

A Book to

GET MASTER IN HTML5

By
Md. Tafsirul Haque Danish



MD TAFSIRUL HAQUE DANISH



Requirements

- This is a beginner to advance course — You do not have to worry about anything , this is from scratch
- Any computer and OS will work — Windows, macOS or Linux
- There is no need for any paid software — The text editor you already have works just fine
- During this course we are going to use free tools, so you do not have to buy anything. :)
- No CSS 3 knowledge is required at all for this course! You will learn it all in this course!

Description

- If you want to design and code the front-end of web apps or mobile apps or email templates, you need to use HTML5.
- Are you looking to enhance your website by trying out new Typeface, Colors, Effects, animations and lot more?
- Have an idea about colors, effects, animations but don't know how to implement it.
- Don't worry here is one stop solution to all your queries.
- Curious to know in detail about your course? Please check out the detailed description of the topics that are covered in course.

Who this course is for ?

- This course is for everyone who want to learn HTML5, CSS 3 and JavaScript from beginning (Absolute beginner)
- Complete beginners who want to learn how to build a professional, beautiful and responsive website
- Designers who want to expand their skill set into CSS 3
- Web developers who want to update their CSS skills to the most modern and advance level
- Developers who want to finally understand how CSS works under the hood
- In general: anyone who wants to learn HTML 5, CSS 3 & JavaScript
- People who are interested in publishing their own websites and mobile apps
- This course is best suited for beginner-level students interested in the latest developments in HTML 5, CSS 3 & JavaScript
- Anyone who wants to learn HTML 5, CSS 3 & JavaScript for the first time or wants to enhance their UI skills
- Anyone who is excited to learn about the latest HTML 5, CSS 3 & JavaScript features
- Anyone who knows HTML 5, CSS 3 & JavaScript but wants to dive deeper and learn more

TOPIC 1

INTRODUCTION TO HTML 5

What is HTML ?

- HTML stands for Hyper Text Markup Language
- In HTML, "5" is the version of HTML.
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.
- The `<!DOCTYPE html>` declaration defines that this document is an HTML5 document
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.

TOPIC 2

TOOLS TO LEARN HTML 5

Tools required to learn HTML 5

- *You need just two tools to learn HTML 5 which are given in the following:*

Editor : You need to have an code editor.

Any one code editor you can download from the following list.



Visual Studio Code



Atom



Brackets

Browser : You need to have an code editor.

Any one browser you can download from the following list.



Note : *For this course we will use **Visual Studio Code** editor and to display our web page will use **Google Chrome** browser.*

TOPIC 3

HOW TO CREATE HTML 5 SKELETON

Basic HTML 5 skeleton

Basic HTML code skeleton/structure is given below:



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
  </head>
  <body>

  </body>
</html>
```

TOPIC 4


<META> TAGS

Why <meta> tags ?

- **Meta tags** are snippets of text that describe a page's content; the meta tags don't appear on the page itself, but only in the page's source code. Meta tags are essentially little content descriptors that help tell search engines what a web page is about.
- Meta tags provide information about the webpage in the HTML of the document. This information is called "metadata" and while it is not displayed on the page itself, it can be read by search engines and web crawlers.
- Search engines such as Google use metadata from meta tags to understand additional information about the webpage. They can use this information for ranking purposes, to display snippets in search results, and sometimes they can ignore meta tags.
- The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data.
- <meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.
- Metadata will not be displayed on the page, but is machine parsable.
- Metadata is used by browsers (how to display content or reload page), search engines (keywords), and other web services.


Types of <meta> tags

- **Meta tag (charset)** : Specifies the character encoding for the HTML document.




```
<meta charset="UTF-8">
```

- **Meta tag (keywords)** : Define keywords for search engines.



```
<meta name="keywords" content="HTML, CSS, JavaScript">
```

- **Meta tag (description)** : Define a description of your web page.



```
<meta name="description" content="Learn UI technologies by M.T.H. Danish">
```

- **Meta tag (author)** : Define the author of a page.



```
<meta name="author" content="M.T.H. Danish">
```

- **Meta tag (refresh)** : Refresh document every 5 seconds.



```
<meta http-equiv="refresh" content="5">
```

- **Meta tag (viewport)** : Setting the viewport to make your website look good on all devices.



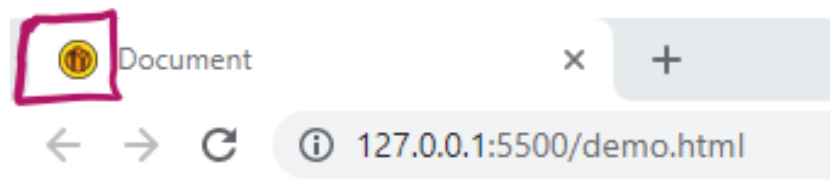
```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

- **To add a fav icon on webpage tab** : We use the following tag.



```
<link rel="icon" href="image-path">
```

- **Output** : after adding the icon web page tab will look like following image:

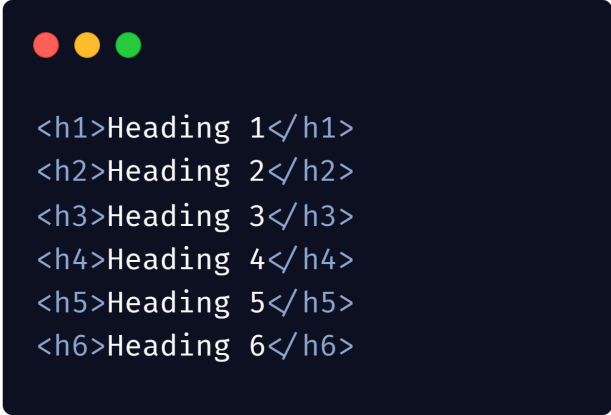


TOPIC 5

TEXT FORMATTING TAGS

Types of heading tags

- **Heading tags** : There are six types of **heading** tags in HTML which are given in the following:



```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

- **Output :**

Heading 1

Heading 2

Heading 3

Heading 4


Heading 5

Heading 6

- We use these tags for heading purpose, when ever you want to put a heading on your web page you can use any of them as per your requirement.
- **Note** : It is recommended that we should not suppose to use **<h1></h1>** tag more than once on a single page.

Paragraph tag

- **Paragraph tag** : We use `<p>` tag when we have to add a paragraph on webpage. Example is given in the following:



```
<p>Lorem, ipsum dolor sit amet consectetur  
adipisicing elit. Ullam itaque iusto illo maiores  
ipsum, laborum molestias quidem ab architecto,  
voluptates doloreque reiciendis dolor et facilis  
fugiat accusantium unde nulla hic.</p>
```

- **Output :**

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Ullam itaque iusto illo maiores ipsum, laborum molestias quidem ab architecto, voluptates doloreque reiciendis dolor et facilis fugiat accusantium unde nulla hic.

Comment tag

- **Comment tag** : We use comment tag just to provide some additional information about any piece of code and another use of this is to remove those tags or piece of code which is not necessary to display on the web page.



```
<!-- This code will not be visible on the web page -->
```


Break tag

- **Break tag** : We use `
` tag when intentionally we have to break any text flow or want to bring some element in new line.
- This is a self closing tag. Example is given in the following:

```
<p>Lorem, ipsum dolor sit amet <br> itaque iusto illo  
maiores ipsum, laborum <br> molestias quidem ab  
architecto, <br> voluptates doloremque reiciendis  
dolor et facilis fugiat accusantium unde nulla hic.  
</p>
```

- **Output :**

Lorem, ipsum dolor sit amet
itaque iusto illo maiores ipsum, laborum
molestias quidem ab architecto,
voluptates doloremque reiciendis dolor et facilis fugiat accusantium unde nulla hic.

Horizontal Ruler tag

- **<hr> tag** : We use `<hr>` tag when we have to put a separator between two elements.
- This is a self closing tag. Example is given in the following:

```
<p>This is paragraph 1</p>  
<hr>  
<p>This is paragraph 2</p>
```

- **Output :**

This is paragraph 1

This is paragraph 2

BOLD & Strong Tags

- **Bold & Strong tags** : We use `` and `` tags to make any text bolder.
- `` tag is deprecated, so do not use this in real time. Example is given in the following:

```
<p>  
  <b>Lorem ipsum, dolor sit amet </b>consectetur adipisicing  
  elit. Sit cum asperiores deleniti beatae minus voluptates  
  libero eveniet dignissimos autem, dicta iusto repellat  
  architecto <strong>deserunt omnis perspiciatis non  
  </strong>nostrum ad accusamus.  
</p>
```

- **Output :**

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Sit cum asperiores deleniti beatae minus voluptates libero eveniet dignissimos autem, dicta iusto repellat architecto **deserunt omnis perspiciatis non** nostrum ad accusamus.

Italic & Emphasized tags

- **Italic & Emphasized tags** : We use `<i>` and `` tags to make any text italic.
- `<i>` tag is deprecated, so do not use this in real time. Example is given in the following:

```
<p>  
  <i>Lorem ipsum, dolor sit amet </i>consectetur adipisicing  
  elit. Sit cum asperiores deleniti beatae minus voluptates  
  libero eveniet dignissimos autem, dicta iusto repellat  
  architecto <em>deserunt omnis perspiciatis non  
  </em>nostrum ad accusamus.  
</p>
```

- **Output :**

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Sit cum asperiores deleniti beatae minus voluptates libero eveniet dignissimos autem, dicta iusto repellat architecto *deserunt omnis perspiciatis non* nostrum ad accusamus.

underline and ins tags

- **Underline & Ins tags** : We use `<u>` and `<ins>` tags to make any text underlined.
- `<u>` tag is deprecated, so do not use this in real time. Example is given in the following:

```
<p>Lorem <u>ipsum dolor sit amet consectetur</u> adipisicing elit.  
<ins>Ab alias tempore, cum debitis, fugit expedita</ins> nesciunt  
tempora, quia ipsum ad ducimus? Repellendus numquam ipsum deserunt  
doloribus mollitia molestiae tempore perferendis?</p>
```

- **Output :**

Lorem ipsum dolor sit amet consectetur adipisicing elit. Ab alias tempore, cum debitis, fugit expedita nesciunt tempora, quia ipsum ad ducimus? Repellendus numquam ipsum deserunt doloribus mollitia molestiae tempore perferendis?

s, strike & del tags

- **s, strike & del tags** : We use `<s>`, `<strike>` and `` tags to make any text strike out.
- `<s>` and `<strike>` tags are deprecated, so do not use this in real time. Example is given in the following:


```
<p>Lorem <s>ipsum dolor sit amet consectetur</s> adipisicing elit.  
<strike>Ab alias tempore, cum debitis, fugit expedita</strike>  
nesciunt tempora, quia ipsum <del>ad ducimus? Repellendus  
numquam</del> ipsum deserunt doloribus mollitia molestiae tempore  
perferendis?</p>
```

- **Output :**

Lorem ~~ipsum dolor sit amet consectetur~~ adipisicing elit. ~~Ab alias tempore, cum debitis, fugit expedita~~ nesciunt tempora, quia ipsum ad ducimus? Repellendus numquam ipsum deserunt doloribus mollitia molestiae tempore perferendis?

code tag

- **code tag** : We use **<code>** tag to add any program code snippet in the web page.
- Example is given in the following:




```
<code>console.log("Hello, world!");</code>
```

- **Output :**

```
console.log("Hello, world!");
```

pre tag

- **pre tag** : We use **<pre>** tag when we want to preserve any text as it is in the editor.
- Example is given in the following:



```
<pre>  
    Hi!  
        My name is Danish!.  
</pre>
```

- **Output :**

```
Hi!  
    My name is Danish!.
```

quote tag

- **quote tag** : We use **<q>** tag to add any quotation in the web page.
- Example is given in the following:

```
<q>Honesty is the best policy.</q>
```

- **Output :**

“Honesty is the best policy.”

blockquote tag

- **blockquote tag** : We use **<blockquote>** tag when we want to add any quotation with its author name in the web page.
- **<cite>** tag we use to provide Author name.
- **cite** attribute we use to provide the reference URL from where it is taken.
- Example is given in the following:

```
<blockquote cite="https://www.example.com">  
  <q>Honesty is the best policy.</q>  
  <cite>-Unknown</cite>  
</blockquote>
```

- **Output :**

“Honesty is the best policy.” -Unknown

definition tag

- **definition tag** : We use **<dfn>** tag to add any definition in the web page.
- Example is given in the following:

```
<p>
  <dfn>HTML</dfn> is the standard markup
  language for creating web pages.
</p>
```

- **Output :**

HTML is the standard markup language for creating web pages.

acronym & abbr tag

- **acronym & abbr tags** : We use **<acronym>** and **<abbr>** tags when we want to add any abbreviation in the web page.
- **title** attribute we use to provide the full form of given word.
- One you will hover over the abbreviated text you will get a tool tip.
- **<acronym>** tag is deprecated, so do not use this in real time.
- Example is given in the following:

```
<p>
  <acronym title="Doctor">Dr.</acronym> A. P. J. Abdul Kalam
  <abbr title="Doctor">Dr.</abbr> A. P. J. Abdul Kalam
</p>
```

- **Output :**

Dr..APJ Abdul Kalam Dr..APJ Abdul Kalam

Doctor

address tag

- **address tag** : We use **<address>** tag to add any address in the web page.
- Example is given in the following:

```
<address>
    Gachibowli, Hyderabad, 500032
</address>
```

- **Output :**

Gachibowli, Hyderabad, 500032

sub & sup tags

- **sub & sup tags** : We use **<sub>** tag for subscript and **<sup>** for super script.
- Example is given in the following:

```
<p>
    H<sub>2</sub>O
</p>
<p>
    (a + b)<sup>2</sup>
</p>
```

- **Output :**

H₂O

(a + b)²

small tag

- **small tag** : We use **<small>** tag to add any smaller text in web page.
- Example is given in the following:

```
<p>This is normal text</p>  
<p><small>This is small text</small></p>
```

- **Output :**

This is normal text

This is small text

center tag

- **center tag** : We use **<center>** tag to align any text or inline element to center of the viewport.
- **<center>** tag is deprecated, so do not use this in real time.
- Example is given in the following:

```
<p>This is normal text</p>  
<p><center>This is center aligned text</center></p>
```

- **Output :**

This is normal text

This is center aligned text

mark tag

- **mark tag** : We use **<mark>** tag to highlight any text in web page.
- Example is given in the following:

```
<p>This is normal text</p>
<p><mark>This is text is highlighted</mark></p>
```

- **Output :**

This is normal text

This is text is highlighted

bdo tag

- **Bi-Directional Override tag** : We use **<bdo>** tag to override the current text direction.
- we use **dir** (direction) attribute to provide the text direction.
- There are two possible values we can use for **dir** attribute. First one is **ltr** (Left to Right) and this one is default, another value is **rtl** (Right to Left).
- Example is given in the following:

```
<p>This is normal text</p>
<p><bdo dir="ltr">This is text is Left to Right</bdo></p>
<p><bdo dir="rtl">This is text is Right to Left</bdo></p>
```

- **Output :**

This is normal text

This is text is Left to Right

tfeL ot thgiR si txet si sihT

TOPIC 6

LIST STYLE TAGS

When to use list style?

When ever you want to display any data in a list format then you have to use lists.

But there are three different types of **list** in HTML for different use cases. Types of lists are given below:

1. **Unordered List**
2. **Ordered List**
3. **Definition / Description List**

Unordered List

- When you want to display a list without any numeric or alphabetical order then you can use **Unordered List**.
- We use **** tag to create **unordered list**.
- To add any **list item** inside unordered list we use **** tag.
- Example is given below:

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

- **Output :**

- List 1
- List 2
- List 3

unordered list types

- In unordered list we have **three** different styles.
 1. **disc**
 2. **circle**
 3. **square**
- To change the style we have to use **type** attribute in **** tag.

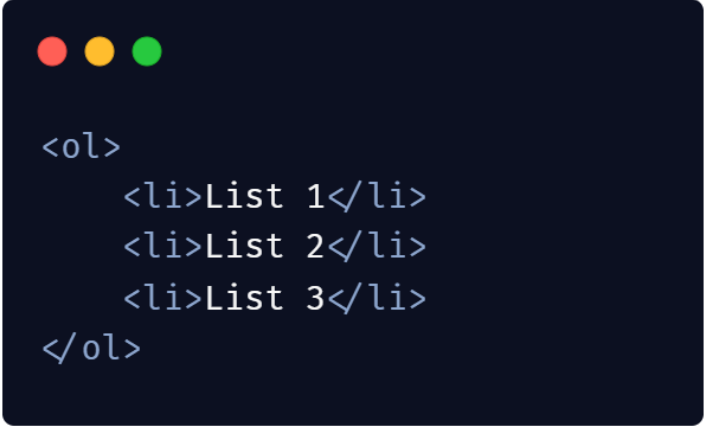
```
<ul type="disc">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ul>
<ul type="circle">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ul>
<ul type="square">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ul>
```

- **Output :**

- List 1
- List 2
- List 3
- List 1
- List 2
- List 3
- List 1
- List 2
- List 3

Ordered List

- When you want to display a list in numeric or alphabetical order then you can use **Ordered List**.
- We use **** tag to create **ordered list**.
- To add any **list item** inside unordered list we use **** tag.
- Example is given below:

A dark-themed code editor window with three colored window control buttons (red, yellow, green) in the top-left corner. It contains the following HTML code:

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

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

- **Output :**

```
1. List 1
2. List 2
3. List 3
```

ordered list types

- In unordered list we have **five** different styles.
- To change the style we have to use **type** attribute in **** tag.

```
<ol type="1">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="A">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="a">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="I">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="i">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
```

ordered list types

- Output :

1. List 1
2. List 2
3. List 3

- A. List 1
- B. List 2
- C. List 3


- a. List 1
- b. List 2
- c. List 3

- I. List 1
- II. List 2
- III. List 3

- i. List 1
- ii. List 2
- iii. List 3

start attribute

- **start attribute** : If you want to start the **ordered list** from a specific numeric or alphabetical value then you can use **start** attribute.
- You have to add **start** attribute in **** tag.
- **start** attribute value always should be in **integer** value format
- Example is given in next page:



```
<ol type="1" start="101">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="A" start="5">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="a" start="27">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="I" start="10">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
<ol type="i" start="101">
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
```


- **Output :**

101. List 1

102. List 2

103. List 3

E. List 1

F. List 2

G. List 3

aa. List 1

ab. List 2

ac. List 3

X. List 1

XI. List 2

XII. List 3

ci. List 1

cii. List 2

ciii. List 3

reversed attribute

- **reversed attribute** : If you want to display your **ordered list** in reversed order then you can use this attribute.
- You have to add **reversed** attribute in **** tag.
- **reversed** attribute is empty attribute, there is no value for this attribute.
- Example is given below:

```
<ol type="1" reversed>
  <li>List 1</li>
  <li>List 2</li>
  <li>List 3</li>
</ol>
```

- **Output**

```
3. List 1
2. List 2
1. List 3
```

Definition / Description List

- When you want to display a list with title and description then you can use description list.
- To create a description list you need to use **<dl>** tag.
- Inside **<dl>** tag to add **data term** you have to use **<dt>** tag.
- Inside **<dl>** tag to add **data description** after **data term** you have to use **<dd>** tag.
- Example is given below:

```
<dl>
  <dt>HTML</dt>
  <dd>Hyper Text Markup Language</dd>

  <dt>CSS 3</dt>
  <dd>Cascading Style Sheet</dd>
</dl>
```

- **Output :**

HTML
Hyper Text Markup Language
CSS 3
Cascading Style Sheet