

HTML BASIC

- HTML Documents

All HTML documents must start with a document type declaration: `<!DOCTYPE html>`.

The HTML document itself begins with `<html>` and ends with `</html>`.

The visible part of the HTML document is between `<body>` and `</body>`.

Example:

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

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

- The `<!DOCTYPE>` Declaration

The `<!DOCTYPE>` declaration represents the document type, and helps browsers to display web pages correctly.

It must only appear once, at the top of the page (before any HTML tags).

The `<!DOCTYPE>` declaration is not case sensitive.

The `<!DOCTYPE>` declaration for HTML5 is:

```
<!DOCTYPE html>
```

- HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

`<h1>` defines the most important heading. `<h6>` defines the least important heading:

Example:

```
<h1>This is heading 1</h1>  
<h2>This is heading 2</h2>  
<h3>This is heading 3</h3>
```

- HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

Example:

```
<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>
```

- HTML Links

HTML links are defined with the `<a>` tag:

Example:

```
<a href="https://www.phinma.edu.ph/">This is a link</a>
```

• HTML Images

HTML images are defined with the `` tag.

The source file (`src`), alternative text (`alt`), `width`, and `height` are provided as attributes:

Example:

```

```

• HTML Elements

The HTML **element** is everything from the start tag to the end tag:

Example:

```
<tagname>Content goes here...</tagname>
```

Example of some HTML elements:

```
<h1>My First Heading</h1>
```

```
<p>My first paragraph.</p>
```

• HTML Attributes

- All HTML elements can have **attributes**
- Attributes provide **additional information** about elements
- Attributes are always specified in **the start tag**
- Attributes usually come in name/value pairs like: **name="value"**

The href Attribute

The `<a>` tag defines a hyperlink. The `href` attribute specifies the URL of the page the link goes to:

Example:

```
<a href="https://www.phinma.edu.ph/">Visit PHINMA</a>
```

The src Attribute

The `` tag is used to embed an image in an HTML page. The `src` attribute specifies the path to the image to be displayed:

Example:

```

```

The width and height Attributes

The `` tag should also contain the `width` and `height` attributes, which specify the width and height of the image (in pixels):

Example:

```

```

The alt Attribute

The required `alt` attribute for the `` tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to a slow connection, or an error in the `src` attribute, or if the user uses a screen reader.

Example:

```

```

• HTML Formatting Elements

Formatting elements were designed to display special types of text:

- `` - Bold text
- `` - Important text
- `<i>` - Italic text
- `` - Emphasized text
- `<mark>` - Marked text
- `<small>` - Smaller text
- `` - Deleted text
- `<ins>` - Inserted text
- `<sub>` - Subscript text
- `<sup>` - Superscript text

HTML `` and `` Elements

The HTML `` element defines bold text, without any extra importance.

Example:

```
<b>This text is bold</b>
```

```
<strong>This text is important!</strong>
```

HTML `<i>` and `` Elements

The HTML `<i>` element defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.

Example:

```
<i>This text is italic</i>
```

```
<em>This text is emphasized</em>
```

HTML <small> Element

The HTML `<small>` element defines smaller text:

Example:

```
<small>This is some smaller text.</small>
```

HTML <mark> Element

The HTML `<mark>` element defines text that should be marked or highlighted:

Example:

```
<p>Do not forget to buy <mark>milk</mark> today.</p>
```

HTML Element

The HTML `` element defines text that has been deleted from a document. Browsers will usually strike a line through deleted text:

Example:

```
<p>My favorite color is <del>blue</del> red.</p>
```

HTML <ins> Element

The HTML `<ins>` element defines a text that has been inserted into a document. Browsers will usually underline inserted text:

Example:

```
<p>My favorite color is <del>blue</del> <ins>red</ins>.</p>
```

- HTML Tables

A table in HTML consists of table cells inside rows and columns.

Table Cells

Each table cell is defined by a `<td>` and a `</td>` tag.

Everything between `<td>` and `</td>` are the content of the table cell.

Example:

```
<table>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
</table>
```

Table Rows

Each table row starts with a `<tr>` and ends with a `</tr>` tag.

Example:

```
<table>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
</table>
```

Table Headers

Sometimes you want your cells to be table header cells. In those cases use the `<th>` tag instead of the `<td>` tag:

Example:

Let the first row be table header cells:

```
<table>
  <tr>
    <th>Person 1</th>
    <th>Person 2</th>
    <th>Person 3</th>
  </tr>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
  <tr>
    <td>16</td>
    <td>14</td>
    <td>10</td>
  </tr>
</table>
```

• HTML Table Borders

To add a border, use the CSS `border` property on `table`, `th`, and `td` elements:

Example:

```
table, th, td {
  border: 1px solid black;
}
```


Collapsed Table Borders

To avoid having double borders like in the example above, set the CSS `border-collapse` property to `collapse`.

This will make the borders collapse into a single border:

Example:

```
table, th, td {  
  border: 1px solid black;  
  border-collapse: collapse;  
}
```

Style Table Borders

If you set a background color of each cell, and give the border a white color (the same as the document background), you get the impression of an invisible border:

Example:

```
table, th, td {  
  border: 1px solid white;  
  border-collapse: collapse;  
}  
th, td {  
  background-color: #96D4D4;  
}
```

Round Table Borders

With the `border-radius` property, the borders get rounded corners:

Example:

```
table, th, td {  
  border: 1px solid black;  
  border-radius: 10px;  
}
```

- HTML Table Sizes

HTML tables can have different sizes for each column, row or the entire table.

HTML Table Width

To set the width of a table, add the `style` attribute to the `<table>` element:

Example:

Set the width of the table to 100%:

```
<table style="width:100%">
```

```
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
```

```
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
```

```
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
```

```
</table>
```

HTML Table Column Width

To set the size of a specific column, add the `style` attribute on a `<th>` or `<td>` element:

Example:

Set the width of the first column to 70%:

```
<table style="width:100%">

  <tr>
    <th style="width:70%">Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>

  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>

  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>

</table>
```

HTML Table Row Height

To set the height of a specific row, add the **style** attribute on a table row element:

Example:

Set the height of the second row to 200 pixels:

```
<table style="width:100%">
```

```
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>
```

```
  <tr style="height:200px">
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
```

```
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
```

```
</table>
```

- HTML Table Headers

Table headers are defined with `th` elements. Each `th` element represents a table cell.

Example:

```
<table>

  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
    <th>Age</th>
  </tr>

  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>

  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>

</table>
```

Vertical Table Headers

To use the first column as table headers, define the first cell in each row as a `<th>` element:

Example:

```
<table>

  <tr>
    <th>Firstname</th>
    <td>Jill</td>
    <td>Eve</td>
  </tr>

  <tr>
    <th>Lastname</th>
    <td>Smith</td>
    <td>Jackson</td>
  </tr>

  <tr>
    <th>Age</th>
    <td>94</td>
    <td>50</td>
  </tr>

</table>
```

Align Table Headers

To left-align the table headers, use the CSS `text-align` property:

Example:

```
th {
  text-align: left;
}
```

Header for Multiple Columns

To do this, use the `colspan` attribute on the `<th>` element:

Example:

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>50</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>94</td>
  </tr>
</table>
```

Table Caption

To add a caption to a table, use the `<caption>` tag:

Example:

```
<table style="width:100%">
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$50</td>
  </tr>
</table>
```

• HTML Table Padding & Spacing

HTML tables can adjust the padding inside the cells, and also the space between the cells.

HTML Table - Cell Padding

Cell padding is the space between the cell edges and the cell content.

To add padding on table cells, use the CSS `padding` property:

Example:

```
th, td {  
  padding: 15px;  
}
```

To add padding only above the content, use the `padding-top` property.

And the others sides with the `padding-bottom`, `padding-left`, and `padding-right` properties:

Example:

```
th, td {  
  padding-top: 10px;  
  padding-bottom: 20px;  
  padding-left: 30px;  
  padding-right: 40px;  
}
```

HTML Table - Cell Spacing

To change the space between table cells, use the CSS `border-spacing` property on the `table` element:

Example

```
table {  
  border-spacing: 30px;  
}
```


- HTML Table Colspan & Rowspan

HTML tables can have cells that span over multiple rows and/or columns.

HTML Table - Colspan

To make a cell span over multiple columns, use the `colspan` attribute:

Example:

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
  <tr>
    <td>Eve</td>
    <td>Jackson</td>
    <td>57</td>
  </tr>
</table>
```

HTML Table - Rowspan

To make a cell span over multiple rows, use the `rowspan` attribute:

Example:

```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone </th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
```

