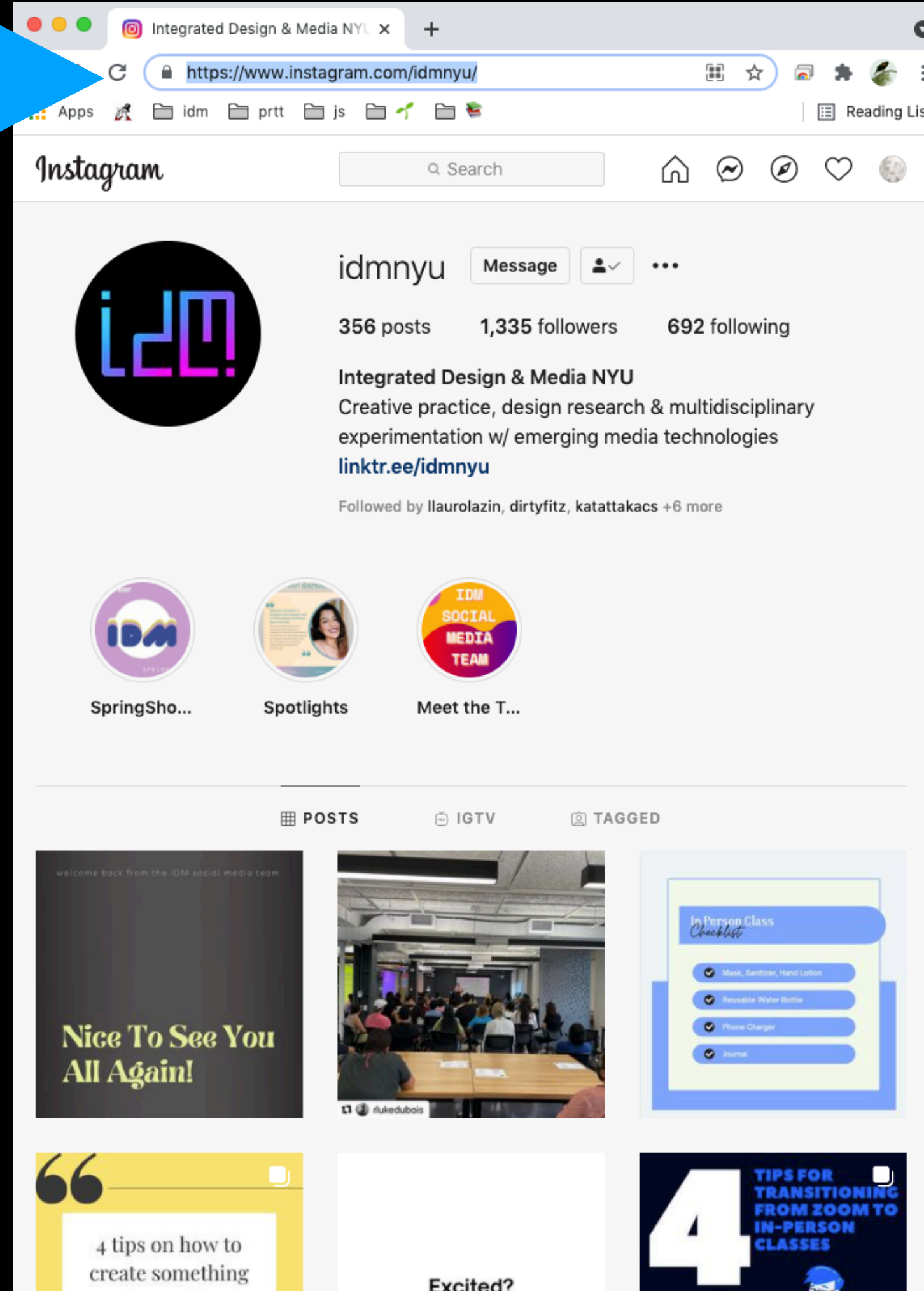


The web is an information system where documents and other resources are identified by **Uniform Resource Locators** which may be interlinked by hyperlinks, and are accessible over the **internet**.

The resources fo the Web are transferred via the **Hypertext Transfer Protocol** may be accessed by users by a software application called a **browser**, and are published by a software application called a **server**.

web apps are called that for a reason



the url for this webpage is:

<https://www.instagram.com/idmnyu/>



Integrated Design & Media NYU x

https://www.instagram.com/p/CTVMwq\_FMuF/

Instagram

Search

idmnyu

Message

356 posts 1,335 followers 692 following

Integrated Design & Media NYU  
Creative practice, design research & multidisciplinary experimentation w/ emerging media technologies

welcome back from the IDM social media team

**Nice To See You All Again!**

idmnyu • Following

idmnyu Happy first day of classes IDM! Can't wait to show you all what we have in store for this school year ;)  
4h

Liked by rlukedubois and 37 others  
4 HOURS AGO

Add a comment... Post

Nice To See You All Again!

rlukedubois

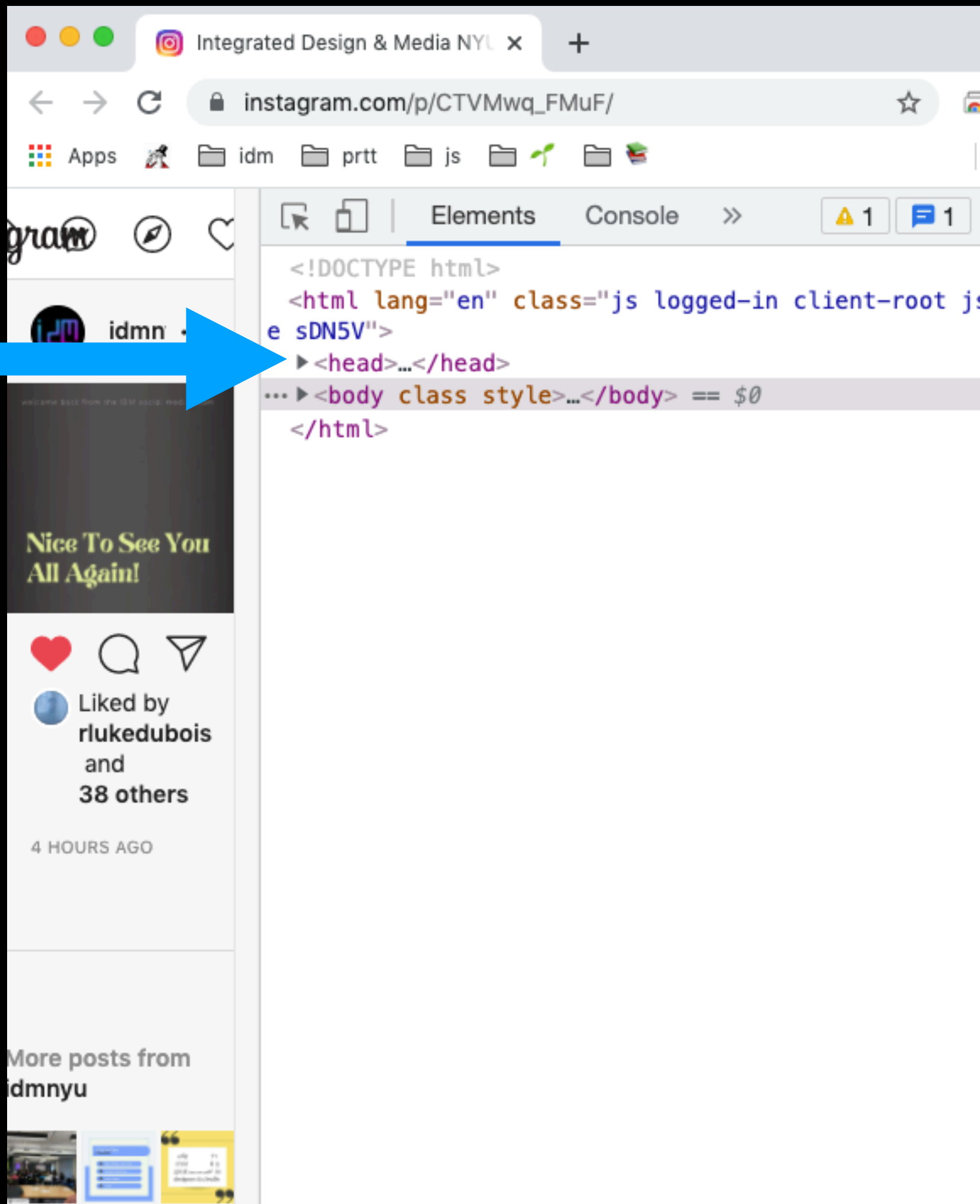
4 tips on how to create something

Excited?

4 TIPS FOR TRANSITIONING FROM ZOOM TO IN-PERSON CLASSES

the url for this webpage is:

[https://www.instagram.com/p/CTVMwq\\_FMuF/](https://www.instagram.com/p/CTVMwq_FMuF/)

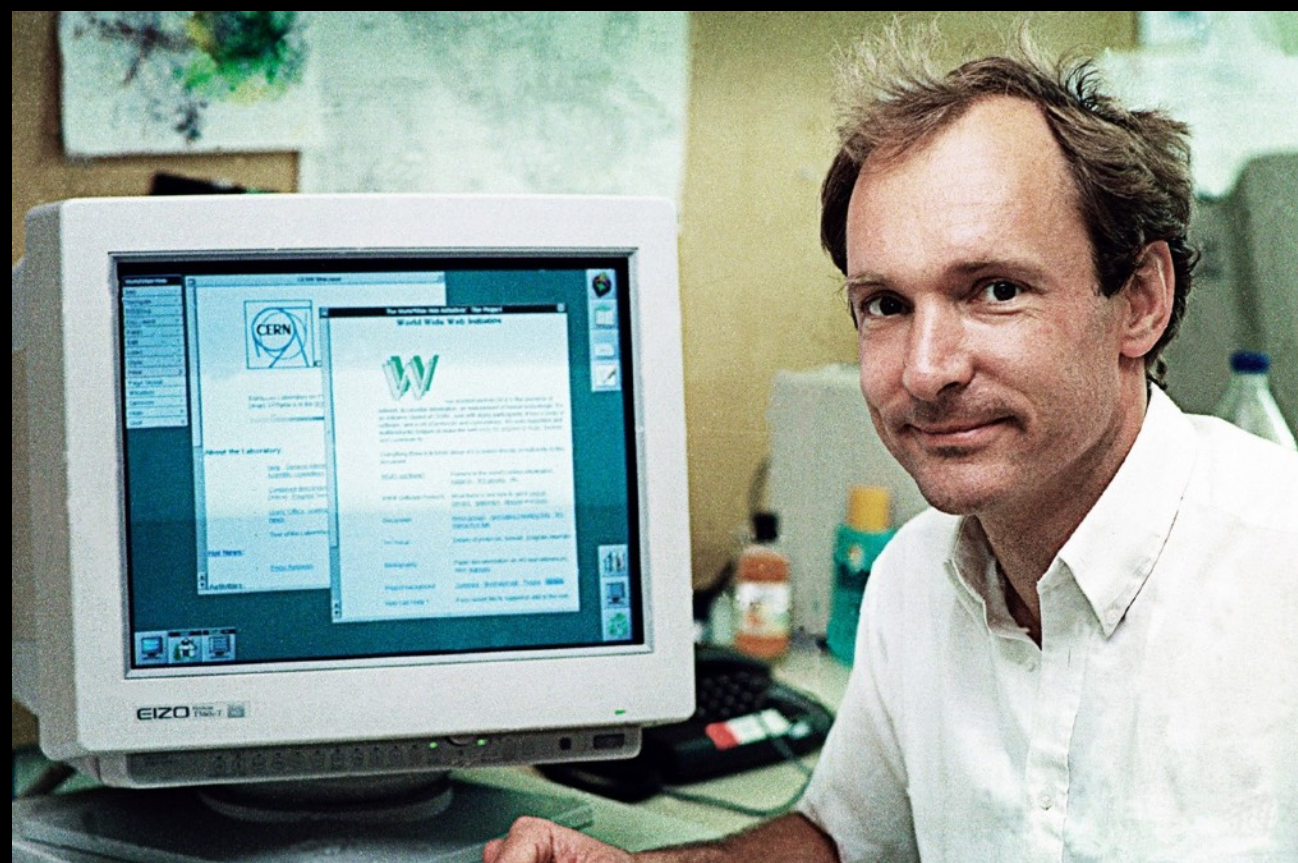


this is the **HTML** for the previous webpage. Much of the code is hidden in this interface.



“I still has to find a way to turn text into **hypertext**, though. This required being able to distinguish text that was a **link** from text that **wasn't**. I delved into the files that defined the internal workings of the text editor, and happily found a spare thirty-two bit piece of memory, which the developers of NeXT had graciously left open for future use by tinkerers like me. I was able to use the spare space as a pointer from each span of text to the address for any hypertext link. With this, hypertext was easy. ”

—Berners Lee, *Weaving the Web*







1989 - First Web Server

Due to the way the computer's storage was designed, Tim Berners-Lee invents the WWW (HTTP) on a NeXT machine



You are required to use **Unix** via a command line to upload your personal class site hosted on **Github** / **Github Pages** servers (fyi it's totally free!).

- Mac: **terminal** (comes installed)
- Wndws: **Linux Bash Shell** (might have to install)

Using any other software (skin) to upload or host your class site is prohibited (ie **GitHub Desktop**, **SFTP**, **Glitch**, **NYU's Wordpress site creator**, etc). If your class site is not hosted on **Github Pages** via a Unix command line you will lose a full letter grade on every assignment.



# UNIX

operating system

Bell Labs 1969 (proprietary)

1973 - released outside Bell



emoji.png Info

emoji.png

16 KB

Modified: January 23, 2022 at 6:09 PM

Add Tags...

General:

Kind: PNG image

Size: 16,455 bytes (20 KB on disk)

Where: Macintosh HD ▸ Users ▸ macbookair ▸ Desktop ▸ nyu

Created: January 23, 2022 at 6:09 PM

Modified: January 23, 2022 at 6:09 PM

☐ Stationery pad

☐ Locked

More Info:

Where from: <https://www.google.com/>  
<https://images.emojiterra.com/twitter/v13.1/512px/1f636.png>

Last opened: January 23, 2022 at 6:09 PM

Dimensions: 512×512

Color space: RGB

Alpha channel: Yes

Name & Extension:

emoji.png

☐ Hide extension

Comments:

Open with:

Preview.app (default)




Use this application to open all documents like this one.

Change All...

Preview:

Sharing & Permissions:

You can read and write

Name	Privilege
 macbookair (Me)	◊ Read & Write
 staff	◊ Read only
 everyone	◊ Read only

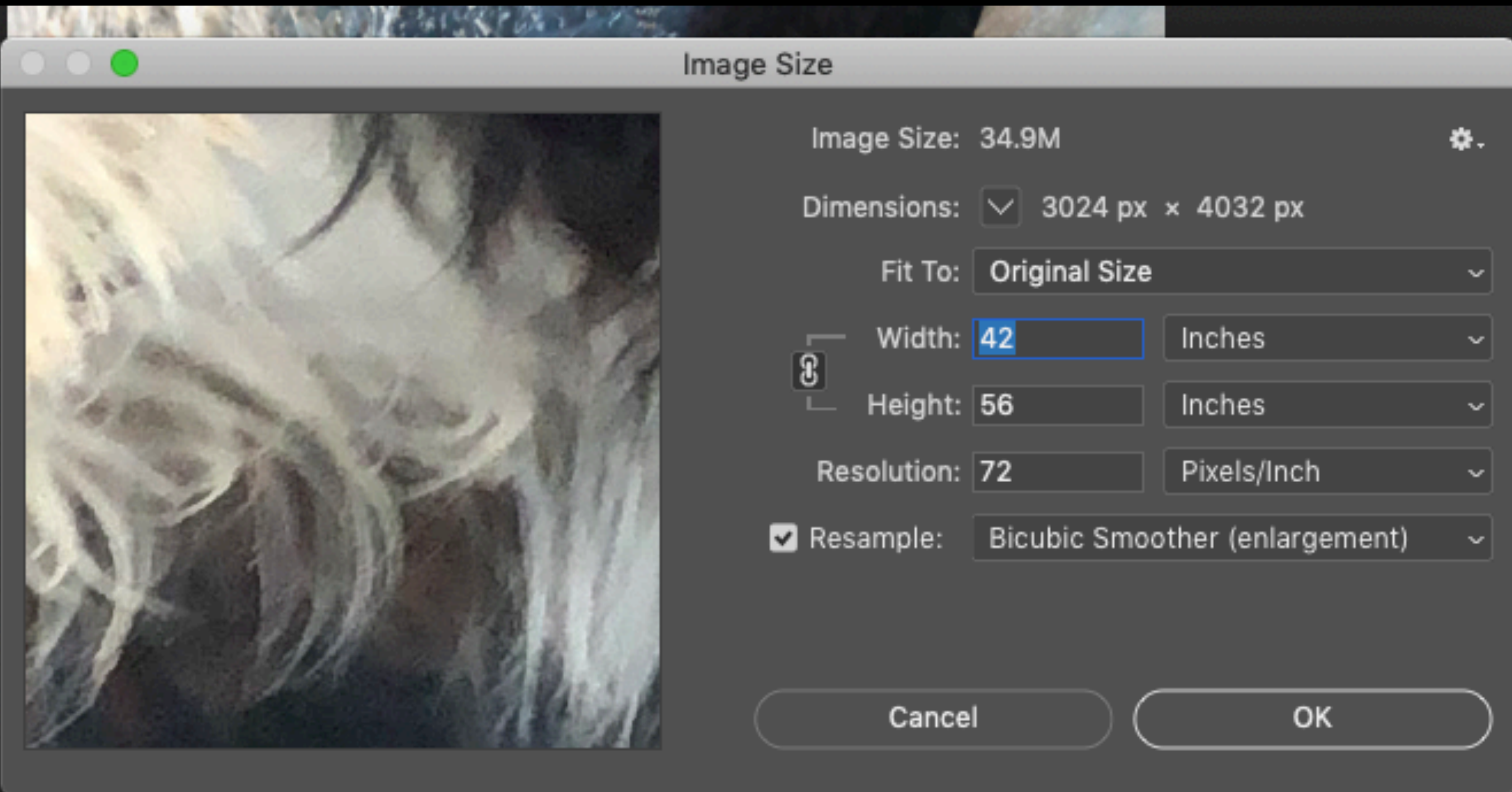
+

−

⚙

⏏





to resize in photoshop > image > image size

## Unix Commands

**pwd** - "present working directory" - where am i in the system!?.

**ls** - list everything in this directory

**cd** - "change diretory [insert name of folder]" - only if the folder is a child of the one you are in

type in just **cd** - terminal will direct you to the root of the drive  
powershell will do nothing just leave you in directory

**mkdir** - "make directory" - make a folder

**rm** - "remove file" - deletes a file forever (**not the trash**). doesn't work on directories

**mv** - "move" - move file

**..** - goes back to the parent directory

At its most complex, git allows professional developers to work together worldwide on software projects without over writing each other's work, causing erased code, bugs and generally breaking collaborative projects.

It is also a great resource (**web site**) to find code examples and inspiration. If you haven't already, you will likely be introduced to it and be asked to implement existing code in your Creative Code class - among many other contexts. It's like a library - only instead of taking out books, you can take out software.

**\*\*Note:** Like a library in English class you should **NEVER** take credit for someone else's intellectual property. There is a grey area between open source and plagiarism.



< HTML >

# Hypertext Markup Language

Describes the **content** + **structure** of a web page;  
NOT a programming language

The key to understanding how **HTML** + **CSS** works is to imagine that there is an invisible box around every **HTML** element.

Block level elements are outlined w/ red + inline elements in green.

**<body>** creates 1st box, then **<h1>**, **<h2>**, **<p>**, **<i>** + **<a>** each create their own boxes within it.

## The Cottage Garden

The *cottage garden* is a distinct style of garden that uses an informal design, dense plantings, and a mixture of ornamental and edible plants.

The Cottage Garden originated in England and its history can be traced back for centuries, although they were re-invented in 1870's England, when stylized versions were formed as a reaction to the more structured and rigorously maintained English estate gardens.

The earliest cottage gardens were more practical than their modern descendants, with an emphasis on vegetables and herbs, along with some fruit trees.

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## < HTML >

### 3 categories of HTML elements

1 - **block**: large blocks of content has height + width  
**<p>, <h1>, <blockquote>, <ol>, <ul>, <table>**

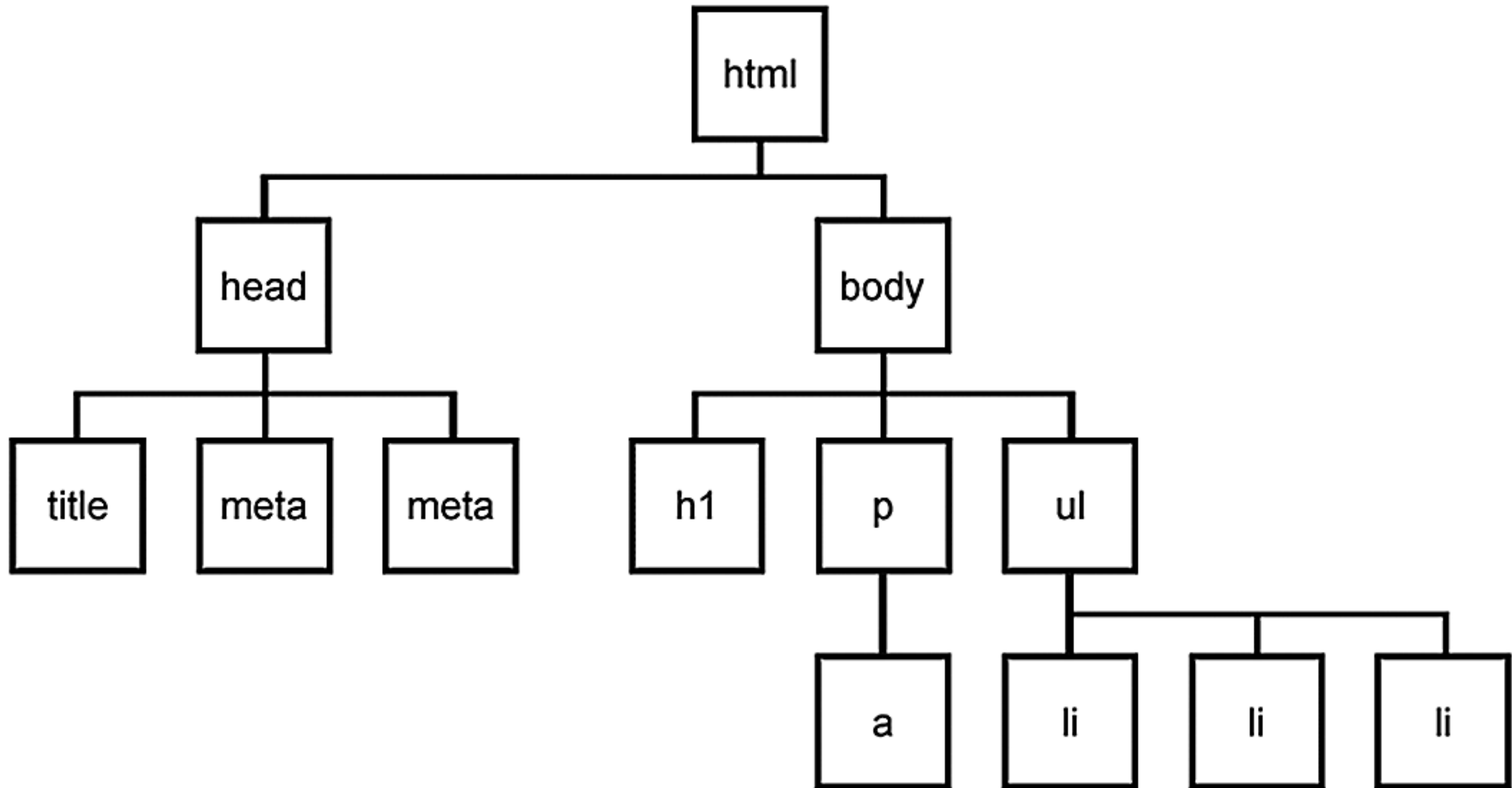
2 - **inline**: small about of content, no height or width  
**<a>, <em>, <strong>, <br>, <span>, <time>**

a. **inline block**: inline content w/ height + width

3 - **metadata**: information about the page, usually not visible  
**<title>, <meta>, <script>**



# Parent / Child Element Structure



The `<head>` element contains the metadata for a web page. Metadata is information about the page that isn't displayed directly on the web page. Unlike the information inside of the `<body>` tag, the metadata in the head is information about the page itself.

# Text tags

**h1, h2, h3, h4, h5, h6** are text tags for headings

**p** is a tag for paragraphs

**b** is for bold, **i** is for italics

**<strong>** is for **bold** **<em>** is for *italics*

**ul, ol, li** are used for making lists

**ul**: unordered lists

**ol**: ordered lists

**li**: an individual list tag

**<br/>** will break to a new line

```
<h1>Heading 1</h1>
```

```
<h2>Heading 2</h2>
```

```
<h3>Heading 3</h3>
```

```
<h4>Heading 4</h4>
```

```
<h5>Heading 5</h5>
```

```
<h6>Heading 6</h6>
```



# Semantic HTML

HTML should be coded to represent the data that will be populated and not based on its default presentation styling. Presentation (how it should look), is the sole responsibility of CSS.

Some of the benefits from writing semantic markup are as follows:

- Search engines will consider its contents as important keywords to influence the page's search rankings (see SEO)
- Screen readers can use it as a signpost to help visually impaired users navigate a page
- Finding blocks of meaningful code is significantly easier than searching through endless divs with or without semantic or namespaced classes
- Suggests to the developer the type of data that will be populated
- Semantic naming mirrors proper custom element/component naming

<https://developer.mozilla.org/en-US/docs/Glossary/Semantics>

`<p>`

`<h1>` - `<h6>`

## Semantic elements

`<main>`

dominant content of the `<body>` element

`<article>`

A document, page or site. This is usually a root container element after body

`<section>`

Generic section of a document

`<header>`

Intro section of a document

`<footer>`

Footer at end of a document or section

`<nav>`

Navigational section

Use these **before** div when appropriate.

# Semantic elements

## `<aside>`

represents a portion of a document whose content is only indirectly related to the document's main content. Asides are frequently presented as sidebars or call-out boxes.

## `<details>`

creates a disclosure widget in which information is visible only when the widget is toggled into an "open" state.

## `<figcaption>`

represents a caption or legend describing the rest of the contents of its parent `<figure>` element.

## `<mark>`

represents text which is marked or highlighted for reference or notation purposes, due to the marked passage's relevance or importance in the enclosing context.

## `<summary>`

element specifies a summary, caption, or legend for a `<details>` element's disclosure box. Clicking the `<summary>` element toggles the state of the parent `<details>` element open and closed.

## `<time>`

represents a specific period in time.

tag attribute value

```
<video src= "filepath/file.mov" alt= "this is the video" height="300"> </video>
```

```
<html attribute= "value" attribute= "value" attribute= "value"> </html>
```



# Absolute Links

direct to another server

OPENING  
LINK TAG

URL WE ARE  
DIRECTED TO



TEXT WE  
CLICK ON

CLOSING  
TAG

```
<a href="https://www.youtube.com/watch?v=qcnnI6HD6DU"> absolute link</a>
```

**< a href** — stands for *hyperlink reference*

# RELATIVE Links

direct to a file on the same site /server

It's faster to simple direct to the file path.

re: Unix!!

if the file is in the same folder:

```
<a href="index.html">Homepage</a>
```

if the file is in the parent folder:

```
<a href=" ../index.html">Homepage</a>
```

if the file is in the child folder:

```
<a href="images/photos.html">Photos</a>
```

id attribute: 

```
<a href="#thisID">Jump to a different element on page</a>
```

```
<li><a href="#theFoot">id attribute link</a></li>
```

# RELATIVE Links

direct to a file on the same site /server

It's faster to simple direct to the file path.

id attribute: `<a href="#thisID">`Jump to a different element on page`</a>`

```
<li><a href="#theFoot">id attribute link</a></li>
```

# Why **index.html**?

The main homepage of a site written in HTML (and the homepage of each section in a child folder) is called index.html.

Web servers are usually set up to return the index.html file if no file name is specified. Therefore, it's always a good idea to name your "home" page index.html



The `<img>` tag has a required attribute called `src`. The `src` attribute must be set to the image's source, or the location of the image. In some cases, the value of `src` must be the *uniform resource locator* (URL) of the image. A URL is the web address or local address where a file is stored.

# Images: relative vs. absolute url

```
<img src= "images/potato07.png" alt= "spud" >
```

```
<img src= "https://pngriver.com/wp-content/uploads/2018/04/Download-Potato-PNG-Pic.png" alt= "spud" >
```

The **<img>** tag is for images, which can be on your local directory or on another webpage.  
Read all about **<img>** tag [here](#). The same goes for **<video>** + **<audio>** tags

The **alt** attribute, which means alternative text, brings meaning to the images on our sites. The **alt** attribute can be added to the image tag just like the **src** attribute. The value of **alt** should be a description of the image.

```

```

1. If an image fails to load on a web page, a user can mouse over the area originally intended for the image and read a brief description of the image. This is made possible by the description you provide in the **alt** attribute.
2. Visually impaired users often browse the web with the aid of screen reading software. When you include the **alt** attribute, the screen reading software can read the image's description out loud to the visually impaired user.
3. The **alt** attribute also plays a role in Search Engine Optimization (SEO), because search engines cannot "see" the images on websites as they crawl the internet. Having descriptive **alt** attributes can improve the ranking of your site.



# <video /> structure

main  
tag

poster

width/  
height

control  
attributes

```
<body>

  <!-- Adding video tag -->
  <video poster="media/listen.jpg" width="400px" preload loop autoplay controls>
    <source src="media/listen.mp4"/>
    <source src="media/listen.webm"/>
  </video>
</body>
```

different  
sources

After the `src` attribute, the `width` and `height` attributes are used to set the size of the video displayed in the browser.

The `controls` attribute instructs the browser to include basic video controls: pause, play and skip. Unlike the `<img>` tag however, the `<video>` element requires an opening and a closing tag.

The text, "Video not supported", between the opening and closing video tags will only be displayed if the browser is unable to load the video.

# <audio /> structure

main  
tag

control  
attributes

```
<audio controls autoplay loop>
  <source src="audio/virginia.mp3" />
  <source src="audio/virginia.ogg" />
  <p>This browser does not support this audio format</p>
</audio>
```

different  
sources

text is the  
file cannot  
be found

## Some Media Attributes

**Preload** - what preloads when the page loads

**Controls** - if the play/stop buttons are visible

**Autoplay** - if the video should start playing  
automatically

**Loop** - if the video should loop on completion

# Attributes

If we want to expand an element's tag, we can do so using an attribute. Attributes are content added to the opening tag of an element and can be used in several different ways, from providing information to changing styling. Attributes are made up of the following two parts:

- 1) The **name** of the attribute
- 2) The **value** of the attribute



One commonly used attribute is the `id`.

We can use the `id` attribute to specify different content (such as `<div>`s) and is really helpful when you use an element more than once.

```
<div id="intro">  
  <h1>Technology</h1>  
</div>
```