

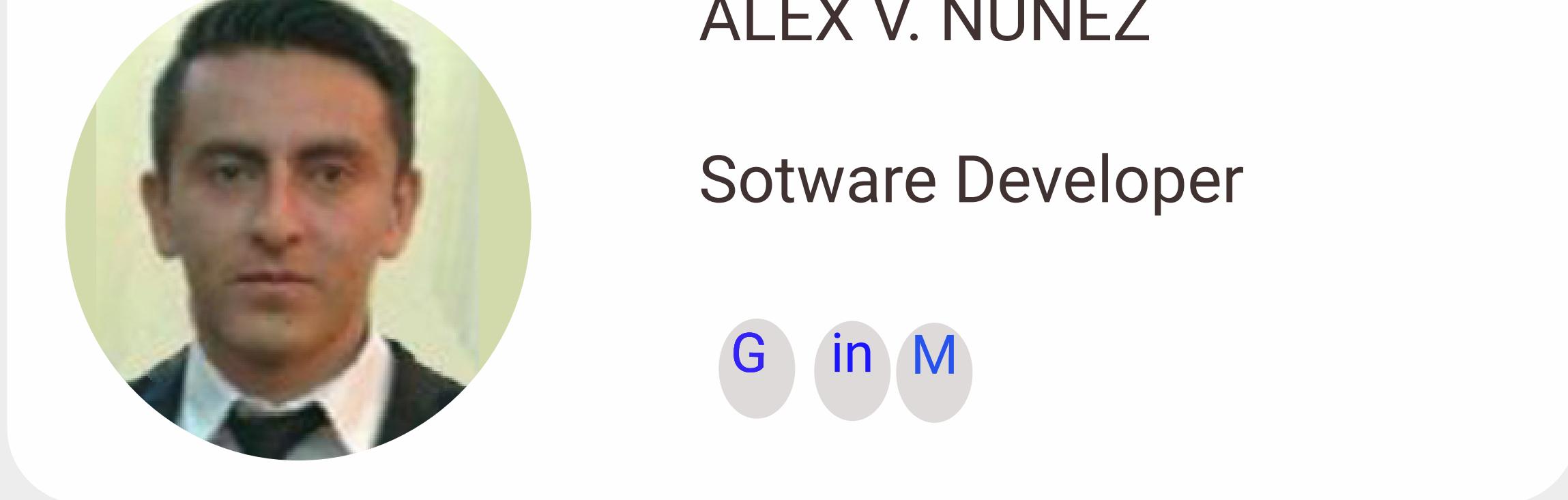
THE INTERNET

ABOUT THE PROJECT

In this project, we will learn about the Internet, its creation, history, the different technologies behind it, and all the elements that make it up. Also, we will analyze and discuss some important concepts like domain names, DNS servers, protocols, and many more.

Additionally, we will learn about some major internet related events such as the Browser Wars and the Dot Com bubble. Finally, we will cover and learn about the major technology companies and the people who built what we now know as the Internet.

ABOUT THE AUTHOR



CONTACT ME

Name

Email Address

Message

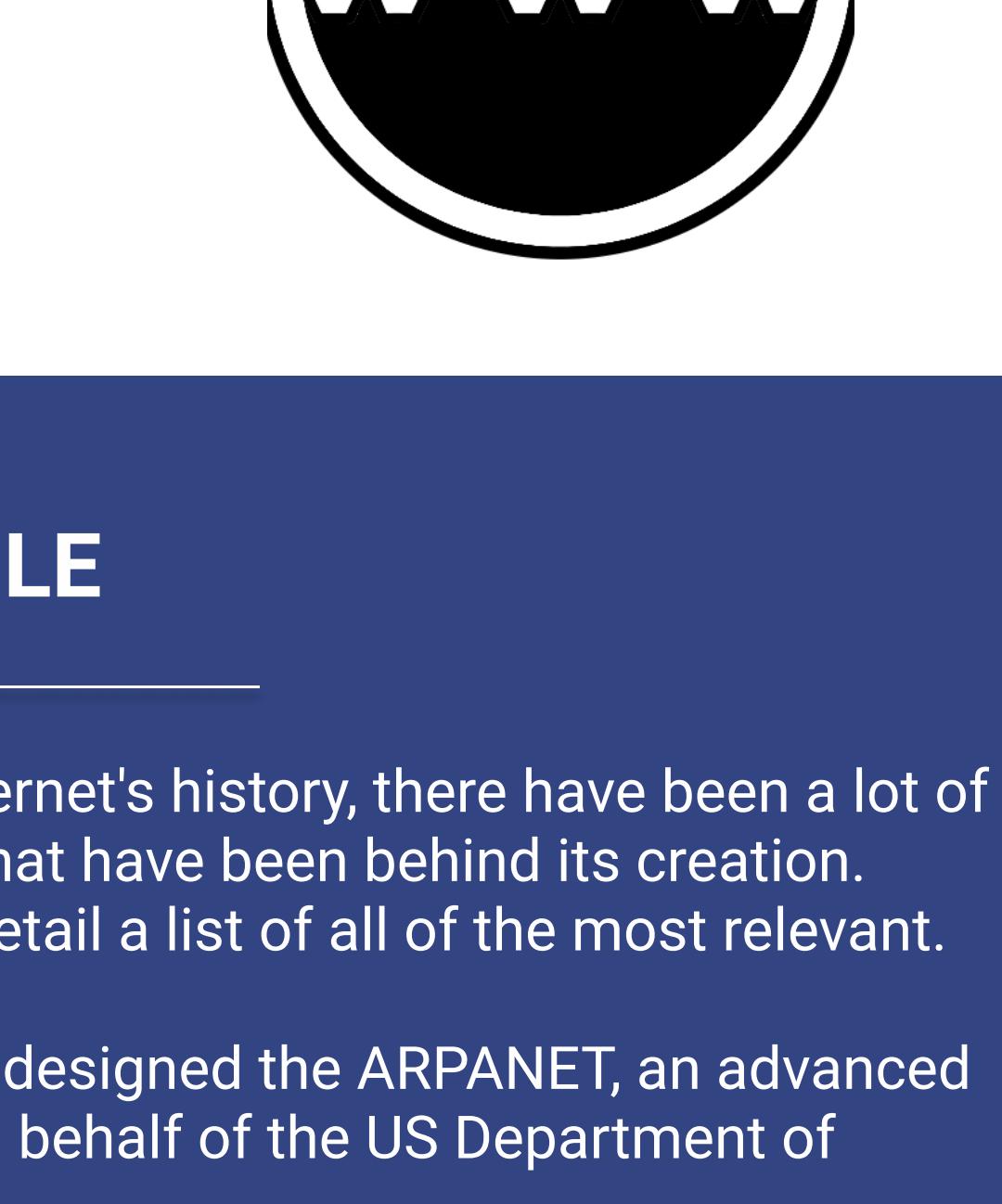
THE INTERNET

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol (IP) for communication between devices. It is a network of networks that consists of millions of private, public, academic, business, and government networks, of local to global scope, connected by a complex network of fiber-optic and wireless links.

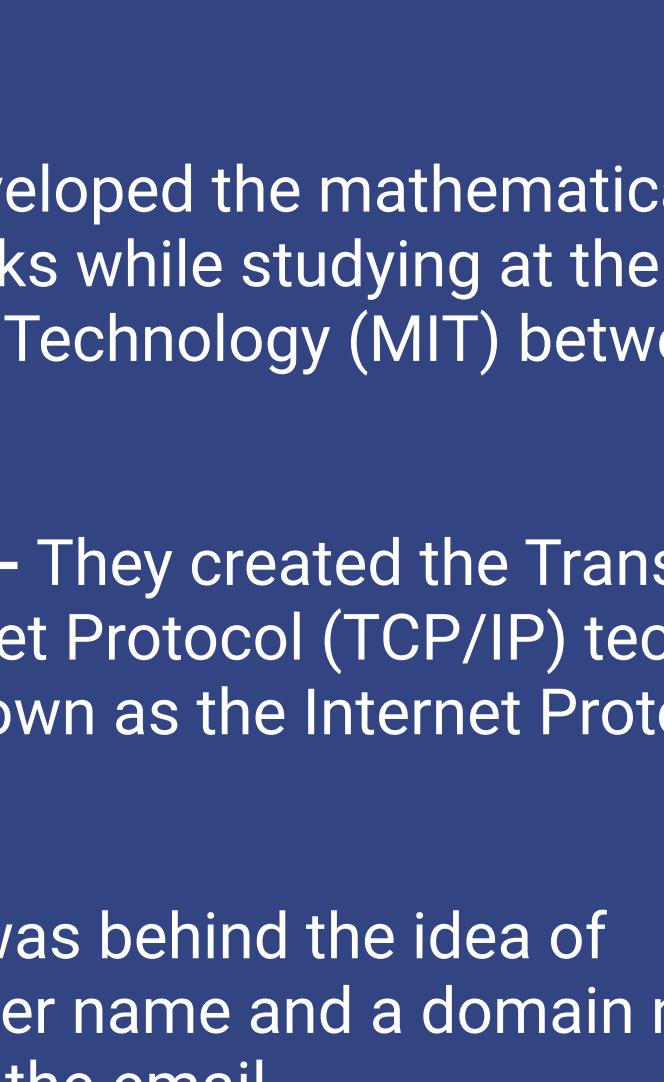
HISTORY

The internet was initially envisioned by J. C. R. Licklider. His vision was that computers would allow us to communicate better, which would be better in sharing information among people.

In 1966 Bob Tylor of A.R.P.A(Advanced Research Projects Agency) had an idea, and wanted to build a network, or a single terminal for more than one computer to talk to each other. At the time all computers had their own terminal. He recruited Larry Roberts for this job (he had built the world's first experimental connection between two computers at MIT lab).

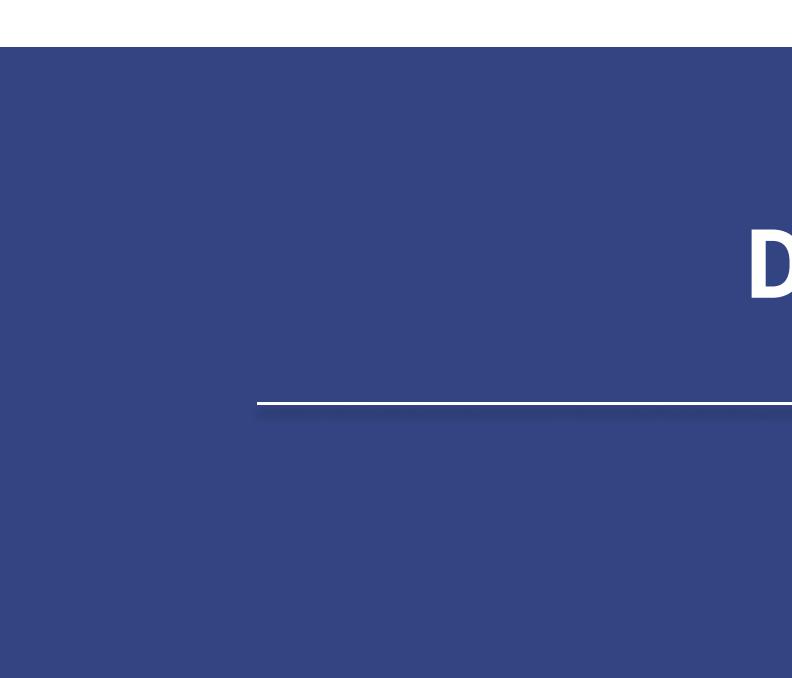
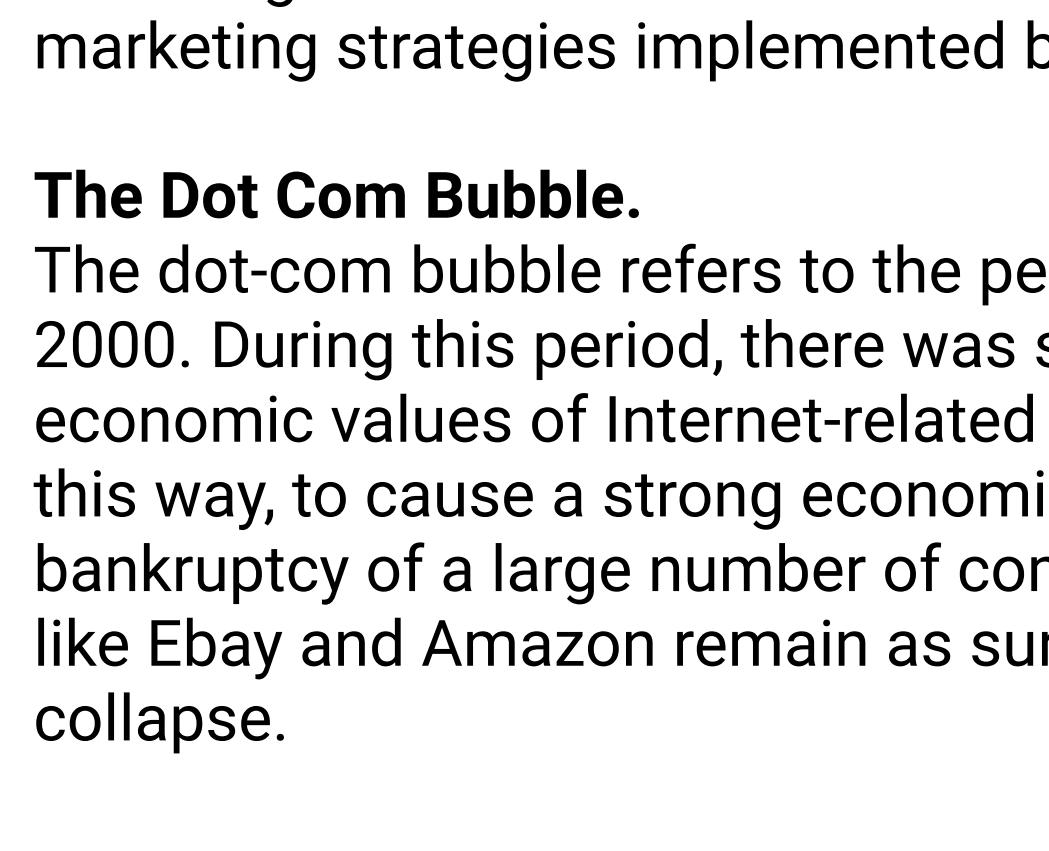
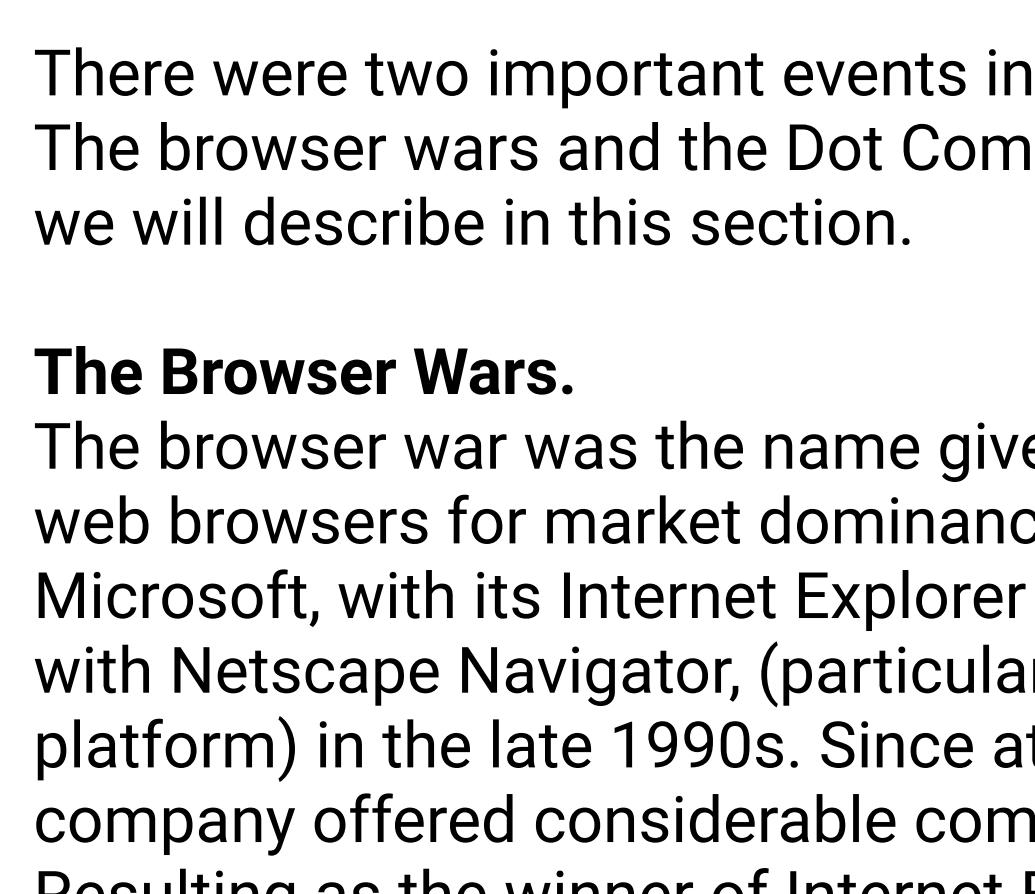


At the time there wasn't much to do on the ARPANET beyond transferring data files among the members. The first application that changed information sharing and also made the internet more important and useful was email. From then the Internet started growing on itself and the World Wide Web (www) was created with the goal of allowing users to easily navigate and find what they wanted.



IMPORTANT PEOPLE

Throughout the internet's history, there have been a lot of important people that have been behind its creation. Following we will detail a list of all of the most relevant.



Larry Roberts. - He designed the ARPANET, an advanced research project on behalf of the US Department of Defense

While Berners-Lee. - Known as the father of the World Wide Web.

Leonard Kleinrock. - He developed the mathematical theory of packet switching networks while studying at the Massachusetts Institute of Technology (MIT) between 1960 and 1962.

Vint Cerf and Robert Kahn. - They created the Transmission Control Protocol and Internet Protocol (TCP/IP) technology, which together became known as the Internet Protocol Suite.

Raymond Tomlinson. - He was behind the idea of connecting an individual user name and a domain name with an @ symbol, creating the email.

Sir Tim Berners-Lee. - He created HyperText Markup Language (HTML), which is still used to create most electronic documents that appear on the web.

Marc Andersen and Eric Bina. - They developed the first widely used browser was called Mosaic, at the National Center for Supercomputing Applications at the University of Illinois in 1993

IMPORTANT EVENTS

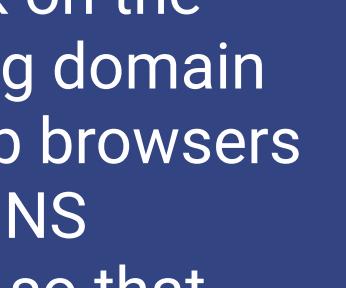
There were two important events in the history of the internet. The browser wars and the Dot Com Bubble. The same that we will describe in this section.

The Browser Wars.

The browser war was the name given to competition between web browsers for market dominance. Specifically, between Microsoft, with its Internet Explorer browser, and Netscape, with Netscape Navigator, (particularly on the Windows platform) in the late 1990s. Since at that time no other company offered considerable competition in the market. Resulting as the winner of Internet Explorer thanks to the marketing strategies implemented by Microsoft.

The Dot Com Bubble.

The dot-com bubble refers to the period between 1997 and 2000. During this period, there was strong growth in the economic values of Internet-related companies. Arriving, in this way, to cause a strong economic bubble that led to the bankruptcy of a large number of companies. Only companies like Ebay and Amazon remain as survivors of this great collapse.



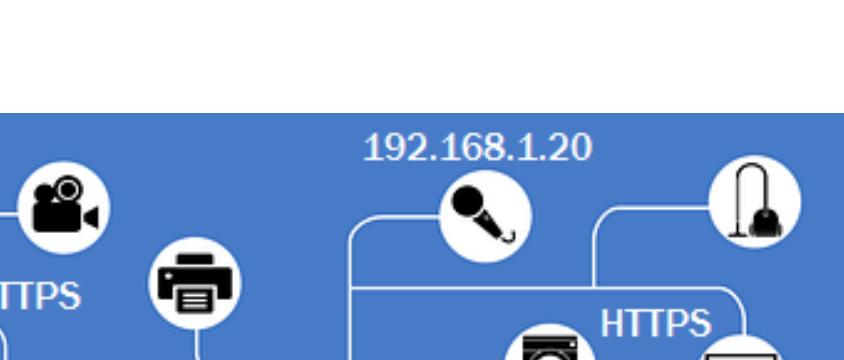
Microsoft



Netscape



amazon



eBay

DOMAIN NAMES AND DNS

Domain names.

A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet. More specifically a domain name is your website name and is the address where Internet users can access your website.

A domain name can be any combination of letters and numbers, and it can be used in combination of the various domain name extensions, such as .com, .net and more as we can see in the picture.

DNS.

The Domain Name System (DNS) is the Internet's system to translate domain names into numeric Internet Protocol (IP) addresses. In other words, is the phone book on the internet. Humans access information online using domain names, such as nytimes.com or sports.com. Web browsers interact using Internet Protocol (IP) addresses. DNS servers translate domain names to IP addresses so that browsers can load Internet resources.

IP address.

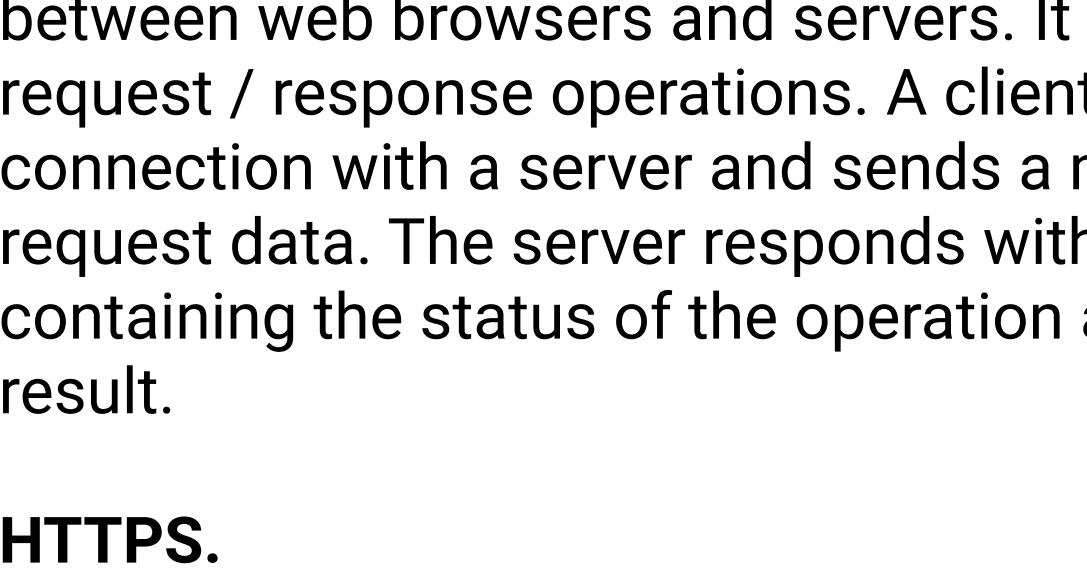
An IP address is a set of numbers that identifies, logically and hierarchically, a device in the network (computer, laptop, smartphone) that uses the Internet Protocol or, which corresponds to the network layer of the TCP / IP model. There are two types of IP addresses IPv4 (most used) and IPv6.

HTTP.

Hypertext Transfer Protocol (HTTP) is an application layer protocol for the transmission of hypermedia documents, such as HTML. It was designed for communication between web browsers and servers. It relies on simple request / response operations. A client establishes a connection with a server and sends a message with the request data. The server responds with a similar message, containing the status of the operation and its possible result.

HTTPS.

Hyper Text Transfer Protocol Secure (HTTPS) is the secure version of HTTP, the protocol over which data is sent between your browser and the website that you are connected to. The 'S' at the end of HTTPS stands for 'Secure'. It means all communications between your browser and the website are encrypted. HTTPS is often used to protect highly confidential online transactions like online banking and online shopping order forms.



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