

Introduction to HTML

Programs : Collection of Instructions

Collection of Programs makes a single "Application"

Applications :-

1. Desktop Applications

- An Application which runs on single computer or in a single network

Example : Git bash, vlc Media Player, Org Chat applications, Supermarket Application

- Intranet Application

2. Mobile Applications

- Which runs on Mobile Devices

3. Web Applications

- Which runs on the browser (Chrome,Firefox,Opera,Safari,IE)
- Internet Application
- Global Applications

Brief Introduction to Web Technologies:-

Web Application - Collection of Web Pages

Web Pages -

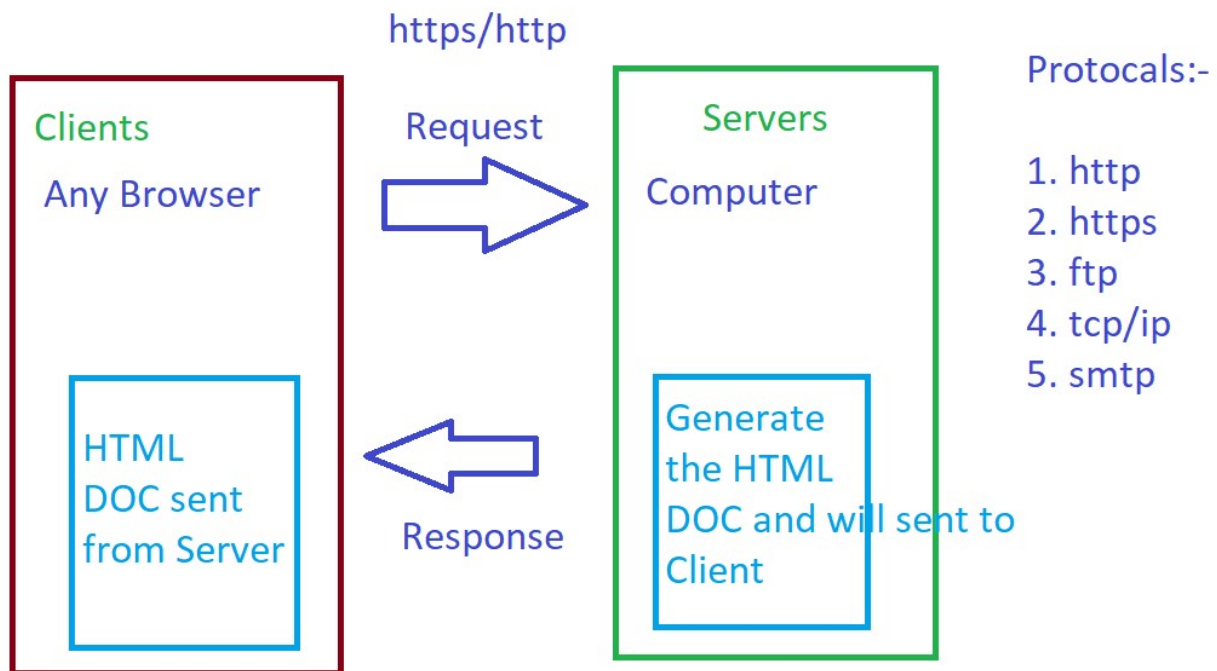
1. Static Web Page

- Content of the web page does not change anytime
- About Us, Contact Us, and Wiki
- Can be developed by HTML and CSS

2. Dynamic Web Page

- Content of the web page its keep on changes
- Insta Feed, Job Portal , Login , Registrations and etc...
- Can be developed by Java, .Net, Python,Node Js, Angular and etc...

Client and Server architecture:-



Protocol : Set of Instructions

Http : hypertext transfer protocol

Https : hypertext transfer protocol security

Ftp : File transfer protocol

Ip : internet protocol

Tcp: Transmission protocol

Smtp : Simple mail transfer protocol

For the request and response will use http and https protocol these protocols are stateless protocols. It does not store any value in the web browser.

In the case of Client and Server Architecture, Client are the browsers and Server is huge computers which presents on remote places

These computers are used to communicate with other devices like (mobile, Laptop, Desktop etc...)

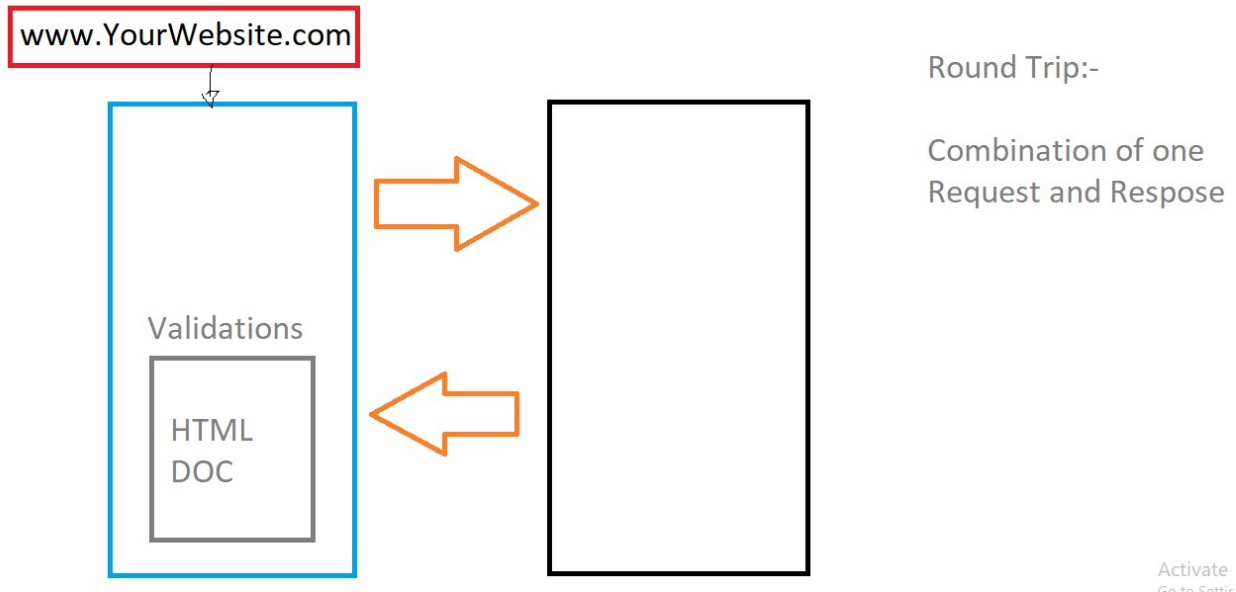
Scripting:-

1. Client Side Scripting
2. Server Side Scripting

Client Side Scripting:-

If the client is validating the web page then it comes under Client side scripting

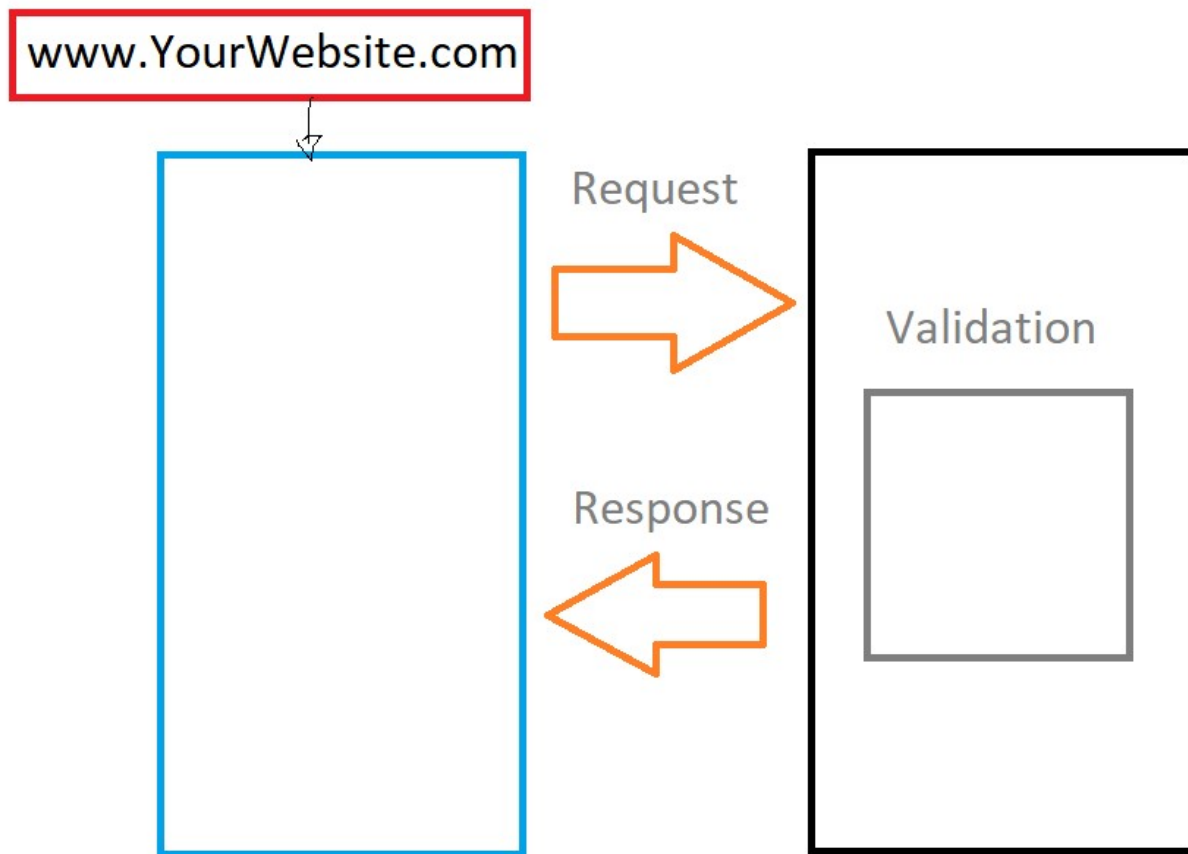
Example : Java script, jQuery, React JS and etc...



Server Side Scripting:-

If the server is able to validate the web page then it would be server side scripting

Examples:- Java(jsp), Python(Django), .Net(Asp.net, Asp.net MVC) and etc....



At the end of this, You need to understand the importance of HTML , CSS and Javascript
Also you need to understand the importance of Angular, React JS

Home Work :

- 1. You need to research on Web Services (SOAP,JSON,REST)
this will be used most of the time in API Communication**

Let's Get starts with HTML

1. HTML - HyperText Markup Language
2. HTML is used to create the static web pages
3. HTML is used to describe the Structure of Web page

Basic HTML Structure

```
<!DOCTYPE html>
<html>
  <head>

  </head>
  <body>

  </body>
</html>
```

Tags, Elements and Attributes


Tag : Sometimes it has open and Close, Some tags have only one tag.

<tagName> -- OPEN
</tagName> -- CLOSE

<tagName /> -- OPEN and CLOSE

Element :

 <h1> Some Content Here </h1> 



Attributes:

Property + Value

<h1 color="red">Content</h1>

Attribute

![Diagram showing HTML tag attributes. The first tag is <h1 color='red'>Content</h1>. A blue box highlights 'color=](SomeImageName)

Different of Tags of HTML

Image 1

```
<!DOCTYPE html>
<html>
  <head>
    <title>First Page</title>
  </head>
  <body>
    Dhyanahita <br />
    Full Stack Development <br />
    HTML and CSS <br />
  </body>
</html>
```

Image 2

```
<!DOCTYPE html>
<html> +
  <head>
    <title>First Page</title>
  </head>
  <body>
    <p>Dhyanahita </p>
    <p>Full Stack Development </p>
    <p>HTML and CSS </p>
  </body>
</html>
```


Image 3

```
<!DOCTYPE html>
<html>
  <head>
    <title>Demo on Html Elements</title>
  </head>
  <body>
    <h1>Heading </h1>
    <h2>Heading </h2>
    <h3>Heading </h3>
    <h4>Heading </h4>
    <h5>Heading </h5>
    <h6>Heading </h6>
  </body>
</html>
```

Image 4

```
<!DOCTYPE html>
<html>
  <head>
    <title>Hyper Links</title>
  </head>
  <body>
    <a href="Demo1.html" target="_blank">Click Here</a> <br />
    <a href="https://www.google.com/" target="_self">Google Site</a>
  </body>
</html>
```

Will open in next tab

Will open in sam tab⁺

Image 5

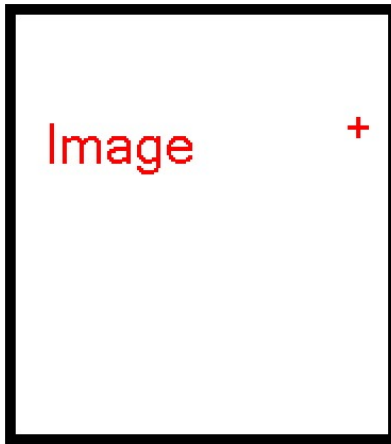
```
<!DOCTYPE html>
<html>
  <head>
    <title>Hyper Links</title>
  </head>
  <body>
    <!-- Comment Lines -->
    <!-- blank -- Open the doc in the next tab
    self -- Open the doc in the same tab
    -->
    <a href="Demo1.html" target="_blank">Click Here</a> <br />
    <a href="https://www.google.com/" target="_self">Google Site</a>
  </body>
</html>
```

Image 6

```
<!DOCTYPE html>
<html>
  <head>
    <title>Images</title>
  </head>
  <body>
    <!-- Either we can use px and % format -->
    

    
  </body>
</html>
```

Assignment 1



Navigation has to happen

HyperLink



Solution

```
<!DOCTYPE html>
<html>
  <head>
    <title>Image Navigation</title>
  </head>
  <body>
    <a href="Demo2.html"></a>
    <a href="Demo1.html"><p>Hyper Link</p></a>
  </body>
</html>
```

Image 7

```
<!DOCTYPE html>
<html>
  <head>
    <title>List tags</title>
  </head>
  <body>
    <!-- List tags are of two types
    1. Ordered List    -- ol
    |   1.1 Type of ol -- A, a, i, I
    2. Unordered List -- ul
    -->
    <ol type="A">
      <li>List 1</li>
      <li>List 2</li>
      <li>List 3</li>
    </ol>
    <ul>
      <li>List 1</li>
      <li>List 2</li>
      <li>List 3</li>
    </ul>
  </body>
</html>
```

Image 8

```
<!DOCTYPE html>
<html>
  <head>
    <title>table Tags</title>
  </head>
  <body>
    <table border="2">
      <tr>
        <th>Heading Tag</th>
        <th>Heading Tag</th>
      </tr>
      <tr>
        <td>Some Content Here</td>
        <td>Some Content Here</td>
      </tr>
      <tr>
        <td colspan="2" align="center">
          Some Content Here
        </td>
      </tr>
    </table>
  </body>
</html>
```

```

<!DOCTYPE html>
<html>
  <head>
    <title>table Tags</title>
  </head>
  <body>
    <table border="2">
      <thead>
        <tr>
          <th>Heading Tag</th>
          <th>Heading Tag</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Some Content Here</td>
          <td>Some Content Here</td>
        </tr>
        <tr>
          <td colspan="2" align="center">
            Some Content Here
          </td>
        </tr>
      </tbody>
      <tfoot>
        <tr>
          <td colspan="2" align="center">Footer of the Table</td>
        </tr>
      </tfoot>
    </table>
  </body>
</html>

```

Image 9

```
<!DOCTYPE html>
<html>
  <head>
    <title>Div tags</title>
  </head>
  <body>
    <div>
      <h1>Some Content Here</h1>
    </div>
    <div>
      <h1>Some Content Here</h1>
    </div>
  </body>
</html>
```