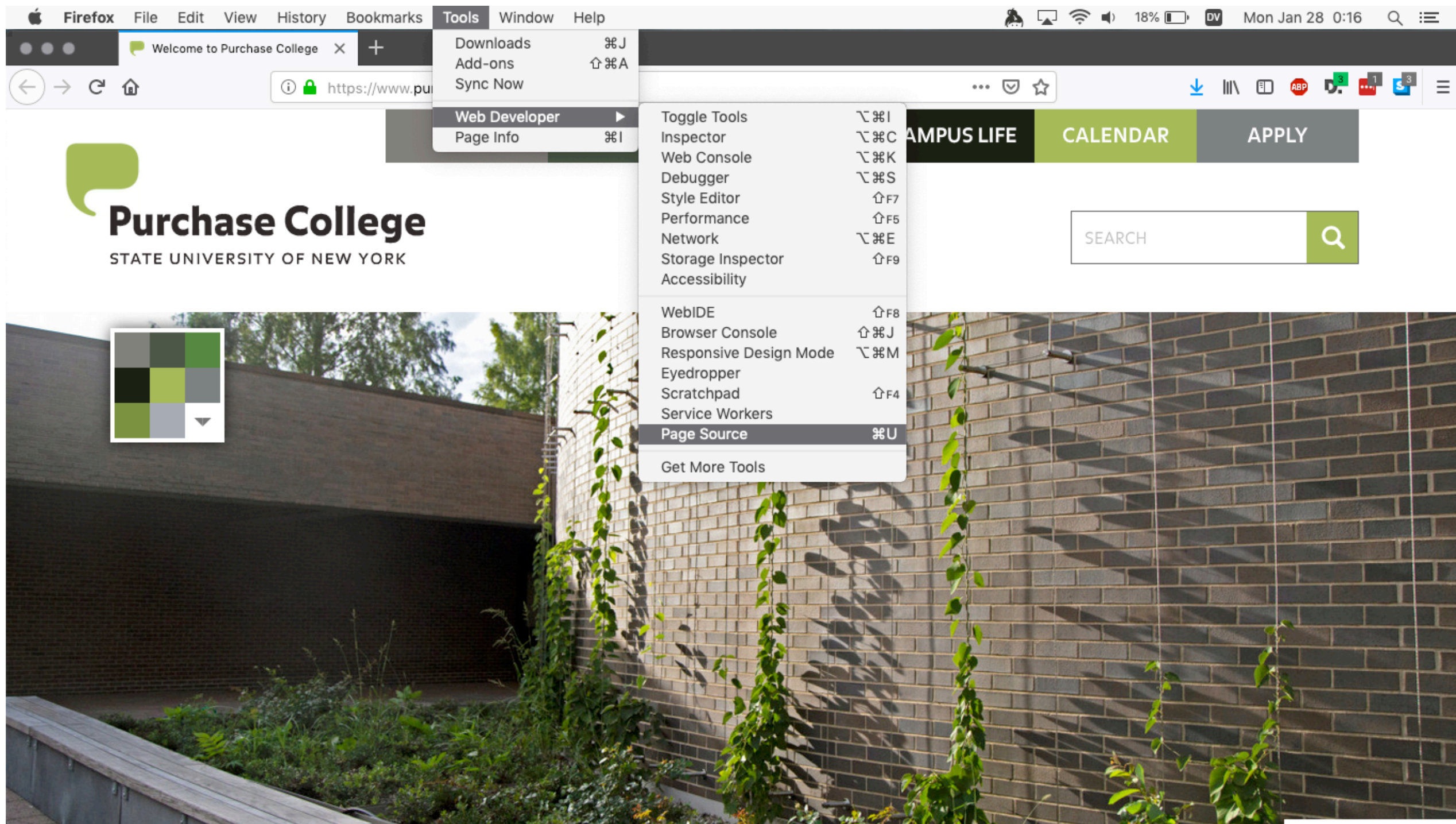


Hyper Text Markup Language

**HTML is a markup language.
It tells your browser how to
structure the webpage.**



HTML consists of a series of **elements**, which you use to enclose, or “mark up” different parts of the content to make it appear or act a certain way.

HTML Tags

tag = < + tag name + >

<p>My cat is very curious.</p>

opening tag

<p>My cat is very curious.</p>

closing tag

<p>My cat is very curious.</p>

content

<p>My cat is very curious.</p>



element

```
<p>My cat is <b>very</b> curious.</p>
```

My cat is **very** curious.

nested tags

The Document

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>

  </body>
</html>
```

the HTML document

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>My Cool Page</title>
```

```
  </head>
```

```
  <body>
```

```
    </body>
```

```
</html>
```

The **doctype declaration** tells the browser to interpret the page as HTML5.

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>My Cool Page</title>
```

```
  </head>
```

```
  <body>
```

```
    </body>
```

```
</html>
```

The `<html>` tag is a wrapper that surrounds the entire document.

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>

  </body>
</html>
```

The **<head>** contains all the meta stuff
you don't show on the page.


```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>

  </body>
</html>
```

The `<title>` is what shows up on the tab (and in google search results).

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>
  </body>
</html>
```

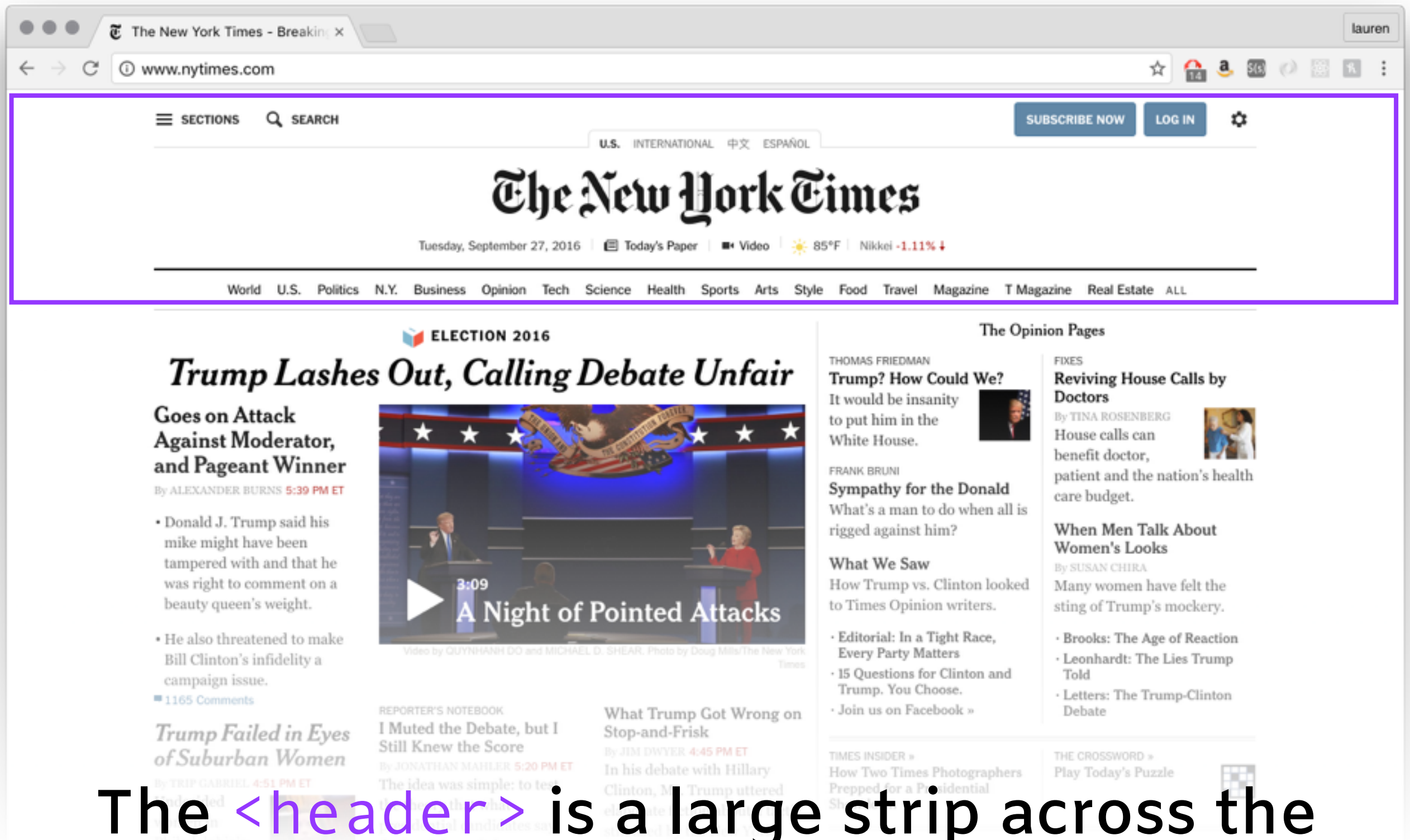
**The `<body>` contains all the elements
that are visible on the page.**

```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>

  </body>
</html>
```

The document has a **tree structure**.
Elements are **nested** within each other.
Use indentation to keep nesting clear.

Structural Tags



The <header> is a large strip across the top of the page that contains title, logo, maybe navigation.

The New York Times - Breaking x

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ELECTION 2016

Trump Lashes Out, Calling Debate Unfair

Goes on Attack Against Moderator, and Pageant Winner

By ALEXANDER BURNS 5:39 PM ET

- Donald J. Trump said his mike might have been tampered with and that he was right to comment on a beauty queen's weight.
- He also threatened to make Bill Clinton's infidelity a campaign issue.

1165 Comments

Trump Failed in Eyes of Suburban Women

By TRISTAN GABRIEL 4:51 PM ET

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Video by QUYNHANH DO and MICHAEL D. SHEAR. Photo by Doug Mills/The New York Times

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I Muted the Debate, but I Still Knew the Score

By JONATHAN MAHLER 5:20 PM ET

The idea was simple: to test

What Trump Got Wrong on Stop-and-Frisk

By JIM DWYER 4:45 PM ET

In his debate with Hillary Clinton, Mr. Trump uttered

The Opinion Pages

THOMAS FRIEDMAN
Trump? How Could We?
It would be insanity to put him in the White House.

FRANK BRUNI
Sympathy for the Donald
What's a man to do when all is rigged against him?

What We Saw
How Trump vs. Clinton looked to Times Opinion writers.

- Editorial: In a Tight Race, Every Party Matters
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House calls can benefit doctor, patient and the nation's health care budget.

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By SUSAN CHIRA
Many women have felt the sting of Trump's mockery.

- Brooks: The Age of Reaction
- Leonhardt: The Lies Trump Told
- Letters: The Trump-Clinton Debate

TIMES INSIDER »
How Two Times Photographers Prepped for a Presidential

THE CROSSWORD »
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The `<nav>` links to site's main pages, consistent across pages. It may be part of the header.

The `<footer>` bottom strip contains common, noncritical information.

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Rosenthal: Gun Control and Gun
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The New York Times

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```
<!DOCTYPE html>
<html>
  <head>
    <title>My Cool Page</title>
  </head>
  <body>
    <header>
      Welcome to my cool page!
      <nav>Link1 Link2 Link3</nav>
    </header>
    <footer>
      Updated on September 27, 2016.
    </footer>
  </body>
</html>
```


There are over 100 tags. You don't need to know all of them.

<https://webdesignfromscratch.com/html-css/html-tags/>

```
<body>  
  <h1>All About Cats</h1>  
  This site is all about cats.  
  <h2>Cat Anatomy</h2>  
  Cats have a strong, flexible body.  
  <h2>Cat Breeding</h2>  
  Cats have a high breeding rate.  
</body>
```

The header tags (<h1>, <h2>, ..., <h6>)
are used for headings. The number is
based on hierarchy of important.

```
<body>
  <h1>All About Cats</h1>
  <p>This site is all about cats.</p>
  <h2>Cat Anatomy</h2>
  <p>Cats have a strong, flexible body.</p>
  <h2>Cat Breeding</h2>
  <p>Cats have a high breeding rate.</p>
</body>
```

The **<p>** tag is used to enclose a
paragraph of text.

```
<div>blah blah blah blah blah</div>
```

The `<div>` tag is the generic container
for flow content, which does not
inherently represent anything

```
<div>blah blah <span>something  
different</span> blah blah</div>
```

The **** represents a span of text
stylistically different from normal text

`<article>` encloses a block of related content that makes sense on its own without the rest of the page.

`<section>` is similar to `<article>`, but it is more for grouping together a single part of the page that constitutes one single piece of functionality.

Styling Tags

```
<p>My cat is <b>very</b> curious.</p>
```

My cat is **very** curious.

The **** tag is used for bold text.


```
<p>My cat is <i>very</i> curious.</p>
```

My cat is *very* curious.

The `<i>` tag is used for italicized text.

```
<p>My cat is very<br>curious.</p>
```

My cat is very
curious.

The `
` tag can be used to add a line
break in the page.

**All whitespace (line breaks,
multiple spaces, tabs) is
effectively collapsed into
single spaces.**

Lists

```
<ul>  
  <li>Apple</li>  
  <li>Banana</li>  
  <li>Guava</li>  
</ul>
```

- Apple
- Banana
- Guava

The `` tag creates an unordered list. It includes nested `` tags for list items.

```
<ol>  
  <li>Apple</li>  
  <li>Banana</li>  
  <li>Guava</li>  
</ol>
```

1. Apple
2. Banana
3. Guava

The `` tag creates an ordered list. It includes nested `` tags for list items.

Images

```

```

The `` tag represents an image on the page. It does not have a closing tag.


```

```

Attributes add additional information to an HTML tag. In this case, the **src=""** attribute specifies the image file to display.

```

```

The link target can be a “relative location” (meaning it includes the path and file relative to the location of index.html).

```

```

Or the link target can be a “fully qualified URL” (meaning it includes the HTTP://)

```

```

The **width** and **height** attributes specifies the width and height in pixels to display the image at. They are optional.

```

```

The **alt** attributes specifies alt text to be displayed if the user chooses not to display images, or if the browser cannot display the image because it is invalid.

Hyperlinks

```
<a href="http://example.com">my link</a>
```

The `<a>` tag is used to create a hyperlink.

```
<a href="http://example.com">my link</a>
```

The **href** attribute specifies where the link directs to.


```
<a href="http://example.com">my link</a>
```

```
<a href="post1.html">my first post</a>
```

**The link target can be a fully qualified url
or a relative location.**