Front-End Development

Front end development is the development of code that creates the visual front-end elements of a software, application or website. Front end languages include **HTML**, **CSS**, and **Javascript**

HTML defines the content of web pages
CSS specifies the layout of web pages
JS programs the behavior of web pages

HTML (Hyper Text Markup Language) is the standard language for creating Web pages. It describes the structure of Web pages.

HTML elements are the building blocks of HTML pages, represented by tags such as: "heading", "paragraph", "table", and so on.

```
<!DOCTYPE html>
<html>
<head>
<title></title>
</head>
<body>
</body>
</html>
```

Purwadhika
Startup and Coding School

Make your first web page

```
<!DOCTYPE html>
<html>
    <head>
        <title>Purwadhika</title>
    </head>
    <body>

    Hello World!

    </body>
</html>
```

Purwadhika
Startup and Coding School

HTML

<!DOCTYPE html>

This declaration appears at the very top of every HTML document and it tells the browser that what follows next is HTML 5

<head>

The head tag contains information about the page itself. This includes the page title you see at the top, linking to any external files like CSS and JavaScript files, and additional meta information.

<body>

The body tag, on the other hand, is where the main content you will see displayed on your screen resides. You need to put anything you want actually rendered between the body tag.

`<h1 style="color:blue;">Hi!</h1>`

Element
`<h1 style="color:blue;">Hi!</h1>`

Tag
`<h1>`

Attribute
style

Attribute Value
"color:blue;"

Hi!

Purwadhika
Startup and Coding School

Paragraph, Break & Comment

```html
<p> Ini paragraf 1. </p>
<p> Ini paragraf 2. </p>

<hr>
Ini baris 1<br>
Ini baris 2

<!-- Ini komentar -->
```

Purwadhika
Startup and Coding School

Heading

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

Purwadhika
Startup and Coding School

HTML Text Formatting

```
<hr>
<b> Ini bold </b> <br>
<strong> Ini strong </strong> <br>
<i> Ini italic </i> <br>
<em> Ini emphasized </em> <br>
<mark> Ini marked </mark> <br>
<small> Ini small </small> <br>
<del> Ini deleted </del> <br>
<ins> Ini inserted </ins> <br>
<sub> Ini subscript </sub> <br>
<sup> Ini superscript </sup> <br>
<hr>
```

Unordered Lists

```
<h1> Daftar belanja: </h1>
<ul>
    <li> Beras </li>
    <li> Minyak goreng </li>
    <li> Gula </li>
    <li> Santan </li>
    <li> Merica </li>
    <li> Ikan </li>
</ul>
```

Purwadhika
Startup and Coding School

Unordered Lists

```
<h1> Daftar belanja: </h1>

<ul type="disc">
    <li> Beras </li>
    <li> Minyak goreng </li>
</ul>
<ul type="circle">
    <li> Gula </li>
    <li> Santan </li>
</ul>
<ul type="square">
    <li> Merica </li>
    <li> Ikan </li>
</ul>
```

Ordered Lists

```html
<h1> Ranking Kelas X: </h1>
<ol>
    <li> Andi </li>
    <li> Budi </li>
    <li> Caca </li>
    <li> Dedi </li>
    <li> Euis </li>
    <li> Fafa </li>
</ol>
```

Ordered Lists

```html
<h1> Ranking Kelas X: </h1>
<ol type="1">
    <li> Andi </li>
    <li> Budi </li>
    <li> Caca </li>
    <li> Dedi </li>
    <li> Euis </li>
    <li> Fafa </li>
</ol>

// type="1"/"a"/"A"/"i"/"I"
```

Description Lists

```
<h1> Glosarium: </h1>

<dl>
    <dt> Mikrokontroler </dt>
    <dd> xyzxyzxyzxyzxyzxyz </dd>

    <dt> Sensor </dt>
    <dd> xyzxyzxyzxyzxyzxyz </dd>

    <dt> Aktuator </dt>
    <dd> xyzxyzxyzxyzxyzxyz </dd>
</dl>
```

HTML Table

```html
<table>
  <tr>
    <th> Nama </th>
    <th> TTL </th>
    <th> Alamat </th>
  </tr>
  <tr>
    <td> Galih </td>
    <td> Jepara, 25 Jan 1992 </td>
    <td> Soditan 02/VI Kramat Jati </td>
  </tr>
  <tr>
    <td> Ratna </td>
    <td> Bandung, 4 Apr 1994 </td>
    <td> Geger Kalong No 45 </td>
  </tr>
</table>
```

Purwadhika
Startup and Coding School

Table's Border

```
<!DOCTYPE html>
<html>
<head>
    <title>Purwadhika</title>
    <style>
    table, th, td {
        border: 1px solid black;
        border-collapse: collapse;}
    </style>
</head>
<body>

--- Insert HTML Table from prev slide here! ---

</body>
</html>
```

Purwadhika
Startup and Coding School

Column Span

```
<table>
    <tr>
        <th>-  Asal  -</th>
        <th>- Domisili -</th>
    </tr>
    <tr>
        <td colspan="2"><center>
        Jakarta
        </center></td>
    </tr>
</table>
```

Row Span

```
<table>
    <tr>
        <th rowspan="2">Jakarta</th>
        <td>-  A  -</td>
        <td>-  B  -</td>
    </tr>
    <tr>
        <td>-  C  -</td>
        <td>-  D  -</td>
    </tr>
</table>
```

Absolute Links

```
<p>
<a href="https://www.google.com">
Google
</a>


<p>
<a href="https://www.yahoo.com"
target="_blank">
Yahoo
</a>
```

Purwadhika
Startup and Coding School

Relative Links

```html
<p>
<a href="satu.html">
Halaman Satu
</a>


<p>
<a href="/index.html"
target="_blank">
Halaman Index
</a>
```

Purwadhika
Startup and Coding School

ID Links

```
<p>
<a href="#aku">Klik untuk cari namaku!</a>
</p>

<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="kau"> Joko </h2>
<h2 id="aku"> Lintang </h2>
```

Purwadhika
Startup and Coding School

Images

```
<img src="cat.png"
alt="Ini kucing">

<img src="tiger.svg"
alt="Ini macan"
width="200" height="200"/>

<img src="url_from_web.jpeg"
alt="Ini gambar dari web"
width="200" height="200"/>
```

Purwadhika
Startup and Coding School

Figures & Captions

```
<figure>
    <img src="lion.png">
        <figcaption>
            Ini singa
        </figcaption>
</figure>
```

Purwadhika
Startup and Coding School

SVG *Scalable Vector Graphics*

```
<svg width="200" height="200">
    <circle cx="100" cy="100" r="80"
    stroke="red" stroke-width="5"
    fill="blue" />
</svg>

<svg width="400" height="200">
    <rect x="25" y="25" width="300"
    height="100"
    style="fill: rgb(100, 0, 100);
    stroke-width: 5;
    stroke: black;">
</rect></svg>
```

Purwadhika
Startup and Coding School

Forms

```
<!DOCTYPE html>
<html>
<head>
    <title>Forms</title>
</head>
<body>
    <form action="" method="post">
    ---- INSERT FORM ELEMENT ----
    </form>
</body>
</html>
```

Input Forms

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

<p><input type="password" required>

<p><input type="checkbox">

<p><input type="radio">

<p><input type="number" min="1" max="10">

<p><textarea rows="8" cols="64">
Ketik di sini</textarea>

<p><input type="submit" value="OK">
```

Button

```
<button type="button">
OK
</button>


<button type="button"
onclick="doSomething();">
Apply
</button>
```

Purwadhika
Startup and Coding School

Select Forms

```
<p> Apa warna favoritmu? </p>
<select>
      <option> Merah </option>
      <option> Kuning </option>
      <option> Hijau </option>
      <option> Biru </option>
</select>

<p> Apa makanan favoritmu? </p>
<select>
      <option> Papeda </option>
      <option> Soto Kwali </option>
      <option> Sate Padang </option>
      <option selected> Gudeg </option>
</select>
```

```html
<p>Minuman favoritmu?</p>
<select>

    <optgroup label="Jus Buah">
        <option> Jus Apel </option>
        <option> Jus Jeruk </option>
        <option> Jus Mangga </option>
    </optgroup>

    <optgroup label="Jamu">
        <option> Kencur </option>
        <option> Asem </option>
        <option> Brotowali </option>
    </optgroup>

</select>
```

Labels

```html
<p>

<label for="user">Username:</label>
<input type="text" name="user">


<p>

<label for="pass">Password:</label>
<input type="password" name="pass">
```

Purwadhika
Startup and Coding School

Field Sets & Legends

```html
<fieldset>
    <legend>Data Diri</legend>

    <p>
    <label for="nama">Nama:</label>
    <input type="text" name="nama">

    <p>
    <label for="usia">Usia:</label>
    <input type="number" name="usia">
</fieldset>
```

Purwadhika
Startup and Coding School

Division Tag

The div tag represents a generic container, because it defaults to a block. As a block, it starts on it's own new line, similar to how <p> tags work.

```
<!DOCTYPE html>
<html>
    <head>
        <title>Division</title>
    </head>
    <body>
        <div>Division 1</div>
        <div>Division 2</div>
        <div>Division 3</div>
    </body>
</html>
```

Purwadhika
Startup and Coding School

Span Tag

The span tag accomplishes the same thing as a div tag except that it is inline, which essentially means that it wraps content but remains inside the same line, and doesn't start on it's own line.

```
<!DOCTYPE html>
<html>
    <head>
        <title>Span</title>
    </head>
    <body>
<p>Namaku <span>Mr.X</span>
    </body>
</html>
```

Purwadhika
Startup and Coding School

Articles & Sections

```html
<article>
    <section class="header">
        <h1>Header Artikel</h1>
        <p>Selamat datang!</p>
    </section>
    <section class="main">
        <p>Ini konten utama.</p>
    </section>
    <section class="footer">
        <p>Bye!</p>
    </section>
</article>
```

Purwadhika
Startup and Coding School

Main, Headers and Footers

```html
<article>
    <header>
        <h1>Header Artikel</h1>
        <p>Selamat datang!</p>
    </header>
    <main>
        <p>Ini konten utama.</p>
    </main>
    <footer>
        <p>Bye!</p>
    </footer>
</article>
```

Purwadhika
Startup and Coding School

Asides

```
<article>
    <header>
        <h1>Header Artikel</h1>
        <p>Selamat datang!</p>
    </header>
    <section class="main">
        <p>Ini konten utama.</p>
        <aside>
            <h2>Ini Snippet!</h2>
            <p>Ini teks Snippet</p>
        </aside>
    </section>
    <footer>
        <p>Bye!</p>
    </footer>
</article>
```

Purwadhika
Startup and Coding School

Navigation

```
<nav>
 <ul>
   <li><a href="#">Home</a></li>
   <li><a href="#">Blog</a></li>
   <li><a href="#">News</a></li>
 </ul>
</nav>

<article>
--- insert article content here ---
</article>
```

Purwadhika
Startup and Coding School