# Module 1) - Foundation

Do search for web-site, http, URL etc given topics in lecture.

- Website is a combination of web pages. There are so many websites on internet. i.e. <a href="https://www.tops-int.com">www.tops-int.com</a>
- HTTP is the protocol for transferring the hyper text
- URL is the method to find any website from all over internet network.

# **Module 2) Fundamentals of IT**

Do search for domain, hosting, SEO etc.

- Domain is the unique name of each website.
- Hosting is the platform to launch website.
- SEO stands for Search Engine Optimization. Which use to push up the website on Google.

# Module 3) HTML

## 1. Are the HTML tags and elements the same thing?

Ans. No, HTML tags are the basic tag to create main module of HTML, while elements includes start tag, it's content and an end tag.

#### Code:

This is an Element

- From the starting tag to ending tag is called as an element.
- is the Starting Tag and is the Ending Tag while "This is an Element" is the content.



## 2. What are tags and attributes in HTML?

Ans. HTML is used to maintain the HTML elements and attributes are used to maintain characteristic of an HTML element in detail.

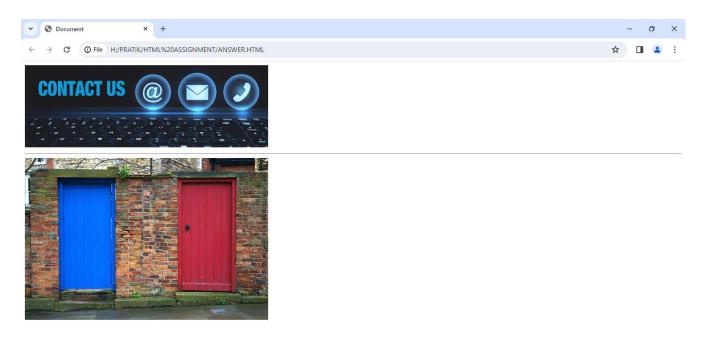
#### Code:



## 3. What are void elements in HTML? With Example.

**Ans.** Single tags are known as void elements which has no end tag. i.e. <br/> <hr>, <image> etc.

#### Code:



## 4. What are HTML Entities? With Example.

**Ans.** HTML entities is used to display reserved and invisible character. It's starts with & sign and ends with;

#### Code:



## 5. What are different types of lists in HTML? With Example.

**Ans.** There are three types of list in HTML

- 1. Ordered List OL [ Also known as Numbered List ]
- 2. Unordered List UL [ Also known as Bulleted List ]
- 3. Description List DL [ Also known as Definition List ]

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
   <style>
       .pc {
           background-color: brown;
           color: white;
           border: 2px solid black;
           width: 50%;
           margin: 20px; padding: 20px;
   </style>
   <style>
       .pc1 {
           background-color: blue;
           color: white;
           border: 2px solid black;
           width: 50%;
           margin: 20px;
                              padding: 20px;
   </style>
   <div class="pc">
       <h2>486 Computer</h2>
       <486 Computer was my first Computer in 1996.</p>
   </div>
   <div class="pc1">
       <h2>Core I5 Computer</h2>
       Core I5 Computer is my working Computer.
   </div>
   <div class="pc">
       <h2>Virtual Machine</h2>
       Virtual Machine is my Dream Machine
   </div>
</body>
</html>
```



## 6. What is the 'class' attribute in HTML? With Example.

**Ans.** The class attribute state one or more class name for an element.

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
   <style>
       .pc{
           background-color: brown;
           color: white;
           width: 50%;
           margin: 20px;
           padding: 20px;
       .pc1{
           background-color: blue;
           color: white;
           width: 50%;
           margin: 20px;
           padding: 20px;
   </style>
   <div class="pc">
       <h2>486 Computer</h2>
       486 Computer was my first Computer in 1996.
   <div class="pc1">
       <h2>Core I5 Computer</h2>
       Core I5 Computer is my working Computer.
   </div>
   <div class="pc">
       <h2>Virtual Machine</h2>
       Virtual Machine is my Dream Machine
   </div>
</body>
</html>
```



7. What is the difference between the 'id' attribute and the 'class' attribute of HTML elements? With Example.

#### Ans.

Id	Class
id's are unique.	Classes are not unique
id attribute is used only with one	Class attribute is used with multiple
HTML element.	HTML element
id declared with # ( hash ) symbol	Class declared with . ( dot ) symbol

```
<!<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
   <style>
       .pc {
           background-color: brown;
           color: white;
          width: 50%;
          margin: 20px;
                            padding: 20px;
   </style>
   <style>
       .pc1 {
           background-color: skyblue; color: black;
           width: 50%;
           margin: 20px; padding: 20px;
   </style>
<body>
   <div class="pc">
       <h2>486 Computer</h2>
       486 Computer was my first Computer in 1996.
   </div>
   <div class="pc1">
       <h1 id="myheader">My Header</h1>
   </div>
   <div class="pc1">
       <h2 id="myheader">My Header</h2>
   </div>
</body>
```



## 8. What are the various formatting tags in HTML?

**Ans.** There are several types formatting tags in HTML.

#### Code:

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
   This is <b>Bold </b>Tag Example<br>
   This is <strong>Important </strong>Tag Example<br>
   This is <i>Italic </i>Tag Example<br>
   This is <em>Emphasized </em>Tag Example<br>
   This is <mark>Marked </mark>Tag Example<br>
   This is <small>Smaller </small>Tag Example<br>
   This is <del>Deketed </del>Tag Example<br>
   This is <ins>Insereted </ins>Tag Example<br>
   This is N<sup>2</sup> Superscript Tag Example<br>
   This is H<sub>2</sub>0 SubscriptTag Example<br>
</body>
</html>
```

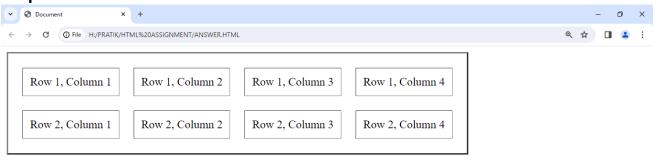
```
This is Bold Tag Examble
This is Important Tag Example
This is Emphasized Tag Example
This is Smalled Tag Example
This is Deleted Tag Example
This is Deleted Tag Example
This is Deleted Tag Example
This is Smalled Tag Example
This is Smalled Tag Example
This is Smalled Tag Example
```

## 9. How is Cellpadding different from Cellspacing? With Example.

**Ans.** Cellpadding is used to set space inside the cell and Cellspacing is used to set space outside the cell in Table. Effect of both are visible when Table Border is must greater than 0.

#### Code:

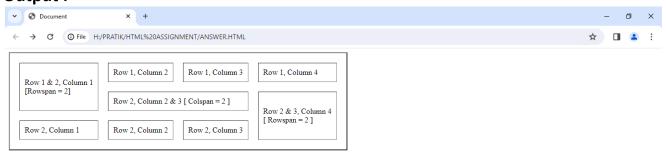
```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
<body>
  Row 1, Column 1
       Row 1, Column 2
        Row 1, Column 3
        Row 1, Column 4
     Row 1, Column 1
        Row 1, Column 2
        Row 1, Column 3
        <td>Row 1, Column 4</td>
```



- 10. How can we club two or more rows or columns into a single row or column in an HTML table? With Example.
- Ans. Rowspan is used to club two or more rows into a single row and Colspan is used to culb two or more column into a single column in HTML.

#### Code:

```
<!DOCTYPE html>
<html lang="en">1
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  Row 1 & 2, Column 1<br>[Rowspan = 2]
       Row 1, Column 2
       Row 1, Column 3
       Row 1, Column 4
     Row 2, Column 2 & 3 [ Colspan = 2 ]
       Row 2 & 3, Column 4 <br>[ Rowspan = 2 ]
     Row 2, Column 1
       Row 2, Column 2
       Row 2, Column 3
     </body>
</html>
```



#### 11. What is the difference between a block-level element and an inline element?

**Ans.** Block-level element always starts on a new line while inline element dose not start on a new line.

Block level elements occupy the space of whole row while Inline elements occupy the space of content.

#### Code:

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
</head>
      My mother has <span</pre>
              style="color:blue; background-color: yellow; font-weight:bold;">blue</span>
          eyes and my father has <span style="color:brown; background-color: skyblue;
          font-weight:bold;">brown</span>
          eyes.
   </h1>
      My mother has <span</pre>
              style="background-color:skyblue;font-weight:bold;">black</span>
          eyes and my father has <span style="color:blue; background-color:aquamarine;</pre>
          font- weight:bold;">blue</span>
          eyes.
</body>
</html>
```



## 12. How to create a Hyperlink in HTML? With Example.

Ans. Anchor tag is used with hypertext reference to create Hyperlink in HTML.

#### Code:

#### **Output:**

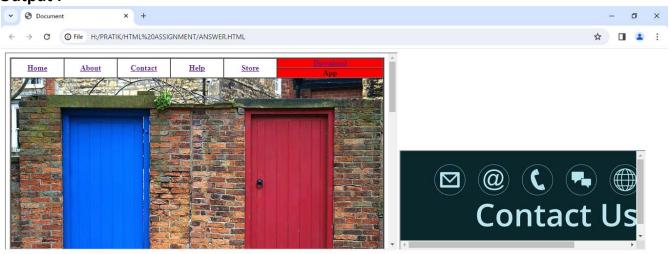


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## 13. What is the use of an iframe tag? With Example.

**Ans.** Iframe tag is used to create one or more iframe in a single window to show one or more HTML page in a single page.

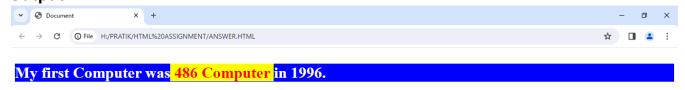
#### Code:



## 14. What is the use of a span tag? Explain with example?

**Ans.** Span tag is used to highlight any part of the text with font color or background color.

#### Code:



- 15. How to insert a picture into a background image of a web page? With Example.
- **Ans.** Background element is used in body tag to insert a picture into a background image of a web page.

#### Code:



#### 16. How are active links different from normal links?

**Ans.** Normal Link is a hyperlink which is not yet clicked by the user. By default the normal link will be in blue color with underline.

#### **Code of Normal Link:**

#### **Output of Normal Link:**

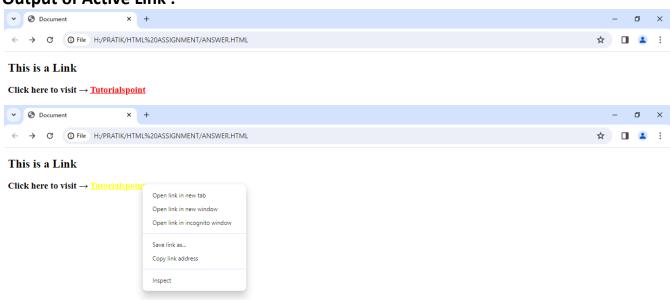


An **Active Link** is a type of hyperlink which is currently being interacted with the user. Whenever the user hold the mouse button on the link and not released yet or if right clicked on it, it will change its color in red.

#### **Code of Active Link:**

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
   <style>
       a:hover {
           color: red;
           background-color: transparent;
           text-decoration: underline;
       a:active {
           color: yellow;
           background-color: transparent;
           text-decoration: underline;
   </style>
</head>
   <h2>This is a Link</h2>
   <h3>Click here to visit → <a href="https://www.tutorialspoint.com/">Tutorialspoint</a>
</body>
```

#### Output of Active Link:



## 17. What are the different tags to separate sections of text?

**Ans.** We separate a section of texts in HTML using the below tags:

- <br> tag It is used to separate the line of text. It breaks the current line and shifts the flow of the text to a new line.
- tag-This tag is used to write a paragraph of text.
- <blookquote> tag-This tag is used to define large quoted sections.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <blookquote>
          Lorem ipsum dolor sit, amet consectetur adipisicing elit. Maiores hic, consectetur tenetur reprehenderit
           quasi incidunt, excepturi enim corporis, similique voluptas minima eaque. Dolore tempore accusantium maxime
           ipsum! Ratione, deserunt libero! Aspernatur impedit cum, eaque veritatis provident doloribus dignissimos
           odit voluptate corrupti corporis quasi in reprehenderit molestiae aut, ipsam similique? Placeat odit ad
           alias incidunt ipsa at porro odio suscipit reprehenderit similique quasi dolorum eum, earum autem,
           laboriosam deserunt amet itaque corporis. Maxime sint sunt pariatur ab tempora laboriosam quis ipsam
           necessitatibus! <br>>Voluptatum qui rerum quia ab autem accusantium, animi repudiandae odit facilis
           ullam minima deleniti aspernatur quis quo dolorum similique, reprehenderit eaque error! Dicta minima laborum
           blanditiis commodi autem tenetur sed porro facilis, aliquid excepturi labore quam corrupti quisquam velit
           repellendus voluptatum corporis quasi quo dolorem ullam perferendis maxime! Perspiciatis quasi quas, eius,
           distinctio, voluptas earum delectus illum vitae ducimus molestiae fuga. Qui quod minima cumque voluptates
           fugit ratione laboriosam nam minus laudantium illo. <br><br>>br>Officia perferendis molestiae iste, dicta esse
           voluptates suscipit ut autem harum, obcaecati iusto alias pariatur molestias est corporis ullam! Quae a
           mollitia quam esse, pariatur quod maiores repudiandae atque quaerat quos obcaecati quasi cupiditate natus
           possimus quis magnam minus laudantium. Odit recusandae consequuntur facilis officia esse vel, fuga error
           exercitationem! Dicta sint et quibusdam voluptas, pariatur dolorem tempora repellendus quae quam officia
           nihil, aspernatur cumque numquam aliquid in neque! Rem minima deserunt omnis hic possimus minus obcaecati
           deleniti? Unde, numquam aspernatur ratione, possimus ducimus blanditiis delectus, explicabo repudiandae iste
          doloribus quae animi?
          </blockquote>
</body>
</html>
```

#### Output:



Lorem ipsum dolor sit, amet consectetur adipisicing elit. Maiores hic, consectetur tenetur reprehenderit quasi incidunt, excepturi enim corporis, similique voluptas minima eaque. Dolore tempore accusantium maxime ipsum! Ratione, deserunt libero! Aspernatur impedit cum, eaque veritatis provident doloribus dignissimos odit voluptate corrupti corporis quasi in reprehenderit molestiae aut, ipsam similique? Placeat odit ad alias incidunt ipsa at porro odio suscipit reprehenderit similique quasi dolorum eum, earum autem, laboriosam deserunt amet itaque corporis. Maxime sint sunt pariatur ab tempora laboriosam quis ipsam necessitatibus!

Voluptatum qui rerum quia ab autem accusantium, animi repudiandae odit facilis ullam minima deleniti aspernatur quis quo dolorum similique, reprehenderit eaque error! Dicta minima laborum blanditiis commodi autem tenetur sed porro facilis, aliquid excepturi labore quam corrupti quisquam velit repellendus voluptatum corporis quasi quo dolorem ullam perferendis maxime! Perspiciatis quasi quas, eius, distinctio, voluptas earum delectus illum vitae ducimus molestiae fuga. Qui quod minima cumque voluptates fugit ratione laboriosam nam minus laudantium illo.

Officia perferendis molestiae iste, dicta esse voluptates suscipit ut autem harum, obcaecati iusto alias pariatur molestias est corporis ullam! Quae a mollitia quam esse, pariatur quod maiores repudiandae atque quaerat quos obcaecati quasi cupiditate natus possimus quis magnam minus laudantium. Odit recusandae consequuntur facilis officia esse vel, fuga error exercitationem! Dicta sint et quibusdam voluptas, pariatur dolorem tempora repellendus quae quam officia nihil, aspernatur cumque numquam aliquid in neque! Rem minima deserunt omnis hic possimus minus obcaecati delenti? Unde, numquam aspernatur ratione, possimus ducimus blanditiis delectus, explicabo repudiandae iste doloribus quae animi?

#### 18. What is SVG?

#### Ans.

- SVG stands for Scalable Vector Graphics.
- SVG defines vector-based graphics in XML format.
- SVG graphics are scalable, and do not lose any quality if they are zoomed or resized.
- SVG is supported by all major browsers.

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Document</title>
    <blookquote>
        <svg width="300" height="250" style="background-color:aqua ;"</pre>
xmlns="http://www.w3.org/2000/svg">
            <circle cx="150" cy="150" r="80" stroke="red" stroke-width="4" fill="pink" />
            <!-- left ear -->
            <circle cx="80" cy="50" r="40" stroke="blue" stroke-width="4" fill="skyblue" />
            <circle cx="220" cy="50" r="40" stroke="blue" stroke-width="4" fill="skyblue" />
            <!-- left eye -->
            <circle cx="120" cy="120" r="20" stroke="white" stroke-width="4" fill="gray" />
            <!-- left eye dot -->
            <circle cx="120" cy="130" r="5" stroke="black" stroke-width="4" fill="black" />
            <circle cx="180" cy="120" r="20" stroke="white" stroke-width="4" fill="gray" />
            <!-- right eye dot -->
            <circle cx="180" cy="130" r="5" stroke="black" stroke-width="4" fill="black" />
            <circle cx="150" cy="180" r="20" stroke="red" stroke-width="4" fill="red" />
</body>
</html>
```



#### 19. What is difference between HTML and XHTML?

Ans. HTML (Hyper Text Markup Language) and XHTML (Extensible Hyper Text Markup Language) are both markup languages used for creating and displaying web pages.

The main difference between them is the syntax and structure; HTML is more lenient in its syntax, while XHTML has a more strict syntax and follows XML rules.

The Most Important Differences from HTML

- <!DOCTYPE> is mandatory
- The xmlns attribute in <html> is mandatory
- <html>, <head>, <title>, and <body> are mandatory
- Elements must always be properly nested
- Elements must always be closed
- Elements must always be in lowercase
- Attribute names must always be in lowercase
- Attribute values must always be quoted
- Attribute minimization is **forbidden**



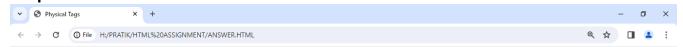
# 20. What are logical and physical tags in HTML? Ans.

**Physical Tag:** These tags are used to provide the actual physical formatting to the text.

For Ex. : <b>, <i>, <u>, <sub>, <sup> etc...

#### Code:

### **Output:**



## **Physical Tags**

Text without any formatting **GeeksforGeeks- This is Bold text** GeeksforGeeks- This is Italic text GeeksforGeeks- This is underlined text 1st H<sub>2</sub>O

**Logical Tag :** These tags are used to display the text according to the logical style. For Ex. : <blockquote> <del>, <ins>, , <strong> etc...

#### Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <h1> Logical Tags </h1>
   <blockquote cite="https://www.geeksforgeeks.org/">
   A Computer Science portal for geeks. It contains well written, well thought and well
   explained computer science and programming articles, and quizzes.
   </blockquote>
   <del> This contains deleted content.</del>
   <ins> Newly inserted content.</ins>
            Dear User,
       <strong>Congratulations !! </strong>
       We are delighted to inform you that you are going to be part of GfG journey.
       Thanks,
       GfG Team
   This is a predefine formatted text 
</body>
```

#### Output:



## **Logical Tags**

A Computer Science portal for geeks. It contains well written, well thought and well explained computer science and programming articles, and quizzes.

This contains deleted content. Newly inserted content.

```
Dear User,

Congratulations !!

We are delighted to inform you that you are going to be part of GfG journey.

Thanks,

GfG Team

This is a predefine formatted text
```

## Q. 21 Create below example using only HTML tags without CSS.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
  <a href="">Home</a>
      <a href="">About</a>
      <a href="">Contact</a>
      <a href="">Help</a>
      <a href="">Store</a>
      <a href="">Download</a>
    App
    <img src="IMG1.jpg" width="100%" height="500px">
    Contact us Page
    <img src="IMG2.jpg" width="100%" height="300px">
    <label for="fname">First Name:</label> <input</pre>
type="text" id="fname"
           name="fname" required>
      <label for="lname">Last Name:</label> <input</pre>
type="text" id="lname"
           name="lname" required>
      <label for="email">E-mail Id :</label> <input</pre>
type="text" id="email"
```

```
name="email" required>
          <label for="mobile">Mobile No. :</label> <input</pre>
type="text" id="mobile"
                  name="mobile" required>
       <label for="city">City :</label>
              <select name="city" id="city">
                  <option value="volvo">Ahmedabad</option>
                  <option value="saab">Bhavnagar</option>
                  <option value="opel">Delhi</option>
                  <option value="audi">Surat</option>
              </select>
          Gender :
              <input type="radio" id="male" name="Gender" value="Male" checked>
              <label for="male">Male</label>
              <input type="radio" id="female" name="Gender" value="Female">
              <label for="female">Female</label>
              <input type="radio" id="other" name="Gender" value="Other">
              <label for="other">Other</label>
          <iframe</pre>
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3672.723604438949!2d72.6063580744467
3!3d22.
                  99718911727658!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.
1!3m3!1m2!1s0x395e85c2fc005927%3A0x918e69150ca1c935!2sTOPS%20Technologies!5e0!3m2!1sen!2sin!
                  4v1710952278524!5m2!1sen!2sin"
                  width="100%" height="450" style="border:0;" allowfullscreen=""
loading="lazy"
                  referrerpolicy="no-referrer-when-downgrade"></iframe></iframe>
          <iframe width="100%" height="450"</pre>
                  src="https://www.youtube.com/embed/26zASCsIa10?si=UdND1MTZVD3SJ4Wf"
title="YouTube video player"
                  frameborder="0"
                  allow="accelerometer; autoplay; clipboard-write; encrypted-media;
gyroscope; picture-in-picture; web-share"
                 allowfullscreen></iframe>
       </body>
</html>
```

