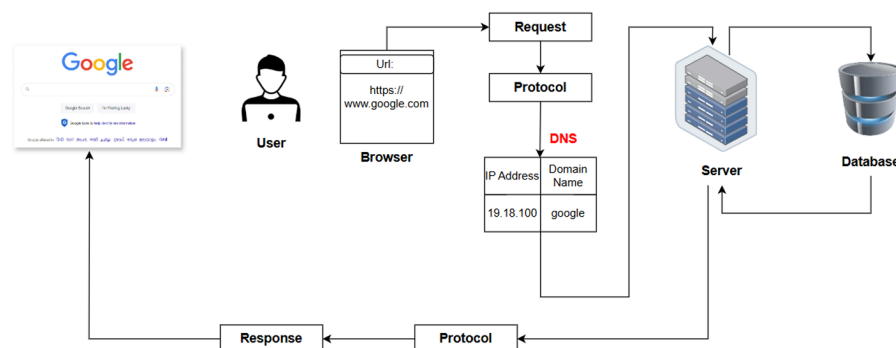# Introduction to HTML

1. Working of Web: →

    a. When you enter something like google.com the request goes to one of many special computers on the internet known as **Domain Name Servers (DNS).**

    b. All these requests are routed through various routers and switches.

    c. The domain name servers keep tables of machine names and their IP addresses, so when you type google.com it gets converted into a number, which identifies the computers that serve the google website to you.

2. Static and Dynamic Web Pages: →

    a. Static Webpages:

        i. A static website contains web pages with fixed content.

        ii. User Interaction is comparatively less.

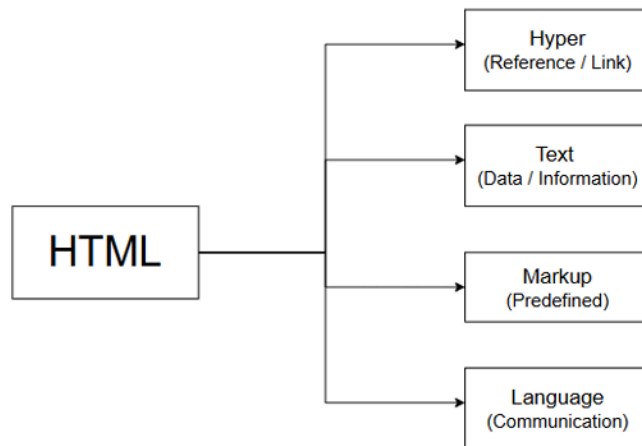   iii. That means it displays the same layout and content every time.

iv. We can create static webpages with the help of HTML and CSS.

v. It does not require the database.

vi. It is simple to design.

vii. It takes very less time for loading the content.

viii. Development cost is minimum.

ix. Examples: Wikipedia, Blog Websites, Newsletter Contents, etc.

b. Dynamic Webpages:

i. A dynamic website contains information that changes depending on the viewer or user.

ii. User interaction is more which can reflect on their network.

iii. It provides a mix of content and designs as per the user's preference.

iv. We can create dynamic webpages with the help of Javascript, PHP, servlets, etc.

v. It requires the database connection to fetch the data from the database.

vi. It is complicated to design.

vii. It takes more time than a static website for loading the content.

viii. Development cost is more because we have to maintain each of the webpage separately.

ix. Examples ⇒ Social Media Platforms, e-commerce sites, etc.

3. What is HTML?

    a. HTML stands for Hyper Text Markup Language.

    b. HTML is used for developing the structure of webpage.

    c. HTML file has extension **.html or .htm**

    d. HTML files can be created by using simple text editors.

```
                              ┌──────────────────────┐
                         ┌───▶│        Hyper         │
                         │    │  (Reference / Link)  │
                         │    └──────────────────────┘
                         │    ┌──────────────────────┐
                         ├───▶│        Text          │
  ┌──────────┐           │    │ (Data / Information) │
  │   HTML   │───────────┤    └──────────────────────┘
  └──────────┘           │    ┌──────────────────────┐
                         ├───▶│       Markup         │
                         │    │    (Predefined)      │
                         │    └──────────────────────┘
                         │    ┌──────────────────────┐
                         └───▶│      Language        │
                              │   (Communication)    │
                              └──────────────────────┘
```

4. History of HTML: →

    a. Tim Berners Lee is known as the father of HTML.

    b. The first available description of HTML was a document called as "*HTML Tags*" proposed by Tim late **1991**.

    c. The latest version of HTML is **HTML5**.

5. Versions of HTML: →

    a. HTML 1.0 ⇒ (1993)

        i. The first version of HTML was 1.0 which was barebones version of HTML language and it was released in 1993.

ii. In this first version they have just introduced structuring elements like headings , paragraphs , images and list .

iii. And also provide the basic font support.

b. HTML 2.0 ⇒ (1995)

i. This was the first next version which was released in 1995.

ii. HTML 2.0 was able to support extra features such as form-based simple text boxes and buttons.

iii. And also they have provided a simple table structure.

c. HTML 3.2 ⇒ (1997)

i. HTML 3.2 version was published in early 1997.

ii. This version was capable of creating tables and upgraded form elements like more interactive & dynamic for user.

iii. Also they have provided the CSS support.

iv. It supports extra features of images.

d. HTML 4.01 ⇒ (1999)

i. HTML 4.01 version was released in 1999.

ii. In this version they provide the CSS file linking with the help of ‹link› tag.

iii. They introduced some new tags like ‹fieldset›, ‹header›, ‹footer›, etc.

iv. Also they work on table enhancement by introducing colspan & rowspan.

e. HTML 5 ⇒ (Initial-2008, Final-2014)

    i.   HTML 5 is the newest version of Hyper Text Markup Language.

    ii.   The final official version of HTML5 was released on **October 28, 2014** by the **World Wide Web Consortium (W3C)**.

    iii.   **First public draft:** January 22, 2008

    iv.   **Final W3C Recommendation (official standard): October 28, 2014**

    v.   They introduced multimedia tags like ‹audio›, ‹video› tags.

    vi.   Along with this they put some tags under the semantic tag.

6. **How can we make Web Applications?**

    a. We can create a web applications for that we need 3 technologies are as follows:

        i.   HTML

        ii.   CSS

        iii.   Javascript