

HTML Chapter 1

Basics of HTML



Explore

What is HTML?

Basic structure of HTML

Container Elements

Empty Elements

Text Formting Tags



What is HTML?

HTML is a Hyper Text markup language used to create the structure of web pages.

A website can be created by linking together individual pages.

HTML is styled and scripted using technologies such as CSS and JavaScript.



Building a website step by step

Lay the Foundation with HTML

Add Visual Flair with CSS

Unlock Interactivity with
JavaScript

Bootstrap: Responsive design and
rapid prototyping



What is Mark-up Language?



Hyper + text + markup Language

Example of a Markup Language

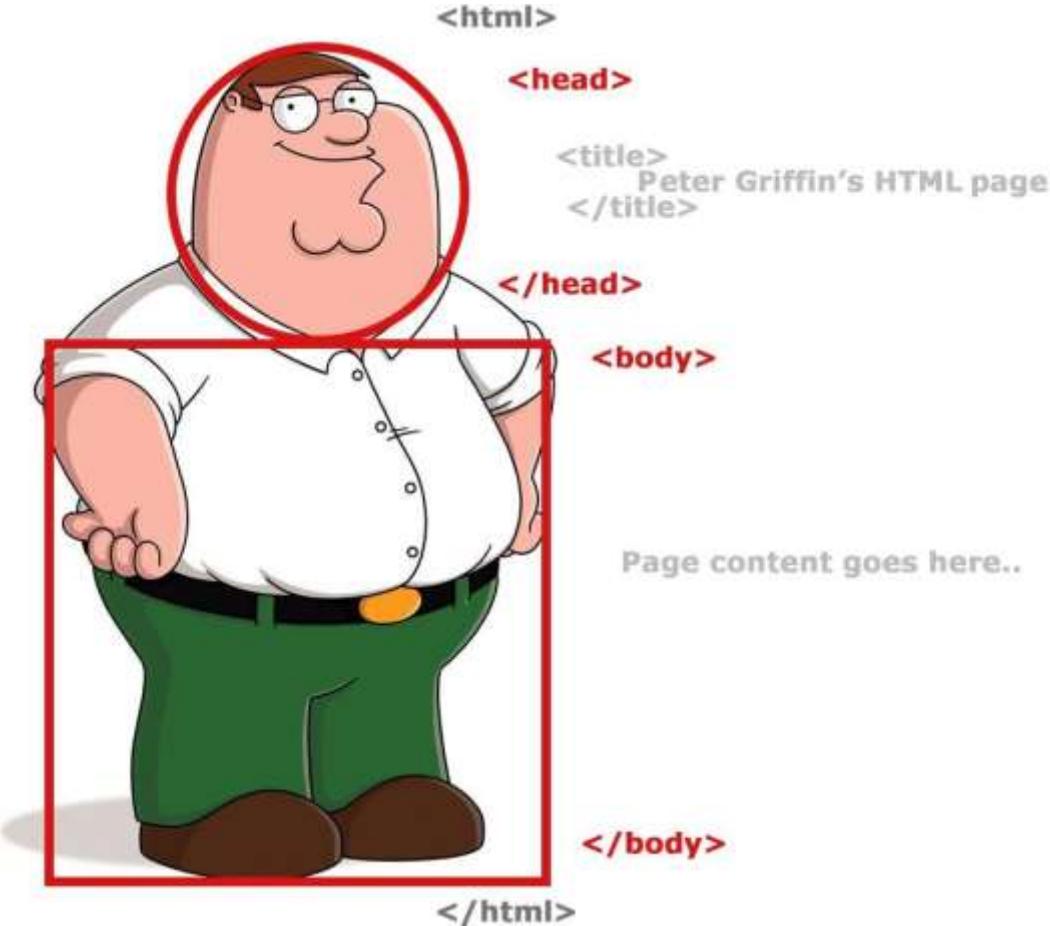
A markup language is a set of markup tags. (< >)

HTML is an example of a widely used markup language.

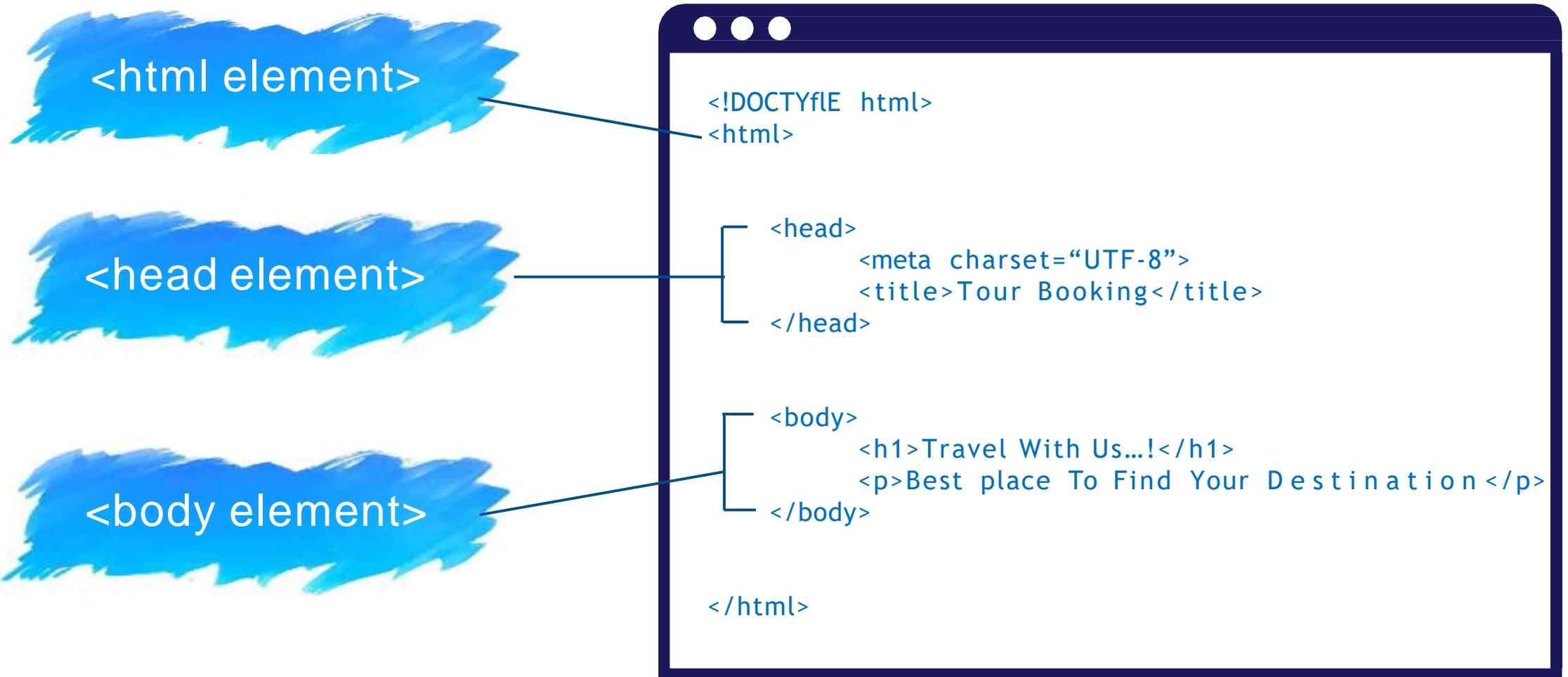


Structure of HTML Document

The structure of an HTML Document can be compared to ours...

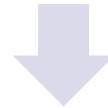


Structure of HTML Document



Version Information and <html> Element

Declared right after DOCTYPE declaration and wraps all other elements.

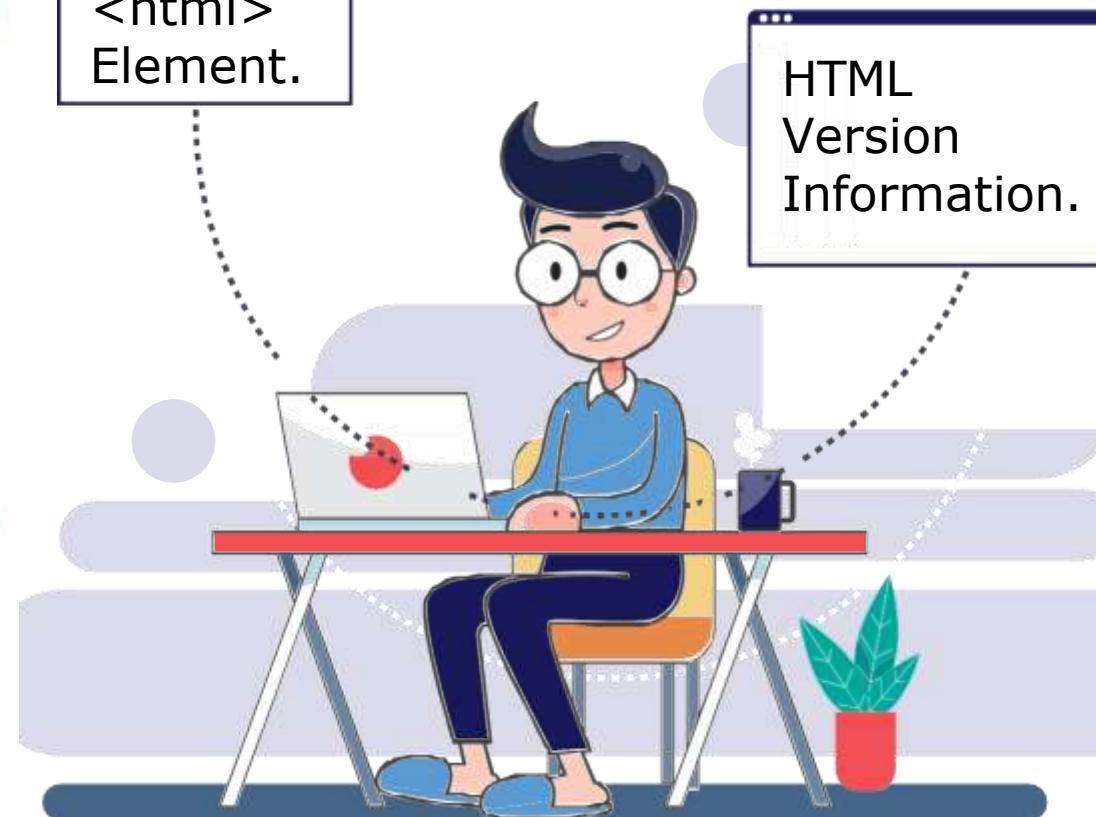


```
<html>  
  //Contents  
</html>
```



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The
<html>
Element.



DOCTYPE declaration is a single line that identifies the HTML Version.



```
<!DOCTYPE html>
```

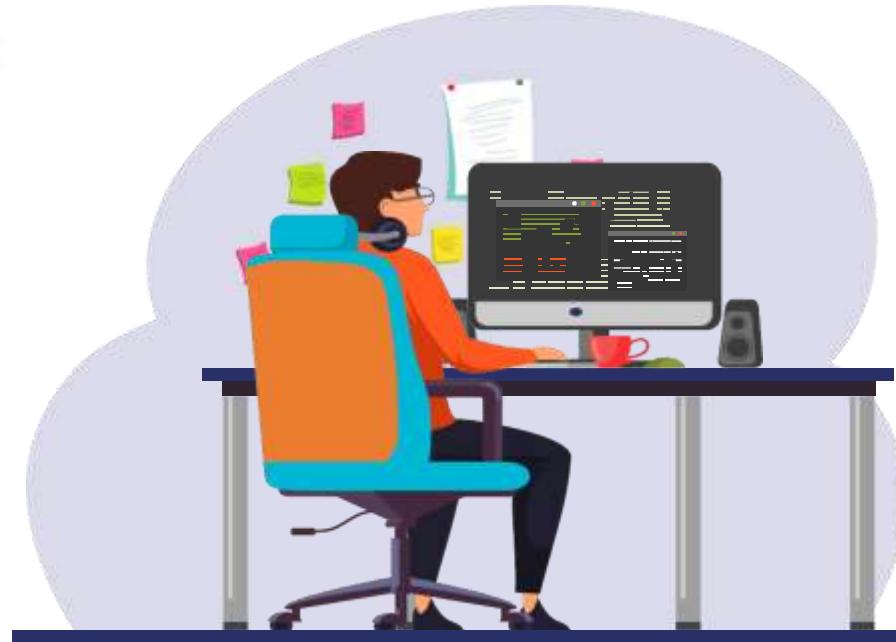
The <head> Element

<title> is an important element in <head> section.

Used to add external resources such as style sheets and scripts.

Contains information about the document

This section's contents are not rendered on the web page



The <head> Element :Example

```
<html>
  <head>
    <meta charset="UTF-8">
    <title>My Awesome Website</title>
    <meta name="description" content="A brief description of my website">
    <meta name="keywords" content="website, development, HTML, CSS, ">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <script src="script.js"></script>
  </head>
  <body>
  </body>
</html>
```



The <body> element



Contains structure and contents visible on the web page.

Includes elements like text, images and links.

<div> and ,
<h1> - <h6>, <p>,
<a>.

Element Vs Tag

Elements are defined by a start tag, content, and an end tag.

Tags are the markers that enclose the content, using angle brackets

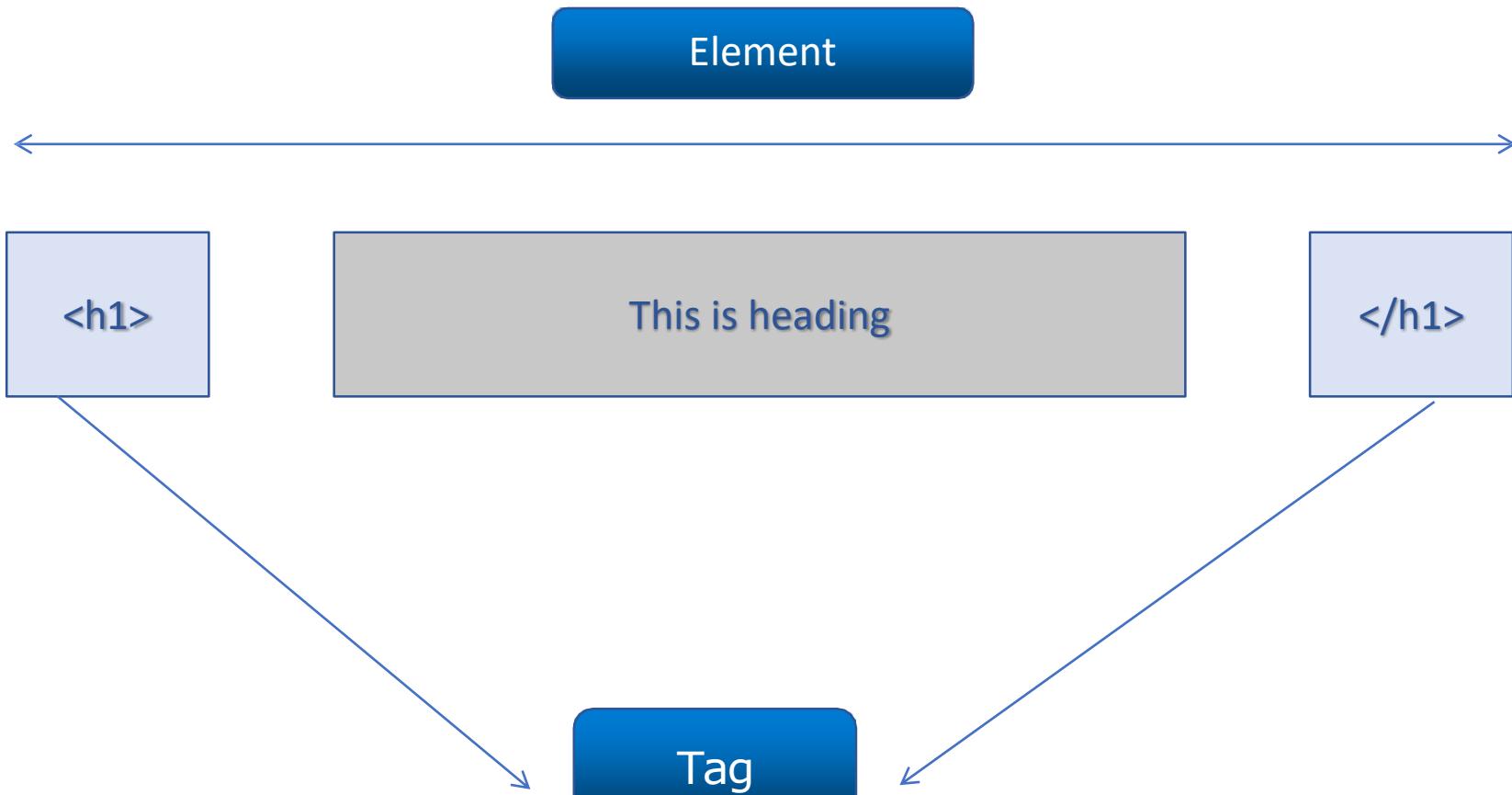
An element includes the complete structure

A tag is a single part either the opening <tag> or closing </tag> part

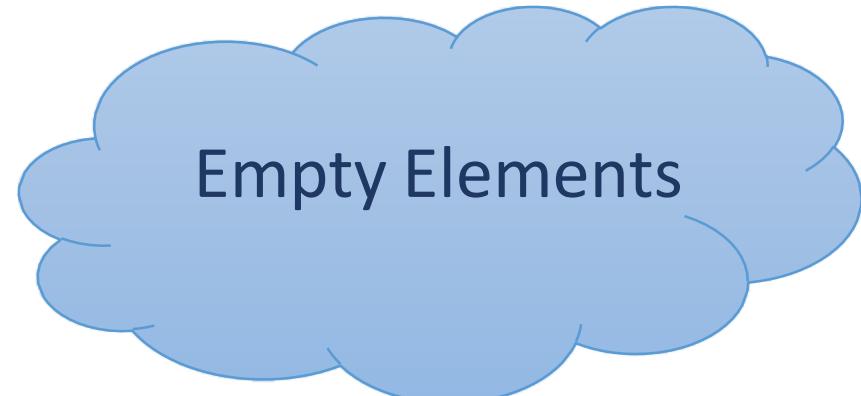
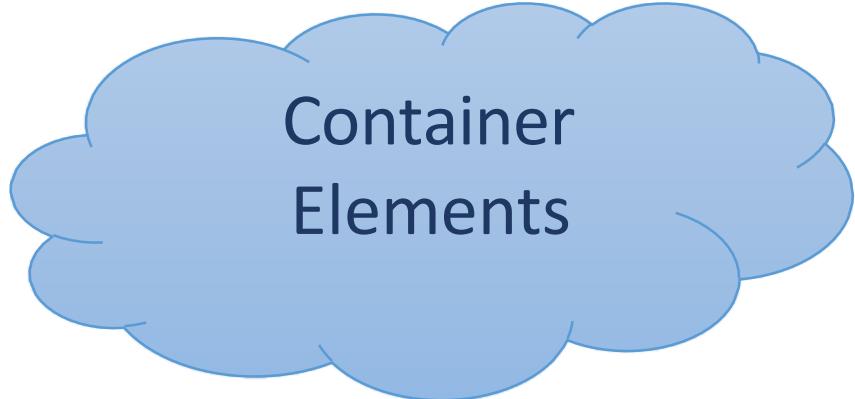
<h1>This is a heading</h1>

<h1> and </h1>





Types of HTML Elements



Container Elements and Empty Elements

Container elements require both, an opening and a closing tag.

Empty elements require only an opening tag and not a closing tag.

Container elements affect the text appearing between their opening and a closing tag.

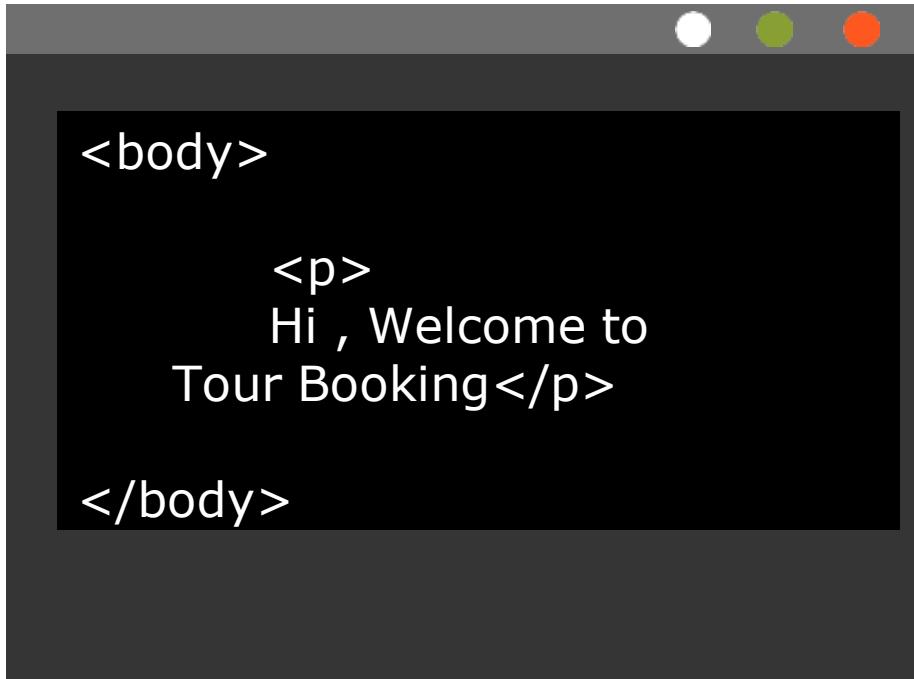
Do not have any content between their tags.

For example, <TITLE>...</TITLE>, ... etc.

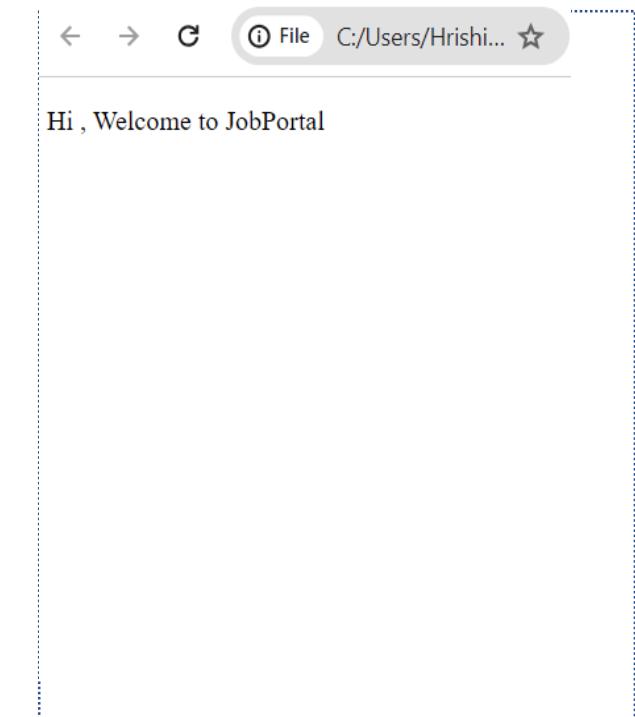
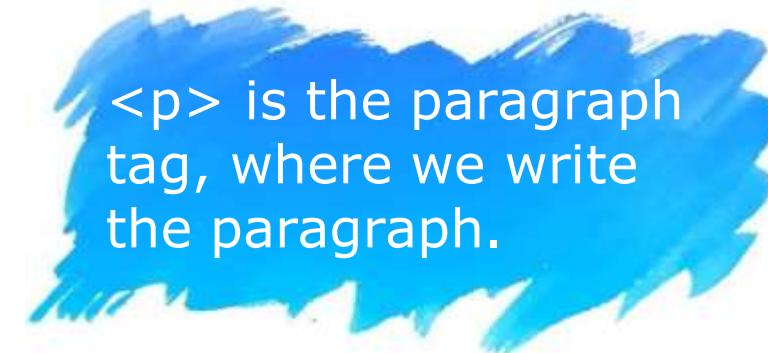
For example,
, <HR> etc.



Basic HTML tags

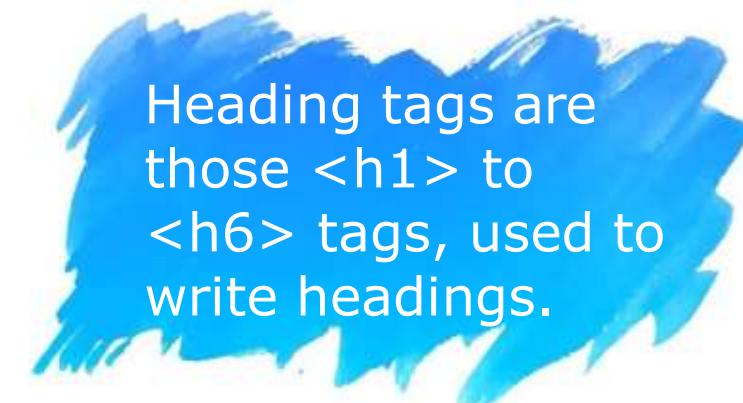


```
<body>
    <p>
        Hi , Welcome to
        Tour Booking</p>
    </body>
```

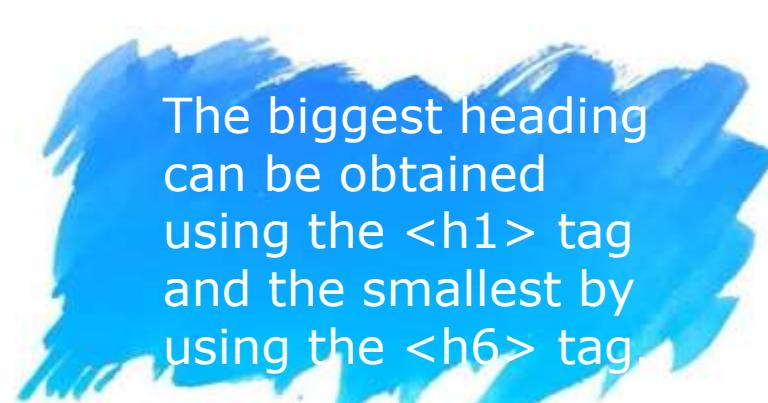


Heading tags

```
<body>  
  
<h1>Heading1</h1>  
<h2>Heading1</h2>  
<h3>Heading1</h3>  
<h4>Heading1</h4>  
<h5>Heading1</h5>  
<h6>Heading1</h6>  
  
</body>
```



Heading tags are those `<h1>` to `<h6>` tags, used to write headings.



The biggest heading can be obtained using the `<h1>` tag and the smallest by using the `<h6>` tag.

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6



Example:

```
<!DOCTYPE html>
<html>
<body>

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

<p><b>Tip:</b> Use h1 to h6 elements only for
headings. Do not use them just to make text
bold or big. Use other tags for that.</p>

</body>
</html>
```

This is heading 1

This is heading 2

This is heading 3

This is heading 4

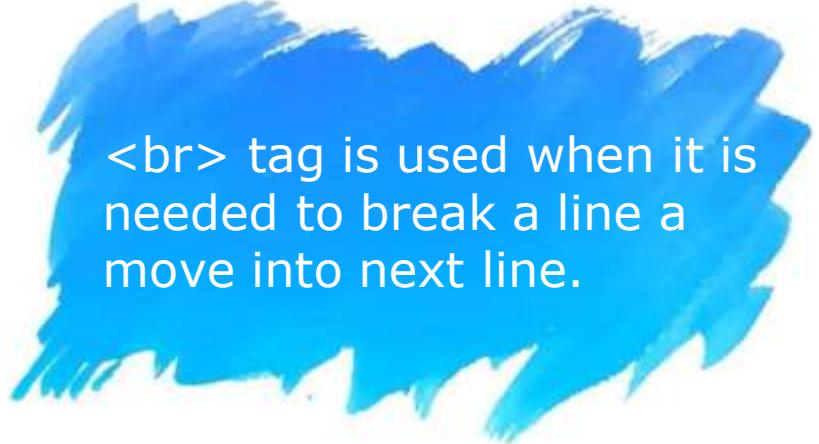
This is heading 5

This is heading 6

Tip: Use h1 to h6 elements only for headings. Do not use them just to make text bold or big. Use other tags for that.

Line Break
 tag

```
<body>  
  
<h1>The br element</h1>  
  
<p>To force<br> line breaks<br> in a text,<br> use the br<br> element.</p>  
  
</body>
```



 tag is used when it is needed to break a line and move into next line.



pen the doors to endless travel possibilities
and find your dream destination with ease.

Example:

```
<!DOCTYPE html>
<html>
<body>
<h2>Explore by Category </h2>
<p >Open the doors to endless travel
possibilities <br>
and find your dream destination with
ease </p>
</body>
</html>
```

Explore by category

Open the doors to endless travel possibilities
and find your dream destination with ease.

HTML Text Formatting Tags

```
<p>This is a paragraph with different text  
formatting:</p>  
<p>This text is <b>bold</b>.</p>  
<p>This text is <em>italicized</em>.</p>  
<p>This text is <small>smaller</small>.</p>  
<p>This is a <strong>very important</strong>  
point.</p>  
<p>Water is made of H<sub>2</sub>O.</p>  
<p>2<sup>3</sup> equals 8.</p>  
<p>This text was <ins>added later</ins>.</p>  
<p>This text was <del>deleted</del>.</p>  
<p>Please remember to <mark>save your  
changes</mark>.</p>
```

This is a paragraph with different text formatting:

This text is bold.

This text is italicized.

This text is smaller.

This is a very important point.

Water is made of H₂O.

2³ equals 8.

This text was ++added later++.

This text was deleted.

Please remember to ==save your changes==.

HTML Attributes

HTML attributes are special keywords that provide additional information or instructions for HTML elements.

They are written within the opening tag of an element

```
<element attribute1="value1"  
        attribute2="value2">
```

Attributes consist of a name and a value separated by an equals sign (=) and enclosed in quotation marks.



Commonly Used Attributes

`src`: Specifies the source of an image
(e.g., ``).

`alt`: Provides alternative text for images
(e.g., ``).

`class`: Assigns one or more classes to an element for styling or other purposes (e.g., `<p class="intro">`).

`href`: Defines the link destination for an anchor tag
(e.g., ``).

`id`: Assigns a unique identifier to an element (e.g.,
`<div id="main-content">`).

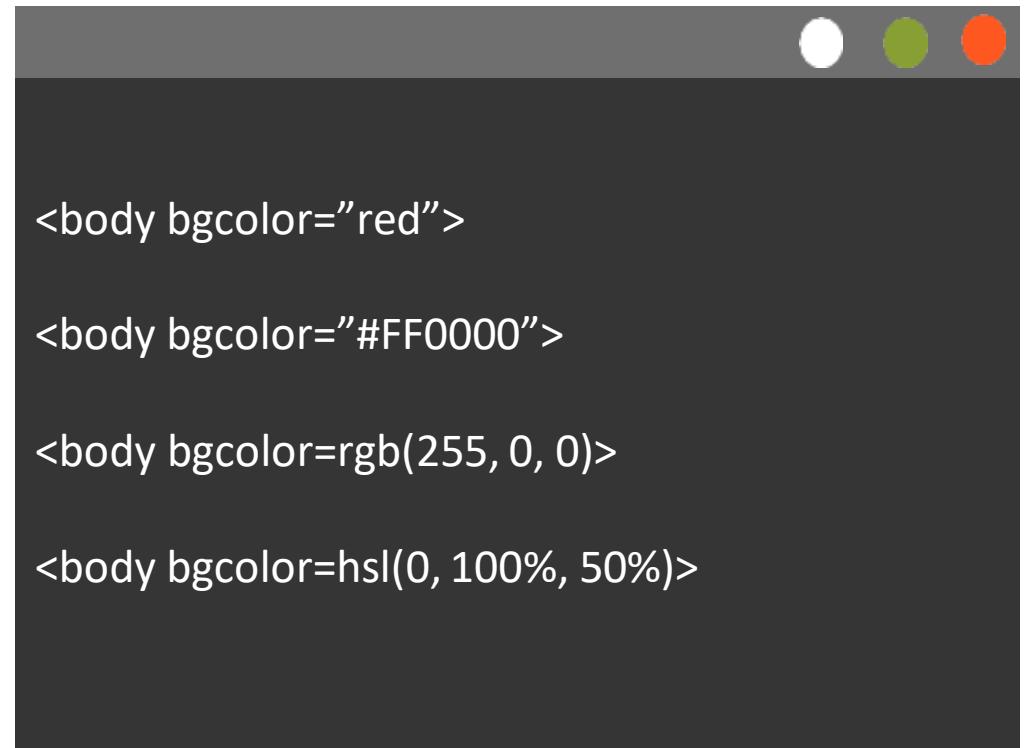
`style`: Applies inline CSS styles to an element (e.g.,
`<p style="color: red;">`).



HTML colors

- In HTML, colors can be specified using different methods.

- Color Names
- Hexadecimal Notation
- RGB Values
- HSL Values



The screenshot shows a dark-themed web browser window. At the top, there are three circular icons: white, green, and orange. Below them, the browser displays four lines of HTML code, each enclosed in a light gray box:

```
<body bgcolor="red">
```

```
<body bgcolor="#FF0000">
```

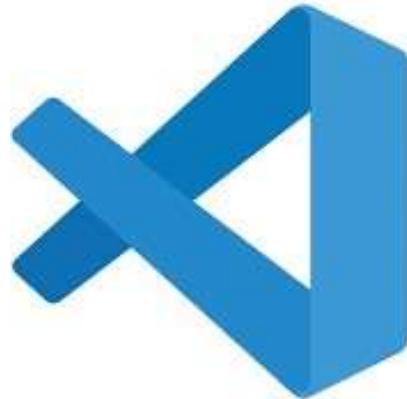
```
<body bgcolor=rgb(255, 0, 0)>
```

```
<body bgcolor=hsl(0, 100%, 50%)>
```



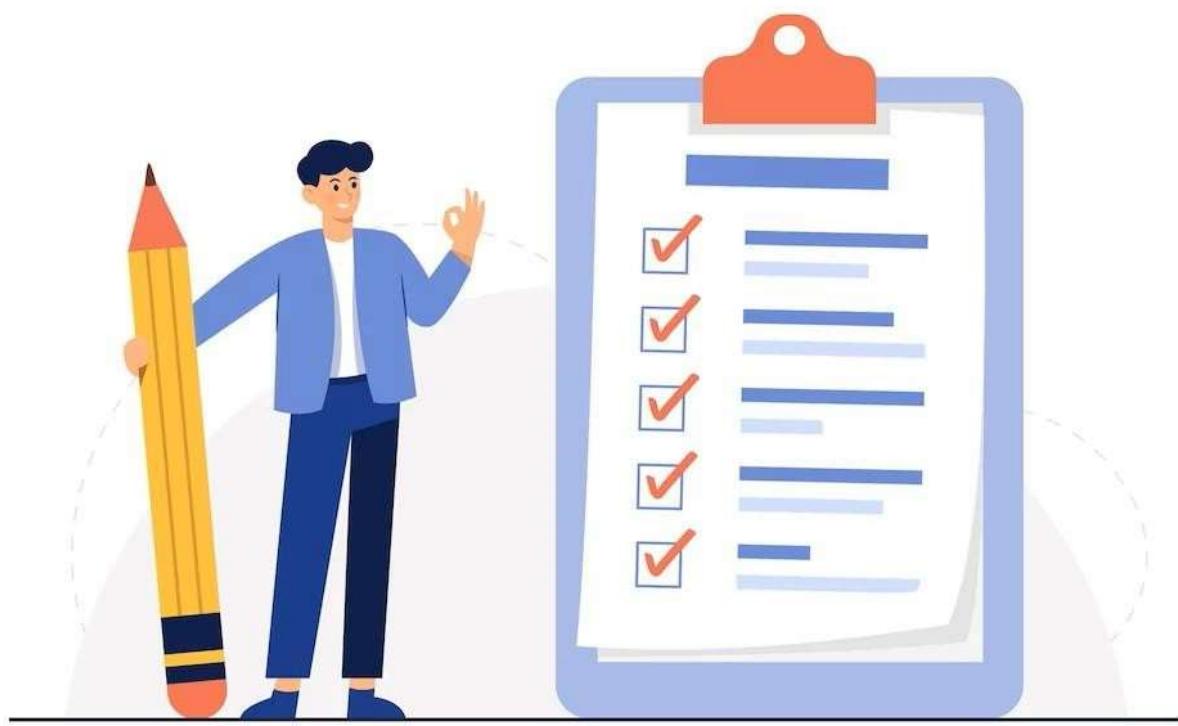
Getting started with html....

- Choose a text editor
- Create an HTML file
- Start writing HTML code
- View your page in a browser
- Experiment and learn



What we have learnt so far...

-  HTML Basics
-  HTML Document Structure
-  The <html> Element
-  The <head> Element
-  The <body> Element
-  The Head and other text Element



What we learn....

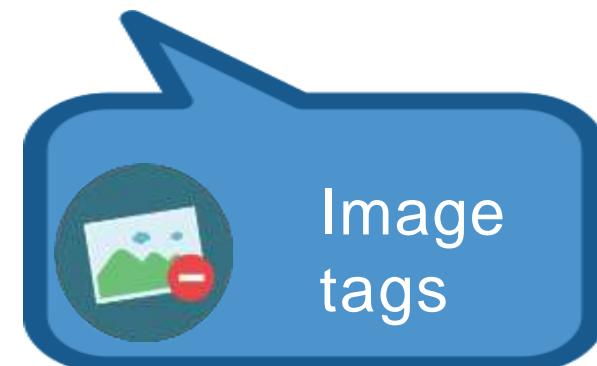
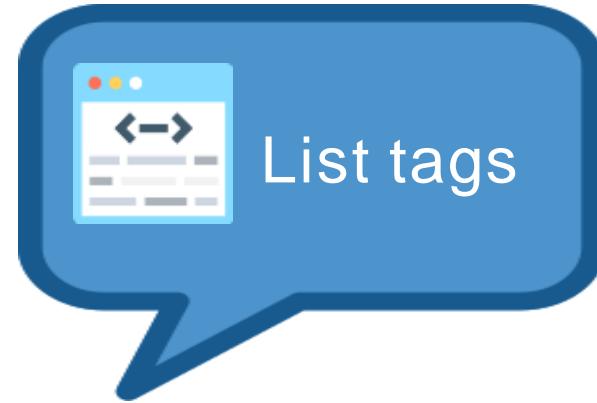
Hyperlink



Images

Lists





The Anchor Tag



- A link is a connection from one Web resource to another.
- A link has two ends(anchors) and a direction.
- The link starts at the "source" anchor and points to the "destination" anchor.
- HTML uses the anchor (<a>) tag to create a link to another document.



Anchor tag Attributes

href: It specifies the URL of the page or file that the link should point to.

download: This attribute specifies that the linked document should be downloaded instead of displayed.

title: This adds a tooltip to the link, which is displayed when the user hovers over the link.

target: This attribute specifies where the linked page should open.



```
<a href="https://www.tours.com/download/report.pdf"
download title="Download the full report"
target="_blank">
    Click here to download the latest report
</a>
```

target Attribute common Values

_self

_blank

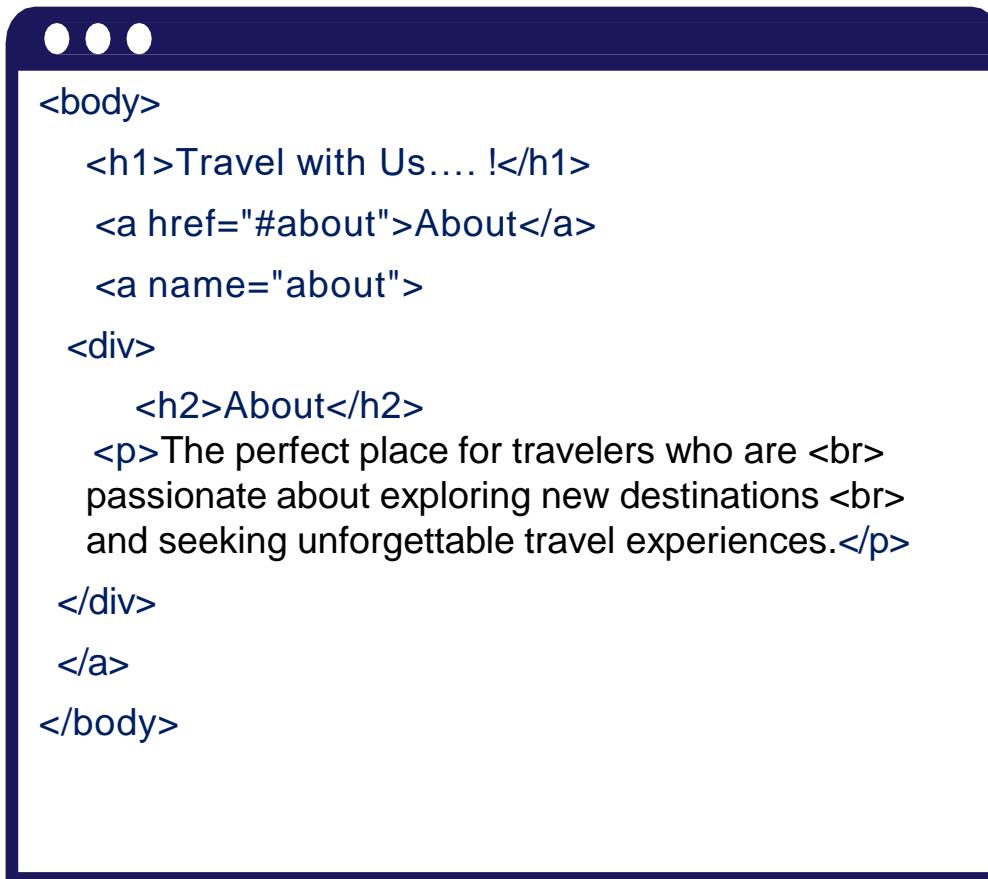
_Parent

_top

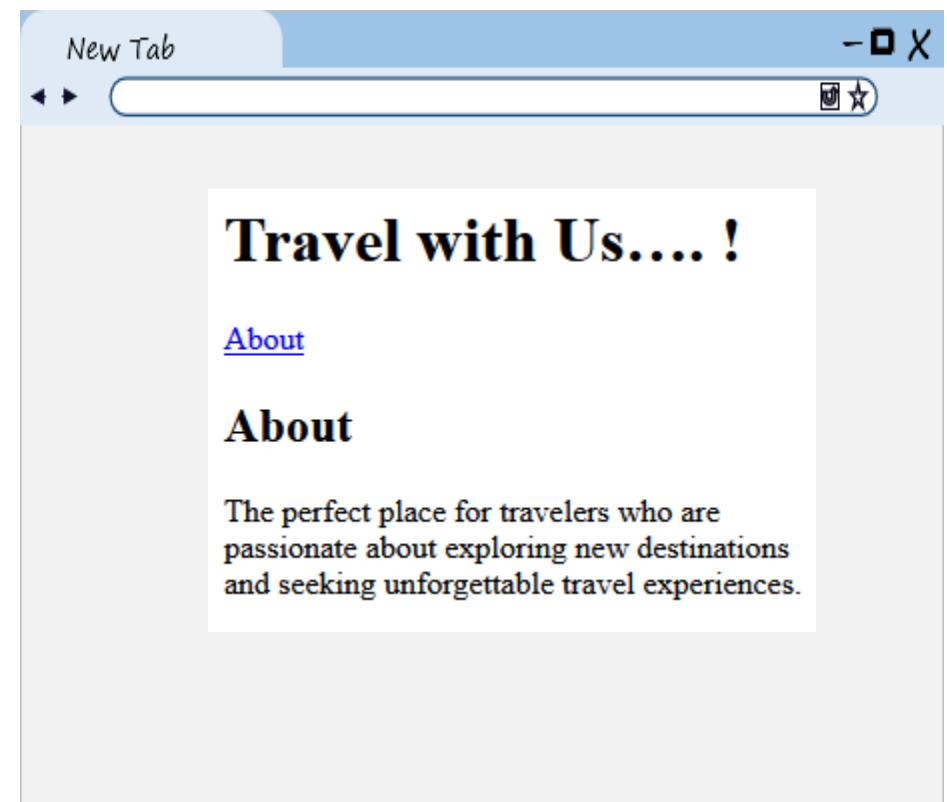


Internal Linking

To create a link within that page, add a name attribute to the anchor tag and specify that name from the place you want that navigation.

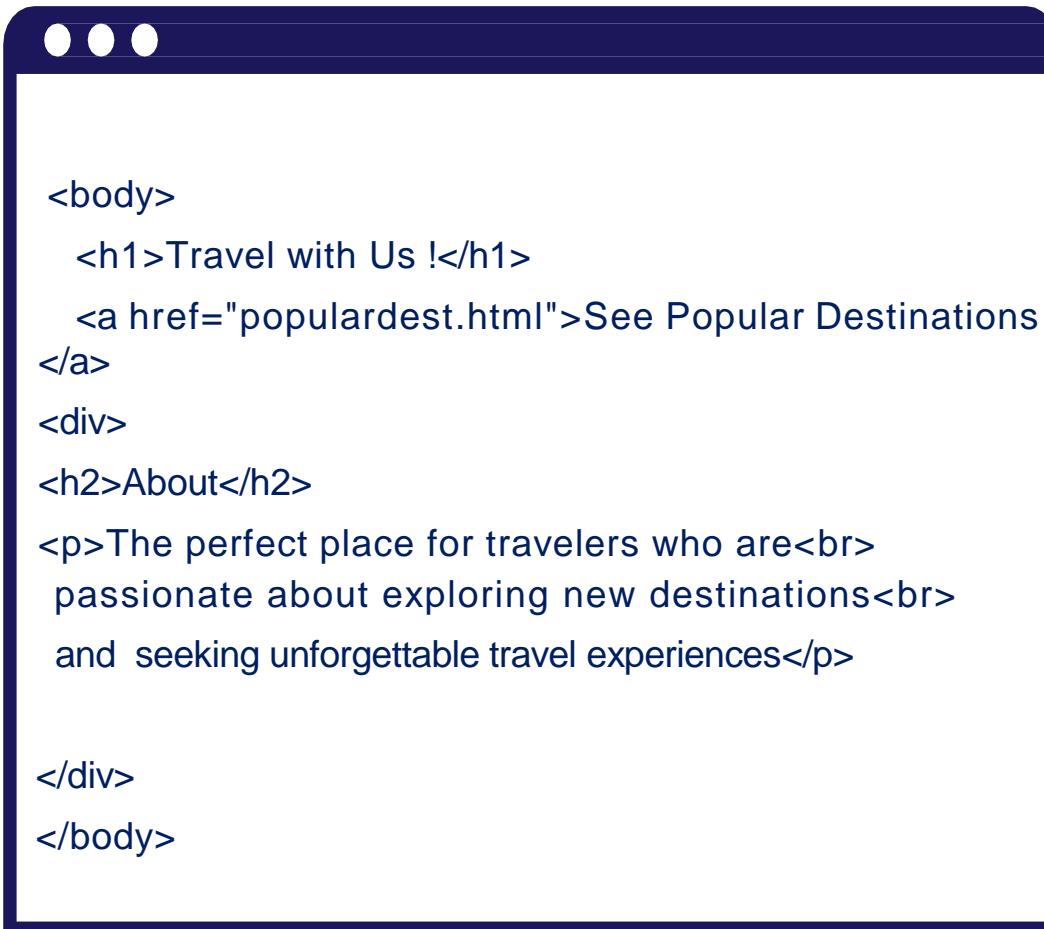


```
<body>
  <h1>Travel with Us.... !</h1>
  <a href="#about">About</a>
  <a name="about">
    <div>
      <h2>About</h2>
      <p>The perfect place for travelers who are <br>
        passionate about exploring new destinations <br>
        and seeking unforgettable travel experiences.</p>
    </div>
  </a>
</body>
```



External Linking

To create a link to any other page



```
<body>
  <h1>Travel with Us !</h1>
  <a href="populardest.html">See Popular Destinations
  </a>
  <div>
    <h2>About</h2>
    <p>The perfect place for travelers who are<br>
      passionate about exploring new destinations<br>
      and seeking unforgettable travel experiences</p>
  </div>
</body>
```

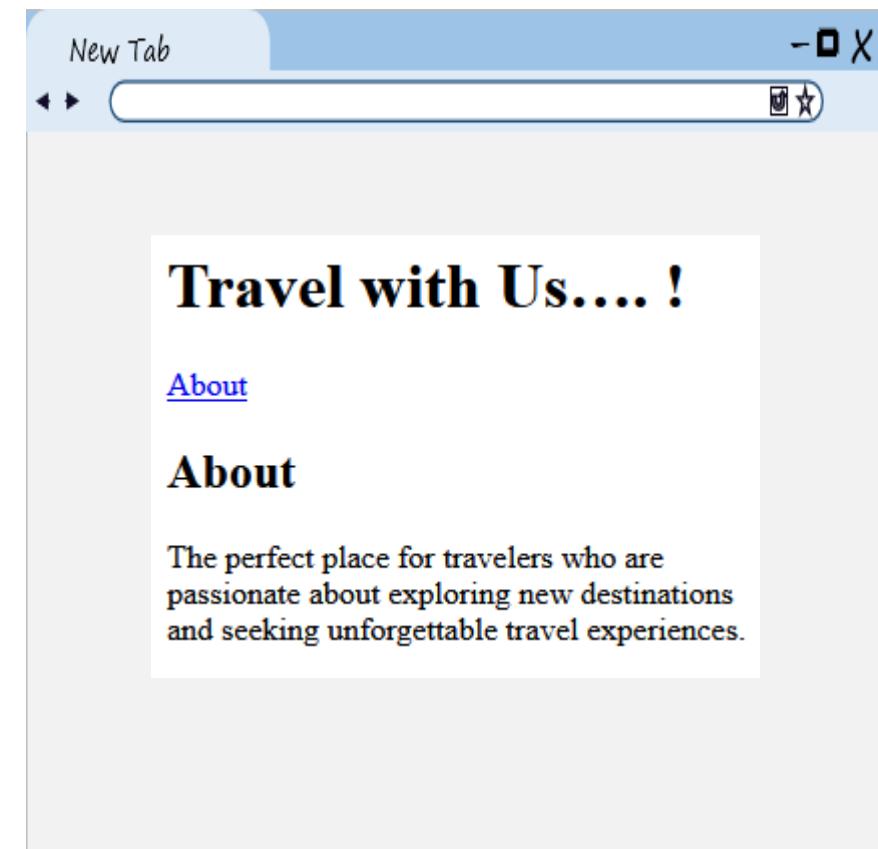
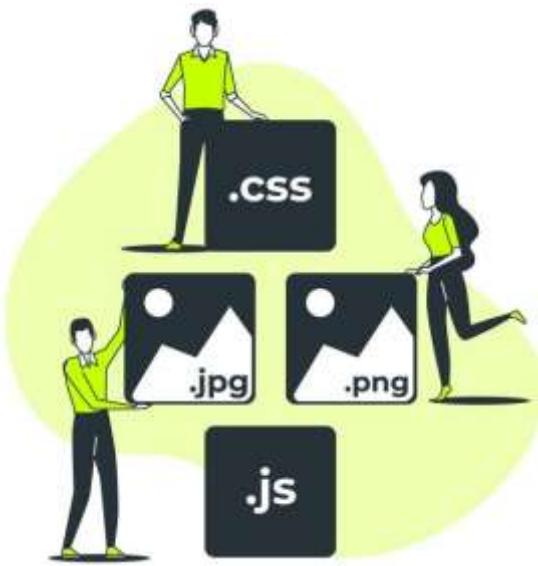


Image Tag



Placing an image on your page

Attributes

src : Is used to specify the location of the image file.

Alt : Is used to specify the alternative text of the image.

Height: Specifies height of an image

Width: Specifies the width of an image

Syntax

```
<img src = "tourbooking.jpg" alt = "job portal" >
```



Type Of Lists



Ordered List (OL)

Unordered List (UL)

Definition List (DL)



Ordered List

- An ordered list is a list that is displayed with numbers or letters.
- It is created using the `` tag.
- Each item in the list is enclosed in `` tag.
- Example:

```
<ol>  
    <li>Item 1</li>  
    <li>Item 2</li>  
    <li>Item 3</li>  
</ol>
```



Ordered List Attributes



TYPE : allows marking list items with different types. By default the list Item markers are set to numbers 1,2,3... so on . Other values of TYPE attribute are:

Attribute	Description
Type = A	Capital letter eg. A, B, C.....
Type = a	Small letter eg. a, b, c,.....
Type = I	Uppercase Roman Numbers eg. I, II, III.....
Type = i	Lowercase Roman Numbers eg. i, ii, iii.....
Type = 1	eg. 1, 2, 3.....

START :It specifies the starting number for an ordered list, overriding the default starting point of 1.



Example



align

```
<ol type="1">
  <li><b>Msc Computer Science </b></li>
  <ol type="a">
    <li><b> University</b> : University of calicut </li>
    <li><b> Year </b> : 2020 </li>
    <li><b>Mark </b> : 80 % </li>
  </ol>
  <br>
  <li> <b>Bsc Computer Scirnce </b> </li>
  <ol type="a">
    <li> <b> University</b> : University of calicut </li>
    <li><b> Year </b> : 2017 </li>
    <li><b>Mark </b> : 85 % </li>
  </ol>
</ol>
```

The screenshot shows a web browser window with a blue header bar. The title bar says "New Tab". Below it is a toolbar with back, forward, and search buttons. The main content area has a graduation cap icon and the word "Education". Below this, there are two numbered lists:

- 1. Msc Computer Scirnce
 - a. **University** : University of calicut
 - b. **Year** : 2020
 - c. **Mark** : 80 %
- 2. Bsc Computer Scirnce
 - a. **University** : University of calicut
 - b. **Year** : 2017
 - c. **Mark** : 85 %

Unordered List

- An unordered list is a list that is displayed with bullet point.
- It is created using the `` tag.
- Each item in the list is enclosed in `` tags.
- Example:

```
<ul>  
  <li>Item 1</li>  
  <li>Item 2</li>  
  <li>Item 3</li>  
</ul>
```



Unordered List Attributes



type: This attribute specifies the type of marker used for each list item. Possible values are "circle" (an empty circle) and "square" (a filled square) and disc



Example

align

```
<ul type="square">
    <li><b>Msc Computer Science
</b></li>
    <ul type="disc">
        <li><b> University</b> : University
of calicut </li>
        <li><b> Year </b> : 2020 </li>
        <li><b>Mark </b> : 80 % </li>
    </ul>
    <br>
    <li> <b>Bsc Computer Scirnce </b>
</li>
    <ul type="disc">
        <li> <b> University</b> : University
of calicut </li>
        <li><b> Year </b> : 2017 </li>
        <li><b>Mark </b> : 85 % </li>
    </ul>
</ul>
```

The screenshot shows a web browser window with a tab labeled "New Tab". The main content area displays a section titled "Education" with a graduation cap icon. Below the title, there are two main bullet points: one for "Msc Computer Scirnce" and one for "Bsc Computer Scirnce". Each point has three sub-points corresponding to the data in the provided HTML code.

Education

- **Msc Computer Scirnce**
 - *University* : University of calicut
 - *Year* : 2020
 - *Mark* : 80 %
- **Bsc Computer Scirnce**
 - *University* : University of calicut
 - *Year* : 2017
 - *Mark* : 85 %



Description List

- In HTML, the `<dl>` element is used to create a description list. A description list is a list of terms and their corresponding definitions. Each term is denoted with a `<dt>` element, and each definition is denoted with a `<dd>` element.

```
<dl>  
  <dt>Term 1</dt>  
  <dd>Definition 1</dd>  
  <dt>Term 2</dt>  
  <dd>Definition 2</dd>  
  <dt>Term 3</dt>  
  <dd>Definition 3</dd>  
</dl>
```



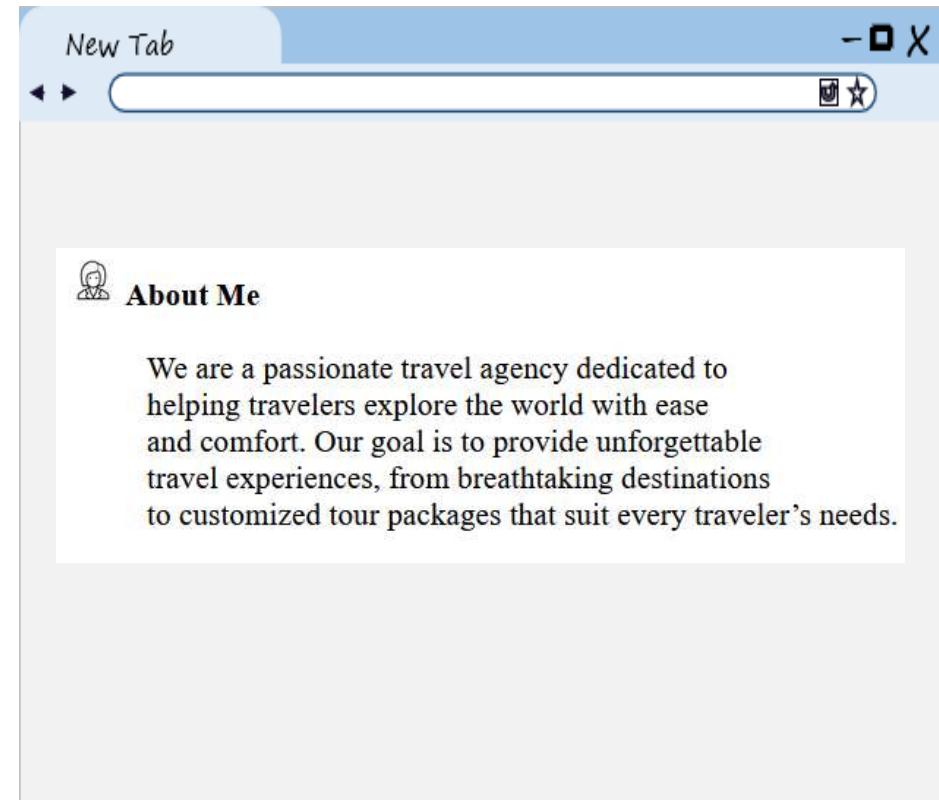
Example

align

```
<body>
  <dl>
    <dt> 
About Me</dt>
    <dd>
      <font size="3" face="math" color="black"
        align="justify-content-center">
        We are a passionate travel agency
        dedicated to<br> helping travelers
        explore the world with ease<br> and
        comfort. Our goal is to provide
        unforgettable<br> travel experiences,
        from breathtaking destinations<br> to
        customized tour packages that suit
        every traveler's needs.
      </font>
    </dd>
  </dl>
</body>
```



nitrich





Questions

