



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

Web Programming

Lecture 8

HTML Links

By

Asst. Lect. Ali Al-khawaja

HTML Links: The Foundation of Web Navigation

HTML links, also known as hyperlinks, are the fundamental building blocks that connect web pages and allow users to navigate the vast landscape of the internet. These powerful elements enable users to jump between documents with a simple click, transforming static text and images into interactive gateways of information. As we explore the world of HTML links, we'll uncover their syntax, attributes, and various applications that make them an essential part of web development.





Understanding HTML Links

1 Hyperlinks Defined

HTML links are hyperlinks. You can click on a link and jump to another document.

2 Visual Indicator

When you move the mouse over a link, the mouse arrow will turn into a little hand.

3 Versatile Elements

A link does not have to be text. A link can be an image or any other HTML element.



HTML Links Syntax

The <a> Tag

The HTML <a> tag defines a hyperlink. It has the following syntax:

Syntax Example

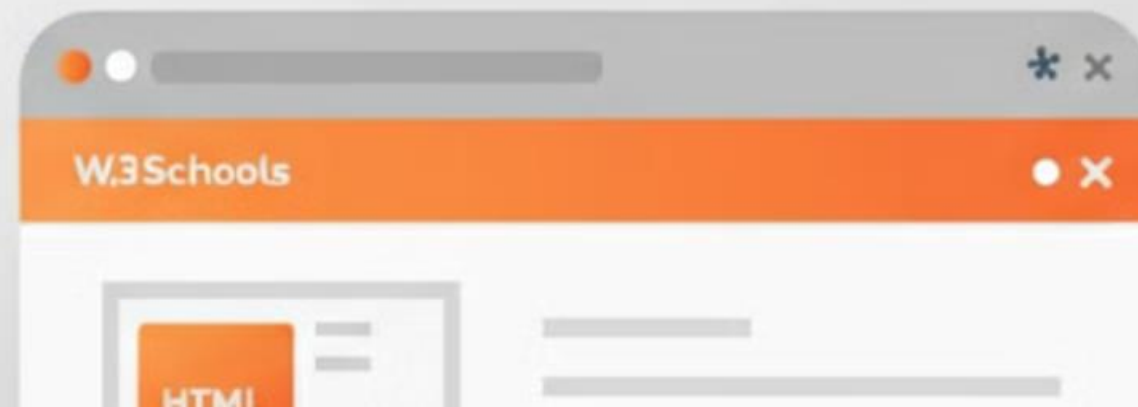
```
<a href="url">link text</a>
```

href Attribute

The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

Link Text

The link text is the part that will be visible to the reader. Clicking on the link text, will send the reader to the specified URL address.



HTML Link Example

1

DOCTYPE Declaration

```
<!DOCTYPE html>
```

2

HTML Structure

```
<html> <body>
```

3

Page Content

```
<h1>HTML Links</h1> <p><a href="https://www.w3schools.com/">Visit W3Schools.com!</a></p>
```

4

Closing Tags

```
</body> </html>
```

The target Attribute

Default Behavior

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

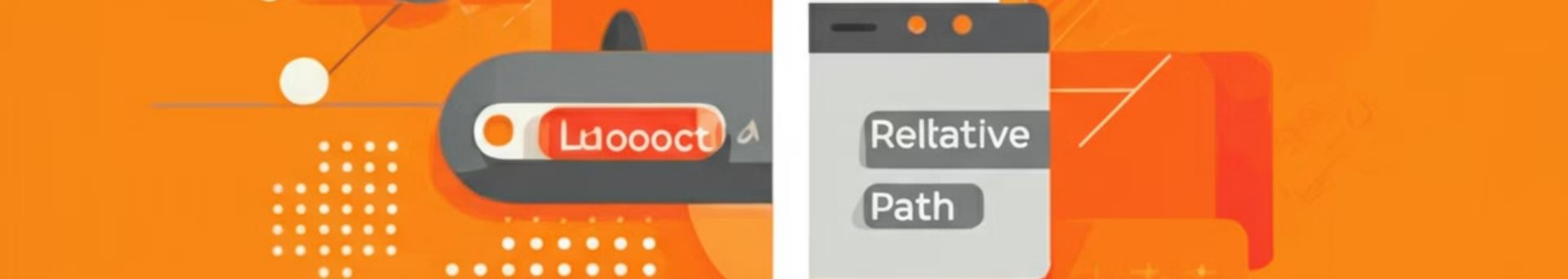
Target Values

The target attribute can have one of the following values:

- **self** – Default. Opens the document in the same window/tab as it was clicked
- **blank** – Opens the document in a new window or tab

Example

```
<a href="https://www.w3schools.com/"  
target="_blank">Visit W3Schools!</a>
```

Absolute vs. Relative URLs

1

Absolute URLs

An absolute URL is a full web address used in the href attribute. Example:
`https://www.w3.org/`

2

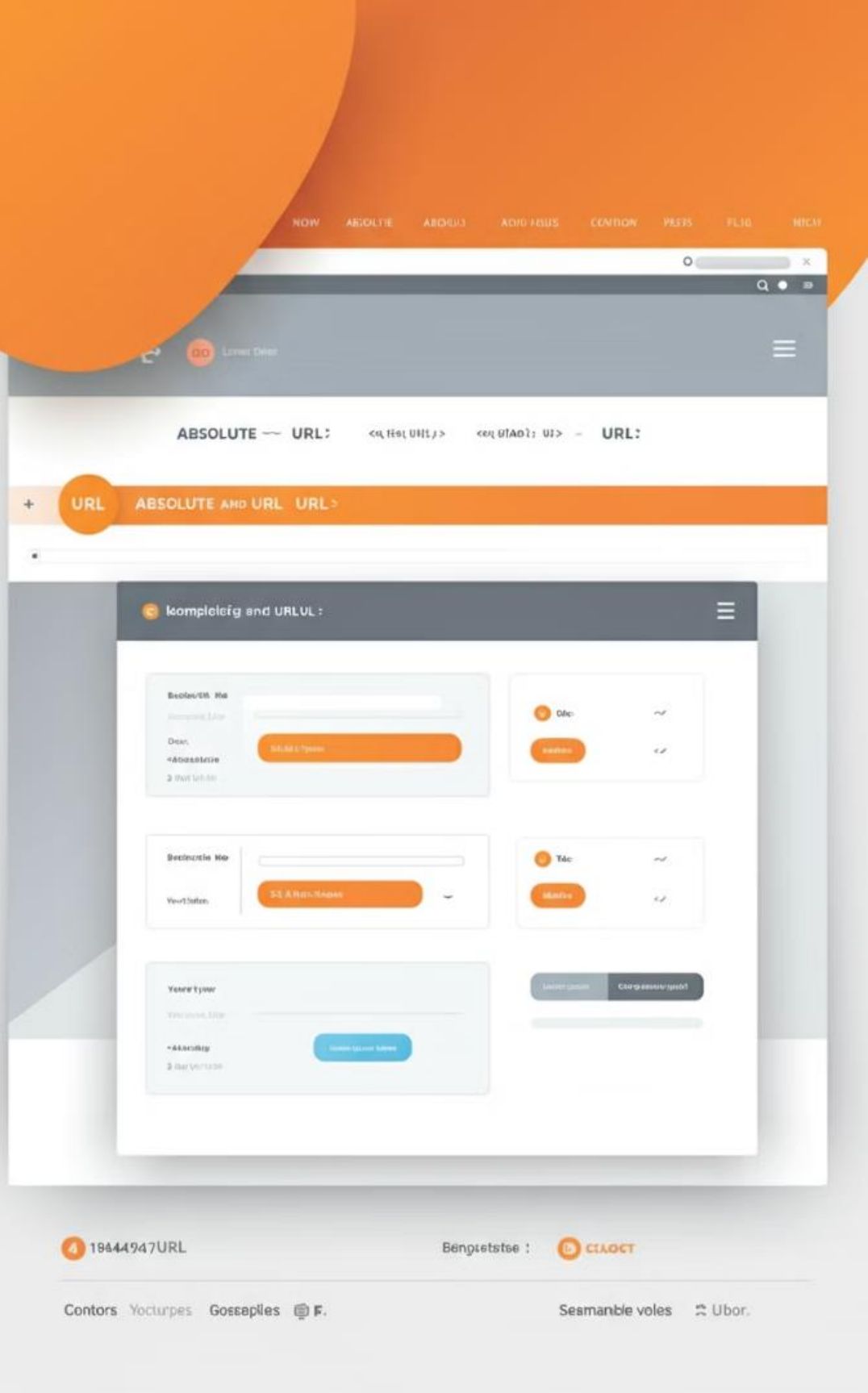
Relative URLs

A local link (a link to a page within the same website) is specified with a relative URL (without the "https://www" part). Example:
`html_images.asp`

3

Usage

Both types can be used in HTML links, depending on the location of the linked resource.



URL Examples

Absolute URLs

```
<a href="https://www.w3.org/">W3C</a>
```

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

Relative URLs

```
<a href="html_images.asp">HTML Images</a>
```

```
<a href="/css/default.asp">CSS Tutorial</a>
```


Using an Image as a Link



Image Link Syntax

To use an image as a link, just put the `` tag inside the `<a>` tag:

Example

```
<a href="default.asp">  </a>
```

Functionality

This creates a clickable image that acts as a hyperlink, directing users to the specified URL when clicked.

Versatility

Using images as links can enhance user experience and provide visual cues for navigation.



Linking to an Email Address

1

mailto: Protocol

Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):

2

Syntax Example

```
<a href="mailto:someone@example.com">Send email</a>
```

3

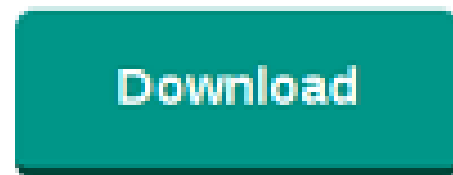
Functionality

When clicked, this link will open the user's default email client with a new message addressed to the specified email.

4

User Convenience

Email links provide a quick and easy way for users to initiate contact directly from a web page.



Using a Button as a Link

1

JavaScript Integration

To use an HTML button as a link, you have to add some JavaScript code.

2

Event Handling

JavaScript allows you to specify what happens at certain events, such as a click of a button:

3

Button Link Example

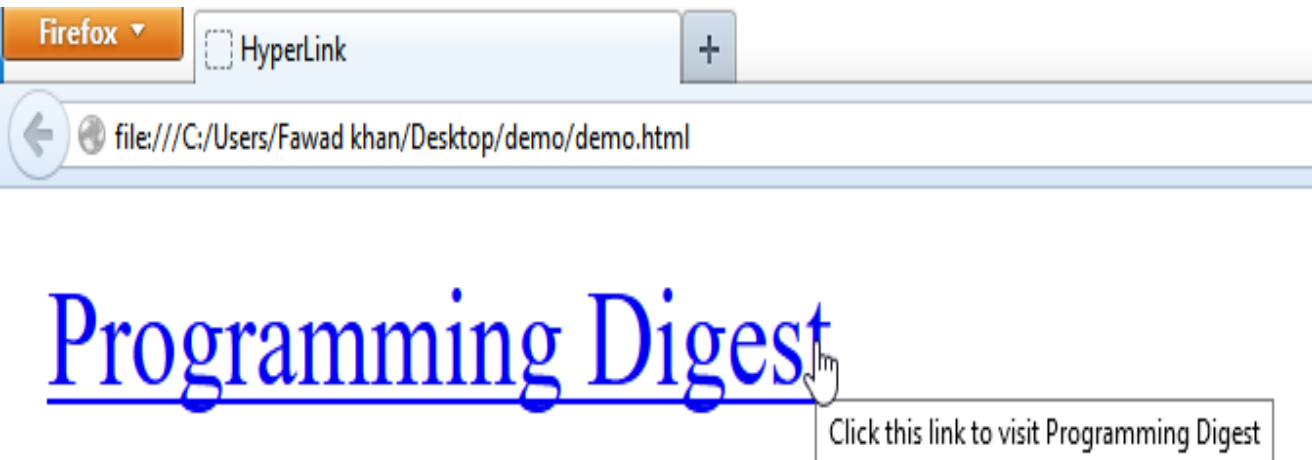
```
<button onclick="document.location='default.asp'">HTML  
Tutorial</button>
```

4

Functionality

When clicked, this button will navigate to the specified URL, mimicking the behavior of a traditional hyperlink.

Link Titles



Title Attribute

The title attribute specifies extra information about an element.

Tooltip Display

The information is most often shown as a tooltip text when the mouse moves over the element.

Example

```
<a  
href="https://www.w3schools.c  
om/html/" title="Go to  
W3Schools HTML  
section">Visit our HTML  
Tutorial</a>
```

Enhanced User Experience

Link titles provide additional context and can improve accessibility and user understanding of the link's destination.

Default HTML Link Colors

Unvisited Links

An unvisited link is underlined and blue

Visited Links

A visited link is underlined and purple

Active Links

An active link is underlined and red

Customizing Link Colors with CSS

1

CSS Styling

You can change the link state colors, by using CSS:

2

Unvisited Link

```
a:link { color: green; background-color: transparent; text-decoration: none; }
```

3

Visited Link

```
a:visited { color: pink; background-color: transparent; text-decoration: none; }
```

4

Hover State

```
a:hover { color: red; background-color: transparent; text-decoration: underline; }
```

5

Active Link

```
a:active { color: yellow; background-color: transparent; text-decoration: underline; }
```




Link Best Practices

1 Descriptive Link Text

Use clear and concise text that accurately describes the link's destination.

3 Accessibility

Ensure links are keyboard accessible and provide appropriate context for screen readers.

2 Consistent Styling

Maintain consistent link styles throughout your website for better user experience.

4 External Link Indicators

Consider using visual cues to indicate when a link will open in a new tab or window.

Advanced Link Techniques

Fragment Identifiers

Use `#` followed by an element's id to link to specific parts of a page: `Go to Section 2`

Download Links

Add the download attribute to specify a file should be downloaded: `Download PDF`

Rel Attribute

Use the rel attribute to specify the relationship between the current document and the linked document: `Example`