Unit : 01
Chapter : 01 Fundamentals of
Web :
My Book
Page No
Date

Internet :- Interconnected Network is a WAN connecting millions of computing devices called hosts or end-systems.

. The internet, an abbreviation for INTERconnected NETwork, is a global network of network that facilitates data transfer and communication services.

. ARPANET (Advanced Research Project Agency Network), 1960s

- TCP/IP — 1970s
- WWW — 1990s

IP address
. 4 Octets or 32 bits
. Binary Decimal number
. 0 to 255

192.168.1.1 /24
Network   host   subnetting

DNS (Domain Name System)
. String that maps IP add
. Consts of TLD (.com)
                  SLD (.edu)
. Domain Name ———> Corresponding IP address

.

WWW world wide web.

Interconnected documents & other resources linked by hyperlinks & URL that are accessed over the Internet.

Various forms of data txt, img, video, audio etc.

Key components:

1. HTTP
2. HTML
3. URL

Web Browser

- Application software that extract info from internet & present it as a web page to the user.
- Uses HTTP protocol to request any info from web server.

Ex: google chrome, mojila firefox, microsoft edge, opera, Apple safari

- Other protocols HTTP, FTP, telnet, https, dns, MTA, MDA etc..

Web Servers

- It a computer that stores, processes, and delivers website files to web browser.

Web browser   Web server

HTTP request →

←

HTTP response

URL (Uniform resource locator)

Locat of web resource like

a website or file or webpage on internet.

Parts

protocol scheme: // hostname: port/path-
and - file - nam

Ex :

http://www.google.com.//y/file.html

Scheme :- http & ftp & mailto &
file.

Port :- default port is 80.

MIME

Multipurpose Internet Mail Extensions is
a specification's that helps different software
systems communicat with each other
over internet

Tells which type of data is been shared
Comprised as:

primary_type /subtype

Ex: text /html

image/jpg
audio/mp3
video/mp4

Internet Security

Measures taken to protect computer
systems & networks from unauthorized
acces.

Some measures are like firewalls, antivirus
(Kaspersky, panda, Avast), encryptⁿ etc

Web programming toolbox

1. HTML
2. To create HTML document.
   - HTML Editors
   - WYSIWYG Editors
3. Plug-ins and filters
4. XML
5. Javascript
6. Flash
7. PHP
8. AJAX
9. Servlets, Javaserver. Pages, and Javaserver faces.
10. Active server page .Net (ASP.NET)
11. Ruby and Ruby on Rails

Chapter : 02
Javascript and HTML Documents.

- Javascript is a programming language that is commonly used for creating interactive and dynamic elements on websites.
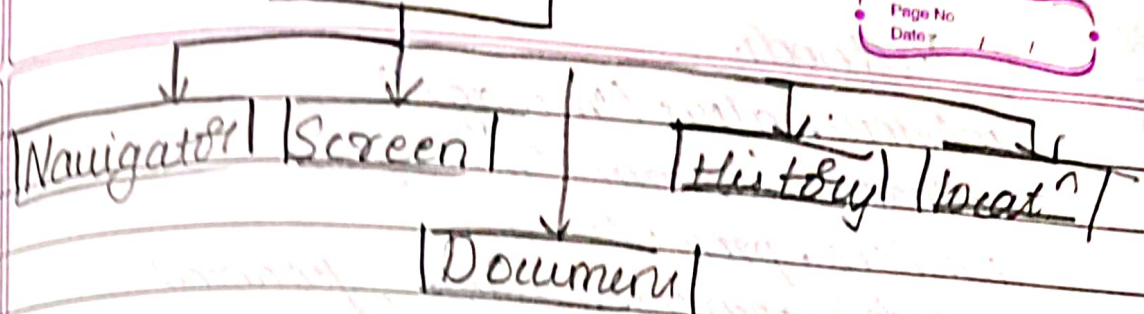- Used for enhancing user experience
- To create dynamic web pages.
- Embeded inside HTML code.
- Can be used as both client & server side scripting.
- Ex:- form validation, if there is a required cell which is not typed, the JS gives an alert msg saying its mandatory to fill the cell.

Window

Navigator Screen

History locat^

Document

Various window objects :-

Name	Example
Window	window.innerWidth
Screen	window.screen.width
Location	window.location.href
Navigator	window.navigator.userAgent
History	window.history.back()
Document	window.document.getElem...
Frames	window.Frames[0].document

Window object properties and methods.
- It also objects in their own way.
- If a global variable is defined it creates a new property.

Property	Examples
window.innerHeight	let i=window.innerHeight.
// .innerWidth	let co=window.innerWidth
.outerHeight	
.outerWidth	//try writing your
.screenX	
.screenY	own
.locat?.href	
.navigator.	
userAgent	

document . links
       · forms
        · styleSheets
         · documentElement
         · cookie

Document object methods

document . getElementById ("id")
document . getElementByTagName (tagName)
document . getElementByClassName ( )
document . createElement ( )
document . createTextNode (text)
document . appendChild ( )
document . removeChild (node)

Document Object Model (DOM)

· DOM is an application program interface (API) for HTML documents.
· It represent a document as a hierarchical tree of nodes, allowing developer to add, remove, and modify individual parth of web page

Levels of DOM

1. DOM0
2. DOM 1
3. DOM 2
4. DOM 3

document   root node

<html>   child node

<head>   <head>

<title>   siblings   <h1> <p> <table>

<th> <td> <td> <td>

leaf node