

Web Fundamentals

What is the web ?

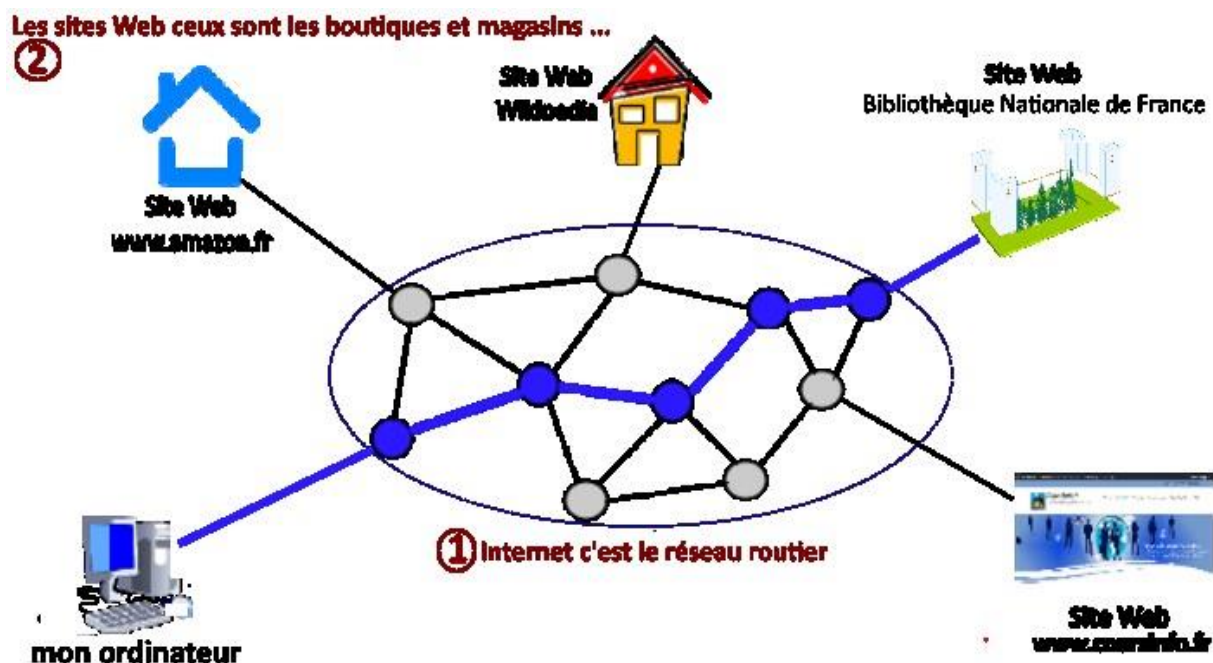
The web is a **hypermedia-based structure** which provides a source of browsing information over the internet in a non-sequential format by the use of hyperlinks which redirects users to more resources and information.

What is the difference between web and internet?

The Internet is a global network of networks while the Web, also referred to formally as World Wide Web (www) is a collection of information that is accessed via the Internet. Another way to look at this difference is; the Internet is infrastructure while the Web is served on top of that infrastructure. Alternatively, the Internet can be viewed as a big book store while the Web can be viewed as a collection of books on that store. At a high level, we can even think of the Internet as hardware and the Web as software !

Web applications use HTTP protocol which is a layer over TCP protocol. Whereas internet

applications can use either TCP or UDP protocol. To visualize the difference think of it as the internet is a network of many computers connected together so you can use any port say 90 to send or receive data whereas in web port is fixed as HTTP uses port 80 to communicate and also the data which is sent is HTML, CSS, and JavaScript. So if you want a feel of internet application make a socket connection at a random port and send data to another computer via the socket. So in this case you are using the internet for communication and not the web.



What is web development ?

A **web developer** is a programmer who develops World Wide Web applications using a client–server model. The applications typically use HTML, CSS, and JavaScript in the client, and any general-purpose programming language in the server. HTTP is used for communications between client and server. A web developer may specialize in client-side applications (Front-end web development), server-side applications (back-end development), or both (full-stack development).