

# Module 1 (Notes)

## Module 1.1

### What is Internet and how it works?

A vast network that connects a system to all over the world, through which systems can communicate with each other.

A computer which accesses the internet is a client.

A computer which helps client to access resources and data from the internet are called servers.

### What happens when we search a website.

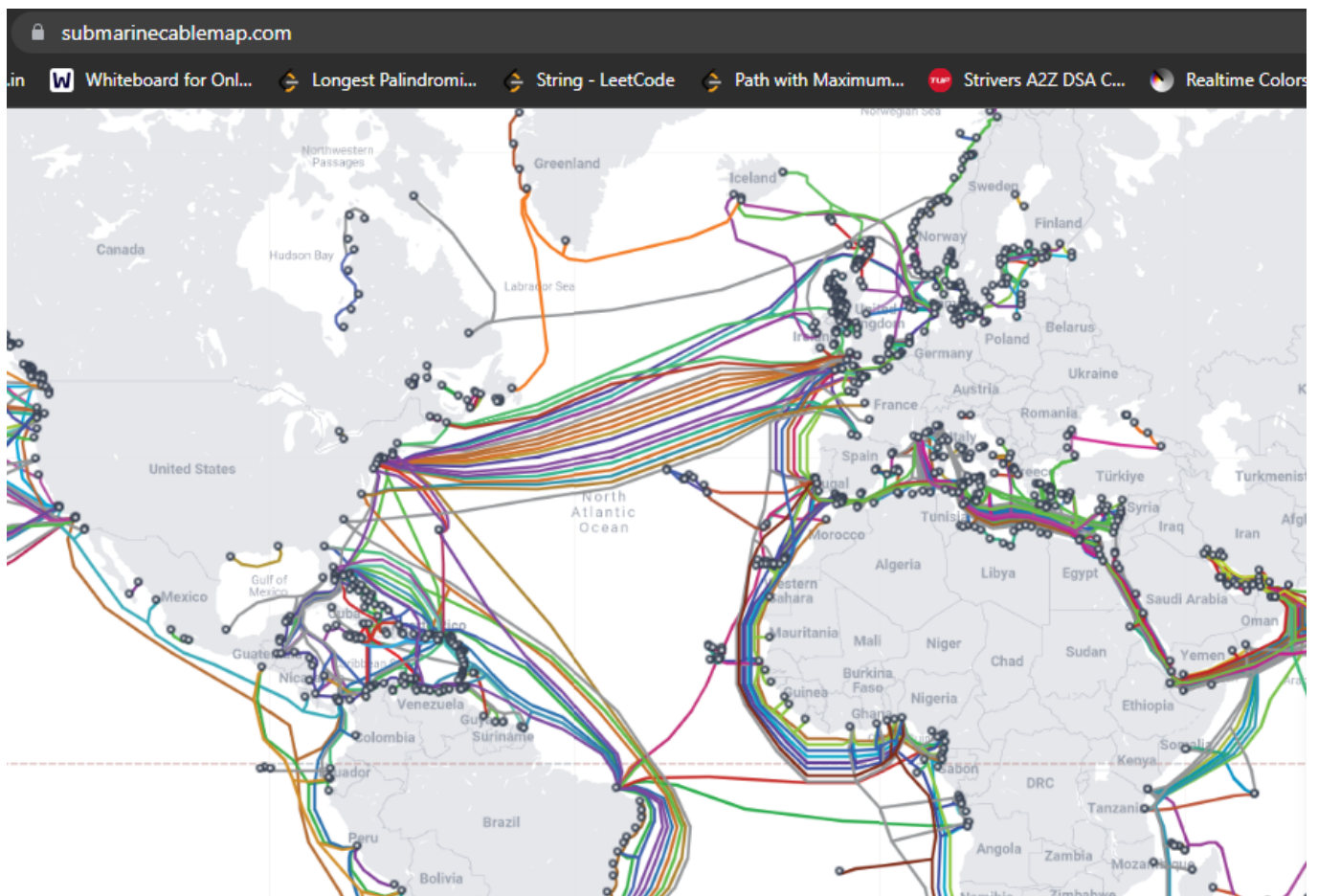
When we type a website name from the client computer, then the req is sent to our Internet service provides (ex. Jio, Airtel) and then ISP sends the req to DNS (Domain name system) which is just like a phone book, which keeps track of all the website and their IP addresses and then DNS finds the right IP of the website we req and sends back to ISP, then ISP searches for that IP over the internet and thats how we access a website.



Check Out [nslookup](#) to find IP of any website

### How all countries are connected to internet ?

via under sea cables (massive fiber optic cables)



source : [submarinecablemap](https://submarinecablemap.com)

## Module 1.2

### How a website is rendered ?

When we type lets say `www.google.com` what really happens after the ISP, DNS. thing is that the website that we types will send us all data of its webpage, i.e. 3 types of files `html`, `css`, `js`

and then using a browser, all of the 3 files gets loaded 1 by one and at last we see the complete website.

## Module 2 (Notes)

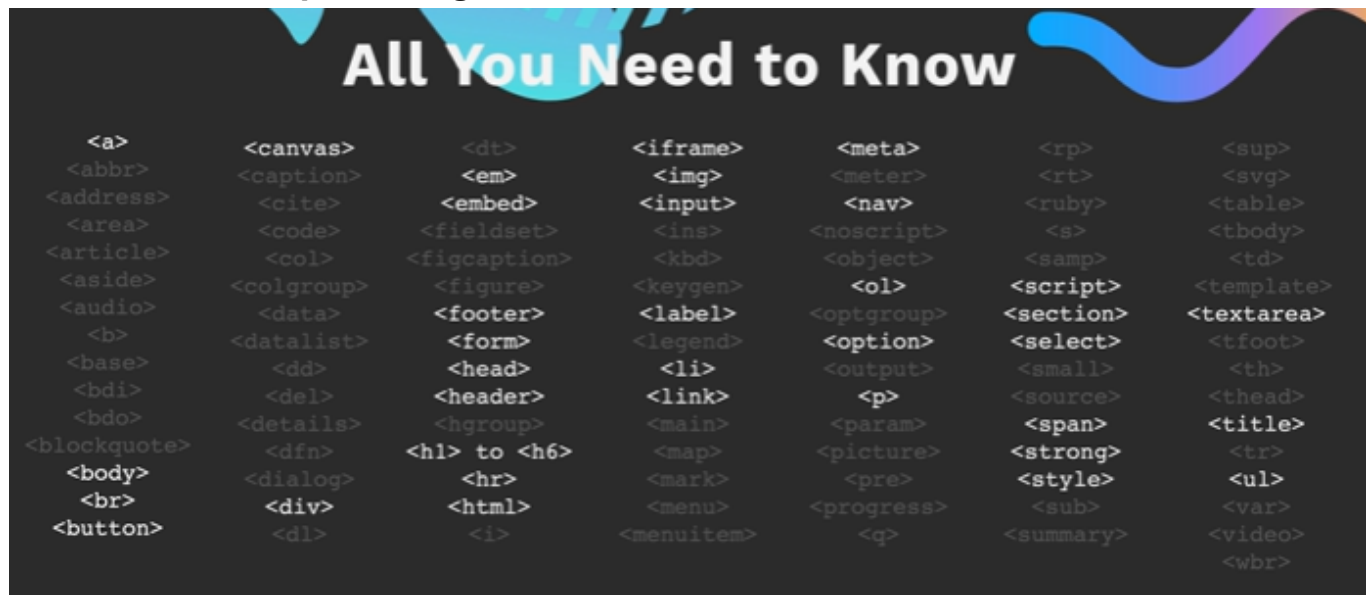
### Module 2.1

#### HTML

Hyper Text Markup Language, where Hyper Text means a text which links to some other part or text, where as Markup is used to tell user/ reader that something is imp

or highlighted (which we do using html tags).

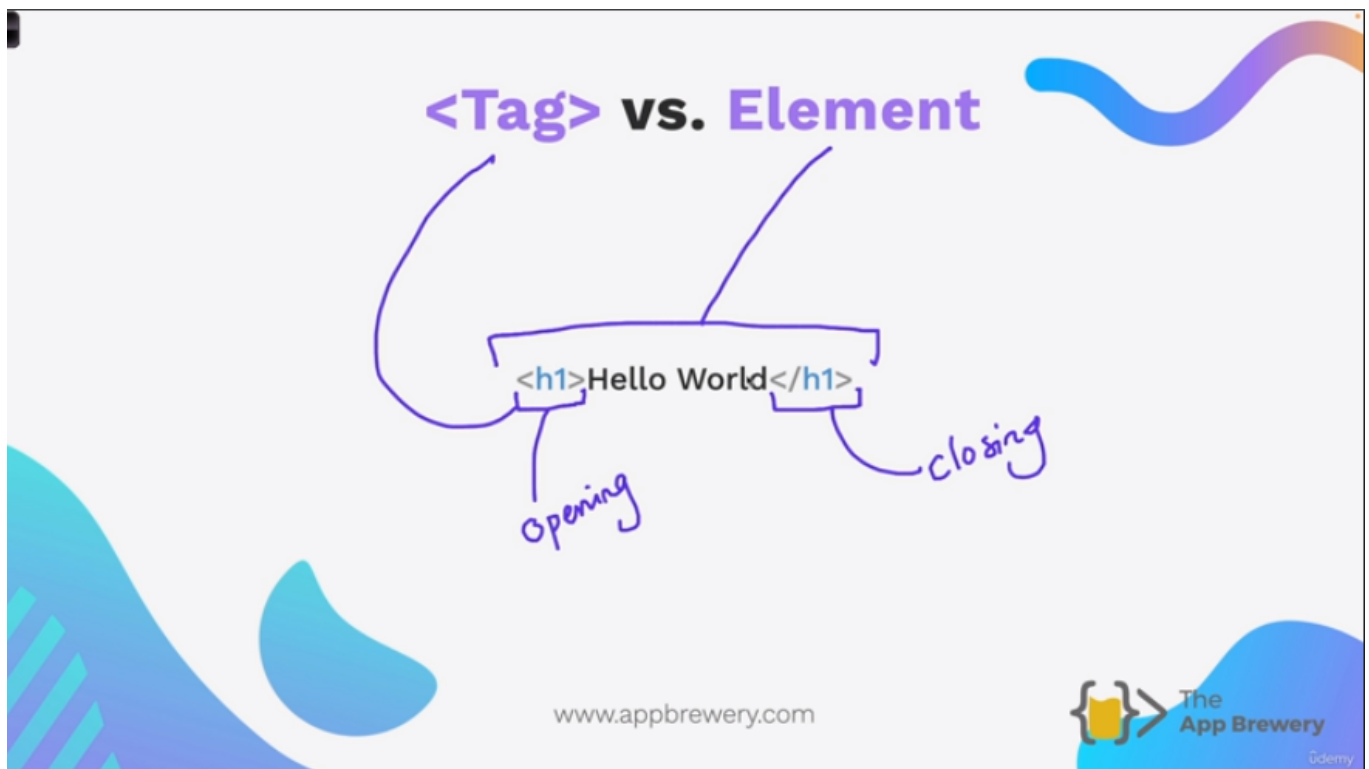
**Some of most imp html tags :-**



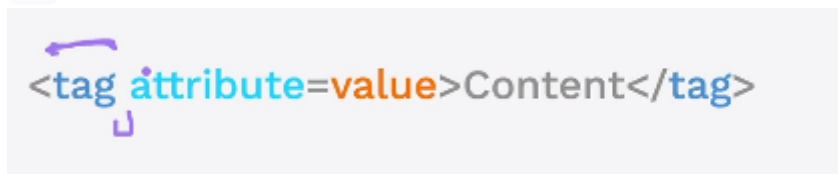
## Module 2.2

### Difference between HTML tags, elements, attributes, values ?

- Tag is basically what's inside the angle braces `<>`
- Element is the complete part starting from opening tag till closing tag. `<> abc </>`
- Attribute is the property of a tag eg. `value="10" color="yellow"`
- value is the value of that property



`<>` are called angle brackets



## Heading Tag

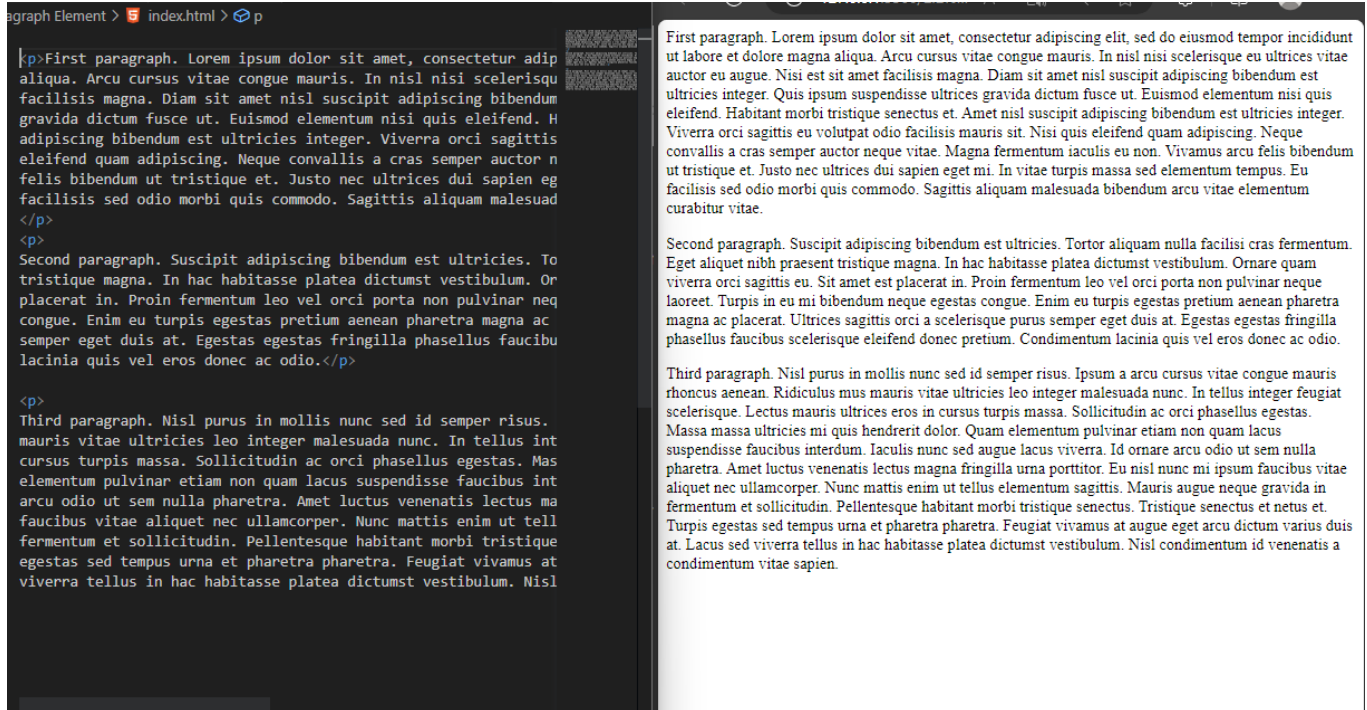
Heading's go from 1 to 6 where 1 is the max font size and 6 is the least font size.

```
<h1> Heading </h1> <!-- largest-->
<h2> Heading </h2>
<h3> Heading </h3>
```

## Paragraph Tag

a paragraph is a distinct section of a piece of writing, usually dealing with similar theme.

a new paragraph always starts in a new line.



## Module 2.3

### Void Elements ?

Void Elements are also called self ending elements ex.

<br /> break tag ends a line

<hr /> horizontal row tag creates a row horizontally

<img /> insert images

*note : it works even with and without /*

```
<h1>William Blake </h1>

<p>
17 south molton street <br/>
London <br>
W1K 5QT <br>
UK
</p>

<hr/>

<p>
William Blake (28 November 1757 – 12 August 1827) was an English
during his life, Blake is now considered a seminal figure in the
Age. What he called his "prophetic works" were said by 20th-cent
to its merits the least read body of poetry in the English langu
Jonathan Jones to proclaim him "far and away the greatest artist
placed at number 38 in the BBC's poll of the 100 Greatest Briton
for three years spent in Felpham,[5] he produced a diverse and s
imagination as "the body of God"[6] or "human existence itself".
</p>

<p>
Although Blake was considered mad by contemporaries for his idio
critics for his expressiveness and creativity, and for the philo
paintings and poetry have been characterised as part of the Roma
been said to be "a key early proponent of both Romanticism and N
the Church of England (indeed, to almost all forms of organised
ambitions of the French and American revolutions.[10][11] Though
maintained an amiable relationship with the political activist T
Emanuel Swedenborg.[12] Despite these known influences, the sing
The 19th-century scholar William Michael Rossetti characterised
forested by predecessors, nor to be classed with contemporari
successors".[14]</p>
```

## William Blake

17 south molton street  
London  
W1K 5QT  
UK

William Blake (28 November 1757 – 12 August 1827) was an English poet, painter, and printmaker. Largely unrecognised during his life, Blake is now considered a seminal figure in the history of the poetry and visual art of the Romantic Age. What he called his "prophetic works" were said by 20th-century critic Northrop Frye to form "what is in proportion to its merits the least read body of poetry in the English language". [2] His visual artistry led 21st-century critic Jonathan Jones to proclaim him "far and away the greatest artist Britain has ever produced". [3] In 2002, Blake was placed at number 38 in the BBC's poll of the 100 Greatest Britons. [4] While he lived in London his entire life, except for three years spent in Felpham, [5] he produced a diverse and symbolically rich collection of works, which embraced the imagination as "the body of God" [6] or "human existence itself". [7]

Although Blake was considered mad by contemporaries for his idiosyncratic views, he is held in high regard by later critics for his expressiveness and creativity, and for the philosophical and mystical undercurrents within his work. His paintings and poetry have been characterised as part of the Romantic movement and as "Pre-Romantic". [8] In fact, he has been said to be "a key early proponent of both Romanticism and Nationalism". [9] A committed Christian who was hostile to the Church of England (indeed, to almost all forms of organised religion), Blake was influenced by the ideals and ambitions of the French and American revolutions. [10][11] Though later he rejected many of these political beliefs, he maintained an amiable relationship with the political activist Thomas Paine; he was also influenced by thinkers such as Emanuel Swedenborg. [12] Despite these known influences, the singularity of Blake's work makes him difficult to classify. The 19th-century scholar William Michael Rossetti characterised him as a "glorious luminary", [13] and "a man not forestalled by predecessors, nor to be classed with contemporaries, nor to be replaced by known or readily surmisable successors". [14]

## Module 2.4

### Creating a collection of best movies

```
<h1>Collection of Great Cinema - by Yashasvi</h1>
<hr>
<h2>Movies :- </h2>

<ul>
<li>Intersteller</li>
<li>Inception</li>
<li>Tumbaad</li>
<li>Tenet</li>
<li>3 idiots </li>
<li>Gangs of Wasepur</li>
</ul>
```

## Collection of Great Cinema - by Yashasvi

### Movies :-

- Intersteller
- Inception
- Tumbaad
- Tenet
- 3 idiots
- Gangs of Wasepur

## Module 2.3

### What is a List tag ?

there are 2 types of lists

- ordered list
- unordered list

Ordered list items is in order (ranking starts from 1 by default)

Unordered list items are represented by bullets (default is a circular filled bullet)

<pre>&lt;ol&gt;   &lt;li&gt;Water&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ol&gt;  &lt;ul&gt;   &lt;li&gt;Water&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ul&gt;</pre>	brown.  1. Water 2. Milk  • Water • Milk
---	--

## How to change the default bullets styles of list items ?

there are 2 ways to do this for ordered lists :-

- 1. by setting `value` attribute to an int .
- 2. by setting `start` attribute to an int.

<pre>&lt;ol&gt;   &lt;li value="5"&gt;yes&lt;/li&gt;   &lt;li&gt;No&lt;/li&gt;   &lt;li&gt;True&lt;/li&gt; &lt;/ol&gt;</pre>	5. The universal selector targets all elements. 5. yes 6. No 7. True
--	---

and for unordered list :-

- 1. set `list-start-type = any style (in styling)`

<pre>&lt;ol start="3"&gt;   &lt;li&gt;Water&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ol&gt;  &lt;ul&gt;   &lt;li&gt;Water&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ul&gt;  &lt;style&gt;   ul{list-style-type: square;} &lt;/style&gt;</pre>	3. Water 4. Milk  ■ Water ■ Milk
--	--

## Nested List

```

<ul>
  <li>A</li>
  <li>B
    <ol>
      <li>B1</li>
      <li>B2
        <ul>
          <li>B2a
            <ul>
              <li>B2aa</li>
              <li>B2ab</li>
            </ul>
          </li>
          <li>B2b</li>
          <li>B2c</li>
        </ul>
      </li>
      <li>B3
        <ol>
          <li>B31</li>
          <li>B32</li>
        </ol>
      </li>
    </ol>
  </li>
  <li>C</li>
</ul>

```

- A
- B
  1. B1
  2. B2
    - B2a
      - B2aa
      - B2ab
    - B2b
    - B2c
  3. B3
    1. B31
    2. B32
- C

## Module 2.4

### What is an Anchor Tag and its attributes?

This tag defines a hyper link which is used to link pages with each other  
 its attributes are `href="www.google.com"` (used to link website or other webpages)  
 and `target="_blank"` which is used to open a new tab ones the link is clicked

attributes :-

```

href=""
target="_blank"
download (makes the link downloadable, usefull for pic and pdfs)

```

```

<a href="./part-1.txt" download>
  Click to download part-1.txt
</a>

```

[Click to download part-1.txt](#)

*note : When this above link is clicked the .txt file mentioned is downloaded*



# My top 5 Favourite Websites

1. [Product Hunt](https://www.producthunt.com/)
2. [Smash the Walls](https://smashthewalls.com/)
3. [Wordle](https://www.nytimes.com/games/wordle/index.html)
4. [Hacker Typer](https://hackertyper.com/)
5. [Stellarium](http://stellarium.org/)

```
<h1> My top 5 Favourite Websites </h1>

<ol>
  <li> <a target="_blank" href="https://www.producthunt.com/"> Product Hunt</a></li>
  <li> <a target="_blank" href="https://smashthewalls.com/"> Smash the Walls </a></li>
  <li> <a target="_blank" href="https://www.nytimes.com/games/wordle/index.html"> Wordle </a></li>
  <li> <a target="_blank" href="https://hackertyper.com/"> Hacker Typer</a></li>
  <li> <a target="_blank" href="http://stellarium.org/"> Stellarium</a></li>
</ol>
```

**Que - How to jump to a specific section on the same page using anchor tags?**

Ans - all we need to do is instead of inserting link, just put the `<a href="#id">` where this id is the id of the specific `<p>` or maybe the `<div>` tag that we are targeting  
*example :-*

```
html > ...

<a href="#part3"> Jump to Part3</a>

<p id="part3"> Part-3 <br>
Nulla quidem eaque dolores praesentium
facilis vero at? Voluptatibus fugiat veniam
architecto, optio ratione aliquam autem
impedit officiis libero dolore fugit
blanditiis dicta. Porro assumenda quibusdam
velit natus, fugit ut labore! Iure quam a
cupiditate similique beatae et ullam itaque
```

[Jump to Part3](#)

Part-3  
Nulla quidem eaque dolores praesentium  
vero at? Voluptatibus fugiat veniam  
ratione aliquam autem impedit  
fugit blanditiis dicta. Porro assumenda  
velit natus, fugit ut labore! Iure

## Module 2.5

## What is an Image `<img>` Element ?

image element is used to insert images into webpage. It is a void Element (self ending).

Here is a a Lorem Ipsum type website for images :- [picsum.photos](https://picsum.photos)

Just write `picsum.photos/size or seq in pixels`

eg.



source = <https://picsum.photos/300>

## Que - How to embed google maps into webpage ?

Ans :-

step1 : search for that location in google maps

step 2 : click on share

step 3 : go to embed link and copy the code, then paste this into `html`

