



# Client Side Technologies

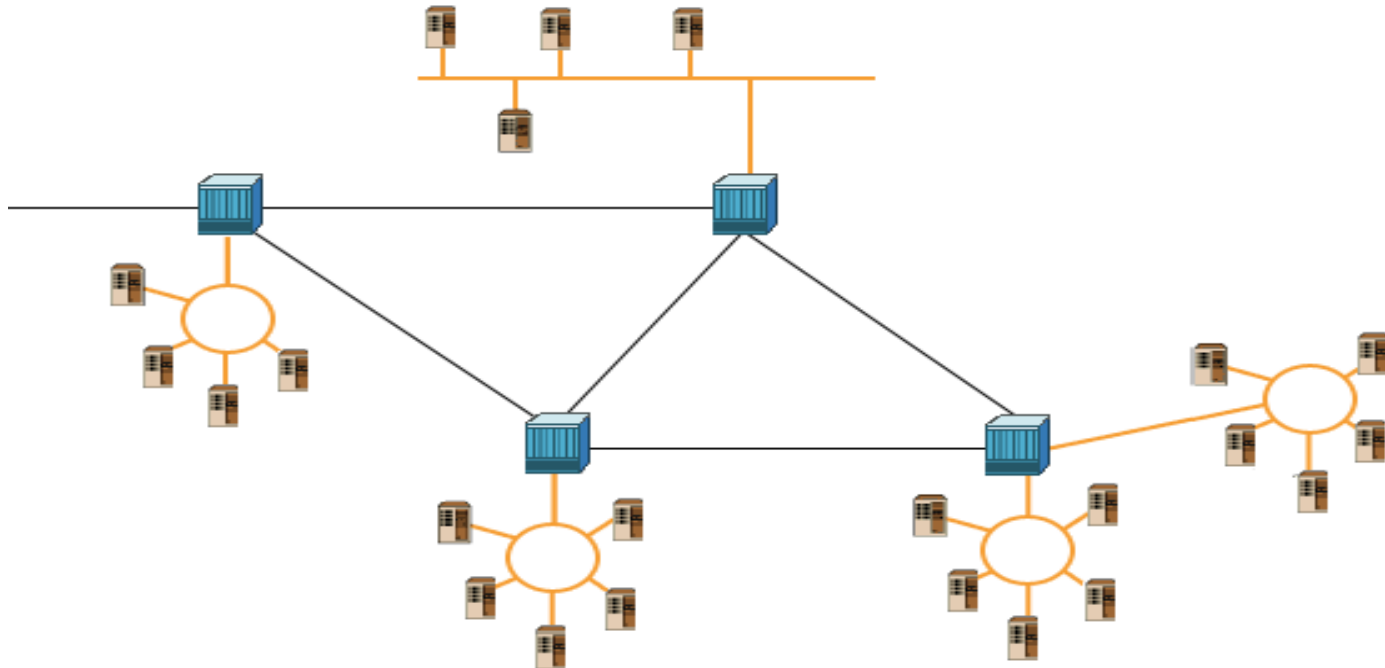
## Introduction To Web Technologies



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# What is Internet ?



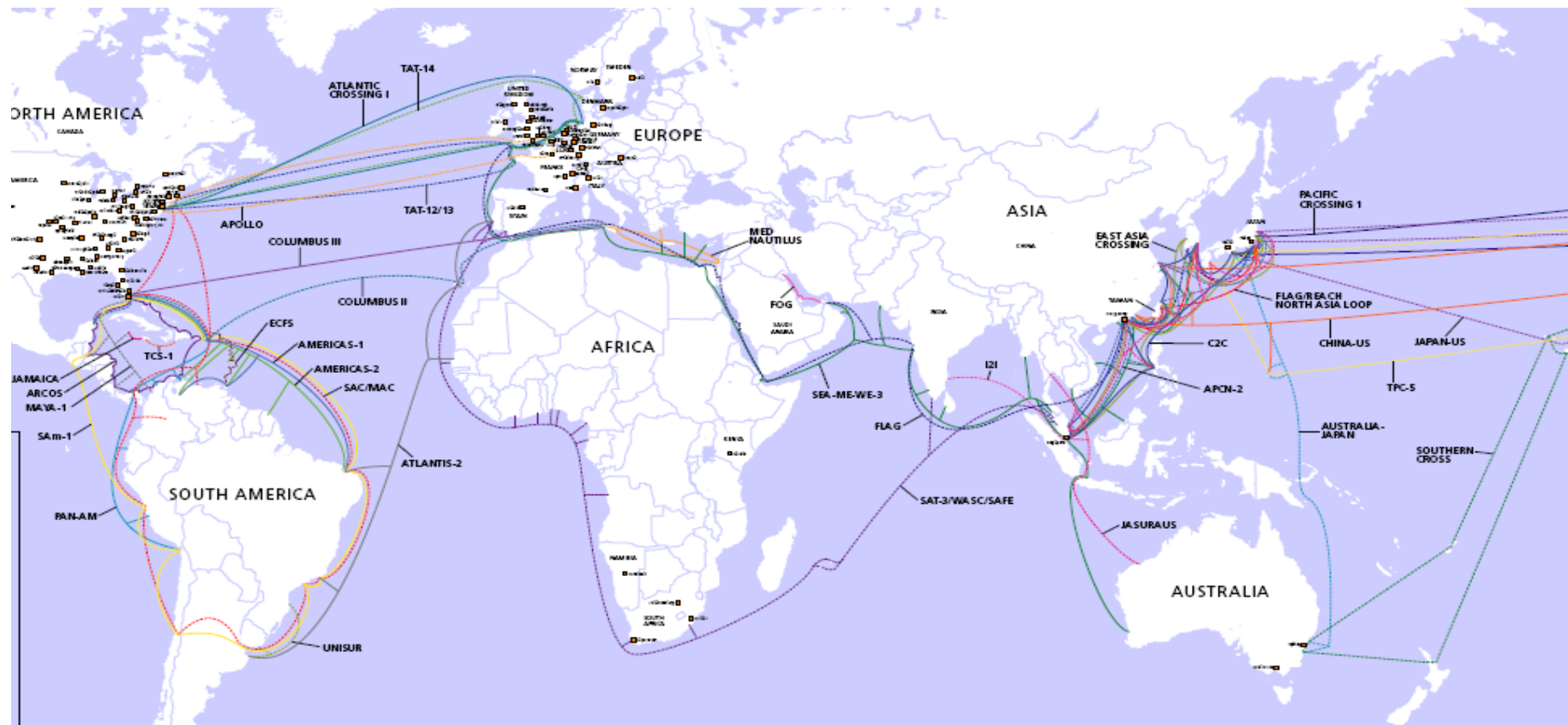
Millions of computer networks connected to each other via the 'Internet Backbone'



# What is Internet ? (Cont.)

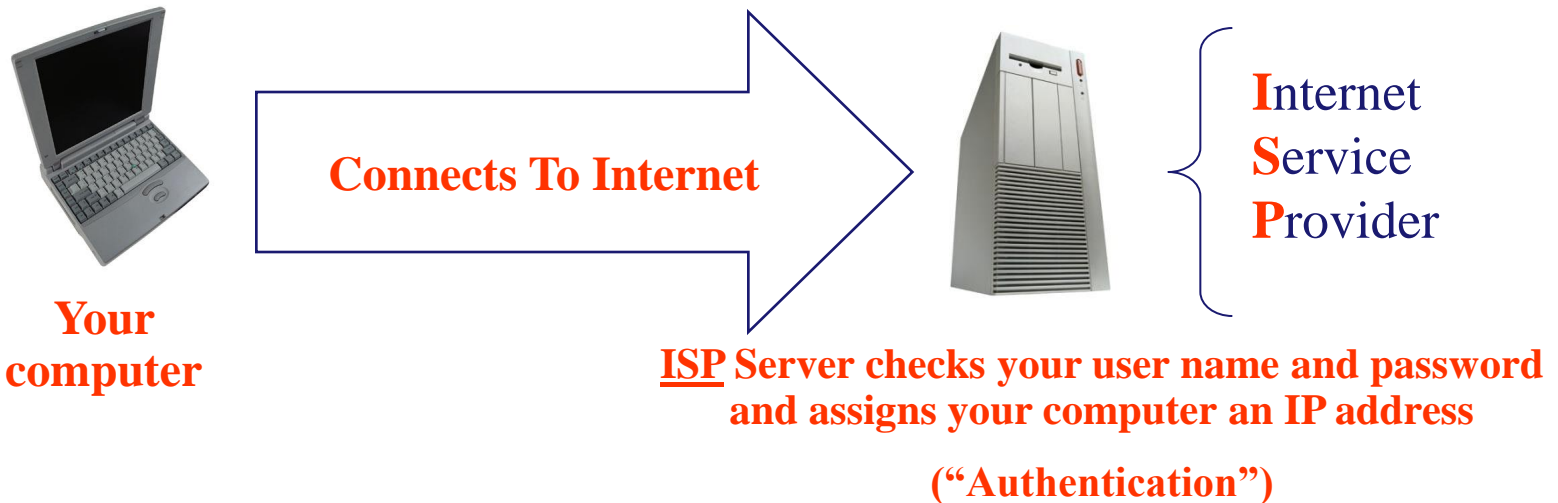
## ❑ The Internet Backbone:

- The Internet Backbone is an infrastructure of fiber optics cable owned by private companies.





# How does your computer connect to the Internet?

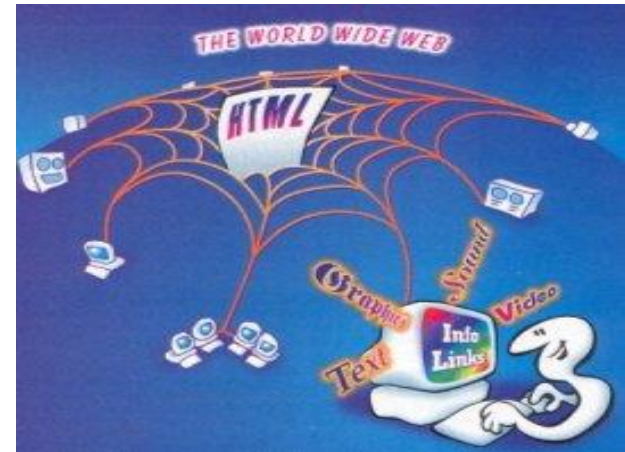




# What is the World Wide Web?

## ❑ The World Wide Web (Web):

Is a network of information resources  
( or collection of websites).



- ## ❑ The Web relies on three mechanisms to make these resources readily available to the widest possible audience:
- A uniform naming scheme for locating resources on the Web (e.g., URL).
  - Protocols: for access to named resources over the Web (e.g., HTTP).
  - Hypertext: for easy navigation among resources (e.g., HTML).



# What is the World Wide Web? (Cont.)

## □ Hypertext:

- Is text displayed on a computer with references (Hyperlinks) to other text that the reader can immediately access, usually by a mouse click. Hypertext may contain tables, images, videos and other resources. The most extensive example of hypertext today is the World Wide Web.

## □ Hyperlink (or link):

- Is a reference to a document or a resource on the web.



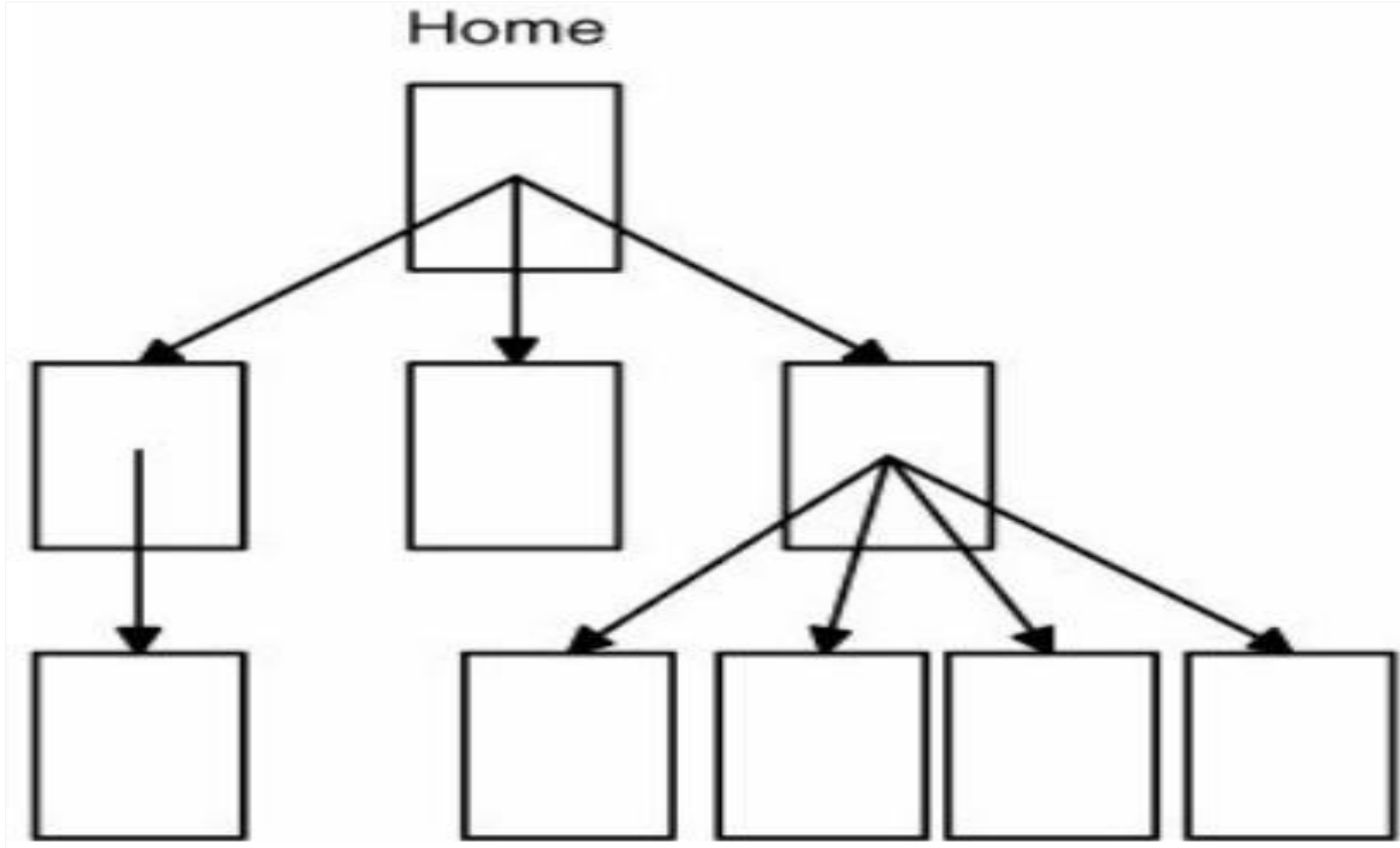
# What is Website?

## □ Website:

- A website is a collection of related and linked web pages via hyperlinks, images, videos or other digital assets that are addressed with a common domain name or IP address.
- A web page is a document, typically written in Hypertext Markup Language (e.g. HTML).
- All publicly accessible websites collectively constitute the World Wide Web.
- The pages of a website can usually be accessed from (Home Page) which is web page has a simple Uniform Resource Locator (URL).



# What is Website (Cont.)?

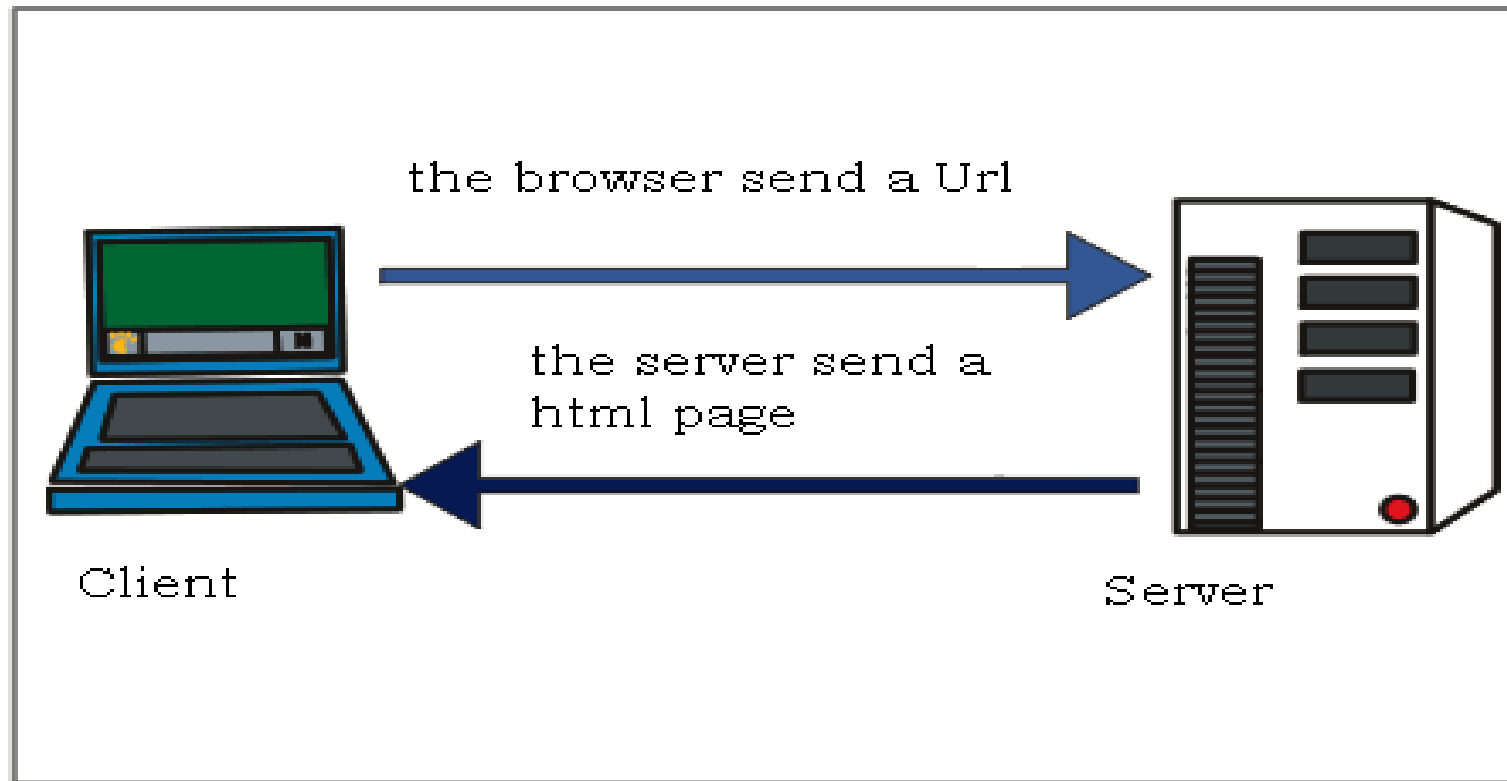






# What is Website? (Cont.)

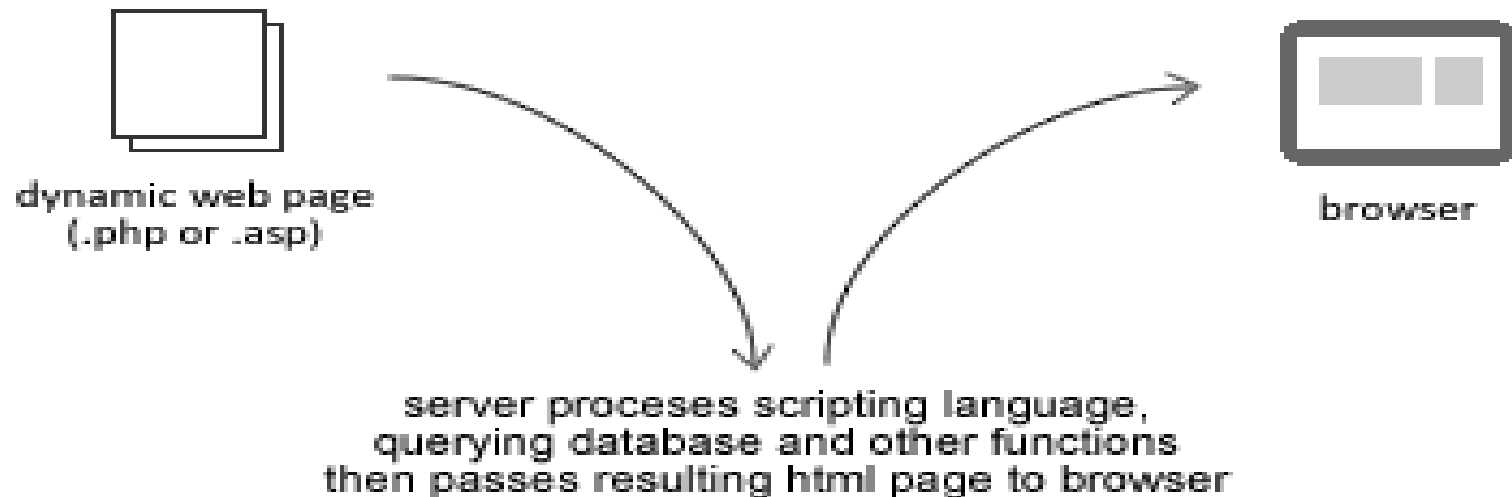
## ❑ Client / Server architecture:





# What is Website? (Cont.)

## ❑ Static and dynamic web sites:





# What is URL?

## □ URL (**U**niform **R**esource **L**ocator):

- Unique address of a document or a resource on the internet.
- You type a website address or “URL” into your browser.

**Requests Data**



**Client**

<http://www.Google.com>

**Serves Data**



**Server**



# What is URL? (Cont.)

- URL Have two parts:

Domain Name

<http://www.Google.com>

Protocol Type

**HTTP = Hyper Text Transfer Protocol**

**FTP = File Transfer Protocol**

A “Protocol” is a structured set of communication rules that allows machines to share data.



# What is URL? (Cont.)

## ❑ Domain Name:

- The name that identifies an Web site. For example:  
“google.com” is the domain name of Google's Web site.
- To register a domain name internationally, you must buy it from **ICANN** or **ICANN-Accredited Registrars**.
- Because the Internet is based on IP addresses, not domain names, every Web server requires a Domain Name System (DNS) server to translate domain names into IP addresses.



# Addressing Schemes

## ☐ Server Addresses

Uniquely identifies a specific computer. Ex.: 131.107.1.240

## ☐ Website Domain Name

Uniquely refers to a specific server address. Ex.: iti.net.eg

## ☐ Website URL

Protocol + Domain name. Ex.: [http:// www.iti.net.eg](http://www.iti.net.eg)

## ☐ Resource Addresses (Resource URL)

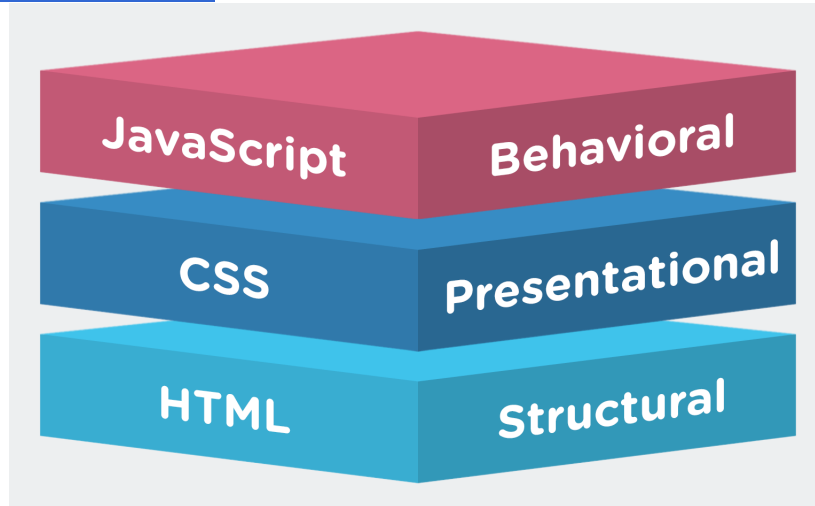
Example : <http://www.iti.gov.eg/itiprofile/assuit.jpg>

## ☐ E-Mail Addresses

Must be unique. Example: [hsaad@iti.net.eg](mailto:hsaad@iti.net.eg)



# Technologies used in Web and covered by this course



## ▪ HTML

- Hypertext Markup Language
- Structure of Page



## ▪ JavaScript

- Interactivity with User
- Dynamic Updates in a Web Page



## ▪ CSS

- Cascading Style Sheets
- Presentation/Styling





# Self Study..

- ☐ What is ICANN?
- ☐ What is IANA?
- ☐ What is W3C?





<Questions> ? </Questions>



**Thank You...**