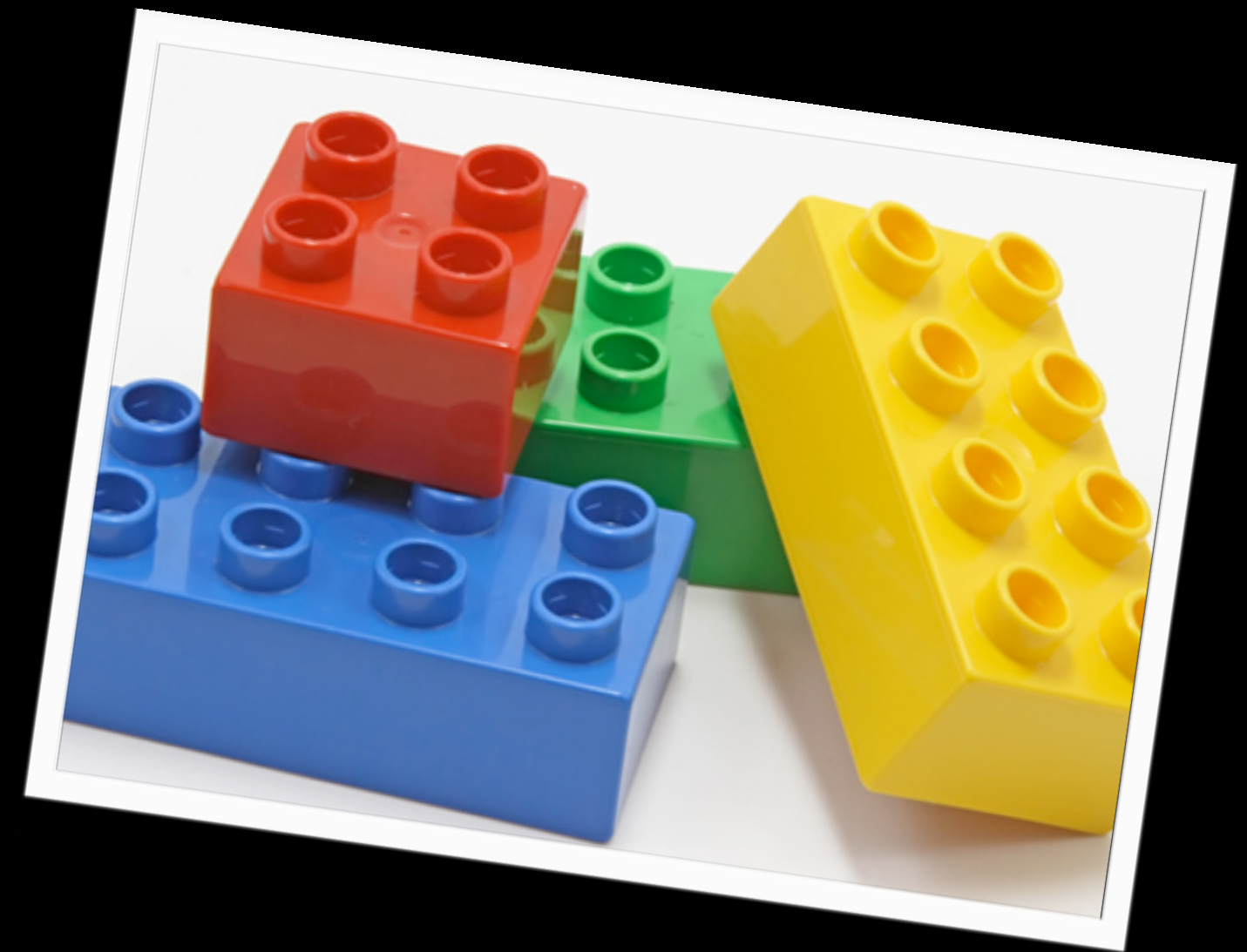Lecture / Instructor: Leigh Cotnoir

fundamentals of website construction

BUILDING A SIMPLE TEMPLATE-BASED SITE

The Basics Steps

▸ Collecting and Organizing Content Data

The Basics Steps

▸ Collecting and Organizing Content Data

▸ Deciding on the Layout

The Basics Steps

▸ Collecting and Organizing Content Data

▸ Deciding on the Layout

▸ Creating the Linking Structure

The Basics Steps

▸ Collecting and Organizing Content Data

▸ Deciding on the Layout

▸ Creating the Linking Structure

▸ Creating the Skeleton Site

The Basics Steps

▸ Collecting and Organizing Content Data

▸ Deciding on the Layout

▸ Creating the Linking Structure

▸ Creating the Skeleton Site

▸ Adding the Content

The Basics Steps

Collecting and Organizing Content Data

Before building your pages, you need to figure out the following:

▶ what the site will do

▶ how you propose the site will do it

▶ and what the layout will be for the best delivery

The Basics Steps

Collecting and Organizing Content Data

Ask yourself the following basic questions:

- ▸ What are my my goals of the site?

- ▸ Who is my audience?

- ▸ How will people likely be viewing/using the content?

Determining the **goals** is important so that you can decide on what type and how much content you will need to display.

Understanding your **audience** is important in helping you identify the types of acceptable technologies the target "market" is comfortable using.

Based on the goals and audience, you will be able to better determine **user experience** based on the devices people will use and the conditions under which they will be using them. For instance, if you are developing a site you expect will primarily be accessed on mobile devices, it will affect your design decisions later.
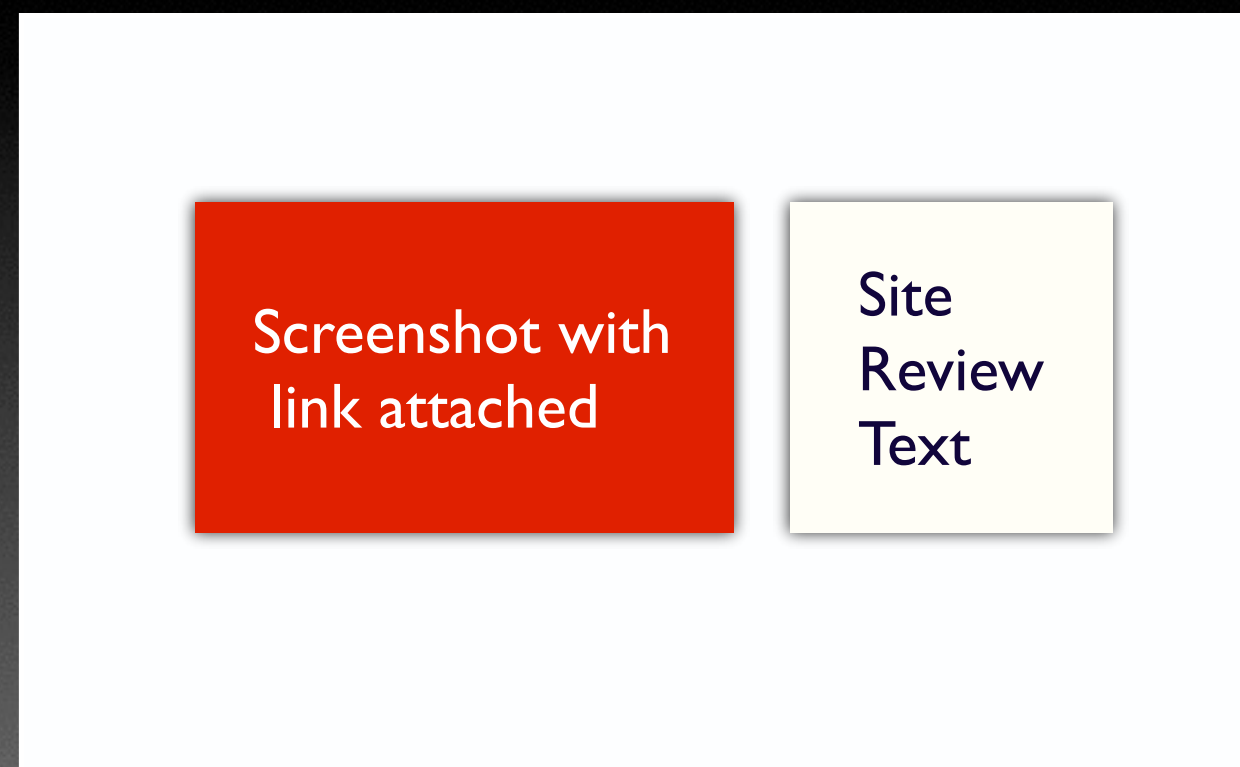
The Basics Steps

Collecting and Organizing Content Data

So in this case for your website review assignment, you will find five sites for which you need to do the following:

▶ a screenshot of the site to display on your website

▶ a written review of the site
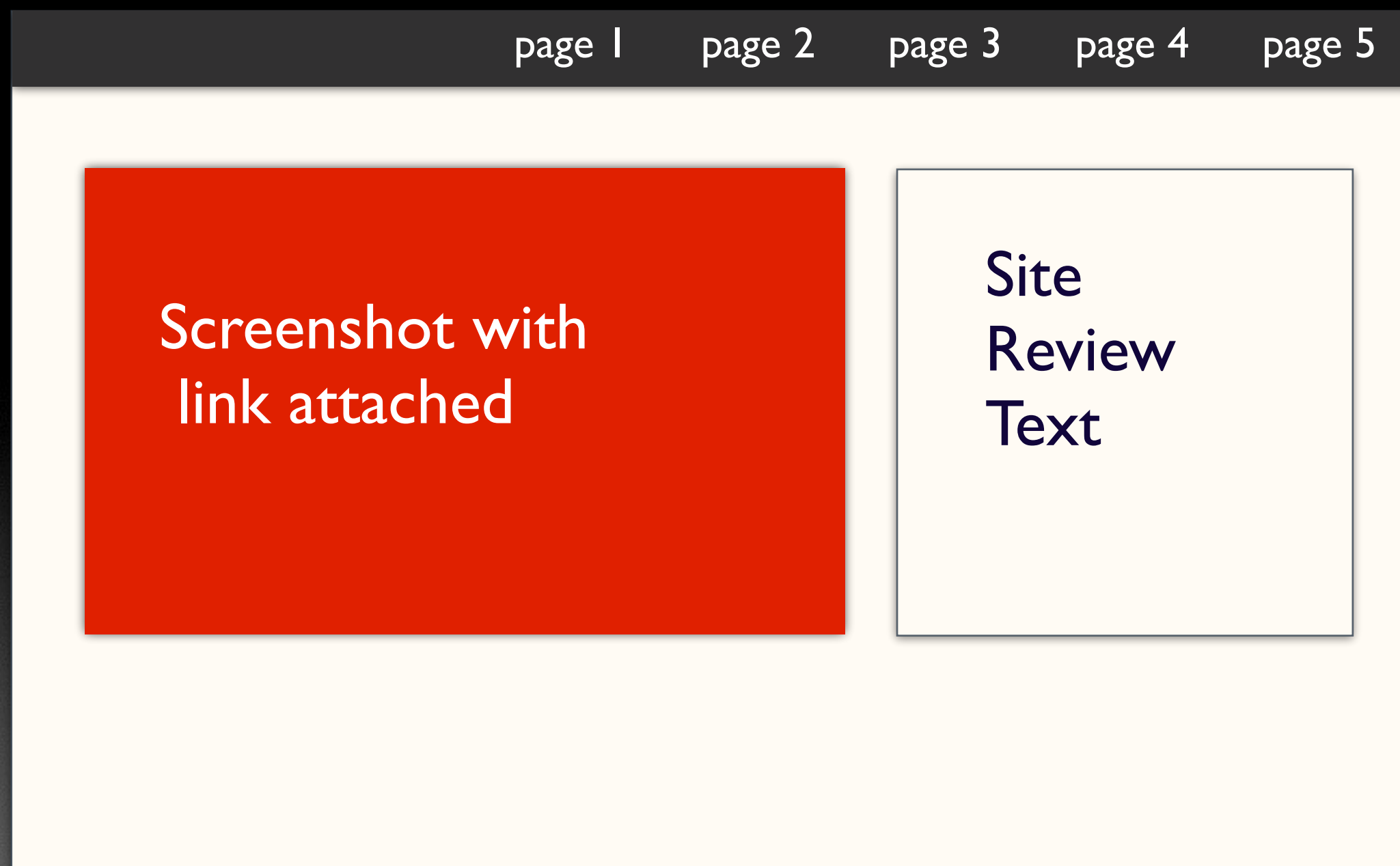
▶ an external link to the site

The content above will eventually be organized so that each site gets its own page. But don't start the page creation yet! Just envision a general page with data placeholders on it for now:

Screenshot with link attached

Site Review Text

The Basics Steps

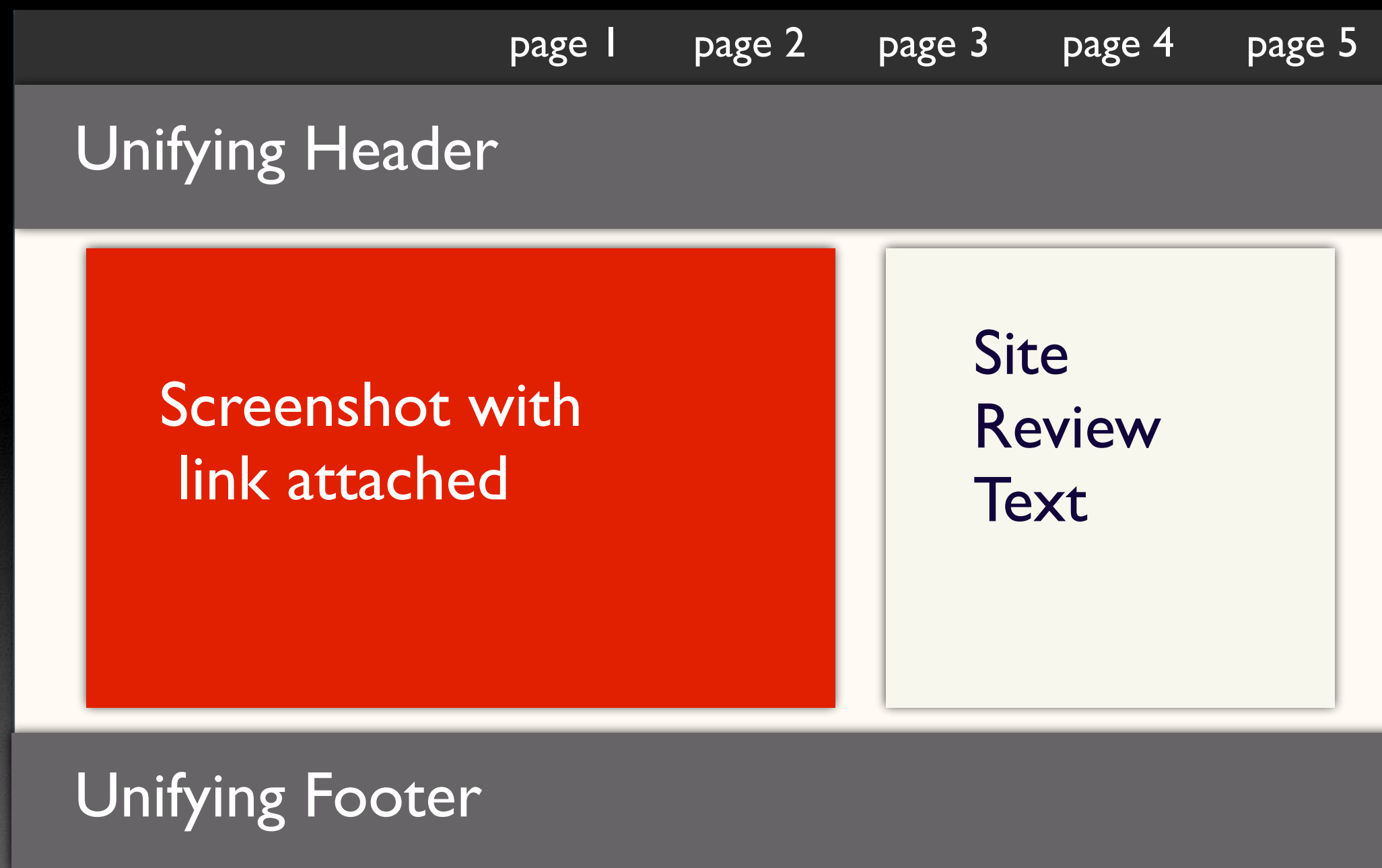## Collecting and Organizing Content Data

Now that we have a data template, we need to remember that ultimately it will be used to produce 5 unique pages. That means we need a way of linking them together: the navigational toolbar.

page 1	page 2	page 3	page 4	page 5

Screenshot with link attached

Site Review Text

The Basics Steps

Collecting and Organizing Content Data
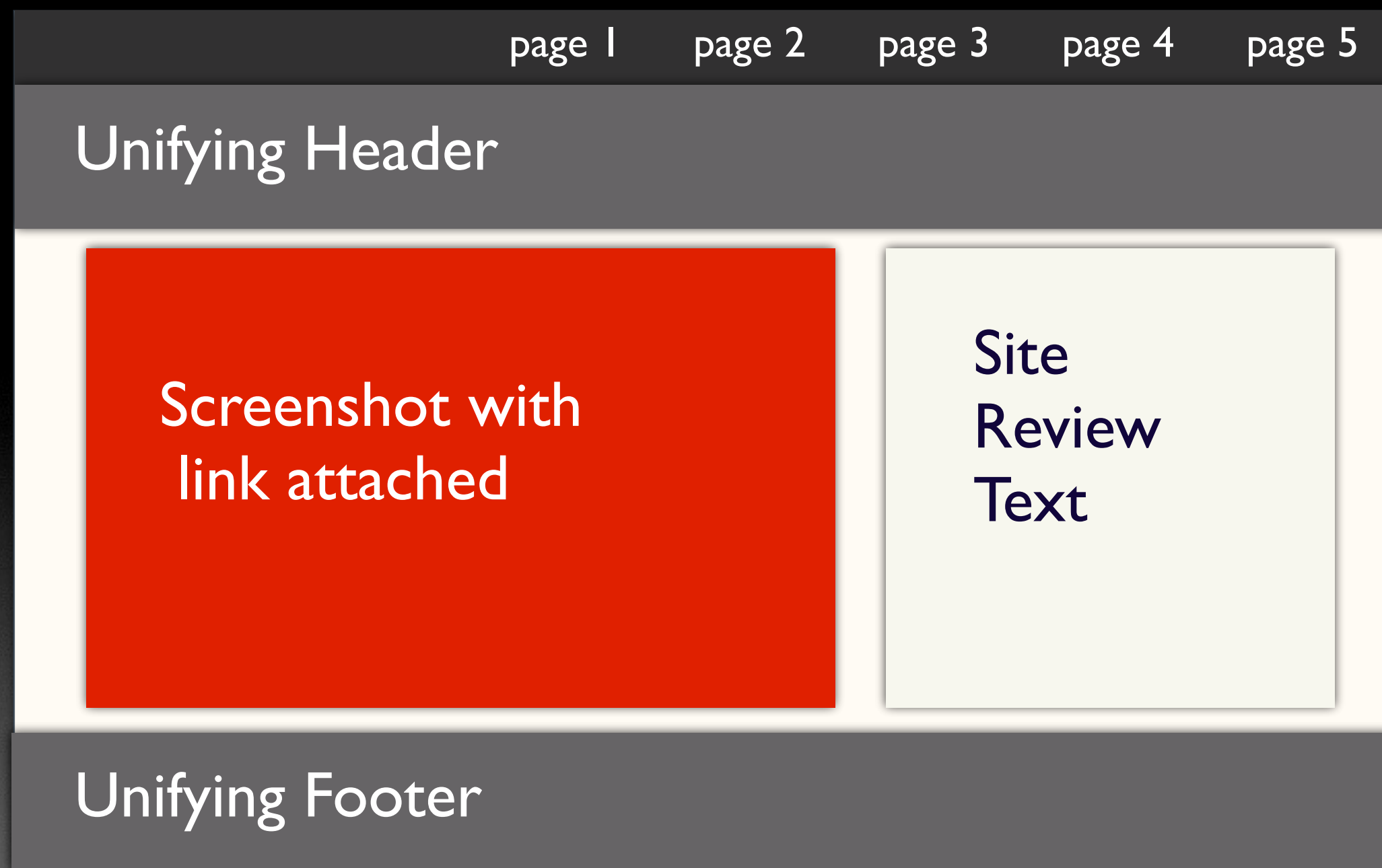
In order to unify the pages, we would also want to create a consistent banner "header" and "footer" section as well:

page 1	page 2	page 3	page 4	page 5

Unifying Header

Screenshot with link attached

Site Review Text

Unifying Footer

The Basics Steps

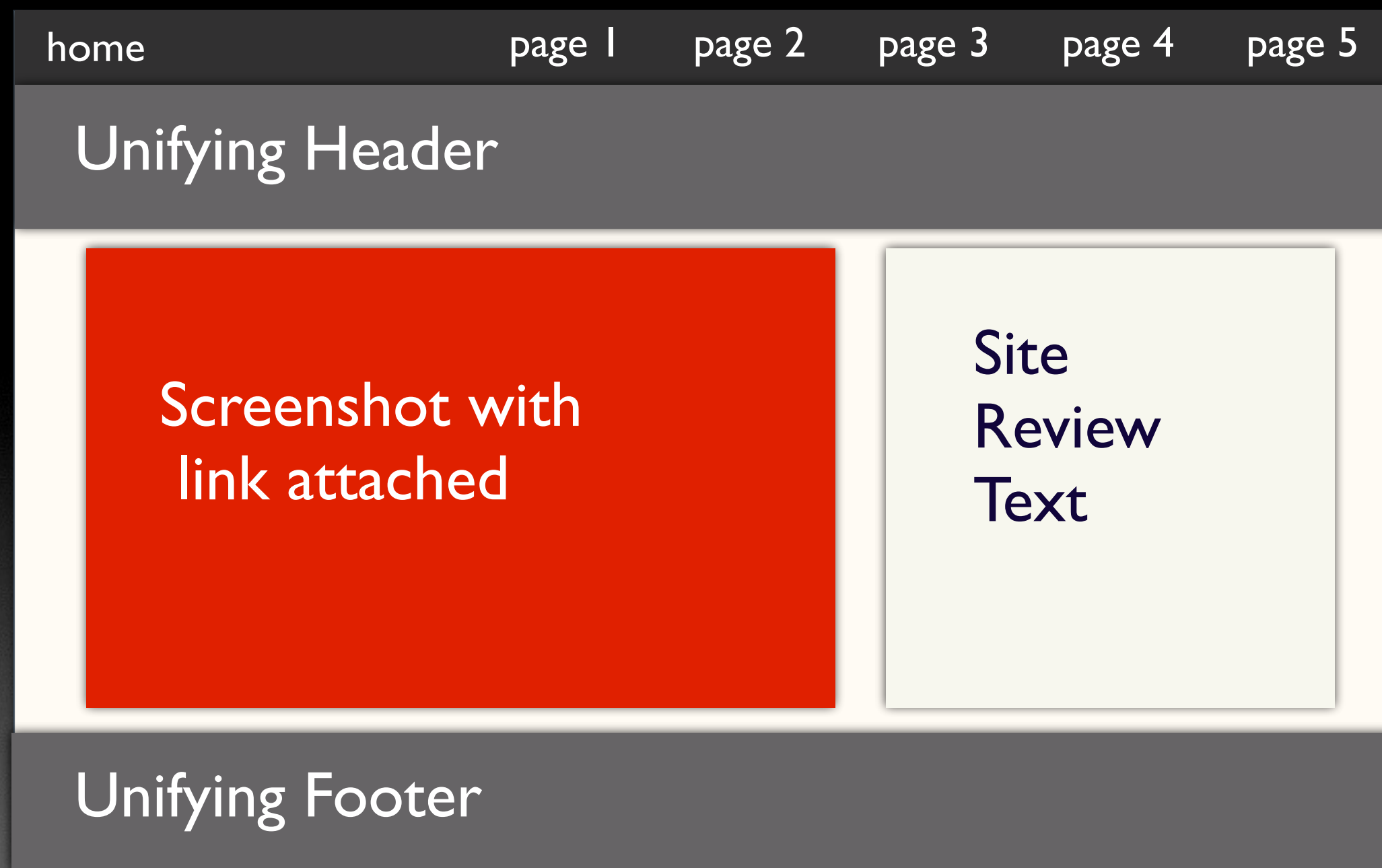## Collecting and Organizing Content Data

So far we have a basic data section template. Before we fully decide on layout, we need to consider the quantity of data that each section requires so that we can decide on how to allocate space in our layout. You can make this consideration based on the research you did for your web reviews, and you can also decide how prominent (large or small) to make the screenshot representation from each review site.

| page 1 | page 2 | page 3 | page 4 | page 5 |

Unifying Header

Screenshot with
link attached

Site
Review
Text

Unifying Footer

The Basics Steps

Collecting and Organizing Content Data

Another consideration in our logic is to decide if we need any additional pages. Because it might be awkward to land immediately on one of five review pages, it might be nice to create an introduction page that lets the viewer know what the goal and purpose is of the site. **Now that we have SIX, not five, pages,** we now need to accommodate the space for six links in the navigational toolbar.

home	page 1	page 2	page 3	page 4	page 5

Unifying Header

Screenshot with link attached

Site Review Text

Unifying Footer

The Basics Steps

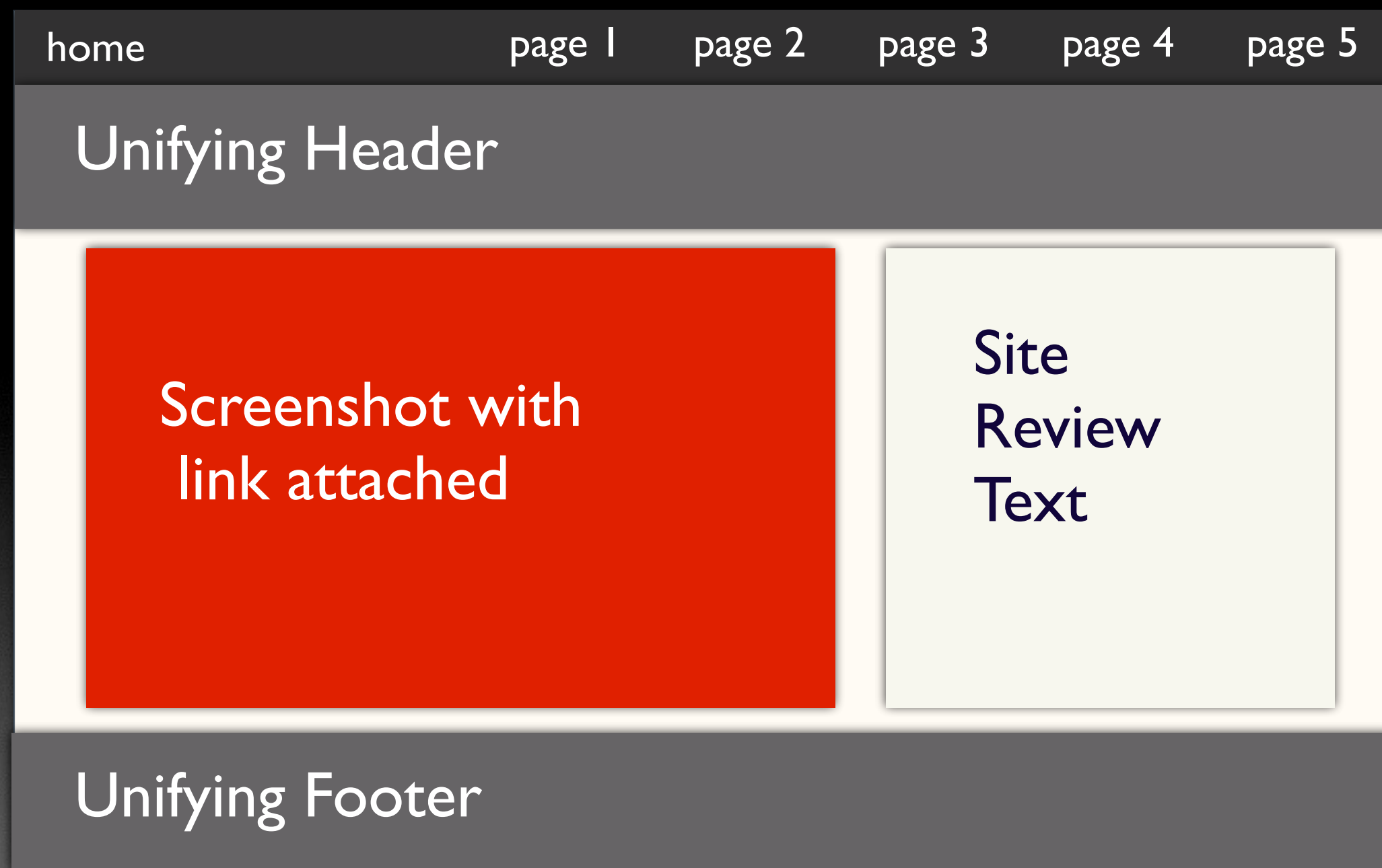## Collecting and Organizing Content Data

Another option for a home button (if you don't want an additional link in the navigation bar), is to make the title/main heading of the page a clickable link.

page 1	page 2	page 3	page 4	page 5

CLICKABLE SITE TITLE

Screenshot with link attached

Site
Review
Text

Unifying Footer

The Basics Steps

Collecting and Organizing Content Data

In this demo, we will stick this this outline, though, so you can see how to make a slightly more technically intricate design. Now that we have decided on the content we can move on to deciding the visual layout of the template page!

home	page 1	page 2	page 3	page 4	page 5

Unifying Header

Screenshot with link attached

Site Review Text
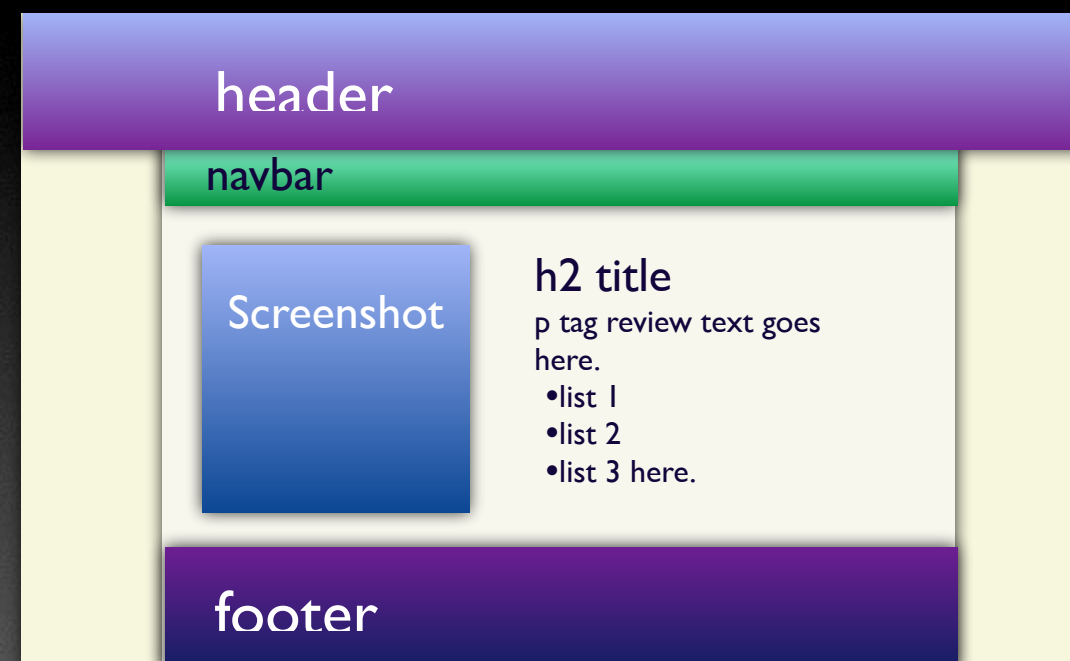
Unifying Footer
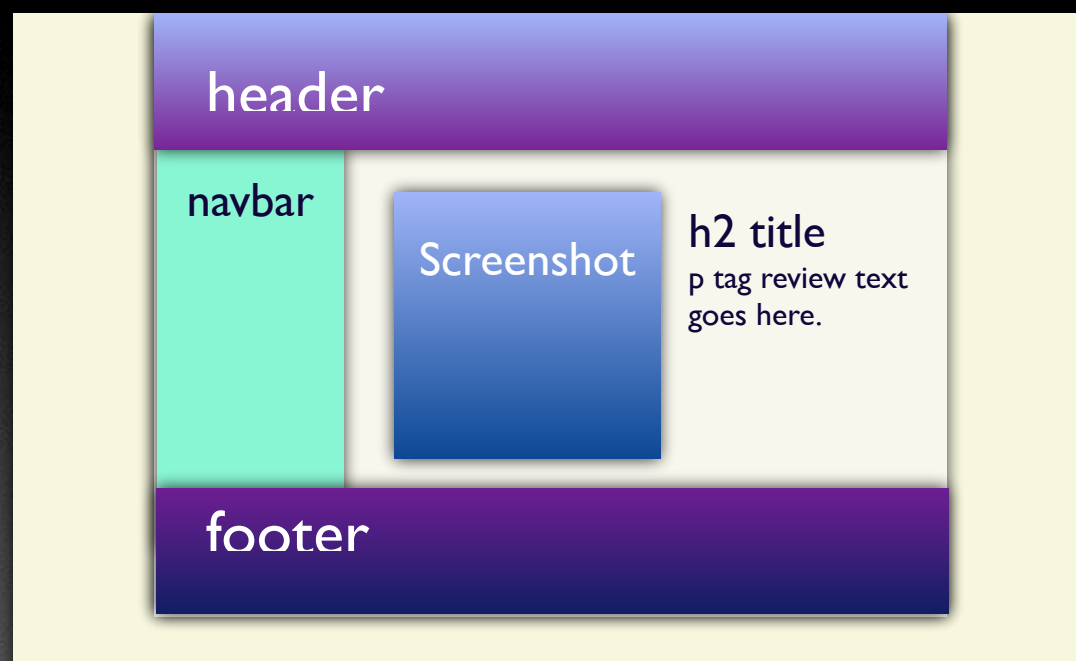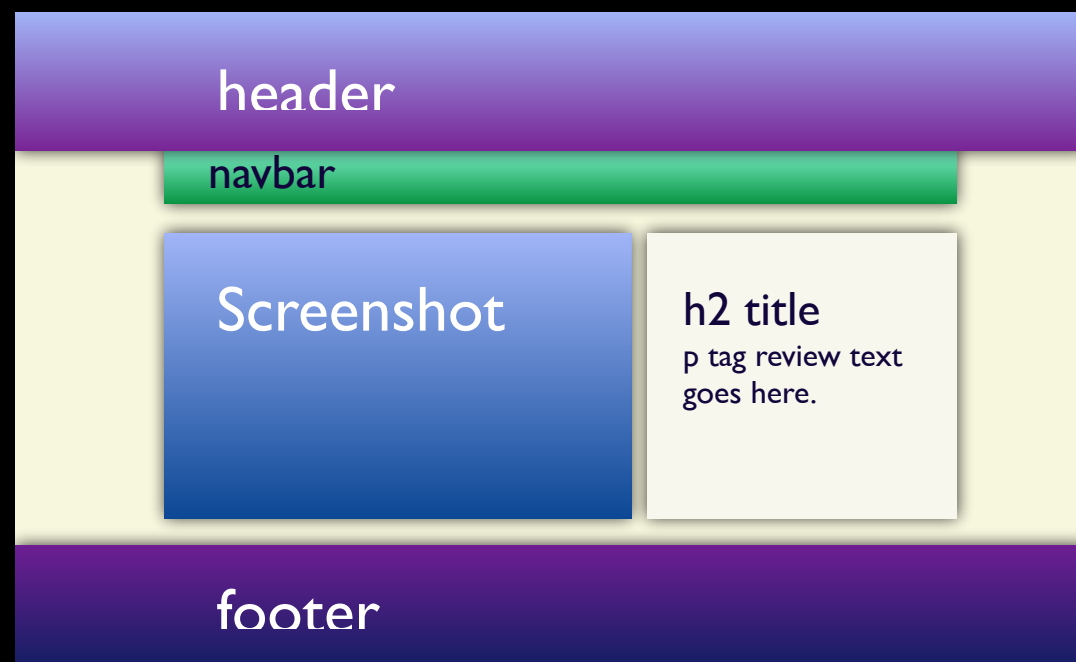
The Basics Steps

Deciding on the Layout

With a pencil and paper, sketch some different possible layouts and designs you might like to achieve. See the next page to get an idea of a variety of explorations.

The Basics Steps

Deciding on the Layout

Just a few examples of other layouts....

The Basics Steps

Deciding on the Layout

In this demo, we will stick this this outline.

home	page 1	page 2	page 3	page 4	page 5

<header><h1>Site Title</h1></header>

<section id="content">

<div class="screenshot">

   <img src="x.jpg"
alt="x">

</div>

<article>
 <header>
<h1>title</h1>
<h2>subhead</h2>

<p>review text goes
here.</p>

</section>

<footer>
 <p>copyright here</p>   <p>social media</p>
                                    </footer>

See next slide
for <nav>
HTML detail

The Basics Steps

Deciding on the Layout

Here's an HTML overview detail of how this nav bar might look:

home	page 1	page 2	page 3	page 4	page 5

```
<nav id="top">
    <h1><a href="index.html">home</a></h1>
    <ul>
        <li><a href="site5.html">page 5</a></li>
        <li><a href="site4.html">page 4</a></li>
        <li><a href="site3.html">page 3</a></li>
        <li><a href="site2.html">page 2</a></li>
        <li><a href="site1.html">page 1</a></li>
    </ul>
</nav>
```
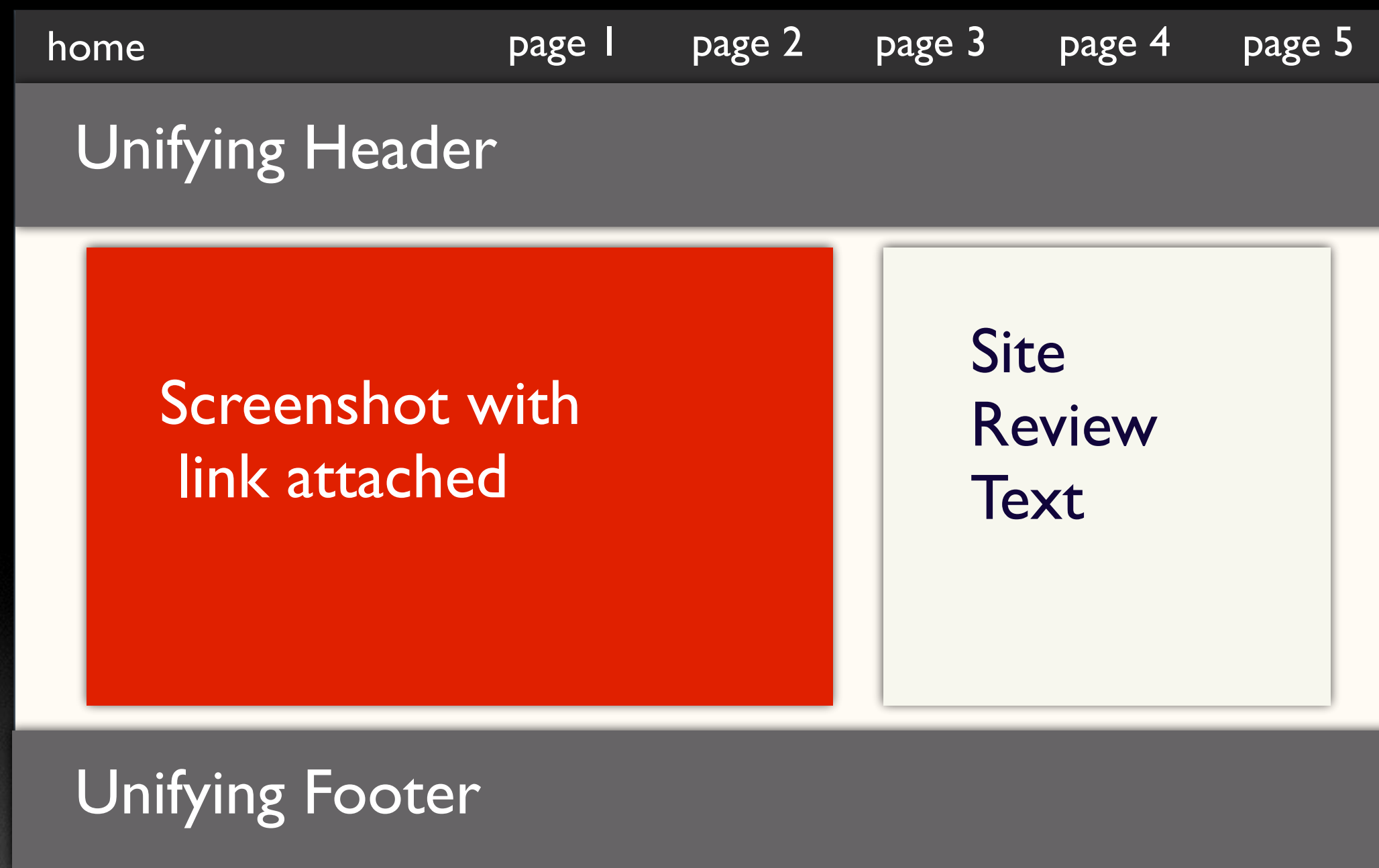
NOTICE that the links are in reverse order because we will use a css "float: right" on the list items to make them horizontally line up on the right side. Right floats reverse the visual order of links on the page.

The Basics Steps

Deciding on the Layout

Let's say after several sketches, we decide on our first one:

home	page 1	page 2	page 3	page 4	page 5

Unifying Header

Screenshot with link attached

Site Review Text

Unifying Footer

Although we now have our layout, the next step is NOT to generate final pages from it. We still have to complete the template by creating a linking structure first.

To see how this works, move on to the next section.

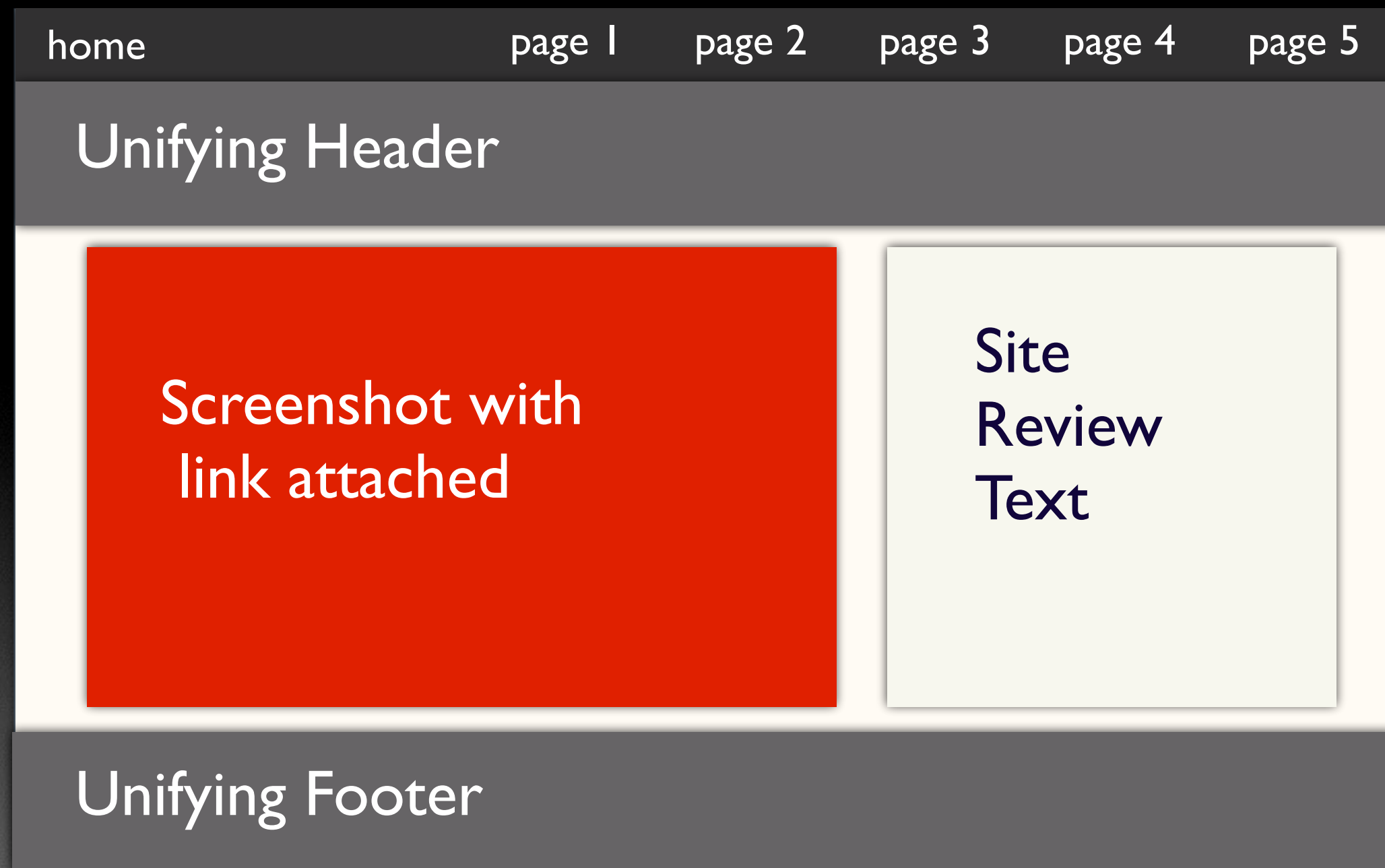# The Basics Steps

Deciding on the Layout

Although we now have our layout, the next step is NOT to generate final pages from it. We still have to complete the template by creating a linking structure first.

home	page 1	page 2	page 3	page 4	page 5

Unifying Header

Screenshot with link attached

Site Review Text

Unifying Footer

To see how this works, move on to the next section.

The Basics Steps

Creating the Linking Structure

IMPORTANT!

Even though we have not made other pages from the templates yet, we can still decide on the linking structure, the **future** file names, and the folder structure of the site. Waiting to reproduce the template file into actual working files is important!
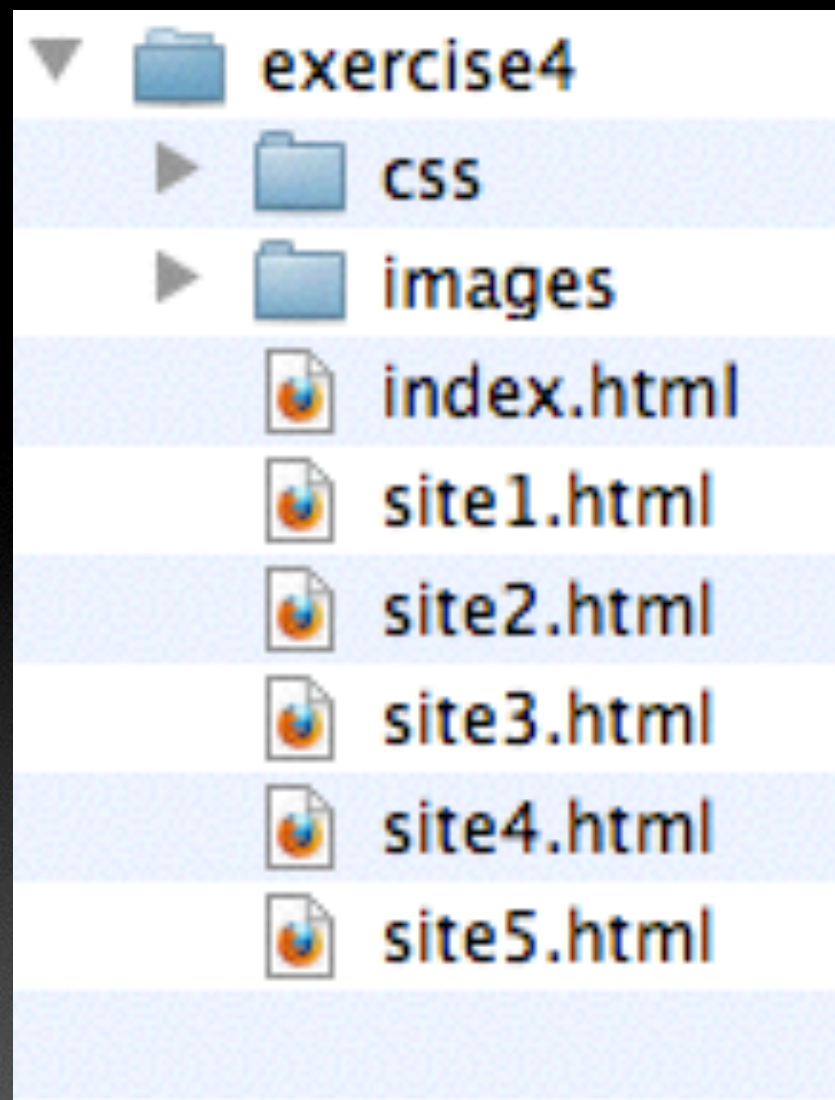
If you create files prematurely before layout and linking structures are well-established and finalized in the template, it can lead later to many inconsistencies, including poorly aligned images, broken links, and odd placement of elements from page to page.

The Basics Steps

Creating the Linking Structure

To create your basic linking structure, draw a diagram of where you intend for your files to be placed within your final folder structure.

The proposed structure would look something like this:

In this example, you would have a web root directory called "exercise4", and inside of it would eventually be the following:

- "css" folder
- "images" folder
- 6 html pages

The Basics Steps

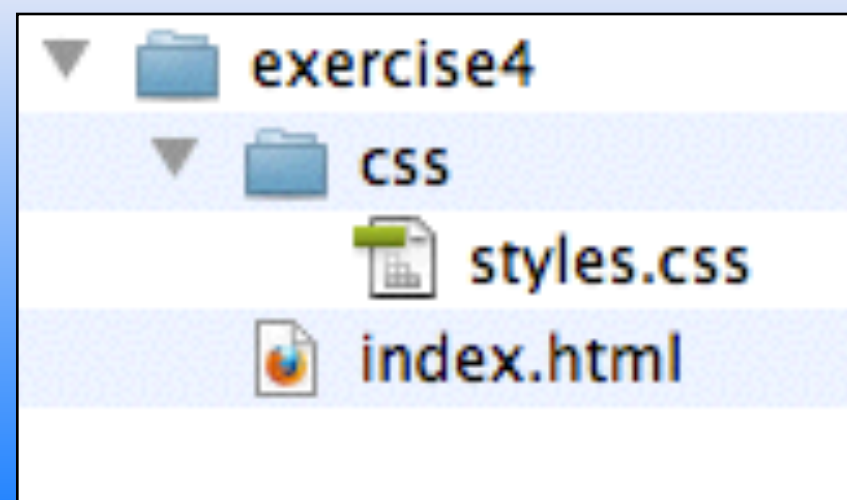## Creating the Linking Structure

Based on the structure from the previous slide's root folder, we can now start by creating a blank template page and css file. Do the following:

1. Create a new folder on your desktop called "exercise4" (no quote marks).

2. Open a new HTML file type in Komodo edit, and save it as "index.html" inside of the "exercise4" folder.

3. Open a new CSS file type in Komodo and save it as "styles.css" inside the "exercise4/css/" folder.

4. In the head of the index file, create a link to the new css file you just made.

   `<link href="css/styles.css" rel="stylesheet" type="text/css" />`

5. Now any styles you create in the "styles.css" file will be applied to the index file's html.

At this point, you should have files on your Desktop that are structured like this:

▼ 📁 exercise4
   ▼ 📁 css
      📄 styles.css
   📄 index.html

The Basics Steps

Creating the Linking Structure

6. The next step is to create the layout you envisioned in your early organizational process. You can refer to slides 18-19 to get an overview of HTML, but you should watch the video demo for a detailed tutorial in setting up layout.

7. After setting up a layout, you will want to create navigational links before making any other pages. This index page will serve as a template for all the other pages in the site, so it is important to create the links in the page PRIOR to making copies of this template page.

8. A strategy is to decide how many pages you will have. Let's say you will have an index page, plus five additional pages. For simplicity, let's say the pages will be named:
   - index.html
   - site1.html
   - site2.html
   - site3.html
   - site4.html
   - site5.html

9. Don't make these pages yet! Instead, you will simply create a set of navigational links that will link to each of these future pages. Continue to the next slide to see how you can do this.

The Basics Steps

Creating the Linking Structure

10. We can plan to place these future pages directly inside the "exercise4" root directory, where the current "index.html" page is located. Because the new future files will be in the same directory as "index.html", the links to each of them only need to call out the name of the page without mention of the directory name. For example:

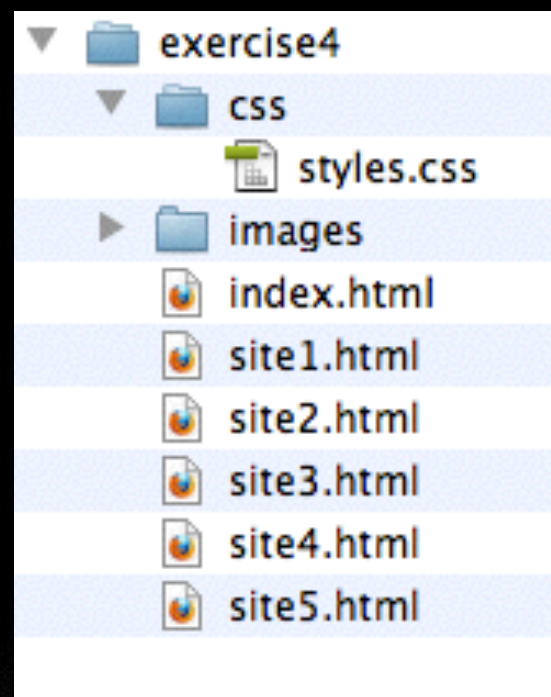   Site One

11. You should also make the links as part of a list. Here's how the individual link would look as a list item link:

    Site One

The Basics Steps

Creating the Skeleton Site

12. Once you have your full set of navigational links made and the layout is the way you want it to be, THEN you can start saving this content-less file as other file names. Using the "File > Save As" option, change the file name each time to a new file name (site1.html, site2.html, site3.html, site4.html, site5.html). Your directories should look like this at this point:

13. Open all six of these pages and make sure that the **<title></title>** section matches the name of the page. For instance, make sure the "site1" has a title of "Site One" or something similar.

14. Now you have a skeleton of empty pages that all link to each other and that have a consistent design layout, and all you have to do is add the content for each page that describes the site reviews.

15. Add the content, and then test the site for broken links.

The Basics Steps

Creating the Skeleton Site

Some final, special notes on adding images to your pages:

1. Remember, images placed in the HTML page use the <img> tag.

2. Images that are decorative or part of the structure of the page (button textures, header images, footer images, etc) are typically set up in the css style sheet as values of the "background" property.

3. Any <img> tags in the HTML are required to have "alt" attributes that describe in a few words what the image is depicting. The pathways are based on the examples in this slide lecture.

   example: <img src="images/site2.jpg" alt="home page of Yahoo">

4. To make a an image a clickable link, nest it within anchor tags like this:

   <img src="images/site2.jpg" alt="home page of Yahoo">