



HTML & CSS



Paul Sembereka



What is IT?

HTML

Hypertext Markup Language

The **language** your **web browser** uses to **describe** the **content and structure** on web pages

Let's make it simple!!

HTML = Set of nested boxes

Let's make it simple!!

Web Page = HTML document

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Students engage in 16 Days of Activism

In December, 2018, students engaged in the 16for16 campaign, which was part of the global 16 Days of Activism. The campaign was led by Limodzi, which is a groupin...

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HTML

We can call all these boxes are **HTML elements**

HTML ELEMENT

An HTML element is an individual component of an HTML document or web page

Used to **structure** content of an HTML document

Represented by **HTML tags**

HTML

Structure???

How HTML supports structure

THE DOM

(Document Object Model)

HTML DOM

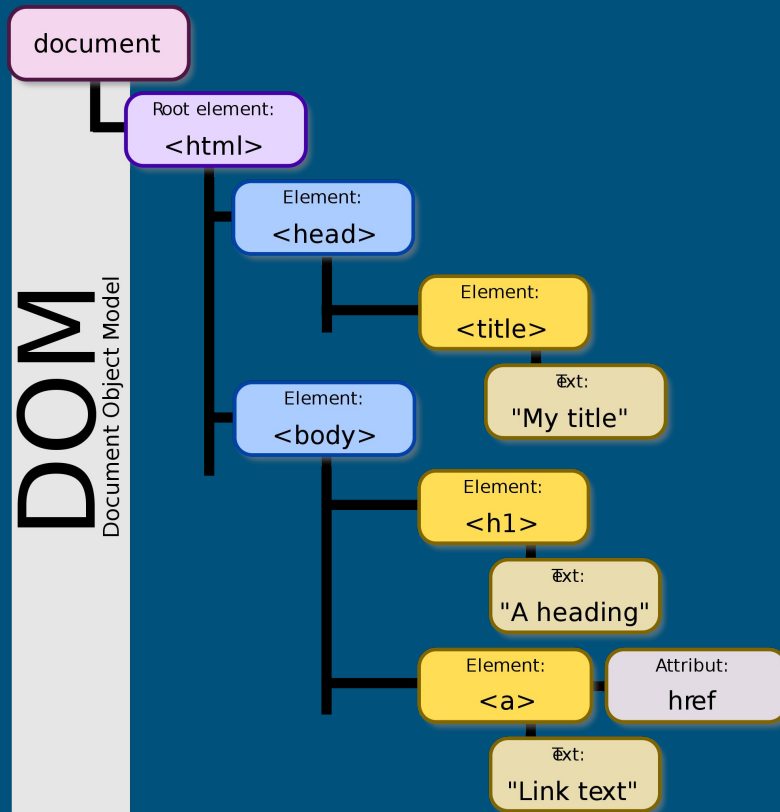
The Document Object Model (DOM) is a programming **API** for HTML (and XML) documents

Hierarchy of HTML elements

HTML DOM

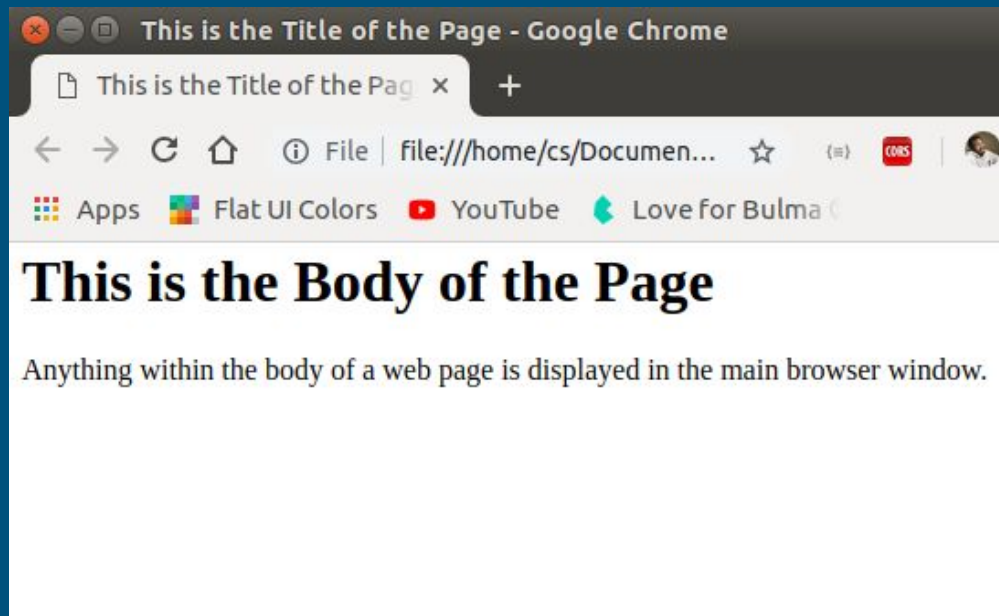
- It defines the logical structure of documents and the way a document is accessed and manipulated
- With the Document Object Model, programmers can create and build documents, navigate their structure, and add, modify, or delete elements and content.

HTML DOM



Basic HTML document

```
<!DOCTYPE html>
<html>
  <head>
    <title>This is the Title of the Page</title>
  </head>
  <body>
    <h1>This is the Body of the Page</h1>
    <p>
      Anything within the body of a web page is
      displayed in the main browser window.
    </p>
  </body>
</html>
```



HTML DOM

- All HTML documents must start with a document type declaration: `<!DOCTYPE html>`.
- HTML documents begins with `<html>` and ends with `</html>`
- The visible part of a web page is rendered between `<body>` and `</body>`

HTML structure

THE TAGS

(Define HTML elements)

HTML TAGS

An HTML element usually consists of a **start** tag and **end** tag, with the content inserted in between:

<tagname>Content goes here...**</tagname>**

The HTML **element** is everything from the start tag to the end tag:

BASIC HTML TAGS

<code><html></code>	Root of HTML Document
<code><head></code>	Info about Document
<code><body></code>	Document Body
<code><h1>, <h2>, <h3>, ...</code>	Header tags
<code><p></code>	Paragraph tags
<code></code>	List tags
<code></code>	Image tags
<code><a></code>	Anchor (link) tags
<code><form></code>	Supports input
<code><div><header><aside>...</code>	container for other HTML tags, defines section
<code><script></code>	Loads JavaScript
<code><style></code>	Loads CSS styles

HTML TAGS

- Opening tags can carry attributes, which tell us more about the content of that element.
- Attributes require a name and a value.
- To learn HTML you need to know what tags are available for you to use, what they do, and where they can go.

HTML TAG ATTRIBUTES

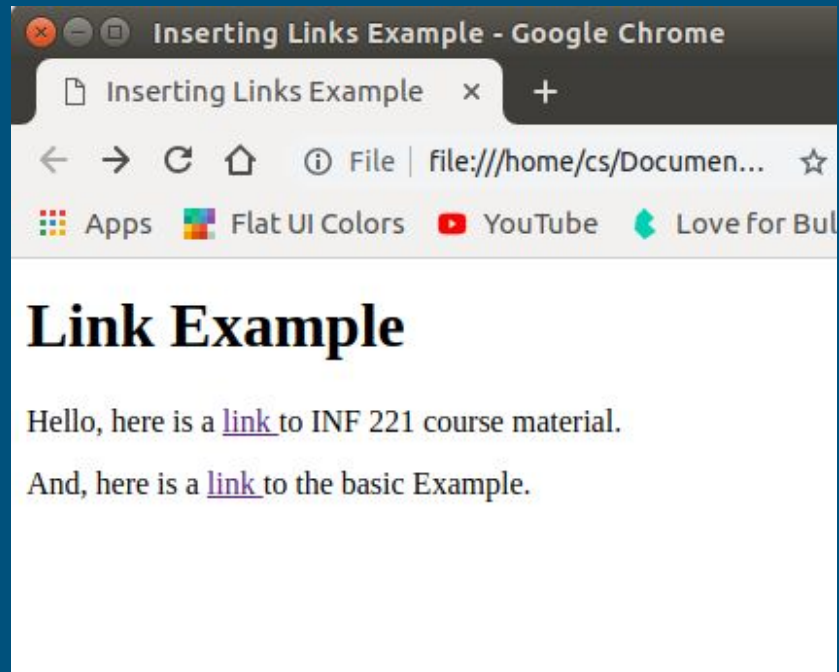
`<p class="en-us">Paragraph in English</p>`

 Attribute name

 Attribute value

INSERTING LINKS

```
<!DOCTYPE html>
<html>
  <head>
    <title>Inserting Links Example</title>
  </head>
  <body>
    <h1>Link Example</h1>
    <p>
      Hello, here is a
      <a href="https://bit.ly/2U9dF8L" title="github inf221 course material">
        link
      </a>
      to INF 221 course material.
    </p>
    <p>
      And, here is a
      <a href="basic-example.html" title="Basic Example">
        link
      </a>
      to the basic Example.
    </p>
  </body>
</html>
```



INSERTING IMAGES

```
<!DOCTYPE html>
<html>
  <head>
    <title>Images Example</title>
  </head>
  <body>
    <h1>Image</h1>
    <p>
      Hello, here is an egg
    </p>
    <div>
      
    </div>
  </body>
</html>
```

Image

Hello, here is an egg



LISTS

``

Ordered List (1, 2, 3...)

``

Unordered List (bullets)

``

List Item

Form Elements

`<input type="text">`

Text input

`<input type="radio">`

Radio input

`<input type="submit">`

Submit button

`<input type="search">`

Search input

`<fieldset><legend>`

Group form elements

HTML CONTENT MODELS

Define the type of content expected inside an element and control syntax rules such as element nesting

HTML CONTENT MODELS

1. Metadata content
2. Flow content
3. Sectioning content
4. Heading content
5. Phrasing content
6. Embedded content
7. Interactive content

And Now!!

CSS

Cascading Style Sheets

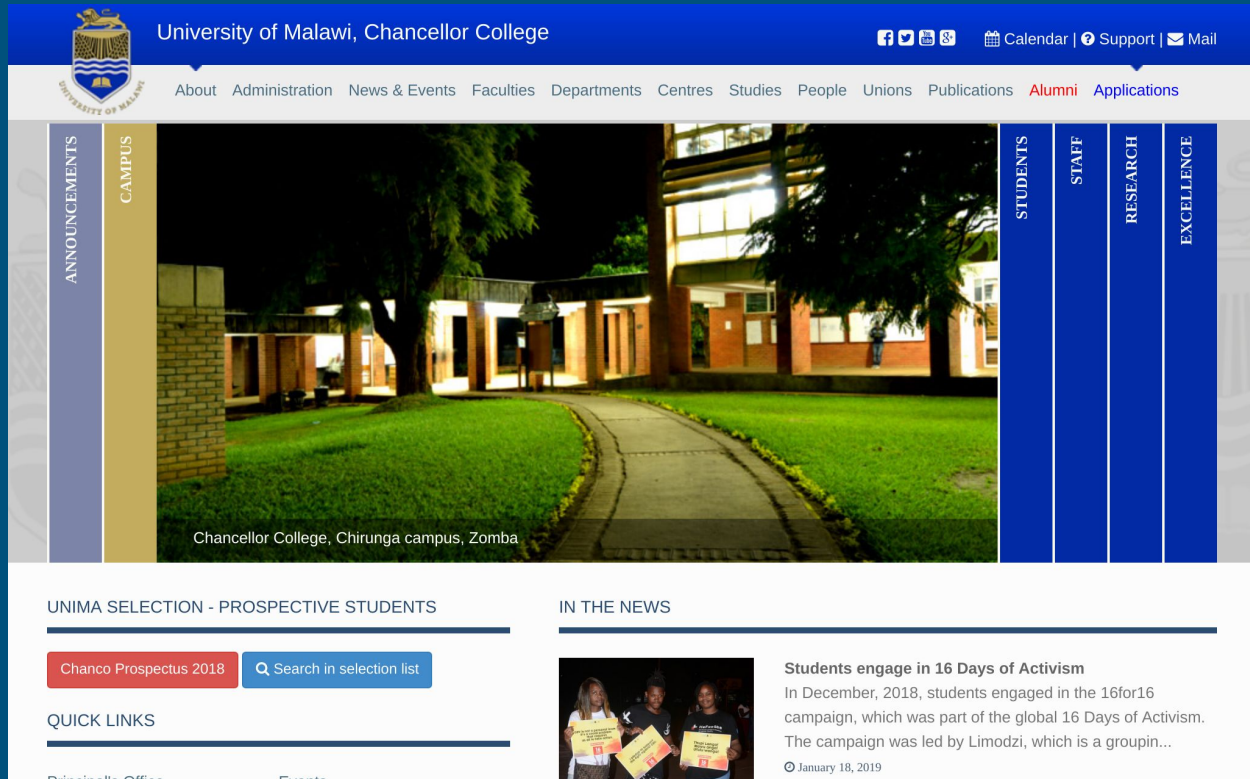
Language that describes **how HTML elements are to be displayed** on screen, paper, or in other media.

rules that tell your web browser **how stuff should look**

Let's make it simple!!

CSS = list of rules

With CSS



Without CSS



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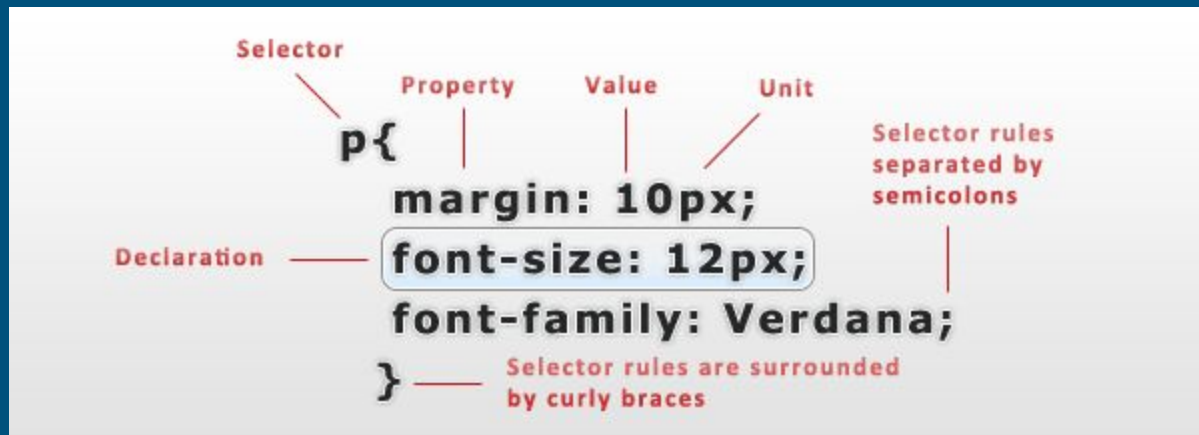
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Some tips



CSS Anatomy

```
selector {  
  property: value;  
}
```



Conclusion

CSS = list of rules

HTML = Set of nested boxes

CSS rules affect how HTML boxes look

Next Class

More CSS
Combining HTML and CSS
Discuss assignment