

**Objective : Developing Web Application/UI for Web Application
UI (HTML,CSS,JavaScript)/UX(Photoshop, Flash,...)**

Course Title:

- 1. HTML**
- 2. CSS**
- 3. Java Script**
- 4. Introduction BootStrap**
- 5. HTML (Project-1)**
- 6. HTML and CSS (Project-2)**
- 7. HTML,CSS and Java Script (Project -3)**

**Front End Developer/UI Developer (User Interface)/Web
Development**

**Full Stack Java Development → Web Application/Web Developer
Full Stack .Net Development → Web Application/Web Developer**

Full Stack Java

Module-1 → Front End

HTML

JavaScript

CSS

Module-2 → Backend

Java

Servlet

JDBC

JSP

Spring Boot

Full Stack .Net

Module-1 → Front End

HTML

Java Script

CSS

Module-2 → Back End

C#.Net
ASP.Net
Full stack Python
Module-1
 HTML
 CSS
 Java Script
Module2:
 Python
 Django/Flask

Duration: 45 sessions

Telegram-id: codewithsatishgupta
Upload course content

Introduction to Web

What is networking?

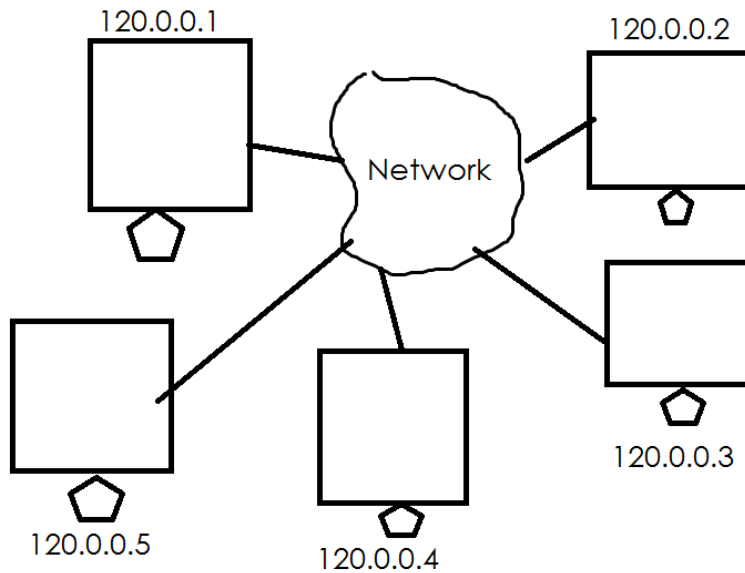
Networking is logical or physical link between two or more devices.

Advantage

Sharing resources (software or hardware)

What is ip-address?

In networking each device or system is identified with a unique number called ip-address. This ip-address is given by network admins.



Networking required two programs.

1. Client
2. Server

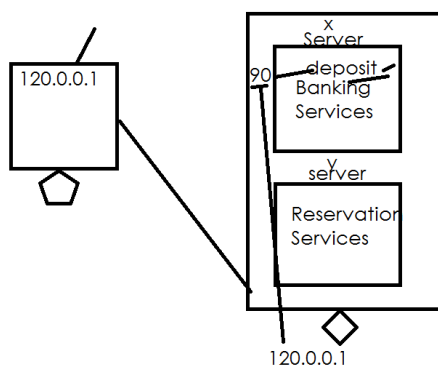
Client who send request/input to server program

Server program which takes request from client process it and generate output/response.

Each server program in networking is identified with a unique number called portno.

What is portno?

Portno is integer number which is used to identify server running within system.



What is protocol?

A protocol defines set of rules and regulations to exchange information between two programs (client/server).

1. HTTP → Hyper Text Transfer Protocol
2. HTTPS → Hyper Text Transfer Protocol + SSL
3. FTP → File Transfer Protocol
4. SMTP → Simple Mail Transfer Protocol
5. TCP → Transmission Control Protocol
6. UDP → User Datagram Protocol

What is hostname?

Hostname is wrapper of ipaddress.

120.0.0.1 → localhost/nit/naresh

What is URL?

URL stands for Uniform Resource Location

This URL consists of,

1. Ip-address
2. Portno
3. Application-name
4. Resource name

IPAddress of system where application is installed.

Portno is server portno where application is installed

Name of the application from which resource is accessed

Resource name → static resource or dynamic resource

[Http://120.0.0.1:8080/webapp1/index.html](http://120.0.0.1:8080/webapp1/index.html) → www.nareshit.com

URI → Uniform Resource Identification

URN → Uniform Resource Name

What is ARPANET?

--> ARPANET full form is Advanced Research Projects Agency NET.

--> ARPANET was the very first network that was created using a distributed form of control. It was also considered to be one of the first networks to implement the protocols of TCP/IP. The creation of ARPANET basically paved the way for the beginning of the web and internet with the help of these technologies.

--> The basic idea behind the creation of ARPANET was to communicate with all the scientific users that existed amongst any university or institute.

--> The introduction of ARPANET happened in 1969 by the Advanced Research Projects Agency also known as ARPA that was a part of the US Department of Defense. The establishment of ARPANET took place with the help of PCs that different colleges had.

The technology helped in sharing the information as well as messages amongst the computers.

What is Internet?

--> Internet is a global network that connects billions of computers across the world with each other and to the World Wide Web. It uses standard internet protocol suite (TCP/IP) to connect billions of computer users worldwide.

--> It is set up by using cables such as optical fibers and other wireless and networking technologies. At present, internet is the fastest mean of sending or exchanging information and data between computers across the world.

What is Web?

The World Wide Web—commonly referred to as WWW, W3, or the Web—is a system of

interconnected public webpages accessible through the Internet. The Web is not the same as the Internet: the Web is one of many applications built on top of the Internet.

Tim Berners-Lee proposed the architecture of what became known as the World Wide Web. He created the first web server, web browser, and webpage on his computer at the CERN physics research lab in 1990. In 1991, he announced his creation on the alt.hypertext newsgroup, marking the moment the Web was first made public.

The system we know today as "the Web" consists of several components:

--> The HTTP protocol governs data transfer between a server and a client.

http
https

--> To access a Web component, a client supplies a unique universal identifier, called a

URL (uniform resource locator) or URI

(uniform resource identifier) (formally called

Universal Document Identifier (UDI)).

--> HTML (hypertext markup language) is the

most common format for publishing web

documents.

Linking, or connecting resources through

hyperlinks, is a defining concept of the Web,
aiding its identity as a collection of connected

documents.

What is W3C?

Soon after inventing the Web, Tim Berners-

Lee founded the W3C (World Wide Web

Consortium) to standardize and develop the

Web further. This consortium consists of core

Web interest groups, such as web browser

developers, government entities,

researchers, and universities.

Types of web applications

What is web application?

An application is collection of programs or resources. These resources accessed using internet.

1. Browser (Thin Client)
2. Http Server/Web Server

1. Static web application
2. Dynamic web application

Static web application

Static web application is called of static resources.

1. HTML pages
2. Images
3. Audio files
4. Video files

Example: Tutorials

Dynamic web applications

Dynamic web application consist of,

1. Static resources
2. Dynamic resources (Backend Programs)

Example: online reservation, online shopping, online banking,...

HTML

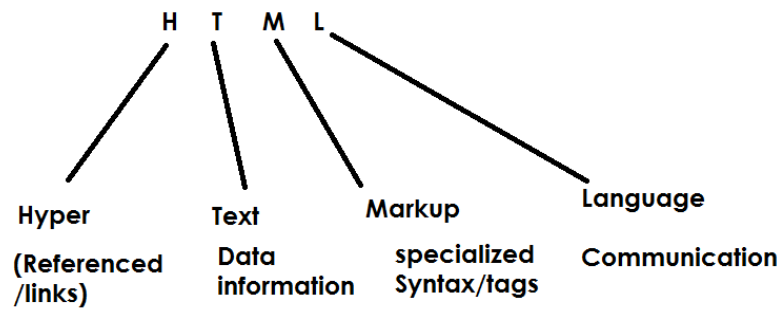
HTML stands for Hyper Text Markup Language.

HTML is not a programming language, it is a markup language.

HTML is used for developing web page. Page consist of information which shared on internet.

HTML is used for developing frontend for web application.

HTML is used in web application development for presenting data or information.



HTML is developed by Tim Berners-Lee in the year 1991.

Versions of HTML

HTML 1.0 □ 1994

HTML 2.0 □ 1995

HTML 3.0 □ 1997

HTML 4.0 □ 1998

HTML 4.1 □ 1999

HTML 5.0 □ 2014

HTML 5.1 □ 2016

HTML 5.2 □ 2017

HTML is interpreted language. HTML tags are interpreted and executed by HTML interpreter/Parsers exists within Browser. No need to install any software to work with HTML. Browser is software responsible in execution of HTML page/web page.

Advantage of HTML

- 1. Easy to understand and develop web pages**
- 2. HTML is case in-sensitive language (upper case and lowercase both are same)**
- 3. HTML is easy to maintain**

Disadvantage HTML

- 1. Need to write lots of code**

Every html file is having extension .html or .htm
HTML is web technology.

Who uses HTML?

1. Web Developer
 - a. Front End Developer
 - b. Back End Developer
2. Web Designer (UI/UX)
3. Full Stack Web Developers

Programming Languages:

C,C++,Java

Web Technologies:

Frontend: HTML,CSS,JavaScript,Bootstrap, JQuery, AngularJS,ReactJS

Backend: Servlets, JSP, Spring Boot and Micro Services

Database : Oracle

Structure of HTML Page

Q: What is Web Page, Web Application and Web Site?

Web page or HTML page used to present data or information to client (OR) Web page is a front end which is used to communicate with back end.

Web Application is a collection of web resources,

1. Static resources □ html, images, audio, videos, ...
2. Dynamic resource server side programs (servlets,jsp,...)

Web site is place where web application is deployed or placed.

HTML is a markup language and it is collection of tags.

What is tag?

HTML present data/information using a special syntax called tag.

Tag is similar to keywords/reserved words in other language.

Tag is represented within angular brackets <tag-name>

Browser does not shows any error, if invalid tag or syntax in defining tag.

These tags are two types.

1. Paired tags
2. Unpaired tag

Paired tags are having beginning and end

Example: <h1> </h1>

Unpaired tags are having only beginning

Example:

HTML tags are parsed or rendered by HTML parser provided by browser.

Structure of HTML page

HTML page/document is divided into three sections.

1. Document Version
2. Head

3. Body

<!DOCTYPE>

<!DOCTYPE> is also called document type definition.

<!DOCTYPE> is used to define HTML version used to prepare HTML document.

Syntax of HTML5

<!DOCTYPE html>

This syntax tells the browser this document is prepared using HTML5 Version.

This tag is appeared top of the web page

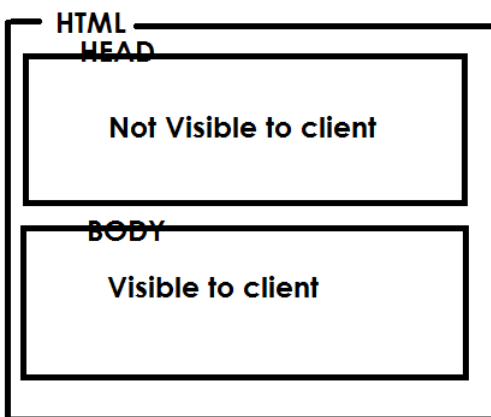
This tag is used by browser.

<html>...</html>

<html> is root tag of every webpage or web document

All other tags or elements are placed within <html> tag.

<html lang="en-US">



<HEAD>...</HEAD>

<head> tag is used to define meta data

<head> is called global scope/section.

Whenever webpage is loaded within browser, browser executes head section.

<head> is not displayed client.

The following are sub tags used within <head> tag.

1. Title
2. Style
3. Base
4. Script
5. Meta
6. link

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