

# Introduction to Basic HTML

## What is HTML

Hyper Text Markup Language (HTML) is a language to describe the page structure.

Head includes Title, Meta-info, CSS, JavaScript libraries. Body holds contents of the page.

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     ...
5   </head>
6   <body>
7     ...
8   </body>
9 </html>
```

## HTML Tags

Opening Tag + Closing Tag, for example:

```
1 | <p> ... </p>
```

The character(s) in <> declare the tag's purpose.

Attributes can also be added to provide additional information, for example, when we need a reference to an URL,

```
1 | <a href="https://edav.info">EDAV</a>.
```

## Start from the Beginning ...

<html>: Indicates this is a HTML document.

<head>: Include title, styles and other specifications.

<body>: Contains contents of the HTML document.

## Markup the Text

HTML Tag	Usage/Meaning
<h1> to <h6>	Largest to smallest headings
<p>	Indicate a paragraph
<code>	Indicate code inside
 	Line break
<hr>	Thematic break
<b>	<b>Bold</b> text
<strong>	<b>Strong</b> text
<i>	<i>Italic</i> text
<em>	<i>Emphasized</i> text
<sup>	Super <sup>script</sup>
<sub>	Sub <sub>script</sub>
<ins>	Insert text
<del>	Deleted text
<s>	Text that no longer correct

## Lists

Ordered list:

```
1 | <ol>
2 |   <li>item 1</li>
3 |   <li>item 2</li>
4 | </ol>
```

Unordered list:

```
1 | <ul>
2 |   <li>item 1</li>
3 |   <li>item 2</li>
4 | </ul>
```

Nested list:

```
1 | <ol>
2 |   <li>item 1</li>
3 |   <ol>
4 |     <li>sub-item 1.1</li>
5 |   </ol>
6 | </ol>
```

## Tables

HTML Tag	Usage/Meaning
<table>	Indicate a table
<caption>	Caption of the table
<tr>	Start of a row
<th>	Heading of the table
<td>	Indicate a table cell

## Forms

HTML Tag	Usage/Meaning
<form>	Indicate a form
<input type="[type]">	Input field of a specific [type]

## SVG

Start with:

```
1 | <svg width="[w]" height="[h]">
2 |   ...
3 | </svg>
```

Inside the <svg> .. </svg>: Can draw different types of shapes. For example,

```
1 | <rect width="200" height="150"
   |   style="fill:red;
   |   stroke-width:1; stroke:yellow"
   | />
```

Also, one can draw any shape with path, "M x y" indicates start at (x,y), "L x<sub>1</sub> y<sub>1</sub>" means drawing a straight line from the starting point to (x<sub>1</sub>,y<sub>1</sub>).

"C cx<sub>0</sub> cy<sub>0</sub>, cx<sub>1</sub> cy<sub>1</sub>, x<sub>1</sub> y<sub>1</sub>" draws a curve from the starting point to (x<sub>1</sub>,y<sub>1</sub>), with (cx<sub>0</sub>,cy<sub>0</sub>) and (x<sub>1</sub>,cy<sub>1</sub>) control the curvature of the curve; check [html.examples.html](#) for more straight-forward interpretation.