An **iframe** (short for inline frame) is an HTML element that allows you to embed another webpage or external content (like a video, map, or document) inside the current page. It's often used to display content from other websites without redirecting the user away from the current page.

Here’s a basic example of an iframe:

**Basic Example: Embedding a Webpage**

html

Copy code

<!DOCTYPE html>

<html lang="en">

<head>

<title>Iframe Example</title>

</head>

<body>

<h2>Embedded Wikipedia Page</h2>

<iframe src="https://www.wikipedia.org" width="600" height="400" style="border: 1px solid black;"></iframe>

</body>

</html>

In this example:

* The src attribute specifies the URL of the webpage that you want to embed (in this case, Wikipedia).
* The width and height attributes define the size of the iframe.
* The style attribute is used to apply a border for visibility.

**Example: Embedding a YouTube Video**

html

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<!DOCTYPE html>

<html lang="en">

<head>

<title>Iframe Example - YouTube</title>

</head>

<body>

<h2>Embedded YouTube Video</h2>

<iframe width="560" height="315" src="https://www.youtube.com/embed/dQw4w9WgXcQ"

title="YouTube video player" frameborder="0"

allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture"

allowfullscreen>

</iframe>

</body>

</html>

In this example:

* We embed a YouTube video using an iframe with the src set to the YouTube video's URL.
* The allowfullscreen attribute allows the video to be played in full screen when clicked.
* frameborder="0" removes the border around the iframe.

**Example: Embedding a Google Map**

html

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<!DOCTYPE html>

<html lang="en">

<head>

<title>Iframe Example - Google Maps</title>

</head>

<body>

<h2>Embedded Google Map</h2>

<iframe

src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3151.8354345093747!2d144.96305761550405!3d-37.814107979751616!2m3!1f0!2f0!3f0!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x6ad65d43e1f42e3d%3A0x3d207427f5042164!2sFederation%20Square%2C%20Melbourne%20VIC%203000%2C%20Australia!5e0!3m2!1sen!2sin!4v1615176224521!5m2!1sen!2sin"

width="600" height="450" style="border:0;" allowfullscreen="" loading="lazy">

</iframe>

</body>

</html>

In this example:

* The src contains a Google Maps embed link. You can get these kinds of links directly from Google Maps by selecting "Share" and then "Embed a map."
* The loading="lazy" attribute helps with performance by loading the iframe content lazily (only when it comes into view).

**Controlling iframe Behavior**

You can control iframes' behavior and interaction with the parent page using attributes:

* sandbox: Restricts what an iframe can do (e.g., disable scripts, forms, etc.).
* allow: Controls permissions like autoplay, fullscreen, etc.
* scrolling: Defines whether or not the iframe should have scrollbars.

Example:

html

Copy code

<iframe src="https://example.com" width="600" height="400" sandbox="allow-scripts" allow="fullscreen"></iframe>

Let me know if you'd like further examples or clarifications!