparing data about this project, its execution, and usage in order to enhance the tool's overall quality and locate problem areas. The aim is to build a tool that anybody can use at any time and respond correctly and easily.Another research paper conclusion is that we need to write a code that produces fast scraping results so that we can show them as soon as possible. Another conclusion is that

many people prefer node.js for web applications because it has many useful libraries and frameworks that are easy to use and safe as opposed to writing code. Python is also very useful for scraping the network.

Since registrants' contact data can change. According to ICANN's rules, refusing to update this information or providing false data can lead to the suspension or cancellation of domains.

In addition, ICANN allows Internet users to file complaints if they discover WHOIS domain name lookup data that is incorrect or incomplete. In such instances, registrars must correct and verify the data in a timely manner. Through this verification protocol, ICANN seeks to maintain the highest possible level of accuracy.

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