Web Navigation: Anchor Links & URL Structure

Part 1: Anchor Links (Links to the Page Itself)

An **anchor link** (or jump link) connects a link to a specific location on the same web page. They enhance navigation in long articles, legal documents, or FAQ directories.

Step 1: Create the Destination Target (The Anchor)

Assign a unique id attribute to the element where the visitor should land.

```
<h2 id="cooking-tips">Useful Cooking Tips</h2>
```

Step 2: Link to That Target

Create an anchor tag (<a>) whose href attribute matches the destination id, prefixed by a hashtag (#).

```
<a href="#cooking-tips">Jump to Cooking Tips</a>
```

Quick Pro-Tips for Anchors:

• **Case Sensitivity:** The id and your hashtag reference must match exactly.

• **No Spaces:** Always separate words in your IDs using hyphens (-) or underscores (_).

• **Back to Top Shortcut:** Using an empty hash (Back to Top) auto-scrolls to the very top of the document.

• **Smooth Scrolling:** Use CSS html { scroll-behavior: smooth; } to smoothly glide instead of abruptly shifting positions.

Part 2: The Anatomy of a URL

A **URL** (Uniform Resource Locator) acts as the complete digital address for any file or document on the global internet. It is composed of multiple distinct blocks, each providing specific instructions to your web browser.

URL Component	Example	Function & Meaning
Scheme / Protocol	https://	Defines how data is transferred. HTTPS encrypts the traffic for safety.
Subdomain	blog.	An optional subdivision pointing to a specific category of the site.

Domain Name	example	The registered name unique to the business or entity hosting the site.
Top-Level Domain (TLD)	.com	The extension specifying the entity category (e.g., .org, .edu, .gov).
Path	/recipes/cake	Points to the abstract folder directory or specific asset file on the server.
Query Parameters	?sort=easy&id;=4	Follows a ?. Key-value pairs used to filter, sort, or track data.
Fragment / Hash	#ingredients	Follows a #. Instructs the browser to instantly jump to an anchor.

How Anchors and URLs Connect

While standard anchor links work perfectly on the **same web page**, you can also link directly to an anchor hosted on a **completely different website**. To do this, simply paste the full URL path, and attach your fragment identifier to the very end of it:

```
https://blog.example.com/recipes/cake?sort=easy#ingredients
```

When a user clicks that full link, the browser fetches the page from the server, loads the resource, looks at the fragment identifier after the hash, and instantly scrolls down to the id="ingredients" section entirely on the client side.