

HTML, CSS, Bootstrap, Javascript and jQuery



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Table of contents

Table of contents	i
1 HTML	1
1.1 Introduction	1
1.2 First code	1
1.3 Basic tags	2
1.4 Attributes	4
1.4.1 Attribute ‘name’ and ‘value’	4
1.4.2 Core attributes	4
1.5 Tables	5
1.6 Text formatting	6
1.7 Images	6
1.8 Lists	8
1.9 Links	8
1.10 Forms	10
2 Cascading Style Sheets (CSS)	15
2.1 Introduction	15
2.1.1 Inline CSS	15
2.1.2 Embedded CSS	15
2.1.3 External CSS	16
2.2 Basic CSS Selectors	17
2.3 Hierarchy	18
2.4 More selectors	20
2.4.1 Attribute selector	20
2.5 More properties	21
3 Bootstrap	22
3.1 Introduction	22
3.2 Setup	22
3.2.1 Download and include files	22
3.2.2 Add CDN	23
3.2.3 Check setup	23
3.3 Grid system	24
3.3.1 Example	25
3.3.2 Nested columns	26
3.3.3 Offset	26
3.4 Components	27
3.4.1 Labels	28
3.4.2 Buttons	29
3.4.3 Forms	29
3.4.4 Horizontal form	30
3.4.5 Form elements	33

3.4.6	Control size	35
3.4.7	More buttons	37
3.4.8	Input group	39
3.4.9	Navigation bar (navbar)	42
4	JavaScript	45
4.1	Introduction	45
4.2	First code	45
4.2.1	JavaScript in HTML file	45
4.3	Keywords, Datatypes, Variables and Operators	46
4.3.1	Keywords	46
4.3.2	Datatypes	47
4.3.3	Variables	47
4.3.4	Operators	48
4.3.5	String to number conversion	49
4.3.6	Convert to integer	49
4.3.7	Convert to float	50
4.3.8	Math	50
4.3.9	String	50
4.3.10	Arrays	50
4.4	Control structure, loops and functions	51
4.4.1	If-else	51
4.4.2	Switch-case-default	52
4.4.3	For loop	52
4.4.4	While loop	52
4.4.5	do-while	53
4.4.6	for-in loop	53
4.4.7	Continue and break	53
4.4.8	Functions	54
4.5	Event handling	54
4.6	Conclusion	55
5	jQuery	56
5.1	Introduction	56
5.1.1	Requirements	56
5.1.2	Add contents	57
5.2	jQuery examples	58
5.2.1	Add jQuery code	58
5.2.2	jQuery in separate file	60
5.2.3	Get input from user	61
5.3	Selectors	64
5.3.1	Select elements	64
5.3.2	Filters	67
5.4	Operations	69
5.5	Event handling	69

Chapter 1

HTML

1.1 Introduction

In this chapter, various component of HTML are discussed to design a web page.

The basic structure for an HTML page is shown below.

- Entries inside the `</... />` are known as tags. Most of the tags has an opening and closing e.g. `<head>` (opening head) and `</head>` (closing head). Some of the tags do not have closing tags e.g. `<!DOCTYPE ...>` and `
`. We need to write the HTML codes inside the tags.
- The comments are written between `<!--` and `-->`.
- Here Line 1 gives the details of the ‘HTML version’ to the web-browser. The ‘html’ tells it is version 5.
- The ‘head’ tag (Lines 3-5) contains the header related tags e.g. ‘title for the page’ and ‘links for the css files’ etc.
- The ‘body’ tag (7-11) contains the actual HTML code which is displayed on the web-browser. Also, we add all the JavaScript related codes just before the closing body tag (`</body>`).

```
1 <!DOCTYPE html> <!-- tells browser above the html version -->
2 <html> <!-- beginning of the html document -->
3   <head>
4     <!-- header related tags e.g. title, links etc. -->
5   </head>
6
7   <body>
8     <!-- actual html document here -->
9
10    <!-- add JavaScript files here -->
11  </body>
12 </html>
```

1.2 First code

In below code, the message “Hello World” is displayed on the HTML page. The [Fig. 1.1](#) is the resultant HTML page.

- The title (Line 4) appears on the top of the browser.
- The tag `<h1>` is called ‘header’ tag, which has the larger size than the normal text (see the size of ‘Hello World!’).
- The tag `<p>` is called the ‘paragraph’ tag, which can be used to write the paragraphs.

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

(continues on next page)

(continued from previous page)

```

<head>
  <title>HTML Tutorial</title>
</head>
<body>
  <h1> Hello World! </h1>
  <p> This is the first HTML code </p>
</body>
</html>

```



Fig. 1.1: First code

1.3 Basic tags

- The [Table 1.1](#) shows the list of tags which are required for writing the basic ‘HTML’ codes i.e. without any style e.g. bold, italics and numbering etc.

Table 1.1: List of basic tags

Tag	Description	Example
h1, ..., h6	Header tag h1 to h6	<h2> Hi </h2>
p	paragraphs (Line changes at the end)	<p> Hi </p>
span	No line change after span	Hi Bye.
div	make division between contents	<div> ... </div>
a	hyperlink	see Section 1.9
center	Move content to center	<center> Hi </center>
br	Line break (no closing tag)	 or
hr	horizontal line (no closing tag)	<hr /> or <hr>
pre	preserve formatting	<pre> ... </pre>
table	insert table	see Section 1.5

- Let’s see the example of each of these tags,

Note: All the new codes are added below the previous codes in the ‘body’ tag. Therefore only newly added codes are shown in the tutorial.

```

<h2> Heading 2 </h2>
  <h6> Heading 6 </h6>

```

(continues on next page)

```

<p> This is paragraph </p>

<span> This is span.</span>
<span> The 'br' tag is used after span to break the line </span>
<br/>

<div style="color:blue;">
  The 'div' tag can be used for formatting the tags inside it at once using 'style' and 'classes'
→etc.

  <p> This paragraph is inside the 'div' tag </p>
  <span> This span is inside the 'div' tag </span>
  <br/>

</div>

<center>
  <h3> Heading 3 is centered</h3>
  <p><span> Centered span inside the paragraph.</span><p>
</center>

Two horizontal line is drawn using two 'hr' tag.
<hr />
<hr>

<pre> 'pre' tag preserve the formatting (good for writing codes)

  # Python code
  x = 2
  y = 3
  print(x+y)

</pre>

```

- Fig. 1.2 is the output of above code. Read the text to understand each tag,

Heading 2

Heading 6

This is paragraph

This is span. The 'br' tag is used after span to break the line

The 'div' tag can be used for formatting the tags inside it at once using 'style' and 'classes' etc.

This paragraph is inside the 'div' tag

This span is inside the 'div' tag

Heading 3 is centered

Centered span inside the paragraph.

Two horizontal line is drawn using two 'hr' tag.

'pre' tag preserve the formatting (good for writing codes)

```

# Python code
x = 2
y = 3
print(x+y)

```

Fig. 1.2: Basic tags : Attribute 'style' is used in 'div' tag

This is a sample, click download link to get the full Tutorial

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