

# Web Design & Programming

**Hypertext Markup Language (HTML) – Part 1**

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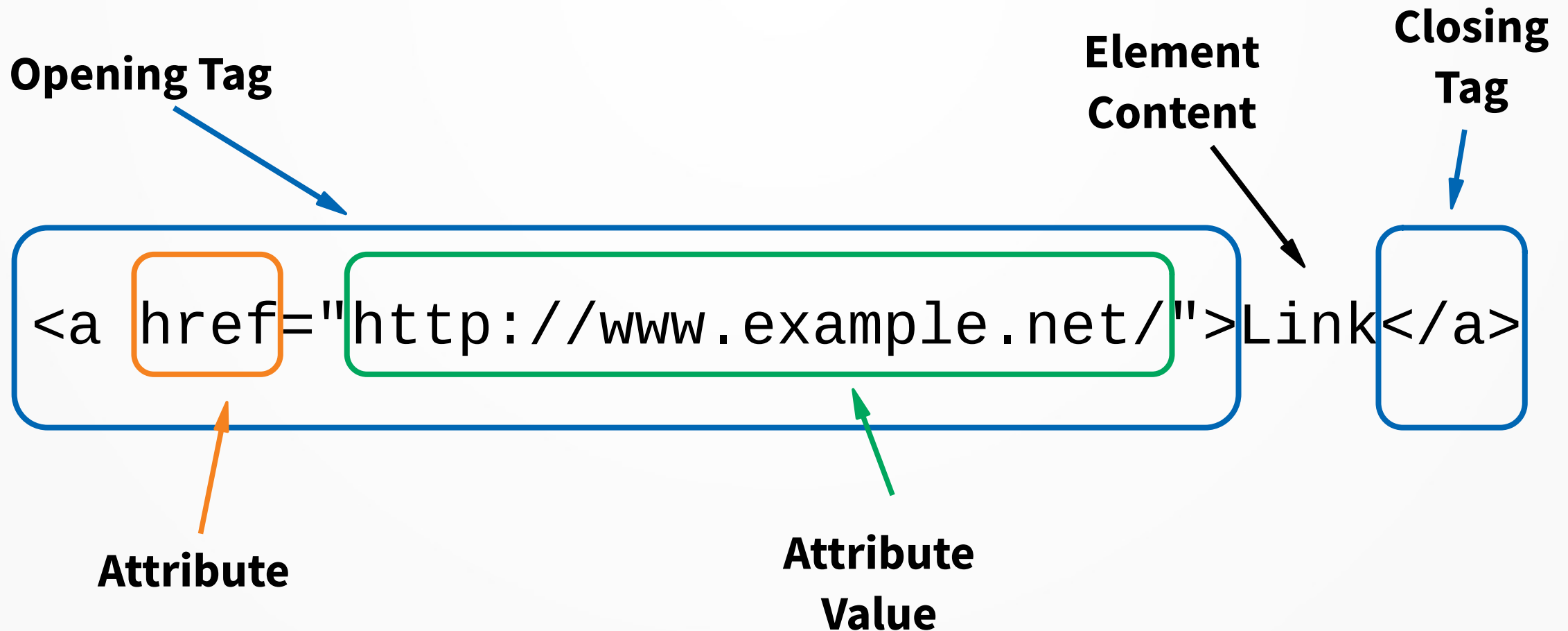
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# Document Structure

```
<!DOCTYPE html>
<html lang="en-US">
<head>
  <meta charset="UTF-8">
  <title>This the title of the document</title>
</head>
<body>
  <p>This is a paragraph in the body of the document.</p>
</body>
</html>
```

# Anatomy of an Element



# General Guidelines

- Use lowercase.
- Always check for opening and closing tags.
- You can use spaces, tabs and empty lines to clarify your code; those are ignored.

# Headers

- `<h1>Main Header<h1>`
- `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`
- You should have only one `<h1>` element in a document.
- Use headers in order: first `<h1>`, next `<h2>`, then `<h3>`, ...

# Paragraphs

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

# Line Breaks & Horizontal Rules

- Line Break: `<br>`
- Horizontal Rule: `<hr>`
- Those are empty elements, they don't have a closing tag.
- When using XHTML, they must be closed internally:  
`<br />`, `<hr />`.



# Lists

- Ordered Lists
- Unordered Lists
- Definition Lists
- Lists can be nested

# Ordered Lists

```
<ol>
```

```
  <li>Item #1</li>
```

```
  <li>Item #2</li>
```

```
  <li>Item #3</li>
```

```
</ol>
```

By default, ordered list elements are prefixed with numbers (1, 2, 3, ...).

# Unordered Lists

```
<ul>  
  <li>Item #1</li>  
  <li>Item #2</li>  
  <li>Item #3</li>  
</ul>
```

By default, ordered list elements are prefixed with bullets.

# Definition Lists

```
<d1>  
  <dt>Term #1</dt>  
    <dd>Term #1 Definition</dd>  
  <dt>Term #2</dt>  
    <dd>Term #2 Definition</dd>  
</d1>
```

By default, definition list elements are not prefixed with any character.

# Tables

Tables are builds with rows, including headers or data cells.

```
<table>  
<tr><th>Header 1</th><th>Header 2</th></tr>  
<tr><td>Cell 1</td><td>Cell 2</td></tr>  
<tr><td>Cell 3</td><td>Cell 4</td></tr>  
</table>
```

# Hyperlinks

- The `a` tag (‘a’ for ‘anchor’) requires to have the *href* attribute defined:
- `<a href="http://www.example.net/">Link</a>`
- Links into the same document can be created by using fragments:
  - `<p id="target">Target paragraph</p>`
  - `<a href="#target">Click to go to the target paragraph</a>`
- Links can be used for “non-web” targets:
  - `<a href="mailto:email@example.com">E-mail</a>`
  - `<a href="tel:3115552368">Phone</a>`

# Absolute and Relative Links

- An absolute link will use a full URL; an external link is always an absolute link.
- A relative link will point to a file to the same directory or related directory (parent or child).
- `<a href=" ../file.html">Link to a file in a parent folder</a>`
- `<a href="directory/file.html">Link to a file in a child folder</a>`

# Images

- The `img` element requires additional attributes:
  - `src`: source of the image (file name or URL)
  - `alt`: description
  - `height` and `width`: dimensions, in pixels

```

```



# File Name References

- When using file names in a link or to display an image, make sure that the name follows the rules used on the hosting server.
- On Mac OS X and Linux systems, file names are case-sensitive.
- Avoid spaces and special characters; use only Latin alphabet if possible (A-Z, a-z, 0-9).
- Do not forget the filename extension (.html, .jpg, .png, ...)