

Intro to HTML 2

CISC-2350-R01 | Fall 2017 | Week 2

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Today's Agenda

- Attendance
- Review HTML structure and tags
- HTML Links
- File structure
- HTML Images
- In-class exercise
- Homework Assignment

Attendance

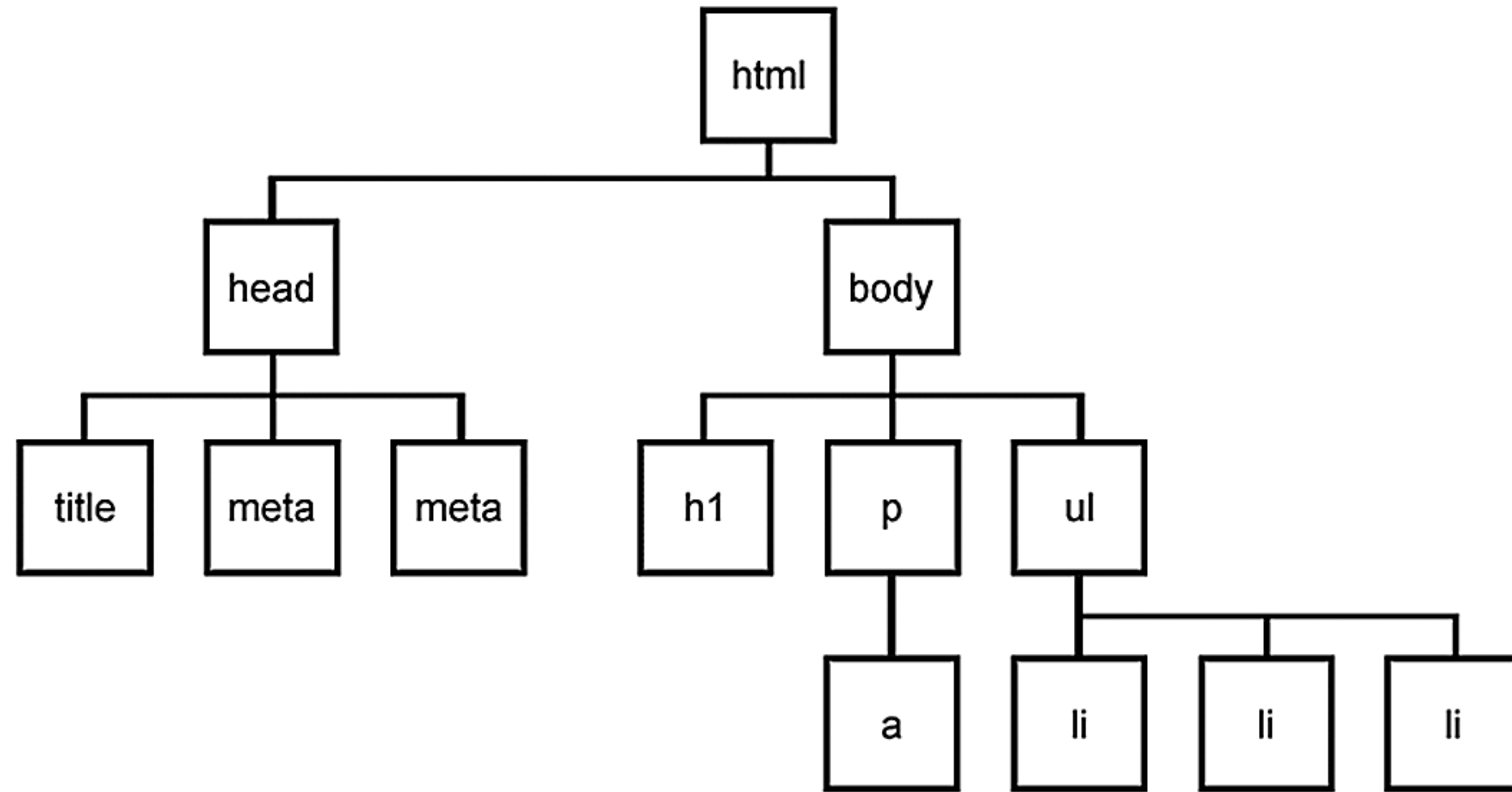
Review: HTML structure & tags

What is HTML?

HTML is “Hypertext Markup Language”

- What is hypertext?
- What is a markup language?





What is TED?

TED is a nonprofit devoted to spreading ideas, usually in the form of short, powerful talks (18 minutes or less). TED began in 1984 as a conference where **Technology**, **Entertainment** and **Design** converged, and today covers almost all topics — from science to business to global issues — in more than 100 languages. Meanwhile, independently run TEDx events help share ideas in communities around the world.

TED is owned by a nonprofit, nonpartisan foundation. Our agenda is to make great ideas accessible and spark conversation.

You might also want to learn about:

- History of TED
- How TED works
- What is TEDx?
- People behind TED

The 3 most viewed TED Talks are:

1. Ken Robinson: Do Schools Kill Creativity
 - 46.8m views
2. Amy Cuddy: Your body language may shape who you are
 - 42.7m views
3. Simon Sinek: How great leaders inspire action
 - 33.8m views

```
<!doctype html>

<html>

  <head>
    <title>In-Class Exercise - Building Structure From Word Document</title>
  </head>

  <body>
    <!-- headline -->
    <h1>What is TED?</h1>

    <!-- paragraphs -->
    <p>TED is a nonprofit devoted to spreading ideas, usually in the form of short, powerful talks (18 minutes or less).<br> TED began in 1984 as a conference where <b>Technology, Entertainment and Design</b> converged, and today covers<br> almost all topics – from science to business to global issues – in more than 100 languages. Meanwhile, <br> independently run TEDx events help share ideas in communities around the world.</p>

    <p>TED is owned by a nonprofit, nonpartisan foundation. Our agenda is to make great ideas accessible<br> and spark conversation.</p>

    <p><i>You might also want to learn about:</i></p>

    <!-- unordered list -->
    <ul>
      <li>History of TED</li>
      <li>How TED works</li>
      <li>What is TEDx?</li>
      <li>People behind TED</li>
    </ul>

    <!-- horizontal rule -->
    <hr>

    <h4>The 3 most viewed TED Talks are:</h4>

    <!-- nested list with the ordered list on top -->
    <ol>
      <li>Ken Robinson: Do Schools Kill Creativity
        <ul>
          <li>46.8m views</li>
        </ul>
      </li>
      <li>Amy Cuddy: Your body language may shape who you are
        <ul>
          <li>42.7m views</li>
        </ul>
      </li>
      <li>Simon Sinek: How great leaders inspire action
        <ul>
          <li>33.8m views</li>
        </ul>
      </li>
    </ol>
  </body>
</html>
```

HTML Elements / Tags, Attributes, Content

- Elements and tags used interchangeably



Structural tags

- **doctype, HTML, head, body, div** are structure tags

```
<!doctype html>
<html>

<!--All necessary information goes here-->
<head>
  <title></title>
  <link rel="stylesheet" href="style.css" type="text/css" />
</head>

<!--Everything viewable on the page goes in the body -->
<body>

  <div>
    This is some information that will go somewhere.
  </div>

</body>

</html>
```

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
- **ul, ol, li** are used for making lists
 - **ul**: unordered lists
 - **ol**: ordered lists
 - **li**: an individual list tag
- **
** 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>

Links

- Links are written using the anchor tag, `<a>`
- Uses URL's (uniform resource locator) link to other websites, relative URL's for the same site, or linking to a specific part of a page
- Uses **blank** to open in a new window
- Follows the format:

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```

Images

- The **** tag is for images, which can be on your local directory or on another webpage in the form of a URL.

```
<!--An image on the local directory-->


<!--Or with size specs -->


<!--Image from another site-->

```

|

Questions

HTML Links

Links

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- Uses **blank** to open in a new window
- Follows the format:

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```

Structure of a link

OPENING
LINK TAG

URL WE ARE
DIRECTED TO

TEXT WE
CLICK ON

CLOSING
TAG

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```



[FORDHAM UNIVERSITY](https://www.fordham.edu/)

Linking to other sites

- Links to external site
- Value of href has to be a full web address: **absolute URL**

```
<!-- link -->  
<a href="https://www.fordham.edu/" target="_blank">Fordham University</a>
```

Linking to other pages on same site

- Uses **relative URLs**
- Link types:
 - same folder: `Homepage`
 - child folder: `Photos`
 - parent folder: `Homepage`

```
<!-- linking to relative page on the same site -->  
<a href="/index.html">Homepage</a>
```

Linking to specific part on same site

- Add **id** attributes to HTML elements
- href value is id # from where you want user to go

```
<!-- linking to specific part on same site -->  
<a href="#myBio">My Bio</a>
```

Linking to specific part on another site

- Add **id** attributes to HTML elements
- href value URL to a site + id # value

```
<!-- linking to specific part on another site -->  
<a href="../../index.html #moreInformation">Read more information</a>
```

The way you link pages depends on your file structure!

Relative URLs can be used when linking to pages within your own website. They provide a shorthand way of telling the browser where to find your files.

Email links

- Start **href** attribute with *mailto:*

```
<!-- sending email -->  
<a href="mailto:rutak.fordham@gmail.com">Email Ruta</a>
```

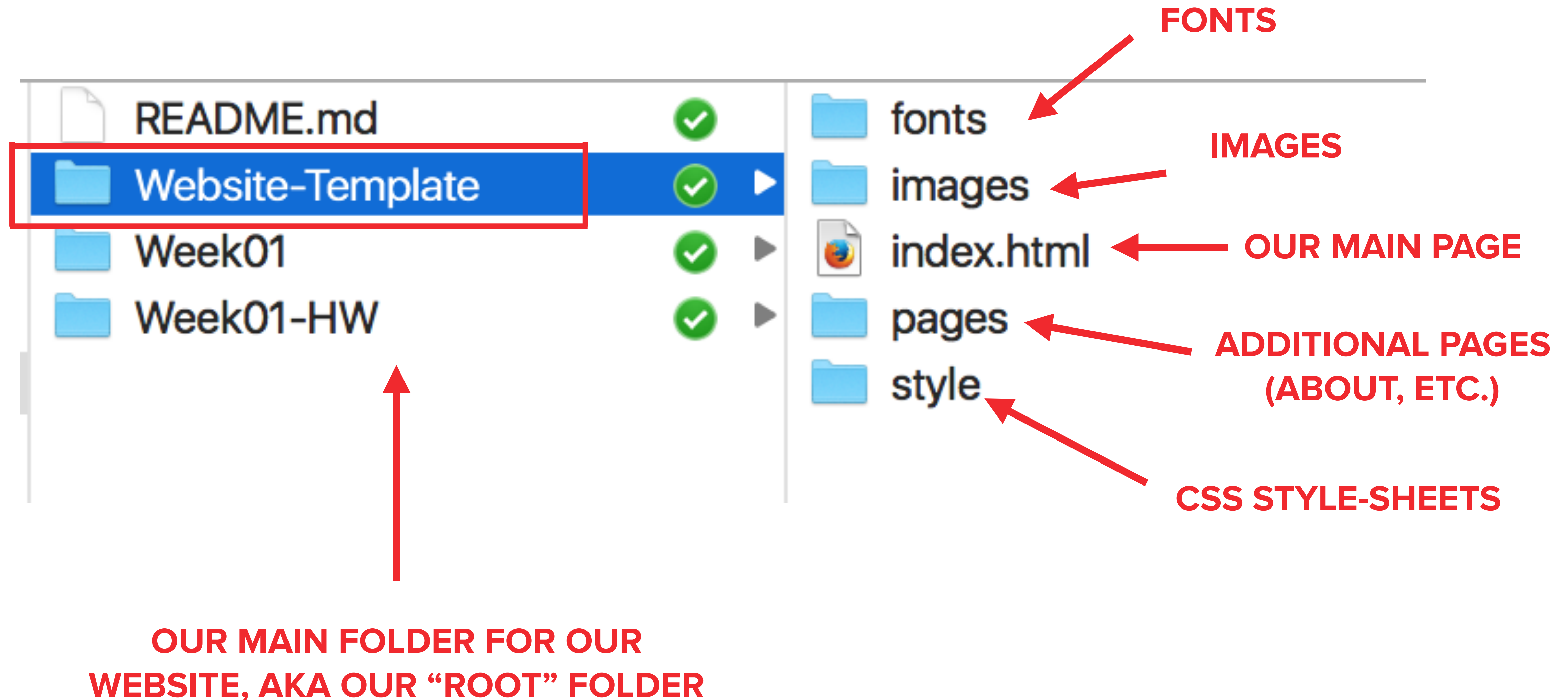
HTML Links Summary

FROM JOHN DUCKET “HTML AND CSS”

- Links are created using the `<a>` element
- The `<a>` element used the *href* attribute to indicate the page you are linking to
- If you are linking to a page within your own site, it is best to use relative links rather than qualified URLs
- You can create links to open email programs with an email address in the “*to*” field
- You can use the *id* attribute to target elements within a page that can be linked to

File structure

Let's break it down



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

If you have doubts or questions about structure, work from Website Template folder on GitHub.

HTML Images

Meet the `` tag

- The `` tag allows you to include images on your page, whether from your computer or a URL on the Internet
- It's an empty element: has no closing tag
- The `` tag has a required attribute: **src**, known as the source of the image
 - src tells the browser where it can find the image (either **external URL** or **relative URL** pointing to image on your own site)

Structure of an image tag

source
attribute



alternative
description
attribute



title
attribute

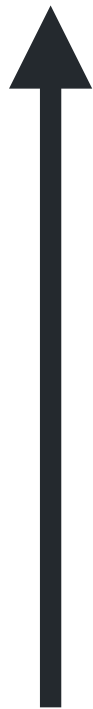


```
<!-- image tag -->  

```



left-angle
bracket



right-angle
bracket

Images: Local vs. URL

- The tag is for images, which can be on your local directory or on another webpage. Read all about tag [here](#)

```
<!-- An image on the local directory -->


<!-- Or with size specs -->


<!-- Image from another site -->

```


Height and Width attributes

- **height=** specifies height of an image
- **width=** specifies width of an image
 - From Duckett book: Images often take longer to load than the HTML code that makes up the rest of the page. This means it's a good idea to specify the size of the image so that the browser can render the rest of the text on the page while leaving the right amount of space for the image that is still loading.
 - We will later specify height and width using CSS
- Make sure to specify height and width **in pixels** (e.g. height="500px")

Image placement: before a paragraph

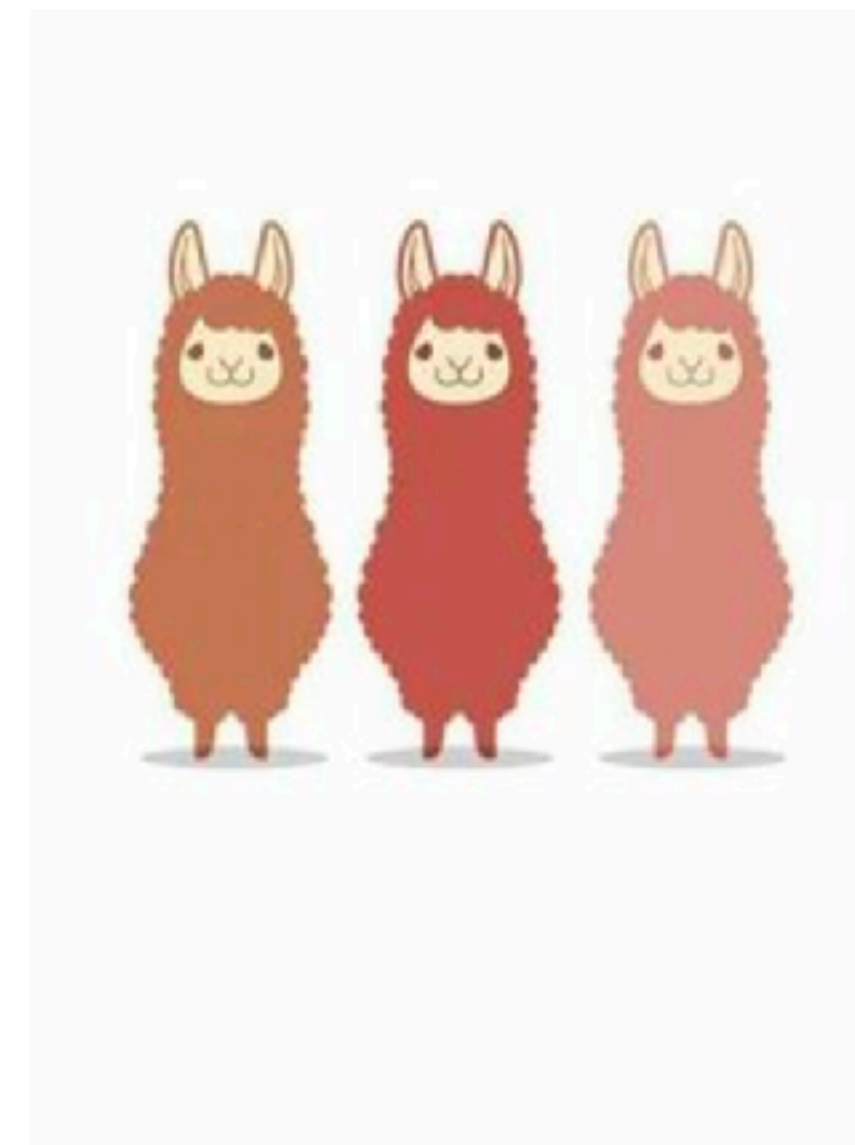
```
<!-- Image before a paragraph -->  
  
<p>There are three different color alpacas staring at us.<br>  
    Source: pinterest.com</p>
```



There are three different color alpacas staring at us.
Source: pinterest.com

Image placement: start of a paragraph

```
<!-- Start of a paragraph -->  
<p>There are three different color  
  alpacas staring at us.<br> Source: pinterest.com</p>
```

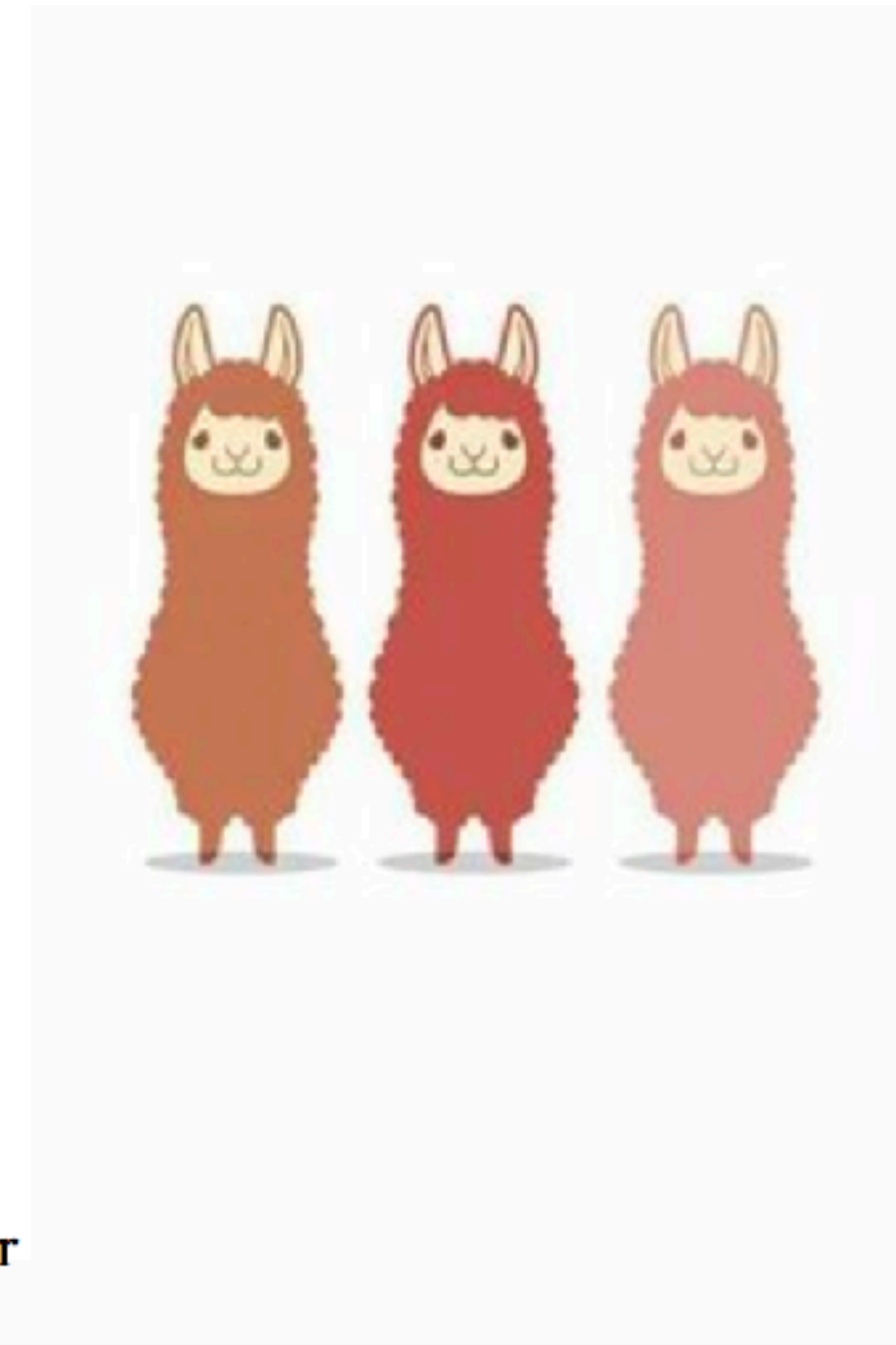


Source: pinterest.com

There are three different color alpacas staring at us.

Image placement: middle of a paragraph

```
<!-- Middle of a paragraph -->  
<p>There are three different color   
  alpacas staring at us.<br> Source: pinterest.com</p>
```



There are three different color
Source: pinterest.com

alpacas staring at us.

Image specs and rules

- The following three rules come from Duckett's book on HTML and CSS

1

SAVE IMAGES IN THE RIGHT FORMAT

Websites mainly use images in jpeg, gif, or png format. If you choose the wrong image format then your image might not look as sharp as it should and can make the web page slower to load.

2

SAVE IMAGES AT THE RIGHT SIZE

You should save the image at the same width and height it will appear on the website. If the image is smaller than the width or height that you have specified, the image can be distorted and stretched. If the image is larger than the width and height if you have specified, the image will take longer to display on the page.

3

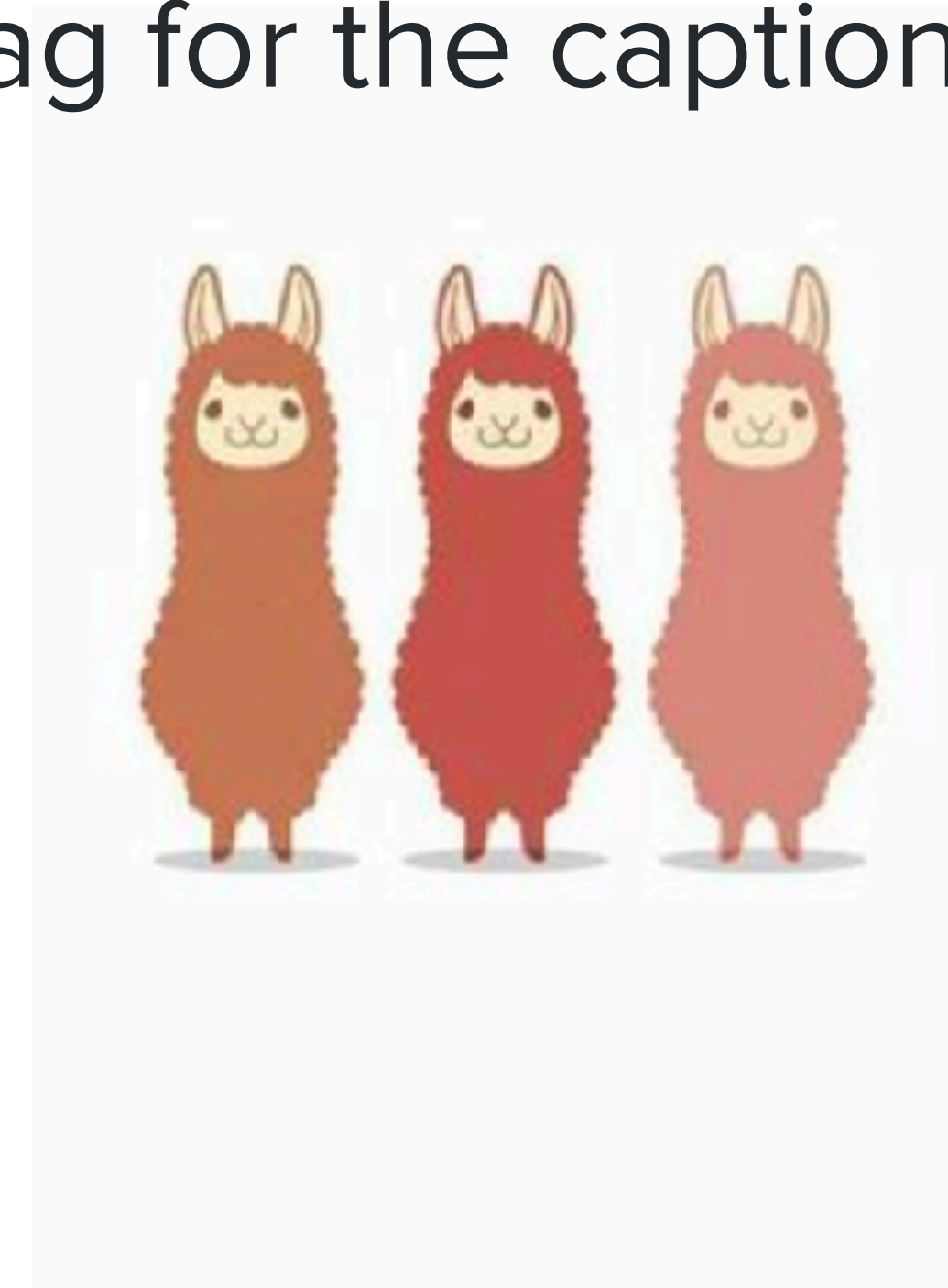
USE THE CORRECT RESOLUTION

Computer screens are made up of dots known as pixels. Images used on the web are also made up of tiny dots. Resolution refers to the number of dots per inch, and most computer screens only show web pages at 72 pixels per inch. So saving images at a higher resolution results in images that are larger than necessary and take longer to download.

Images with Captions: figure element

- If you want to add an image that is paired with a caption, use the `<figure>` element, which is a new element in HTML5
- You can think of figure as a container element, that contains an `` tag for the image and a `<figcaption>` tag for the caption - like this:

```
<!-- Figure caption -->
<figure>
  
  <figcaption>This is the cutest alpaca</figcaption>
</figure>
```



This is the cutest alpaca

Using images from external sources

- Good databases: <https://www.flickr.com/>, <https://www.pond5.com/>
- **Give credit!!!** Read more about Creative Commons [here](#).

HTML Images Summary

FROM JOHN DUCKET “HTML AND CSS”

- The `` element is used to add images to a web page
- You must always specify a `src` attribute to indicate the source of an image and an `alt` attribute to describe the content of an image
- You should save images at the size you will be using them on the web page and in the appropriate format
- Photographs are best saved as JPEGs; illustrations or logos that use flat colors are better saved as GIFs

Exercise

Self Portrait

Create a single web page that introduces yourself to the class and tell us a bit about who you're

- Make sure there are structural tags: head, body, p and two headers
- Include links and images
- Be sure to comment out your information

Save your page as index.html and post it on Slack

***#share_work* channel along a screenshot of how it looks on your browser by the end of class**

Homework assignment

Homework

For Monday (due Sunday by 6pm):

1. Create an account on [GitHub](#) and send me a direct message on Slack with link to it
2. Register for [Codecademy](#) and do lesson 1 of *Learn HTML* course (HTML Elements and Structure -> Introduction to HTML & Common Elements)
 - Post what new you learned and any questions you may have on #general channel on Slack
3. Web Review presentation (Keba & Chrissy) - by Sunday 6pm post link to the web you'll review ([on sign up sheet](#))

For Thursday (due Wednesday by 6pm):

- 1. Make a single page website as a response to one of the following subject prompts:**
 - Tell us about an artist or person who is most influential to you creatively
 - Pick a topic you know nothing about on Wikipedia and tell us about it in a new way
- 2. Regardless of what prompt you choose, you must include all of the following tags:**
 - Two kinds of headers from <h1> to <h6>
 - Paragraphs <p>
 - Links <a>
 - One list, either or
 -
 and <hr> tags
 - Three tags: at least one local (on your computer) one image from URL - make sure the file structure is right
 - One figure tag (an image + caption) - e.g. give credit whose photo you're using
 - One tag we have not yet learned in class (use [W3 Schools](#))
 - Be sure to clearly comment everything out
- 3. Save your page as index.html and email it to me along with any image files as a .zip and proper file structure file by Wednesday at 6pm**
- 4. Be ready to talk about it in class**
- 5. Office hours:** Monday 6:45-7:45pm. Sign up [here](#).