

Layers of HTML

Discussion

An HTML document is a hierarchical structure. Each part of an HTML page can be thought of as nested under the previous part. For example, everything on the page is inside of the `html` tag. The `title` tag is a part of the `head` tag. Every `p`, `h1`, or `ul` tag in the main part of the web page is part of the `body` tag.

HTML Nesting

The nested structure of a web page determines how each piece is displayed and styled. The tags are displayed in the browser in the order they are listed in the document. For example, if you have a `h1` tag and then a `p` tag, the `h1` text will appear above the text contained in the `p` tag. As you will see later, any colors that you set for a particular element will also apply to any of the elements inside. If you set the background of the `body` to be blue, then all of the elements in the `body` will also get a blue background. You can override this behavior, but the structure of the page is important to remember and understand.

Parent Tags

Consider this simple web page that displays a grocery list:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Grocery Shopping</title>
  </head>
  <body>
    <h1>Grocery List</h1>
    <ul>
      <li>Apples</li>
      <li>Bananas</li>
      <li>Milk</li>
      <li>Bread</li>
      <li>Cookies</li>
      <li>Butter</li>
    </ul>
  </body>
</html>
```

Here, the `html` tag is the parent of every other element in this page. The `head` tag is the parent of the `title` tag. The `body` tag is a parent of the `h1` and `ul` tag.

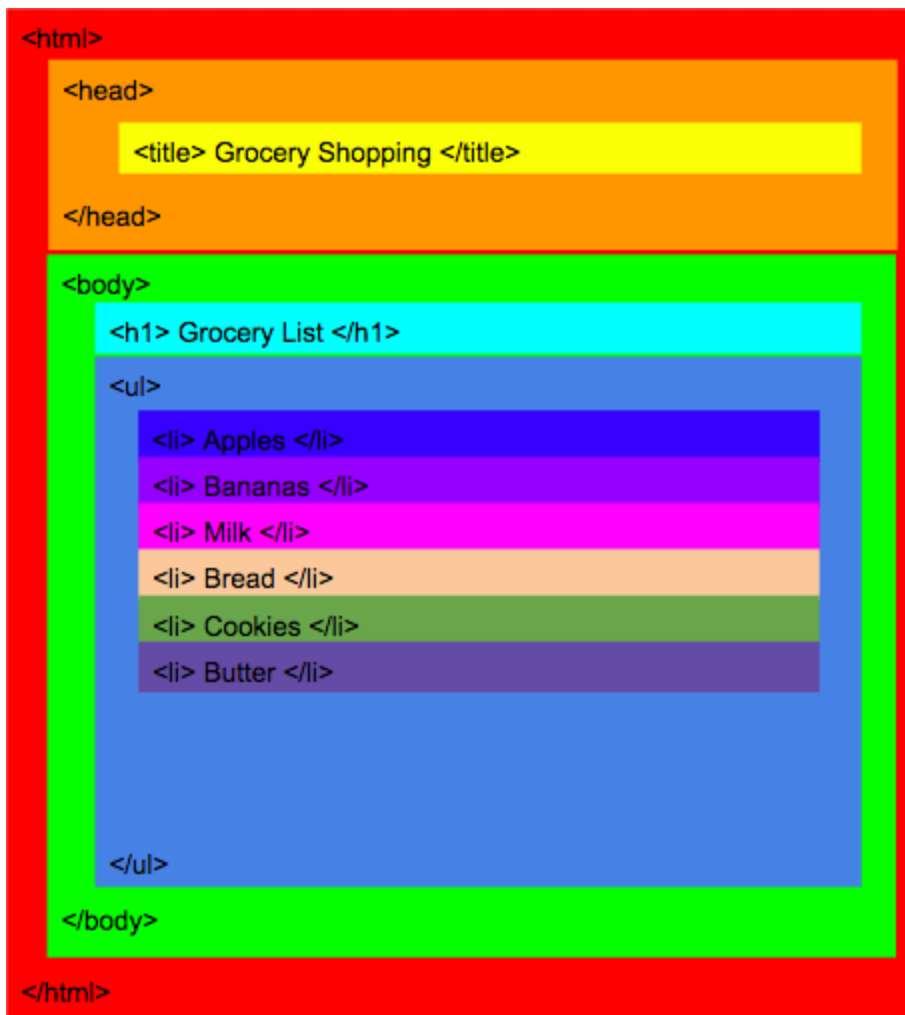
Do you see the pattern for what makes a tag a parent? A given tag is a parent to any tags that are inside of it. We can see this relationship visually thanks to the indentation.

Class Exercise

In this exercise, you will create a physical version of a web page. When you build web pages on the computer, parent tags are shown through indentation. On your physical version of a web page, you will show the relationship between tags by using colored paper.

Your Tasks:

1. Write out a simple web page. It should have at least seven different tags in it, one of which must be a `ul` or `ol` tag.
2. Build your web page layer by layer using colored paper. Each tag should get its own container of a particular color. Then, each element inside should get a nested container of a different color. The picture below shows what the example web page above would look like.



By looking at the web page above, we can easily see that the `html` tag contains everything. The `ul` tag contains each of the `li` tags. The `title` and `li` tags are not parents to any other tag.