



## Aim: How Can We Use File Paths To Add Images To Our Web Pages?

Do Now: Imagine you see some cool art or a funny meme while browsing the web. How would you share that image with others? Try to describe it or write it down as a step-by-step process.

Does that process change depending on any factors? (i.e. where you saw the image, if you're on your phone or a computer, who you're sending it to, etc.)



# The <img> tag

- The <img> tag is used to add images to web pages. An example of the syntax for the <img> tag is shown below:

```
<img src = "https://i.imgur.com/FKmX7dt.gif">
```

How is this tag different from some of the tags we viewed in the previous lesson?



# Self-Closing Tags

- Unlike the tags we learned about previously, the `<img>` tag doesn't have a start and end tag, it is just made up of one tag
- Tags that are only made up of one tag are called Self-Closing Tags. `<img>` is just one example of a Self-Closing Tag, but there are other Self-Closing Tags as well
- Because Self-Closing Tags are made up of only a single tag, it's not possible to put other HTML tags between the tags like it is with other tags.
- But it is possible to put something in the tag itself...



# HTML Attributes

- Sometimes HTML tags need extra information to be used properly.
- For example, it's not enough to say we want to add an image to a webpage, we need to specify *what* image we want to use
- For cases like this, we use attributes inside the HTML tag, which follow a syntax like this.

```
<tagname attribute="value">
```

- Note that attributes go inside the angular brackets
- A tag is not limited to one attribute and can have multiple attributes
- Attributes are not limited to Self-Closing Tags, but some tags have attributes specific to that tag
- `<img>` is an example of just one tag that uses attributes, we'll see more later in the class



# Attributes of the <img> tag

- To specify what image to display on a web page with the <img> tag, the src attribute is used
  - The src attribute needs to have its value set to the location of an image file
  - As seen in the previous slide, this can be done with the URL for an image but there are other ways to do this as well, as we will see soon...
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- Another attribute we can add to the img tag is the alt attribute
  - The alt attribute is useful for screen reader accessibility or as an alternative to users when a page is loading slowly
  - The value of the alt attribute should describe what the image is
  - An image tag with an alt attribute might look like this

```
<img src = "https://i.imgur.com/FKmX7dt.gif" alt="Rick Roll">
```



# Another way to use src attribute

- While the `<img>` tag can be used with URLs for images, it can also be used with local images, or images on the same computer / server, as well
- A benefit of using the `<img>` tag this way is that you don't have to worry about image URLs changing or expiring.
- It is also easier to tell at a glance what image an `<img>` tag will display when you can see the filename instead of the URL
- Before we go over how to use `<img>` tags in this way, it's important to become more familiar with how files and folders work on our computers
- We'll do a brief demonstration of how to download an image from the internet and how to find it on your computer

← → ↻ 🏠 ⓘ https://store.steampowered.com/app/386940/Ultimate\_Chicken\_Horse/



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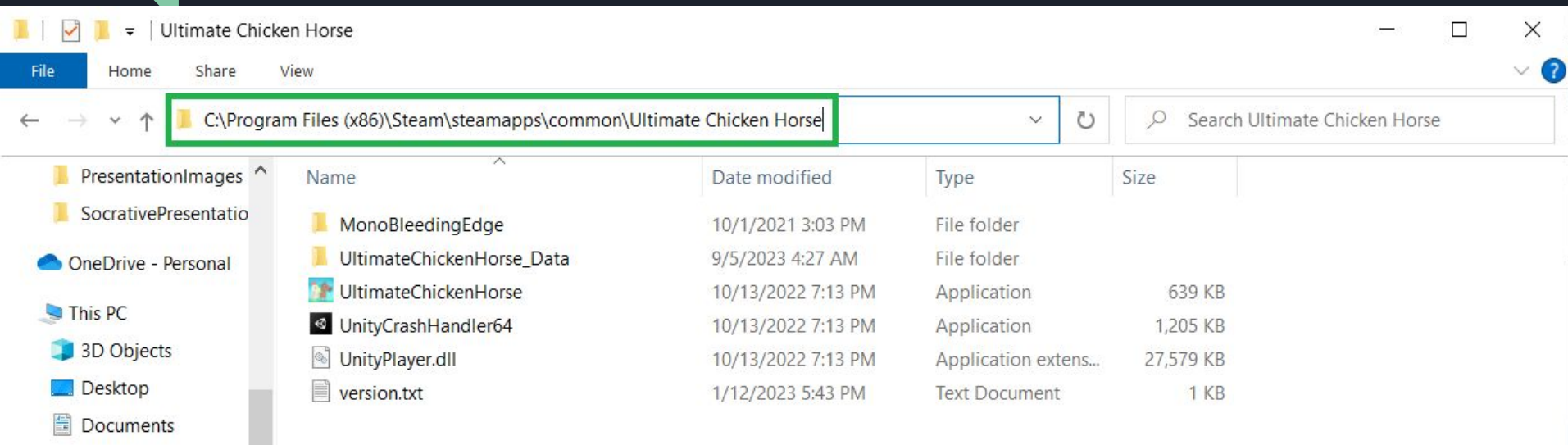
# Ultimate Chicken Horse

The Pier

Community Hub

NEW  
OUTFITS







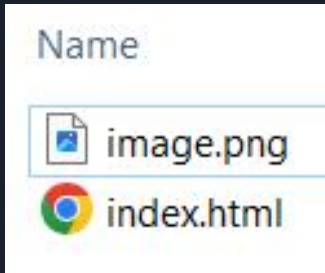


# File Paths

- Consider the images on the two previous slides, both relating to the Steam game Ultimate Chicken Horse
- The first image shows the Steam page for game while the second shows the files for the game on my computer
- Both URLs and File Paths can be thought of as directions for the file(s) we're looking for
- In the first image, the URL is telling me to get to the page to buy the game, I need to go to steam website and navigate through the app folder, the unique folder for the game (386940), and then the Ultimate Chicken Horse folder
- In the second image, the file path is telling me to get to the game files I need to go through the Program Files folder, then the Steam folder, next the steamapps folder, after the common folder, and finally the Ultimate Chicken Horse folder

# Relative File Paths (Same Folder)

- We can compare file paths to giving directions on how to get to a folder or file(s) we want
- Much like giving directions in real life, it's a lot easier the closer we are to our destination
- Imagine we're writing HTML code in an index.html file inside some folder. Also in that folder is an image, image.png
- If we're starting from index.html, because image.png is in the same folder and so close, the directions to reference the file would be quite simple
- Thus, if we wanted to add an image of image.png, the code for it would look like this

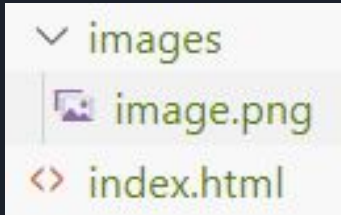


```

```

# Relative File Paths (Child Folder)

- Now imagine that the file that we want, image.png, is inside another folder
- image.png is a bit further away from index.html now, so the directions to get from index.html to image.png are a little bit more complicated
- The code to add an image of image.png in this instance would look like this:



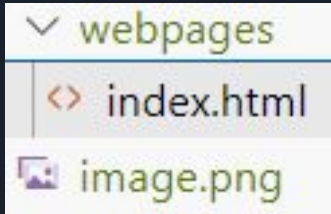
```

```

- When a file we want is inside another folder in the same folder our html file is in, we call that a child folder or a subfolder
- When accessing something in a child folder, we have to put the name of the folder(s) it's in and a / before putting the name of the file we want

# Relative File Paths (Parent Folder)

- Now imagine the scenario from the previous slide, but with the positions of index.html and image.png swapped
- In other words, the image file we want is just outside of the folder our html file is in
- The code to add an image of image.png in this instance would look like this:



```

```

- When a file we want is outside the folder the folder our html file is in, we call that a parent folder
- When accessing something in a parent folder, we need to put ../ before putting the name of the file we want



# File Extensions

- Every file has a file extension at the end that informs what type of file it is and how it should be used
- Our HTML files have a .html extension, such as index.html
- There are actually many different file extensions for images, such as:
  - .jpeg/.jpg: These types of images tend to have smaller file sizes and are better at compressing data, but cannot have transparency
  - .png: Unlike jpegs, pngs can have transparent backgrounds and can be resized without losing too much quality
  - .gif: One of the biggest reasons to use gifs is if you want to include animated images
- As long as it is an image, nearly any image file type can be used with the <img> tag in HTML