Class 4: Multi-Page Websites (Content Organization, URLs, & Navigation)

- Review: CSS Basics
- Content Organization – Card Sorting
- URLs
- Links
- Structuring Navigation

Review: The Browser's Styling Language

CSS: **C**ascading **S**tyle **S**heets

CSS, is a language to describe the **presentation** of (HTML) documents.

Review: CSS for Static Websites

1. Create `styles/site.css`
2. Add
   `<link rel="stylesheet" type="text/css" href="styles/site.css">`
   to `<head>` of each HTML file
3. Add CSS property-value pairs to `styles/site.css` to style the HTML elements on your web pages
4. Validate `styles/site.css`

Review: CSS Vocabulary

Selector: Which HTML elements to style (`p`)
Property: What aspect of the element to style (`color`)
Value: How to style the property (`#ff0000`)
Rule: A selector + property + value pair

```
p {
  color: #ff0000;
}
```

Review: CSS Selectors

Element Selector – Selects **all** elements of a given type.

```
h2 { ... }
```

Descendant Combinator Selector – Selects all elements that are descendants of a given element.

```
article p { ... }
```

Review: Descendant Combinator Selector

Selects **all** elements that are descendants of a given element.

```
ELEMENT_NAME DESCENDANT_NAME { ... }

figure img {
  border-radius: 10px;
}
```

```
<picture>
  <img src="images/mcgraw-tower.jpg alt="">
</picture>

<figure>
  <img src="images/mcgraw-tower.jpg alt="">
</figure>
```

Gotcha: Observe the **space** between the element names. It's **required**.

`figure img` will **only** style the `<img>` elements inside `<figure>` elements.

Organizing Content into Pages

–

Card Sorting

Review: Designing a Website

1. Identify the website's audience by their goals. (Not your goals.)
2. Assemble/create content to address the audience's goals.
3. Organize content into web pages. (Websites have *multiple* pages.)
4. Plan the website's design.
5. Evaluate the site's design. Does the website address the audience's goals?

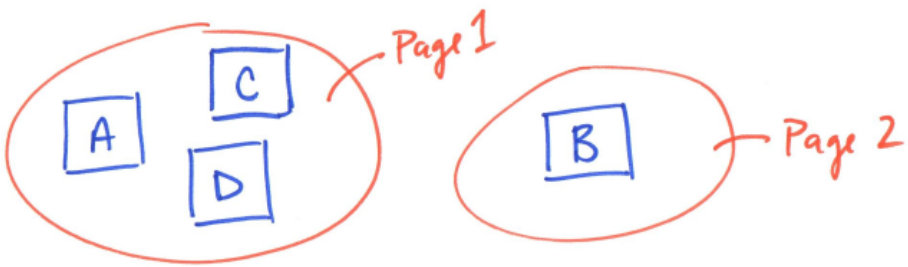
Designing a Website – Today!

1. Identify the website's audience by their goals. (Not your goals.)
2. Assemble/create content to address the audience's goals.
3. **Organize content into web pages.** (Websites have *multiple* pages.)
4. Plan the website's design.
5. Evaluate the site's design. Does the website address the audience's goals?

Organizing Content – Card Sorting

Card Sorting is a method for designing the information architecture of a website. Pieces of related content are ***physically*** **grouped** into categories and labeled.

Card sorting helps us determine the pages for a website and each page's name.



How To: Card Sorting

1. Identify content for the audience (not you!)
   Examples: “Clocktower Photo,” “Cornell History”, etc.

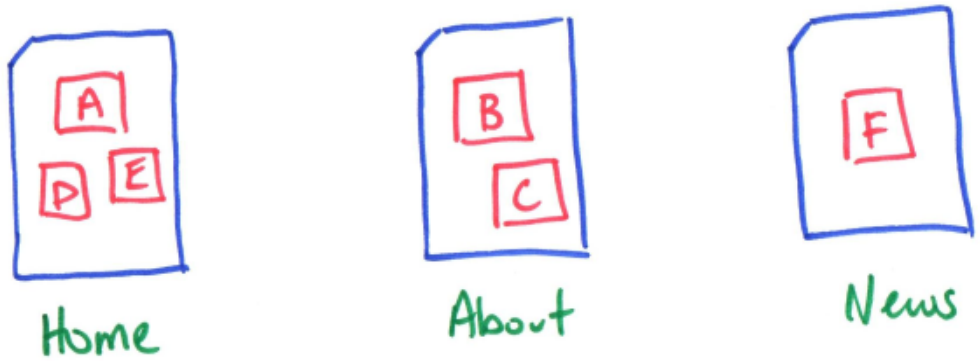
2. For **each** piece of **content**, write a ***brief*** **description** of the content on a card or post-it.

Note: Post-its are not required. Small pieces of paper also work.

How To: Card Sorting

3. Group the cards/post-its into related categories.
   Each group is a page.

4. Label each grouping using your **primary audience's** vocabulary.
   Each label is the page's name.



Activity: Card Sort Practice

1. Form groups of 3 or 4.
2. Label each post-it note with an item of content from this list →

   Ignore the color of the post-it notes!
3. As a group, spend some time discussing the different ways you could organize the cards.
4. Now sort the cards into groups.

As a class we'll discuss how the different groups sorted their "content".

- Banana
- Grape
- Zucchini
- Peach
- Carrot
- Broccoli
- Apple
- Bell Pepper
- Strawberry
- Squash
- Raspberry
- Avocado
- Green Bean
- Tomato
- Potato
- Beet
- Cherry
- Cauliflower

Considering Your Audience

Different audiences have different goals. One of the biggest mistakes new web designers make is not identifying the audience and **organizing the site's content** around that audience's **goals**.

Discussion: Page on Degree Requirements

- Students majoring in *X*
- Faculty advisors

Activity: Card Sort for a Specific Audience

Audiences:

- **Alayna** is an artist who likes to paint pictures of different foods that are all the same color.
- **Bindi** just found out they are allergic to nightshades (eggplant, tomatoes, potatoes, peppers) and wants to know what kinds of food to avoid.
- **Chyrsa** is packing boxes of groceries for shipment and needs to pack similarly shaped produce together.

As a group:

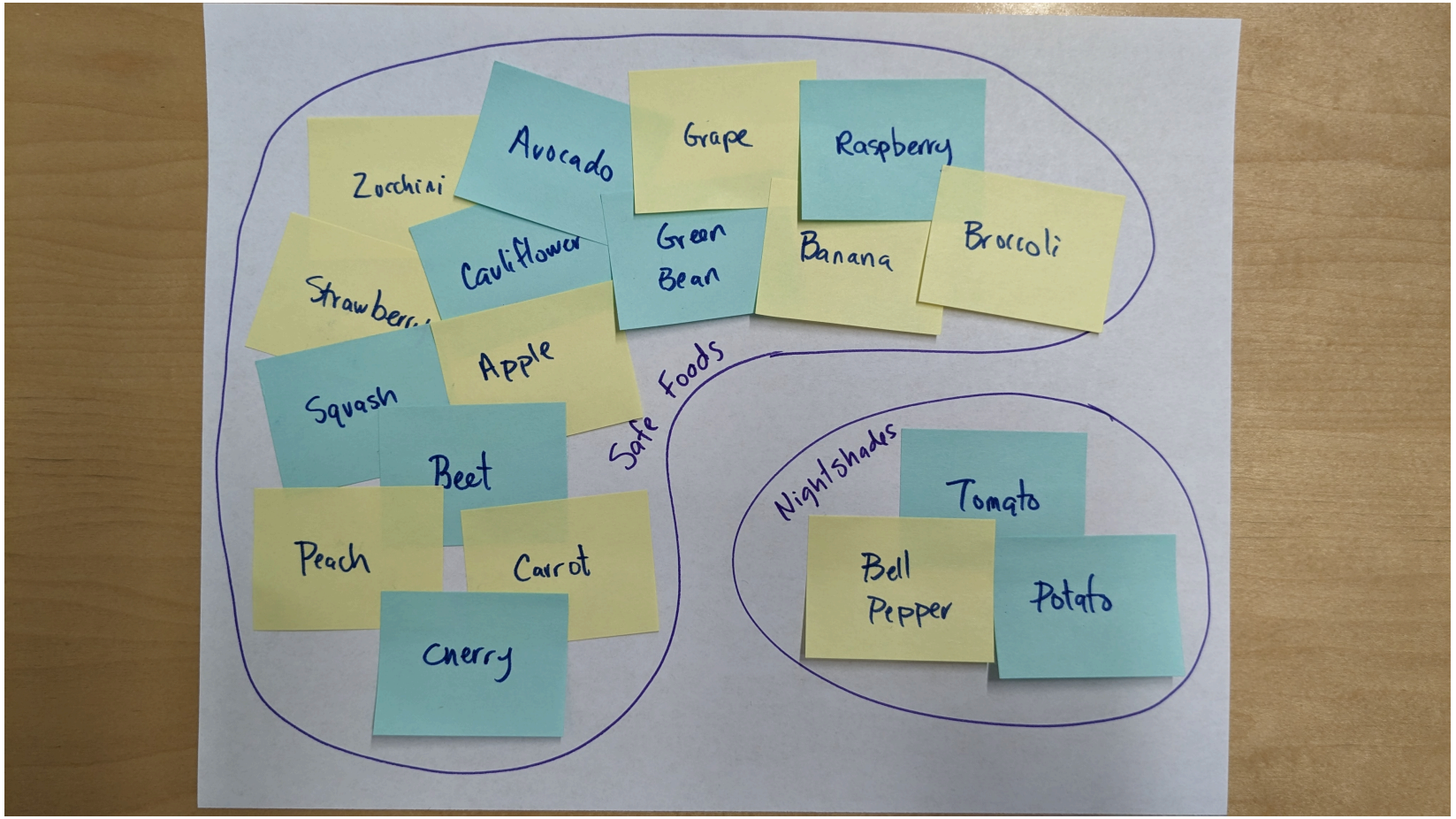
1. Pick an audience.
2. Discuss the goals of this audience.
3. Card sort based on the goals you identified.
4. Name each group using vocabulary that your audience (not you) would understand.

Discussion: Content Organization + Audience Goals

Different audiences have different goals. How did you change your content organization for Alayna, Bindi, or Chyrsa?

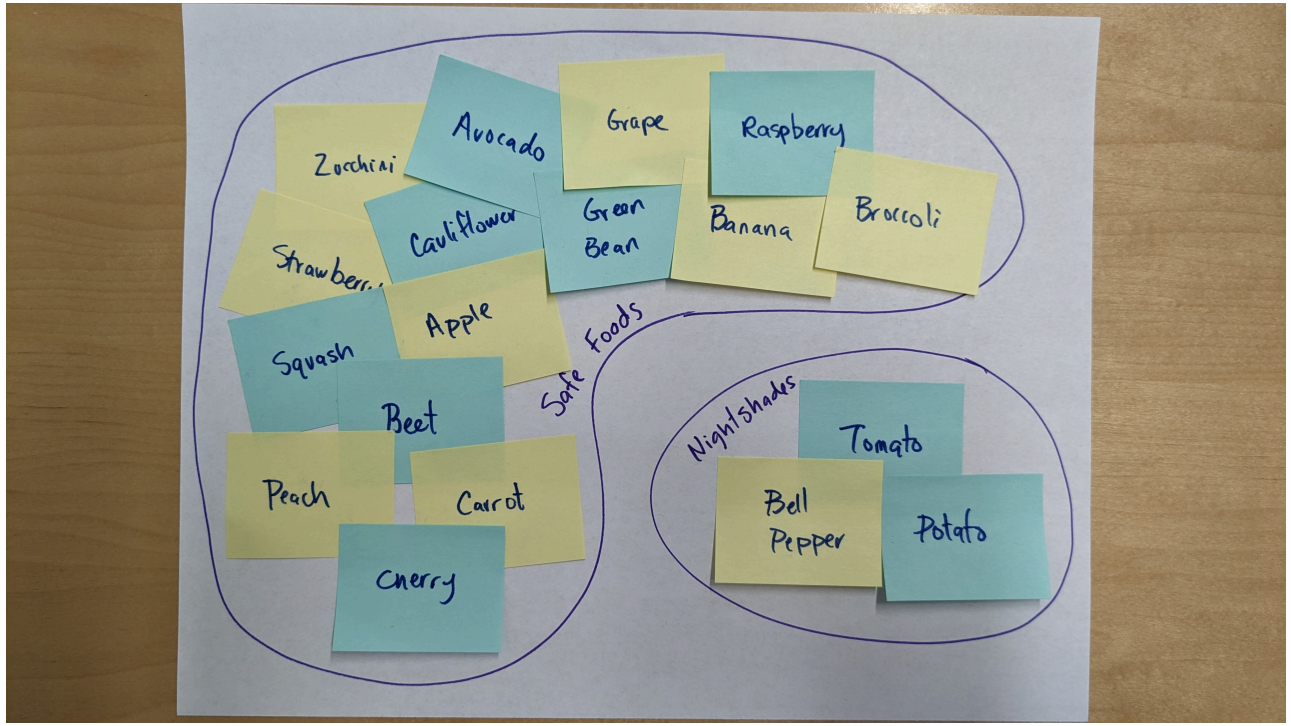
- **Alayna** is an artist who likes to paint pictures of different foods that are all the same color.
- **Bindi** just found out they are allergic to nightshades (eggplant, tomatoes, potatoes, peppers) and wants to know what kinds of food to avoid.
- **Chyrsa** is packing boxes of groceries for shipment and needs to keep track of what shape the groceries are.

Example: Card Sorting – Bindi



Gotcha: Post-it Note Color has No Meaning

You are organizing content into groups. The color of the cards (post-it notes) has no meaning. **Ignore the color of the cards.**



What does sorting fruits and vegetables have to do with organizing content for a website?

- Each fruit/vegetable card *represents* a piece of website **content**.
- Each group of sorted cards *represents* a **page** on a website.
- The name of each group is the **page's name**.

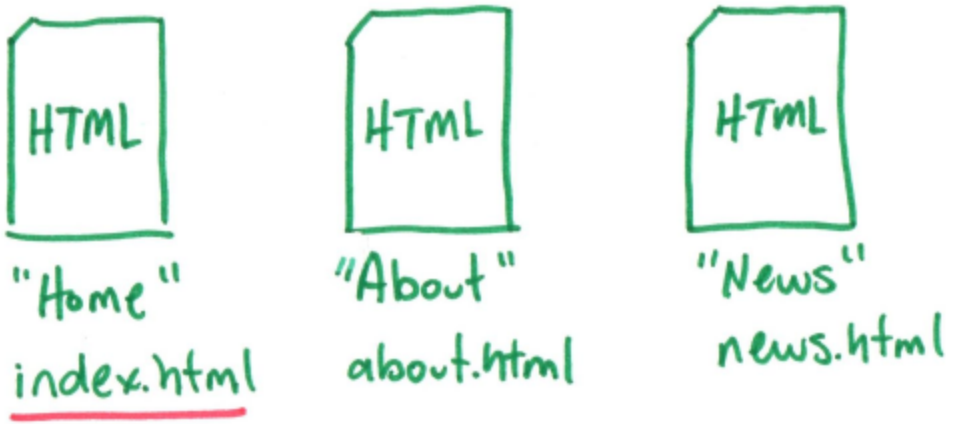
Tip: The *All Pages* Group

If there's content that feels like it should belong on every page, create a grouping for *all pages*.

All content in this group should then be included on every web page on the website.

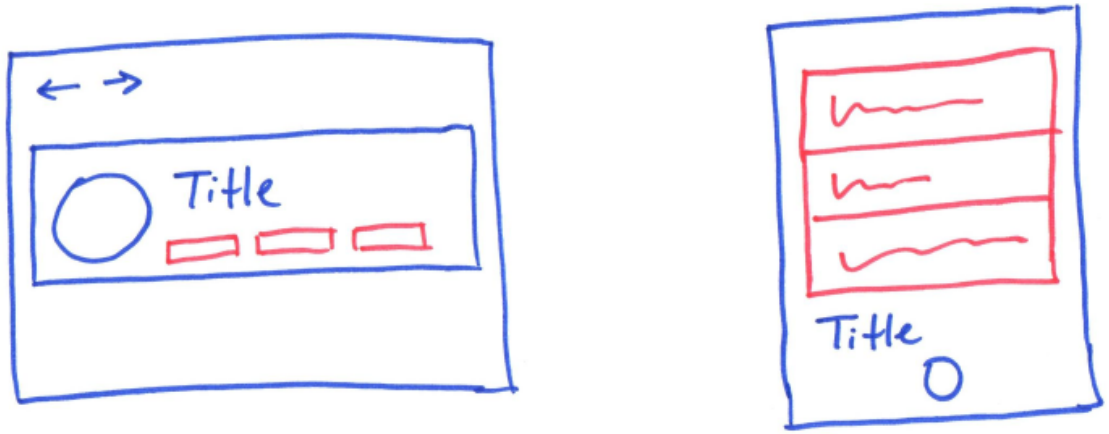
URLs, Links, and Structuring Navigation

Review: Website = *Several* Web Pages



Website Navigation

Support a familiar way for users to navigate between the pages if a website.



We typically call this a **navigation bar** and **navigation menu**.

URLs

URL – Uniform Resource Locator

URL – the address of a resource (file)

Examples:

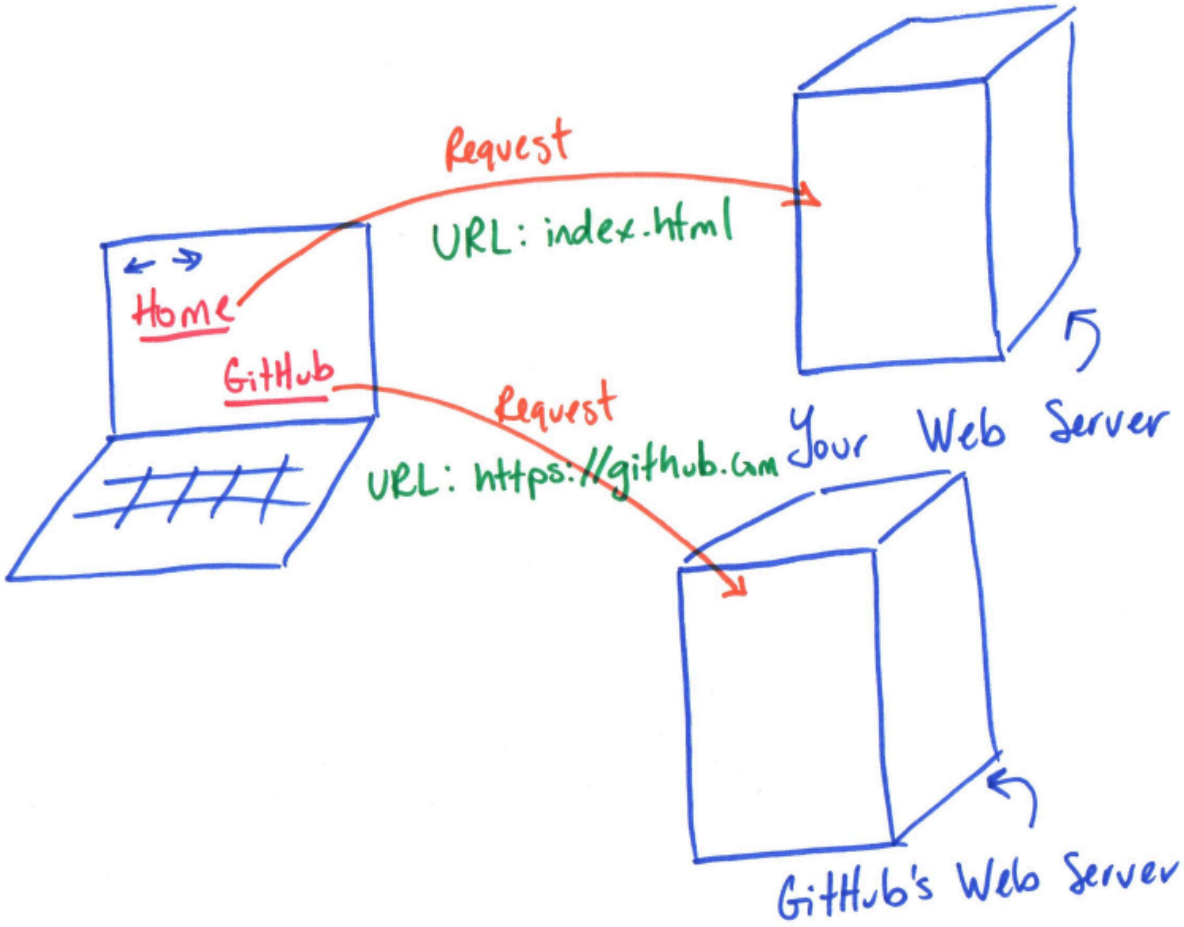
- `http://www.cornell.edu/`
- `http://www.cornell.edu/images/tower.jpg`
- `index.html`
- `images/avatar.jpg`

“Anatomy” of a URL

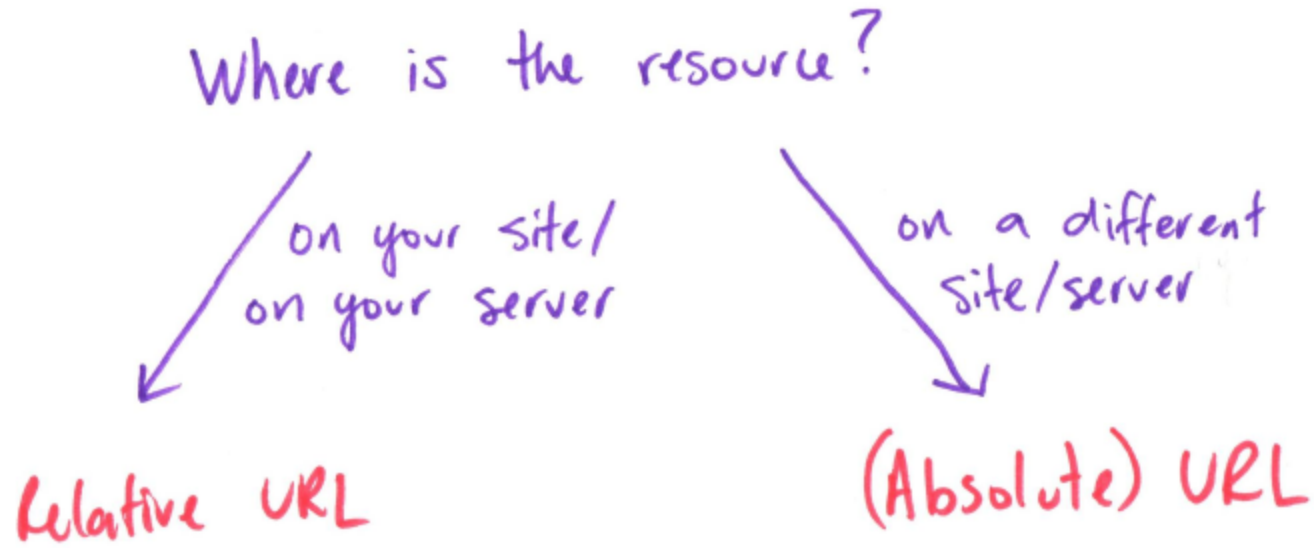
(Absolute) URL: scheme + domain + path

Relative URL: path only (no scheme, no domain)

Links on a Page & Links to Other Web Pages



What type of URL (absolute or relative) should you use?

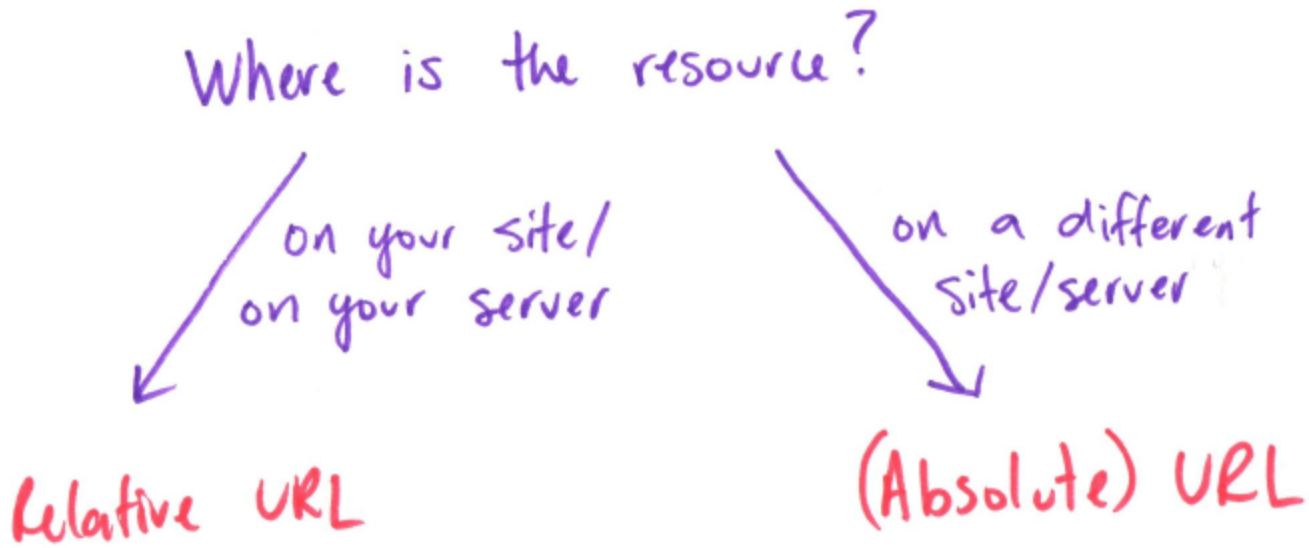


`index.html`

`https://www.example.com/index.html`

Activity: Relative vs Absolute URLs

Working with a **peer**, complete **Part I** on the handout.



`index.html`

`https://www.example.com/index.html`

Best Practices: URLs

- **Design** your URLs to be **usable**.

  URLs should be concise **and** user readable (for your audience)!
- **Avoid** upper case letters in file names / URLs; **use lowercase.**

  `INFO1300.html` → `info1300.html`
- **Never** use spaces in file names / URLs. **Use dashes/hyphens.**

  `info 1300.html` (info**%20**1300.html) → `info-1300.html`
- The “home” page is always named **`index.html`**.

  (not `Index.html`, not `home.html`, not `HOME.HTML`)

Links

Linking to a Web Page

The **Link** (Anchor) Element: `<a>`

```
<a href="URL">LINK CONTENT</a>
```

Where ***LINK_CONTENT*** is...

- Text
- An HTML Element (`<p>` , `<h1>` , etc.)
- A Picture Element (`<image>` , `<figure>` , etc.)

Example: Internal and External Links

Internal link (part of website) → Relative URL

```
<a href="index.html">Home</a>
```

External link (outside of website) → Absolute URL

```
<a href="https://www.cornell.edu/">Cornell University</a>
```

Activity: Link (`<a>`) Practice

Working with a **peer**, complete **Part II** on the handout.

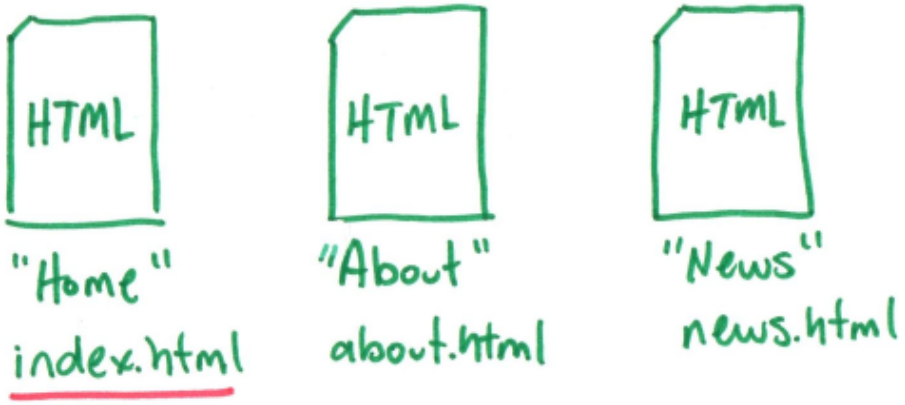
Reference:

```
<a href="URL">LINK CONTENT</a>
```

Example:

```
<a href="https://www.cornell.edu/">Cornell University</a>
```

Example: Navigation Links




```
<a href="index.html">Home</a>
<a href="about.html">About</a>
<a href="news.html">News</a>
```

Structuring Navigation for a Website

Structuring the Site's Navigation

`<menu>`

```
<nav>
  <menu>
    <li><a href="index.html">Home</a></li>
    <li><a href="about.html">About</a></li>
    <li><a href="news.html">News</a></li>
  </menu>
</nav>
```

`<ul>`

```
<nav>
  <ul>
    <li><a href="index.html">Home</a></li>
    <li><a href="about.html">About</a></li>
    <li><a href="news.html">News</a></li>
  </ul>
</nav>
```

Both structures are correct. The `<menu>` element is newer and is slightly more semantic. **Pick one and be consistent!**

Activity: Navigation Practice

Working with your **peer**, complete **Part III** of the activity on your handout.

```
<nav>
  <menu>
    <li><a href="index.html">Home</a></li>
    <li><a href="about.html">About</a></li>
    <li><a href="news.html">News</a></li>
  </menu>
</nav>
```

Gotcha: Navigation *Styling*

This only **structures** the navigation. It does not style it!
It will not look like a nav bar/menu yet. Please wait… it's coming soon!

```
<nav>
  <menu>
    <li><a href="index.html">Home</a></li>
    <li><a href="about.html">About</a></li>
    <li><a href="news.html">News</a></li>
  </menu>
</nav>
```

- Home
- About
- News

What's Next

Assigned Yesterday: Homework 2

Unofficial Deadline: Homework 2, Thursday, 9/3, 11:59pm

Friday Section: Practice Quiz 1 (Classes 1-3, Homeworks 1-2)

Deadline: Homework 2, due Friday, 9/4/2026, 11:59pm
(no Monday deadline due to holiday)

No Class: No class on Monday, 9/7/2026 (Labor Day)