



HTML Intro

FT-WEB-13



Sprint -1 Day-1

Objectives:

- What is HTML
- HTML elements
- Structure of HTML
- Various HTML tags
- HTML forms
- HTML tables



What is HTML?

- HTML stands for **HyperText Markup Language**.

Hyper Text : "Hypertext" refers to links that connect web pages to one another, either within a single website or between websites, allows a user to click a link and be redirected to a new page referenced by that link

Markup : HTML uses "markup" to annotate text, images, and other content for display in a Web browser.

- HTML consists of a series of **elements**.
- HTML elements tell the browser how to display the content.



What is an HTML Element?

- An HTML element is defined by a start tag, some content, and an end tag:

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



Start tag



End Tag

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



A Simple HTML Document:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

Info about website (title)


```
</head>
```

```
<body>
```

Visible in browser

```
</body>
```

```
</html>
```

- 
- The `<!DOCTYPE html>` declaration defines the version of HTML document, in this case it is 5
 - 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.
 - 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.

Tree Structure

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title></title>
```

```
  </head>
```

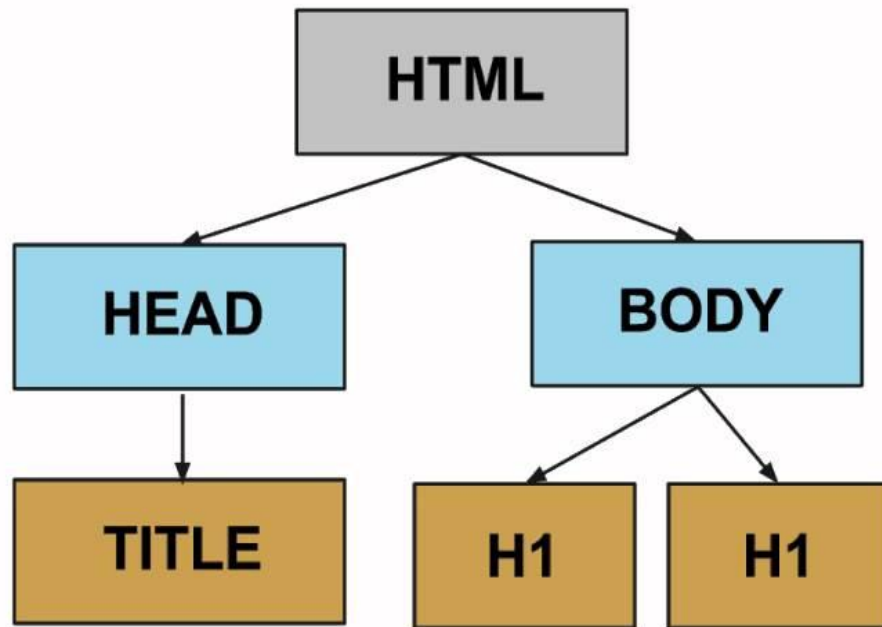
```
  <body>
```

```
    <h1></h1>
```

```
    <h1></h1>
```

```
  </body>
```

```
</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:

```
<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>
```




HTML Paragraphs

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

Example

```
<p> Welcome to Masai School.</p>
```



HTML `<a>` Tag

The `<a>` tag defines a hyperlink, which is used to link from one page to another.

```
<a href="https://www.https://www.masaischool.com">
```

href is an *attribute*

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"**



HTML `` Tag

The `` tag defines an unordered (bulleted) list.

Use the `` tag together with the `` tag to create unordered lists.

```
<ul>
```

```
<li>Mouse</li>
```

```
<li>Keyboard</li>
```

```
<li>Speaker</li>
```

```
<li>Monitor</li>
```

```
</ul>
```



HTML `<input>` Tag

- The `<input>` tag specifies an input field where the user can enter data.
- The `<input>` element can be displayed in several ways, depending on the type attribute.

```
<input type="text"/>
```



HTML `` Tag

The `` tag is used to embed an image in an HTML page.

The `` tag has two required attributes:

- `src` - Specifies the path to the image
- `alt` - Specifies an alternate text for the image, if the image for some reason cannot be displayed

Syntax:

```

```



Empty HTML Elements

HTML elements with no content are called empty elements.

The `
` tag defines a line break, and is an empty element without a closing tag:

Example

```
<p>This is a <br> paragraph with a line break.</p>
```

`
` , `<image>` , `<input>` are other empty HTML elements



HTML Forms:

The `<form>` element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

`<form>`

.....form elements

`</form>`



Syntax

```
<form>
```

```
<label for="fname">First name:</label><br>
```

```
<input type="text" id="fname" ><br>
```

```
<label for="lname">Last name:</label><br>
```

```
<input type="text" id="lname" >
```

```
</form>
```




The `<label>` Element

The `<label>` element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.

The `for` attribute of the `<label>` tag should be equal to the `id` attribute of the `<input>` element to bind them together.

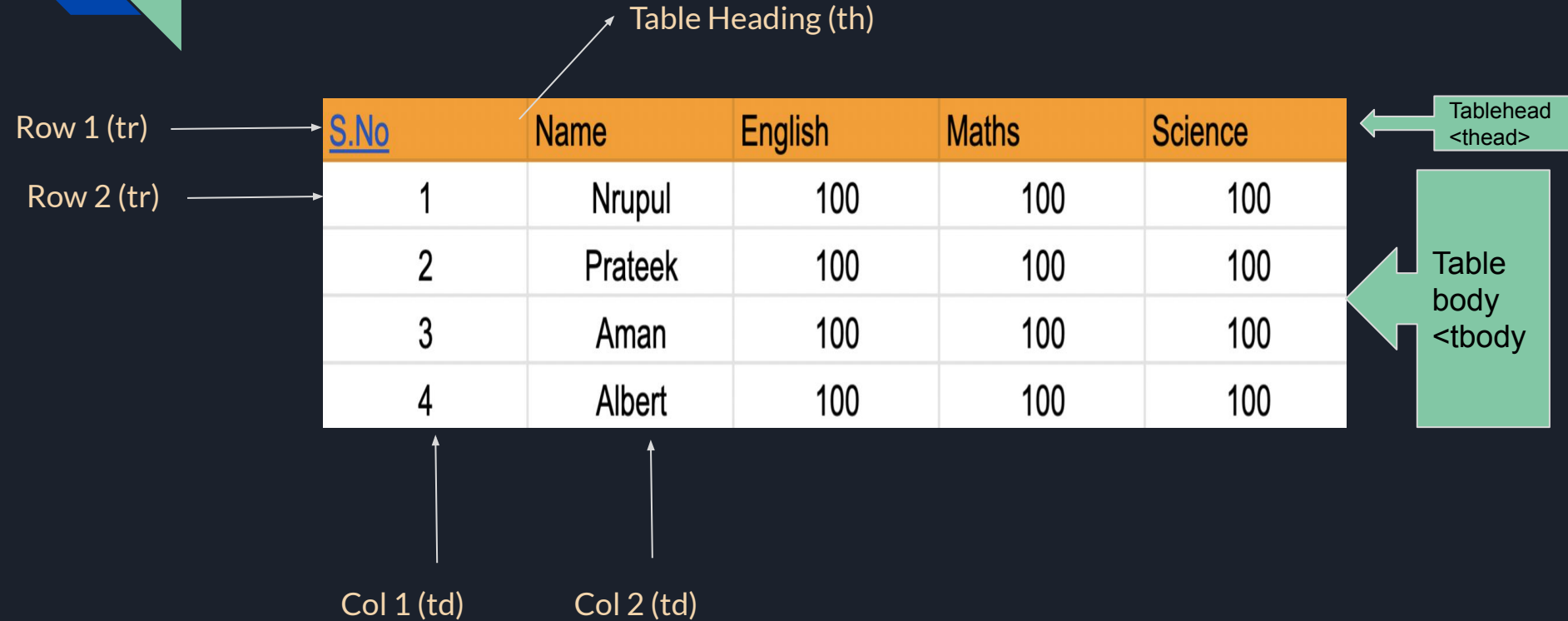
HTML Table

| <u>S.No</u> | Name | English | Maths | Science |
|-------------|---------|---------|-------|---------|
| 1 | Nrupul | 100 | 100 | 100 |
| 2 | Prateek | 100 | 100 | 100 |
| 3 | Aman | 100 | 100 | 100 |
| 4 | Albert | 100 | 100 | 100 |

Tablehead
<thead>

Table
body
<tbody>

HTML Table



The diagram illustrates the structure of an HTML table. It features a table with 5 columns and 5 rows. The first row is the header, and the subsequent four rows are the body. Annotations include: 'Table Heading (th)' pointing to the first column of the header; 'Row 1 (tr)' and 'Row 2 (tr)' pointing to the first and second rows respectively; 'Tablehead <thead>' pointing to the header row; 'Table body <tbody>' pointing to the body rows; 'Col 1 (td)' and 'Col 2 (td)' pointing to the first and second columns of the body respectively.

| <u>S.No</u> | Name | English | Maths | Science |
|-------------|---------|---------|-------|---------|
| 1 | Nrupul | 100 | 100 | 100 |
| 2 | Prateek | 100 | 100 | 100 |
| 3 | Aman | 100 | 100 | 100 |
| 4 | Albert | 100 | 100 | 100 |



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | - |