Navigation Diagrams

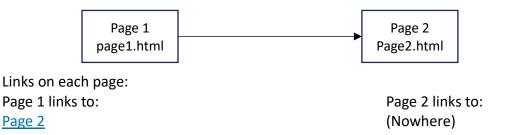
Sitemaps for a website can serve many different purposes. They may be a comprehensive list of files of the site, or they may be a file structure diagram, or many other purposes. In this document we are going to discuss how to build a linkage diagram that describes how one can navigate a website. While we will look at other navigation schemes, the main focus will be on building a global navigation diagram for a small website.

There are two main elements to a navigation diagram: the page element, and the link element.

Page element: Link Element: Page 1 page1.html

To be meaningful, the page element should list the name of the page, but the specific shape you use is not particularly important. Typically, rectangles look most like pages, so these are standard. The link element must contain an arrow to be fully meaningful to show the direction of linkage.

Example 1.



In this example, the one-way arrow indicates that Page 1 has a link to Page 2, but Page 2 does not have a link back to Page 1.

By comparison, if use a double arrow, this indicates that the pages link back to each other.



Links on each page: Page 1 links to: Page 2

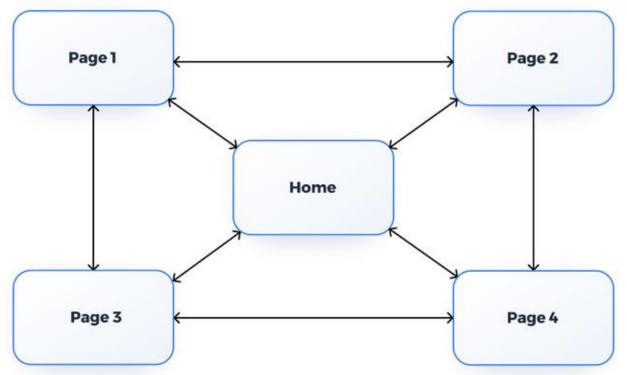
Page 2 links to: Page 1 If we use no arrow at all as shown below, this situation is ambiguous. We don't know if only one page is linked, or if both pages are linked to each other, or if this means something else. It's best to avoid this lack of clarity.

Page 1	Page 2
page1.html	Page2.html

Elements that should appear on your diagram are only those that fit what you are diagraming. Since our purpose is to diagram the navigation structure, do not include pages in your diagram that are "behind the scenes". This includes things like your style sheet or folder structures. Customers can't see these things, can't (and shouldn't) visit these pages, so they should not be included in the map. They would be appropriate to include in a file structure diagram, but that is not our purpose here. We also don't include links to outside sites.

Example 2.

Let's consider a more complex diagram and understand its linkages.



What are the pages on this site? There are 5 pages: Home, Page 1, Page 2, Page 3, and Page 4. How are they linked together?

Follow the arrows from each page to pages that connect to it and make a list of those pages.

Links on each page:

Home links to:	Page 1 links to:	Page 2 links to:	Page 3 links to:	Page 4 links to:
Page 1	Home	Home	<u>Home</u>	<u>Home</u>
Page 2	Page 2	Page 1	Page 1	Page 2
Page 3	Page 3	Page 4	Page 4	Page 3
Page 4				

Notice that while the Home page is linked to all other pages on the site, Page 1 is not linked to Page 4, and Page 2 is not linked to Page 3, Page 3 is not linked to Page 2, and Page 4 is not linked to Page 1. Consider that you are on Page 2 and want to get to Page 3, how would you have to navigate to do that? You'd have to first go to another page and then go to Page 3. How would a visitor to this site know to do that? How annoying would it be to have to go back to the homepage in order to get to another page? This site only has 5 pages on it. Pages 1-4 can handle one more link to make navigation simpler and more intuitive.

Let's look at a small website and create a diagram of their navigation design.

Example 3.

As of November 2023, the screenshots below were taken from Arrowhead Springs Vineyard in New York state. You can visit the site at <u>https://arrowheadspringvineyards.com/</u>.

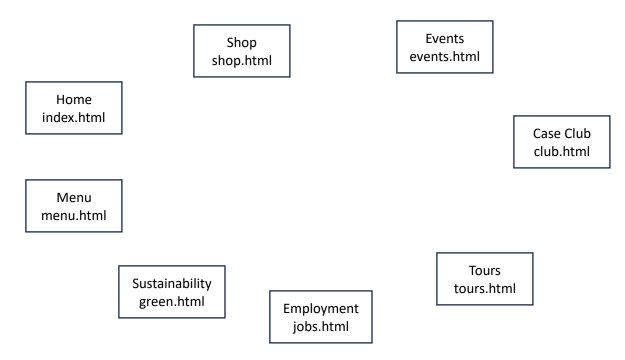
Their homepage links are:

HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
If you go to their Shop page:									
HOM	E SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Events page:									
HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Case Club page:									
HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Tours page:									
HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Employment page:									
НОМЕ	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Sustainability page:									
HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		
And their Menu page:									
HOME	SHOP	EVENTS	CASE CLUB	TOURS	EMPLOYMENT	SUSTAINABILITY	MENU		

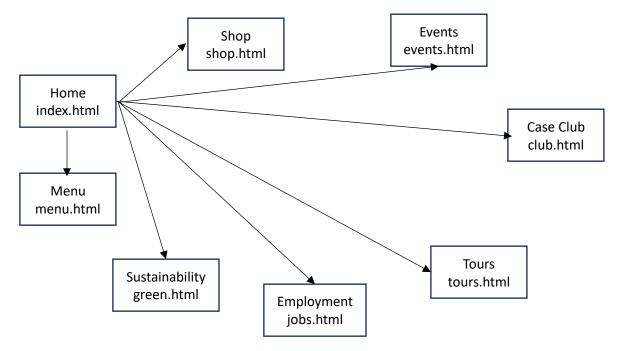
After poking around on the site a bit, it's quite clear that these 8 pages are the only pages on the site. The underlines on the linkage list are telling you which page you are on, but otherwise,

the list of links is the same on every page. Let's diagram this since this is the global navigation scheme we want. (Note: I'm going to modify the page names to make them easier for the diagram.)

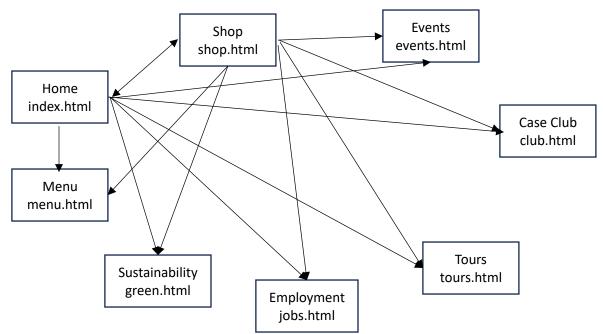
Let's start with a blank diagram that contains all the pages. The exact configuration is not that important here, but we want to be able to easily draw linkages. We can used curved lines if needed, but straight ones are easier, so I've spread out the pages in a kind of circle.



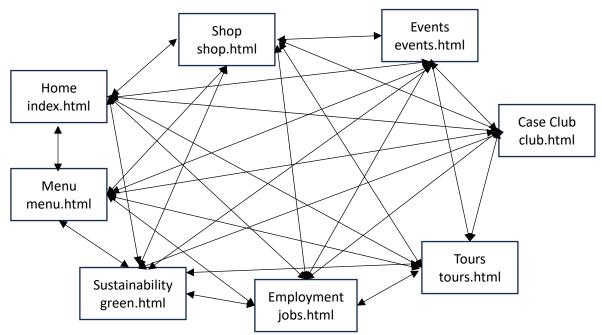
Consider the links from the homepage and add those next.



For the time being, I've made them one-way arrows since we are just looking at links from the homepage, but if we now go on to the shop page, if an arrow is already there from the homepage, rather than add a separate return arrow, just make the existing arrow a double arrow.

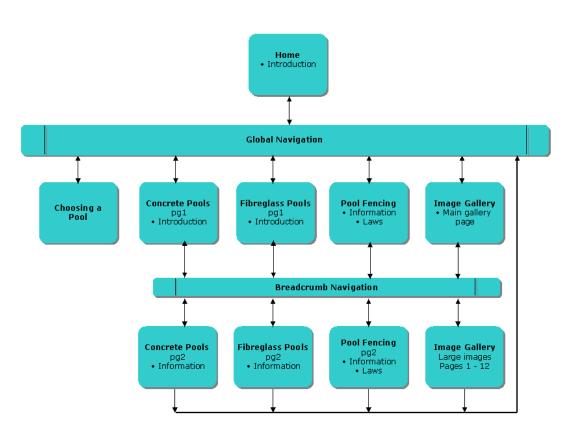


Continue in this fashion, until you've mapped the links from all the pages.



We can see from the link list that every page connects back to every other page, so if you use two-way arrows from the beginning, the number of links you have to connect decreases with every page as you go. As the site of a site gets larger, it becomes more and more difficult to maintain a global navigation structure. There are simply too many links to list. Websites that are a middle size may have a sitemap page on their site where there is a one-stop place to find any page, but this too can become difficult if a site reaches more than a couple dozen pages. For such large pages, they may use a tiered structure. In these cases they will essentially break down the site into subsites, sites within sites, in usually thematically organized sections of similar content. Pages may link to the superstructure of these subsections, but not individual pages. If sites get very, very large, they may resort to dynamically generated pages that pull content from a database.

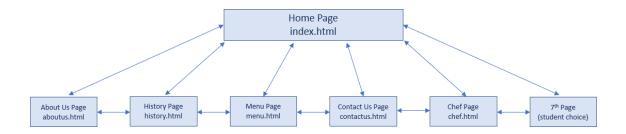
An example might look something like this, taken from <u>https://sadiqm.blogspot.com/2012/06/why-good-website-navigation-systems-is.html</u>



The main navigation bar will still link to all major sections, but pages further down into the tiers will often link to the homepage (not shown in the diagram), or to structures further up in the tiers it is within, but not every page on the site.

Practice:

The following diagram is a model of a small restaurant website that meets the most of the technical requirements for our sitemap diagram, but why does it still make for a bad navigation scheme?



Hint: list out the linkages on each page. Suppose that you are on the Chef page and want to get to the Menu page. How do you do that?