

Notes :- Web application Development

UNIT - I

* Introduction to Web Programming :-

- Web programming refers to the writing, markup and coding involved in web development which includes web content, web client and server scripting and network security.
- The Most Common Languages used for Web Programming are :-
 - XML
 - HTML
 - Javascript
 - PHP
- Web Programming, also known as Web development, is the creation of web applications.
- Examples of Web Applications :- social networking sites like facebook or e-commerce like Amazon.
- Web Programming allows you to turn a simple, static HTML page into a dynamic master piece.

- Web Programming can be briefly categorized into **client** and **server** coding.

Client Side needs Programming related to accessing data from users and providing information.

HTML5 and CSS3 supports most of the client-side functionality provided by other application frameworks.

Server Side The server side needs Programming mostly related to data retrieval, security and performance.

PHP, Java and MySQL are included in it.

* **Client Server Architecture** :-

A Client Server Architecture divides an application into two parts :-

client
Server

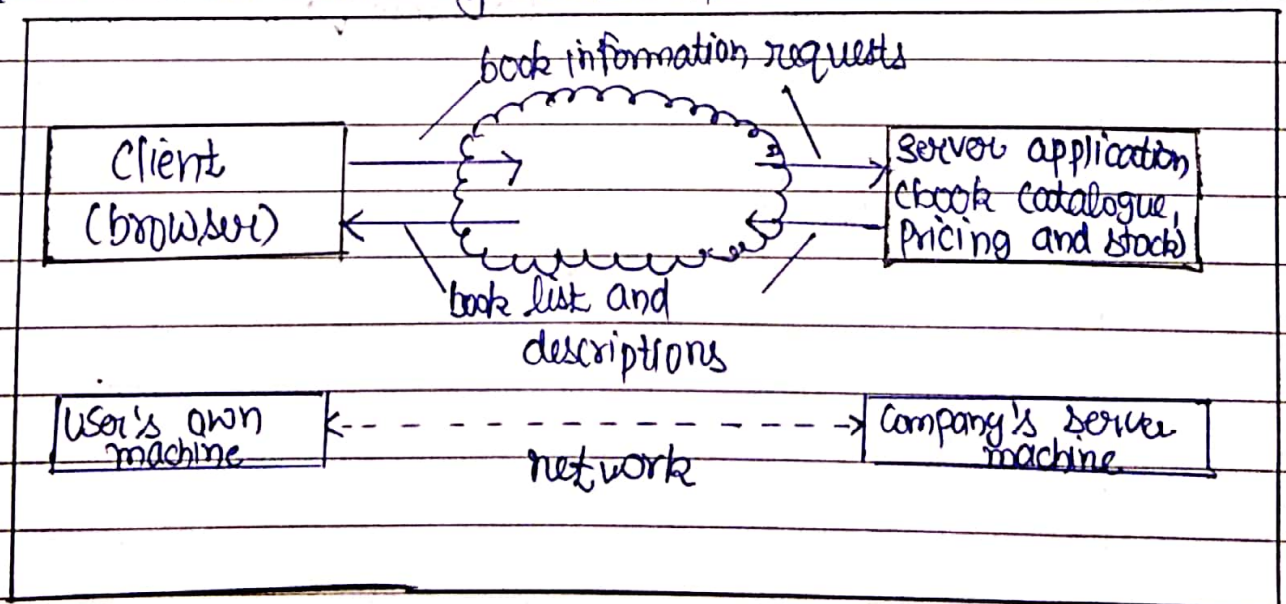
Server part of that architecture provides the central functionality i.e. any number of clients can connect to the server and request that it

Performs a task. The server accepts these requests, performs the required task and returns results to the client.

Example:- Consider, an online bookstore as an example.

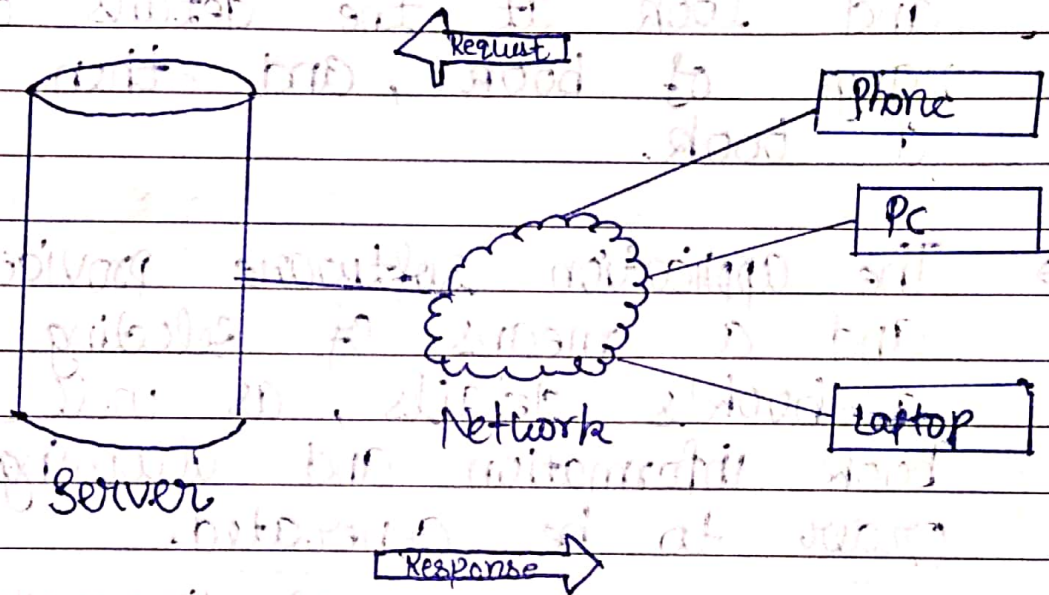
→ This application allows a user to search and look at the details of large range of books, and then to order a book.

→ The application software provides an interface and a means of selecting or finding a book's details, as well as displaying book information and allowing a book order to be generated.



→ In this client-server model, many clients can connect to the server applications and request information about books.

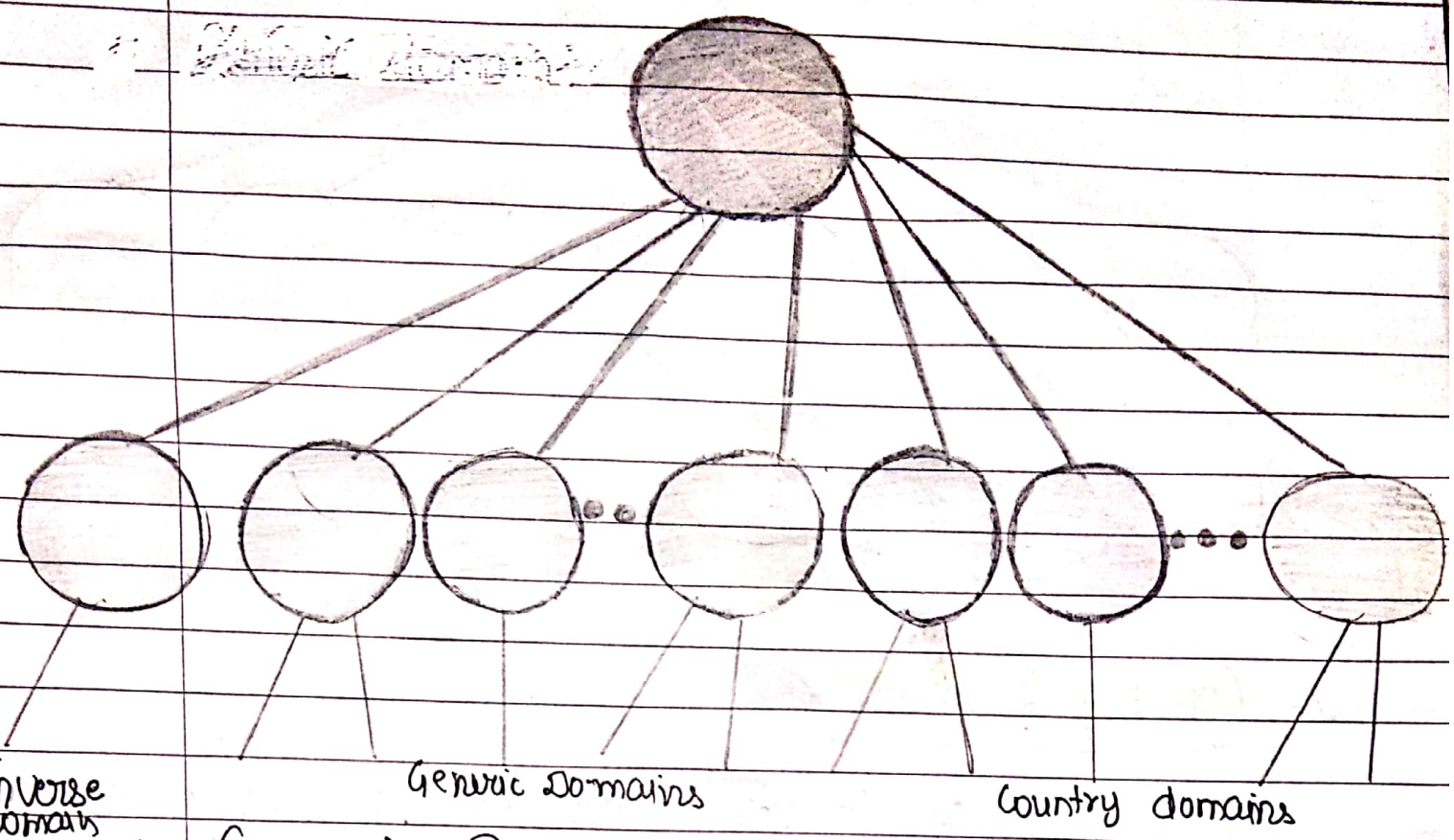
→ The server has to process these requests and send the response to the client the originated the request and not to any other clients.



* DNS :-

- DNS stands for Domain Name System.
- The Domain Name System (DNS) is the phonebook of the internet.
- Humans access information ^{online} through domain names, like facebook.com or amazon.in.
- DNS is a service that translates the domain name into IP addresses.
It allows the users of networks to utilize user-friendly names, instead of ~~have~~ remembering the IP address.
- For example :- Suppose site Amazon had an IP address of 205.251.252, most people would reach this site by specifying amazon.in. Therefore the domain name is more reliable than IP address.
- It is divided into three different sections:-
 - Generic domains.
 - Country domains.
 - Inverse domains.

Domain Hierarchy



Inverse domains

Generic domains

Country domains

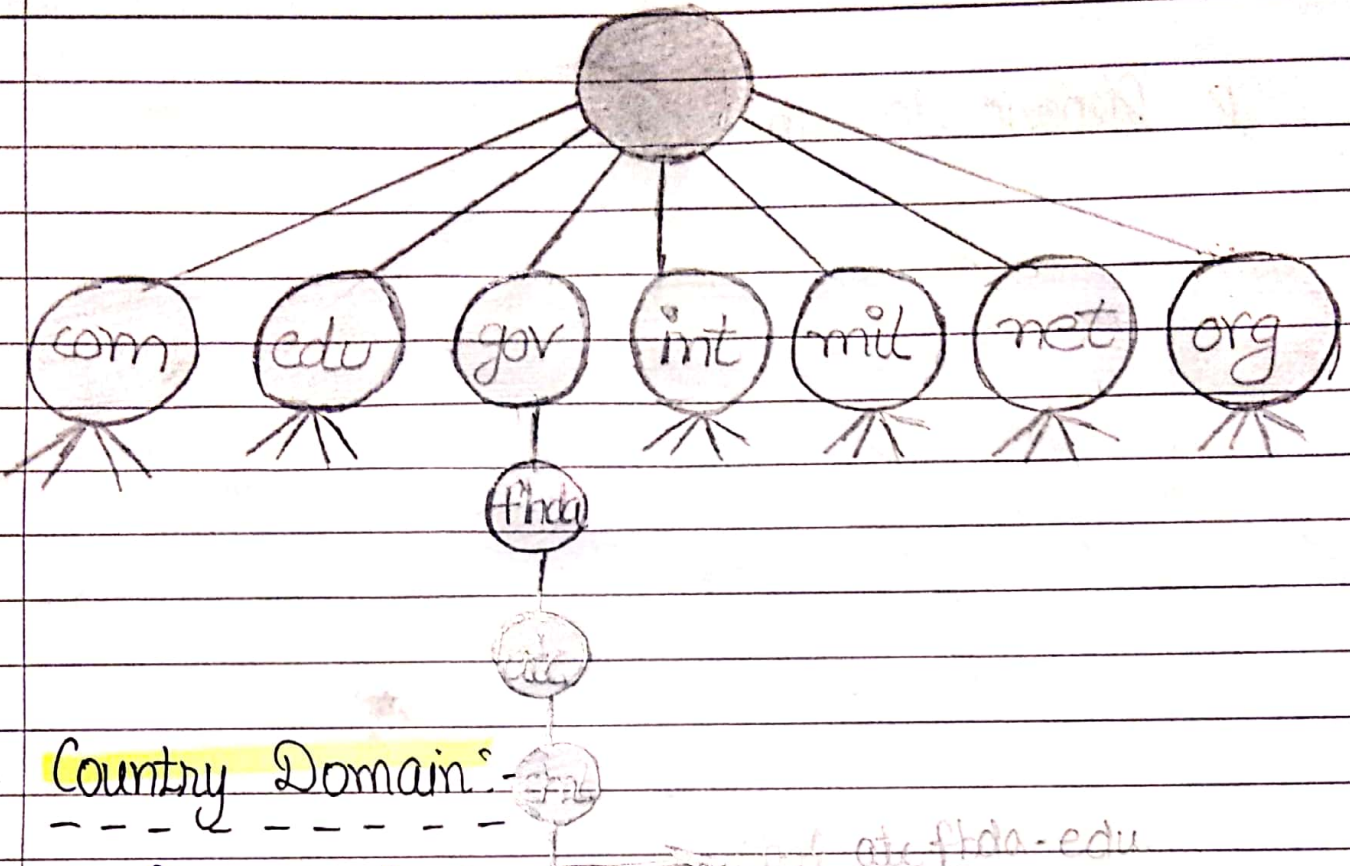
1. Generic Domain :-

The generic domain define registered hosts according to their generic behaviour.

- com (Commercial)
 - edu (educational)
 - mil (military)
 - org (Non Profit Organizations)
 - net (Network Support Centers)
 - info (information service Providers)
 - gov (Government institutions)
 - edu (educational institutions)
- all these are generic domains

ROOT LEVEL

— / — / —



2. Country Domain

The format of country domain is same as generic domain, but it uses two-character country abbreviations. e.g.:- us for United States

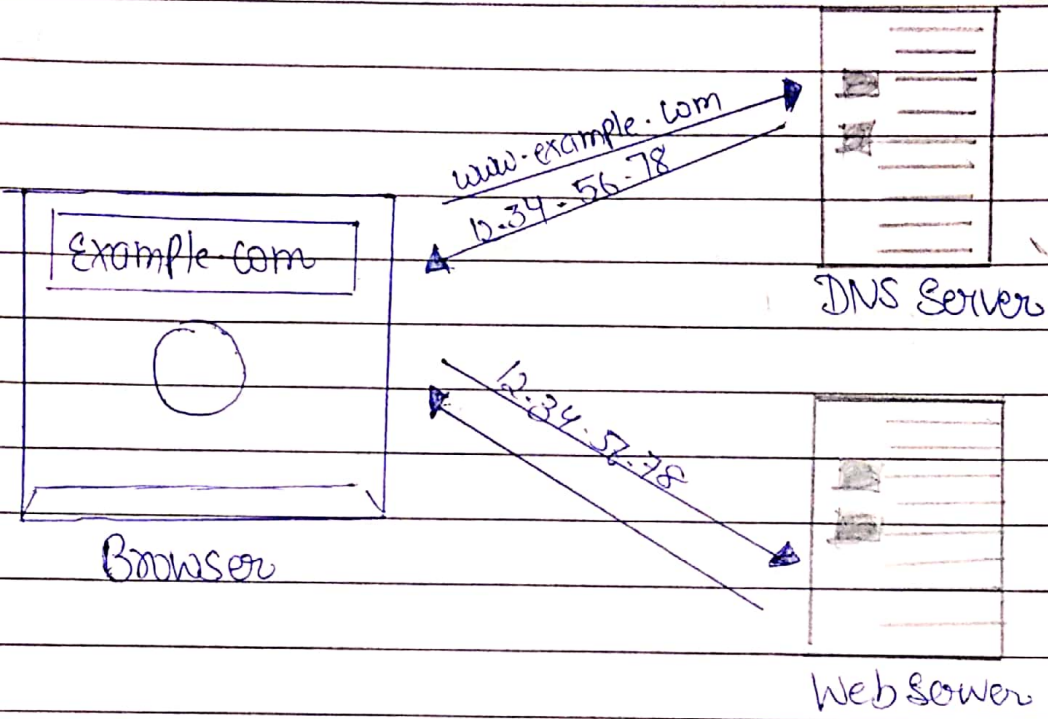
- in (india)
- us (United States)
- uk (United kingdom)
- jp (Japan)
- ca (Canada)
- hk (Hongkong)

3. Inverse Domain

The inverse domain is used for mapping an address to a name. When the server has received a request from the client, and the server contains the files of only authorized clients. → To determine whether the client is on the authorized list or not, it sends a query to the DNS server and ask for mapping an address to the name.

HOW DNS WORKS:-

DNS Like your smartphone's contact lists, which matches people's names with their phone numbers and email addresses.



→ Server that work together to provide IP address of the requested website to web browser.

* Difference Between HTML and HTML5

HTML:- Stands for "Hyper-Text Markup Language"

→ It is used to design web pages using a markup language.

→ HTML is combination of HyperText and Markup Language.

→ HyperText defines links between the web pages.

→ Markup language is used to define the text document within tag which defines the structure of web pages.

HTML5:- HTML5 is the fifth version of HTML.

Many elements are removed or modified from HTML5.

HTML

HTML5

Def:- HTML (Hypertext Markup Language) is the standard markup language for creating, structuring, displaying web pages

Def:- HTML5 is fifth and latest major version of HTML. It includes newly added tags and elements.

HTML

HTML5

- | | | |
|---|--|--|
| 1 | It didn't support audio and video without the use of Flash Player support. | It supports audio and video controls with the use of <audio> and <video> tags. |
| 2 | It works with all old browsers. | It supported by all new browsers like Mozilla, Chrome, Safari etc. |
| 3 | Older version of HTML are less mobile friendly. | HTML5 is more mobile friendly. |
| 4 | Elements like nav, header were not present. | New elements for web structure like nav, header, footer etc. |
| 5 | Doctype Declaration in html is too long. | The Doctype declaration in html5 is very simple. |

HTML

HTML5

6. It does not allow Javascript to run in browser.

6. It Allows Javascript to run in background

7. It can not handle in accurate syntax.

7. It is capable of Handling inaccurate syntax.

8. It not supported Drag and Drop effects.

8. It Supports Drag and Drop effects.

9. Shape Like Circle, Rectangle, Triangle etc.

9. Shapes like Circle, Rectangle, etc.

10. Structure

10. Structure:-

