

SESSION TWO
SEPTEMBER 5, 2023

HTML... A PRIMER

AGENDA

- > Reading Discussion
- > HC Themes
- > Break
- > Lecture: *HTML... a Primer*
- > Demos
- > Homework

READING DISCUSSION

HARMONIC COLLECTION

- > Please break into groups of three.
- > Please break into groups of three.

BREAK

HTML

HTML is the ‘skeleton’ of the web.
It’s the scaffolding on which content
is built and inserted for access.

HTML

HYPertext Markup Language

SITS OUTSIDE OF
EXPLICIT LANGUAGE

USES ANNOTATIONS TO
TELL THE COMPUTER WHAT
TO DO

SYSTEM WITH RULES

HTML

There have been **five** primary revisions to HTML, mostly affecting the syntax (rather than the function) of the language.

HTML

HTML consists of a range of **nested elements**. The relationship and ordering of elements affects how an HTML document is displayed.

HTML

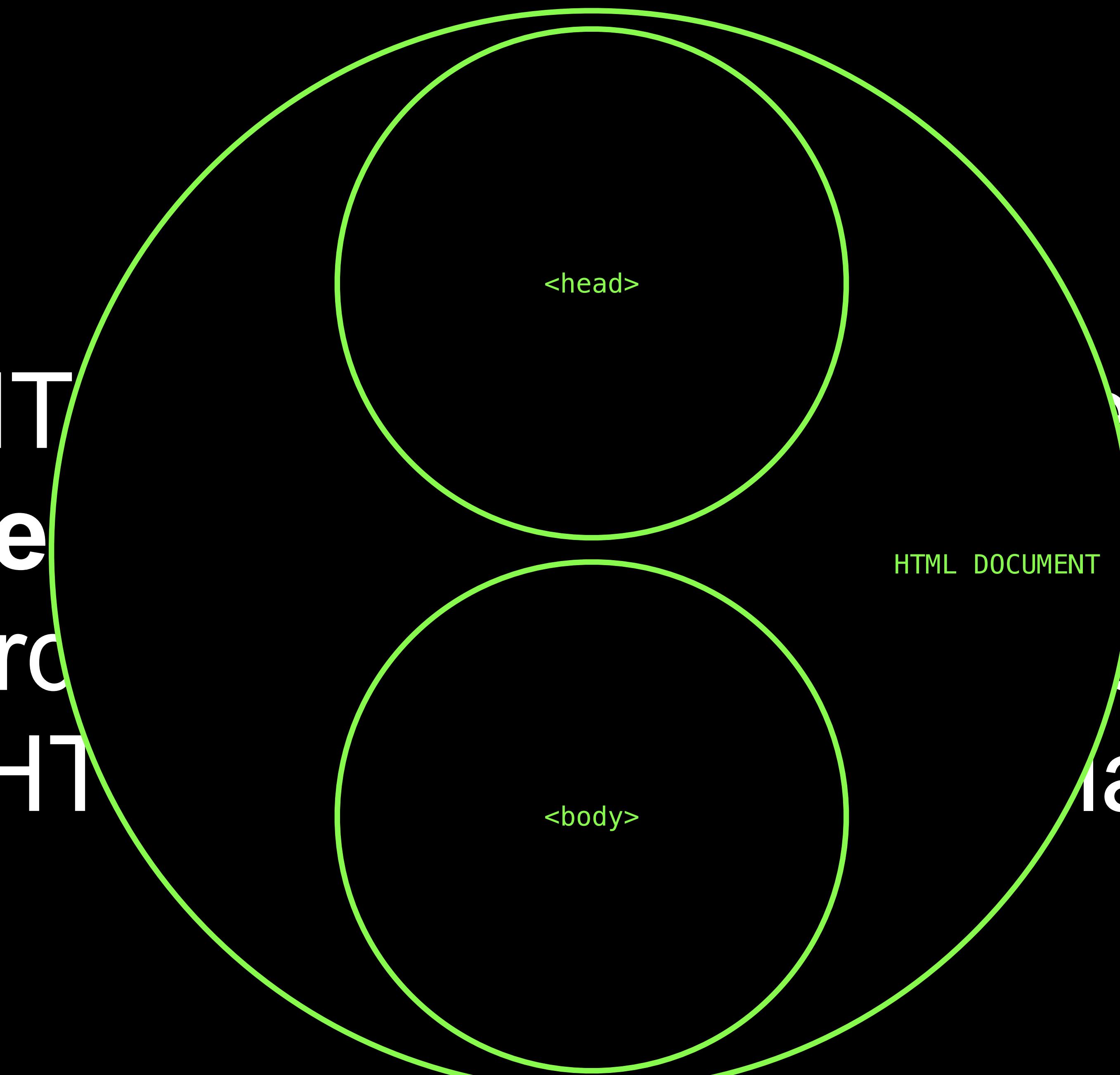
HT
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HTML DOCUMENT

HTML

HT
nestes
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an H1

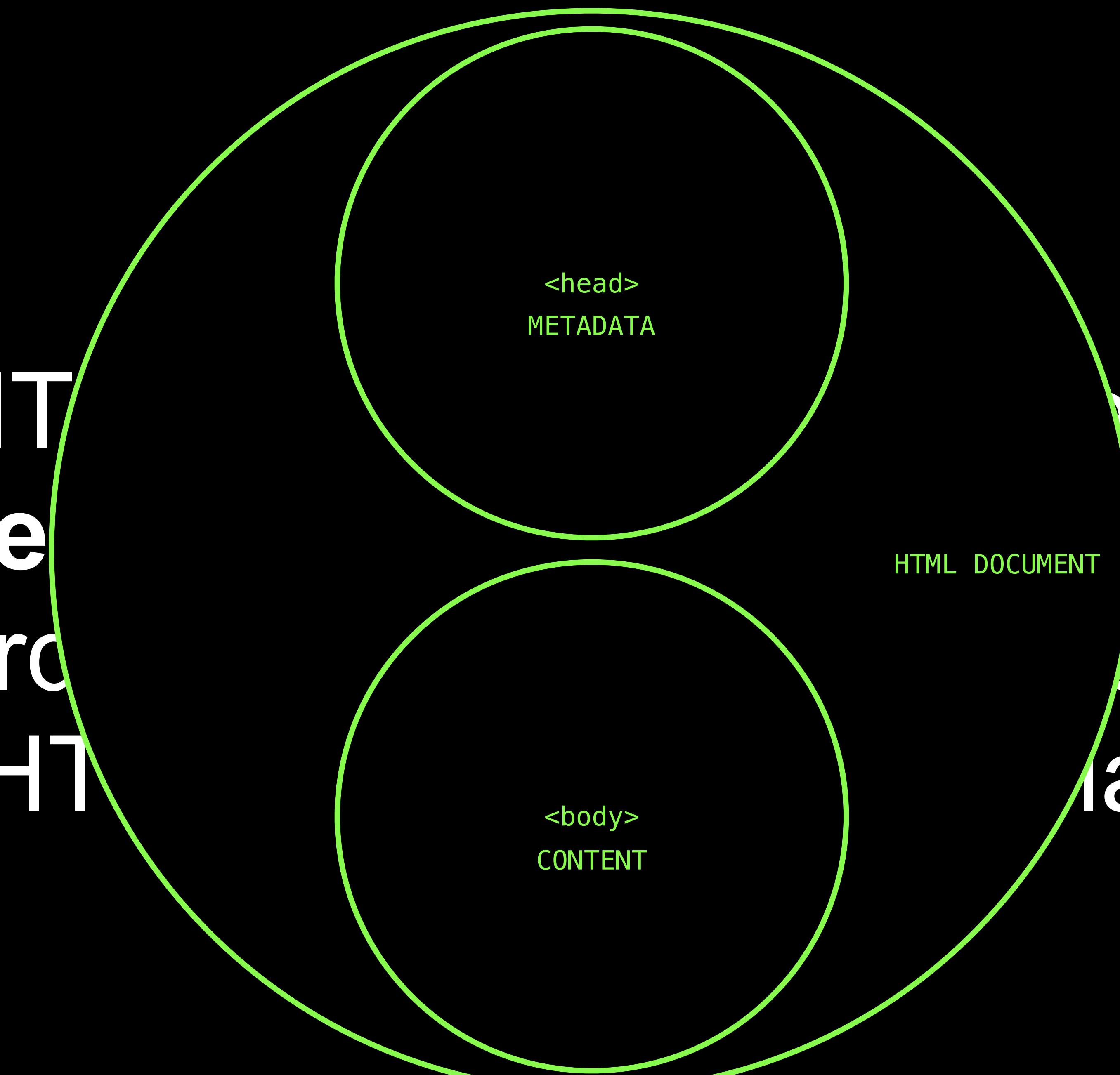


The diagram illustrates the nesting of HTML elements using three concentric circles. The innermost circle is labeled '<body>'. The middle circle is labeled '<head>'. The outermost circle is labeled 'HTML DOCUMENT'. The text 'HT' is positioned to the left of the inner circles, and 'nestes' is positioned to the right of the outer circle. Below the text 'nestes' is the text 'and ord'. To the right of the text 'nestes' is the text 'an H1'. The text 'HT' is partially cut off by the left edge of the slide.

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HTML

HT
nestes
and ord
an H1



The diagram illustrates the nesting of HTML elements using three concentric circles. The innermost circle is labeled '<body> CONTENT'. The middle circle is labeled '<head> METADATA'. The outermost circle is labeled 'HTML DOCUMENT'. The text 'HT' is positioned to the left of the inner circle, and 'nestes and ord' is positioned to the right of the outer circle.

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HTML

JS/PHP/++ SCRIPTS
FUNCTIONALITY

an H1

<head>
METADATA

<body>
CONTENT

HTML DOCUMENT
CSS DOCUMENT
VISUAL STYLES

ct
layed.

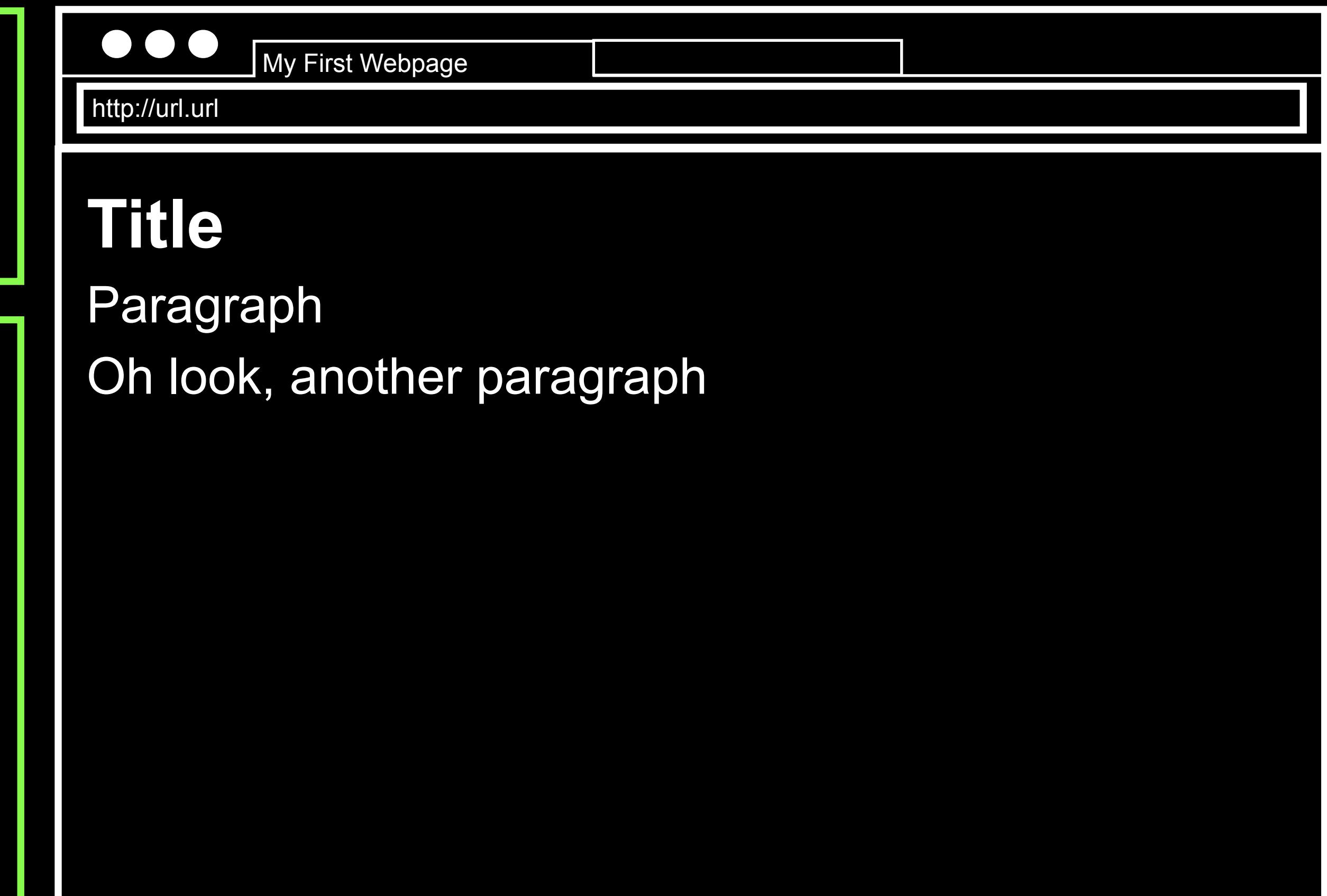
HTML

```
<!DOCTYPE html>
<html>

<head>
    <title>My First Webpage</title>
</head>

<body>
    <h1>Title</h1>
    <p>Paragraph</p>
    <p>Oh look, another paragraph</p>
</body>

</html>
```



HTML

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>My First Webpage</title>
```

```
  </head>
```

```
<body>
```

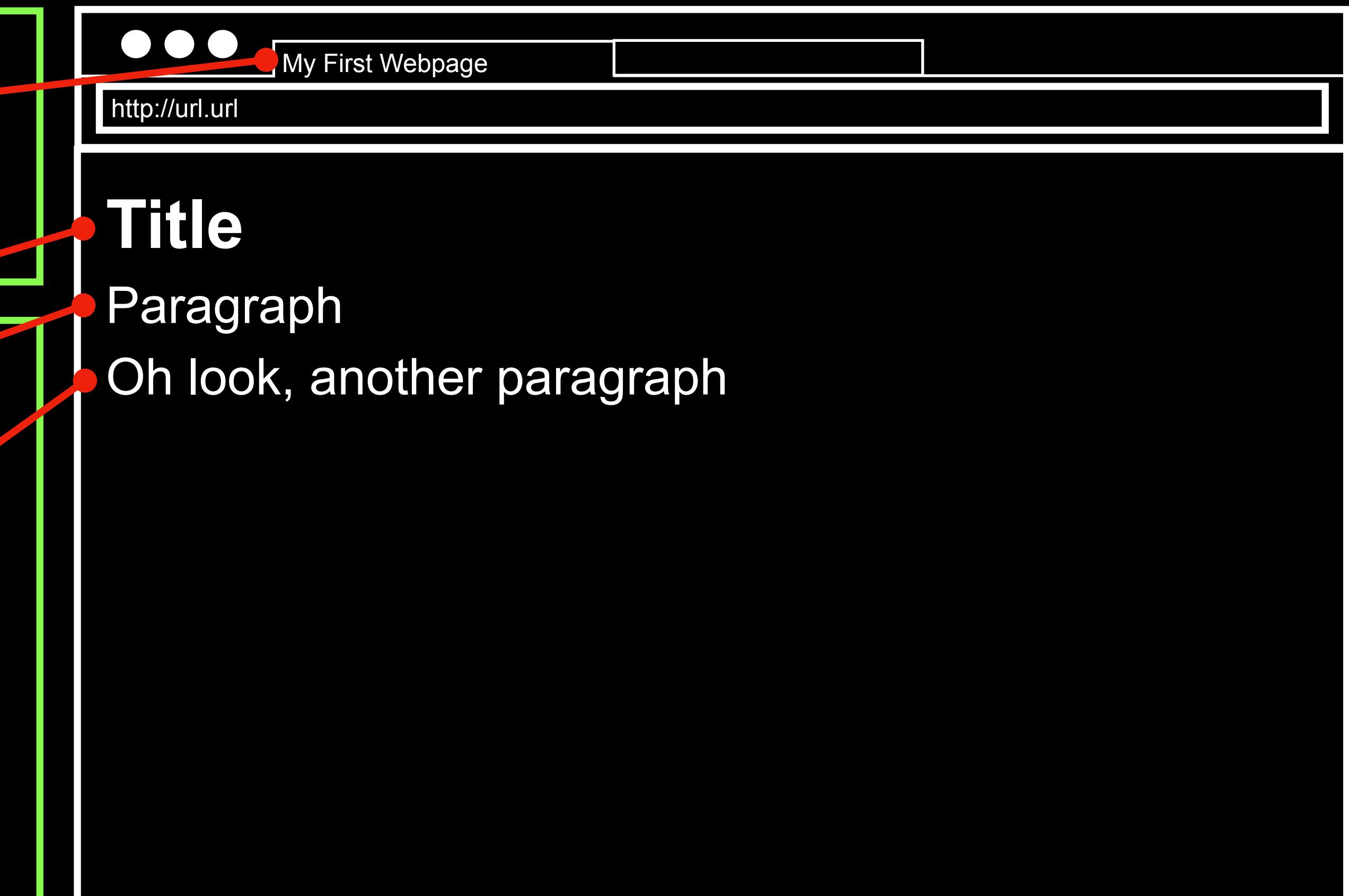
```
  <h1>Title</h1>
```

```
  <p>Paragraph</p>
```

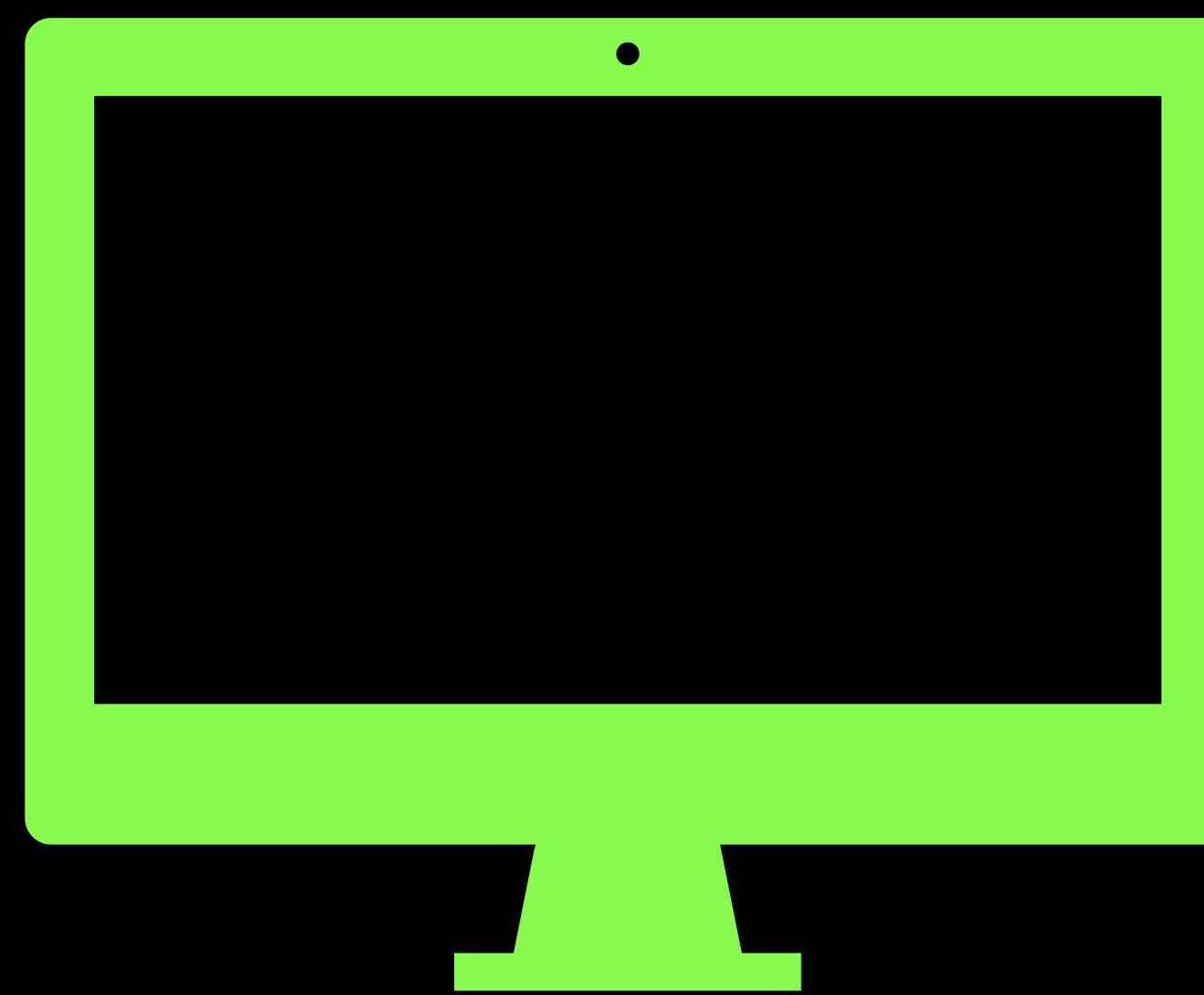
```
  <p>Oh look, another paragraph</p>
```

```
</body>
```

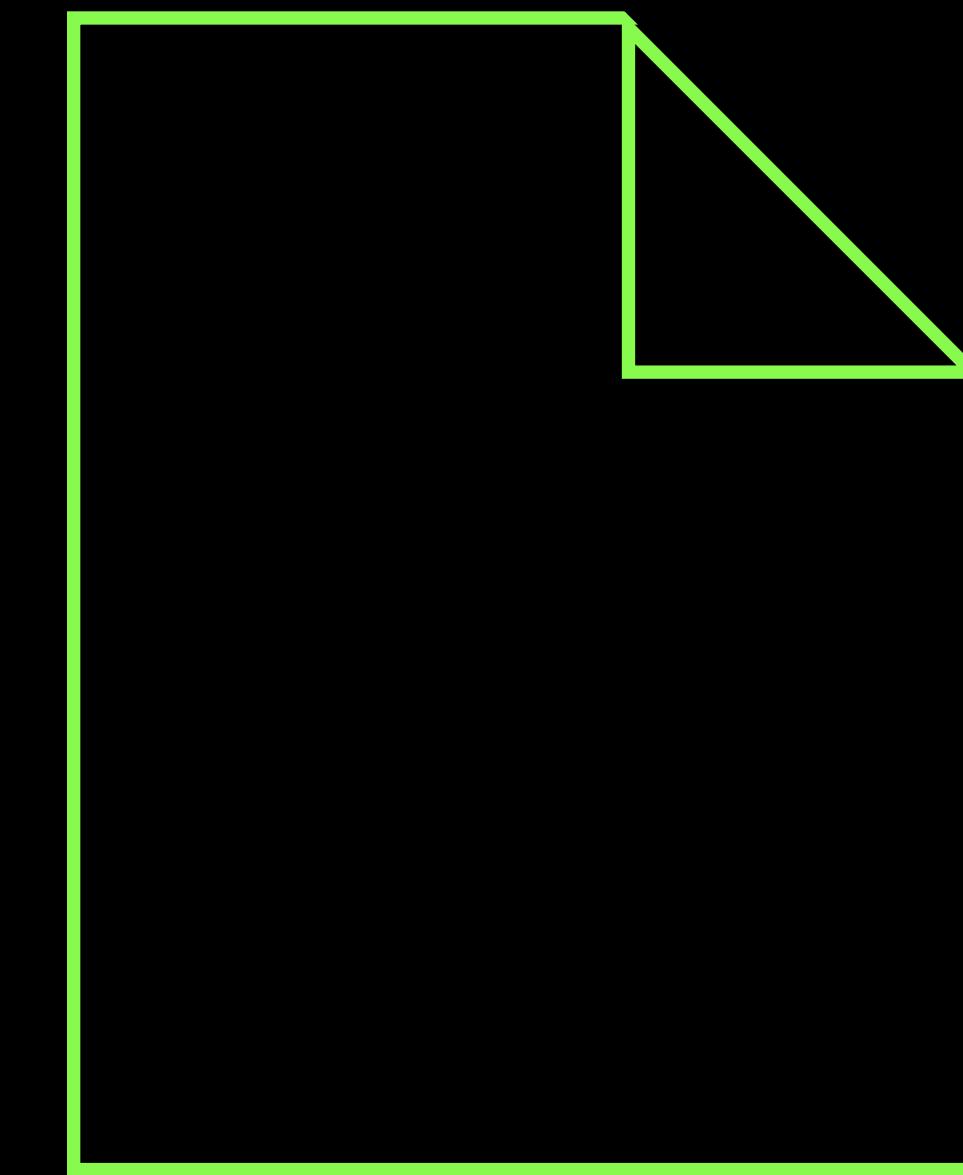
```
</html>
```



FILE STRUCTURE

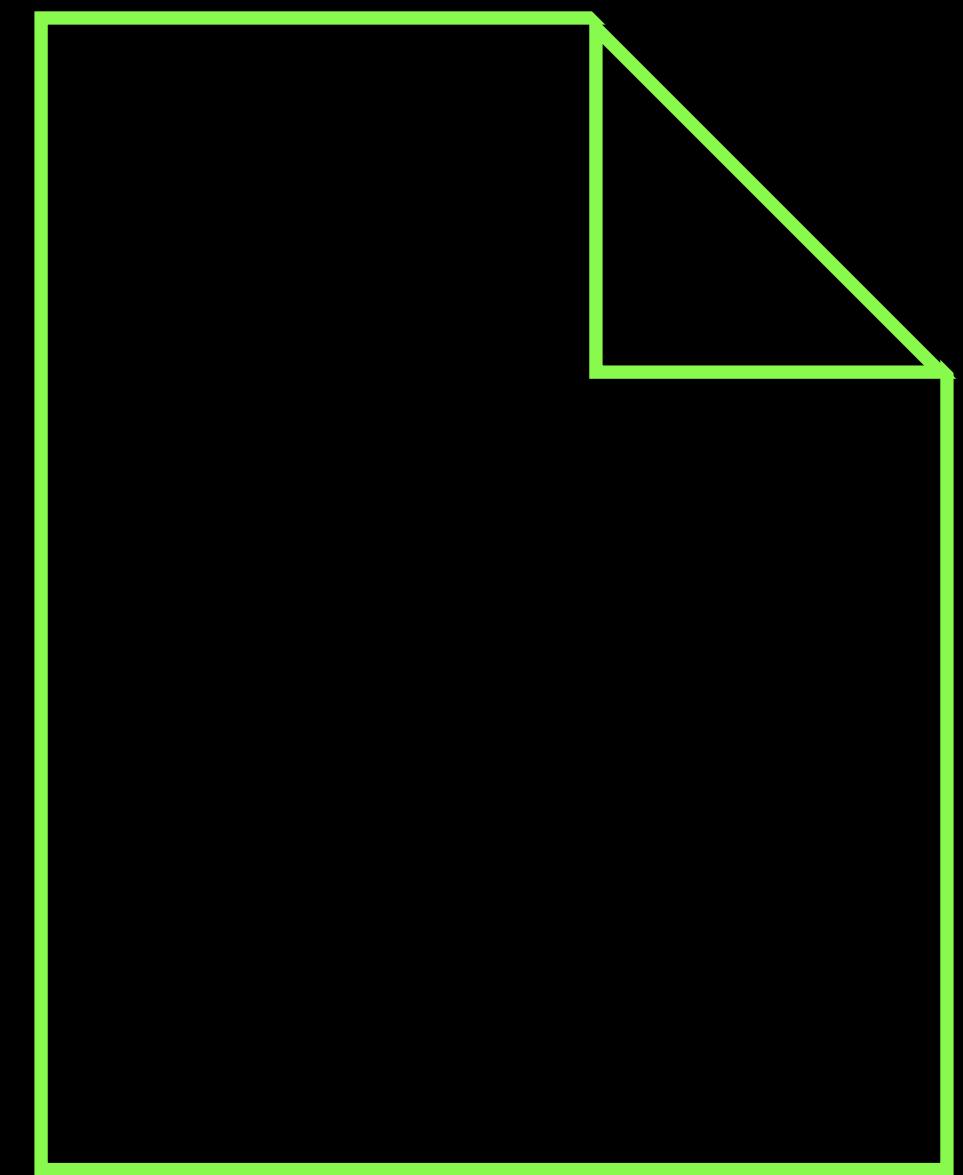


→
reads files,
starting with
`index.html`



`index.html`

→
link to
stylesheet
in the head



`style.css`

FILE STRUCTURE

```
<head>
  <link rel="stylesheet"
        href="style.css">
</head>
```

HTML ELEMENTS



HTML ELEMENTS

Some elements do not have any content or children. These are called empty elements. For example, `
` and `` do not have closing tags.

COMMON ELEMENTS

Headings <h1> <h2> <h3> <h4> <h5> <h6>

<h1>Each sequential heading gets smaller.</h1>
<h2>Great for hierarchy.</h2>

Each sequential heading gets smaller.
Great for hierarchy.

COMMON ELEMENTS

Paragraph

< p >

< p > All text needs to be wrapped in tags . < / p >

All text needs to be wrapped in tags.

COMMON ELEMENTS

Links

< a >

< p > < a href="url.com" > Links need to have a specified path </ a > and can be nested within paragraphs </ p >

Links need to have a specified path and can be nested within paragraphs.

*href=Hypertext REference

COMMON ELEMENTS

Images


```

```



The **source** of your element is a pointer to your image. If it is nested in a folder, the file path needs to be included in the code. e.g.

The **alt** tag in the image element is a place to add a caption or credit. It is not a visible thing, but is important for accessibility.

COMMON ELEMENTS

Areas

```
<header> <footer> <nav> <main>  
<article> <section> <div>
```

```
<header>  
  <h1>for example</h1>  
<header>
```

Area type elements are used for organization and navigation. These compartments don't have inherent display qualities, but can be referenced in your style sheet or help with the accessibility of your code.

COMMON ELEMENTS

Styles

` `

`<p>These tags wrap around
text to create styled effects</p>`

These tags wrap *around text* to create styled effects.

COMMON ELEMENTS

Lists

` `

```
<ul>
  <li>ul is 'unordered'</li>
  <li>use it to build
  bulleted lists</li>
  <li>li is line item</li>
<ul>
```

- ul is ‘unordered’
- use it to build bulleted lists
- li is line item

```
<ol>
  <li>ol is 'ordered'</li>
  <li>use it to build
  numbered lists</li>
<ol>
```

1. ol is ‘ordered’
2. use it to build numbered lists

HTML ATTRIBUTES

HTML elements can have ‘attributes,’ which provide more information about the element.

HTML ATTRIBUTES

‘alt’, ‘href’, and ‘src’ are examples of this.

HTML ATTRIBUTES

The diagram illustrates the structure of an HTML attribute. A horizontal line represents the attribute itself, with the word "Attribute" written above it. Two vertical tick marks extend downwards from this line to the corresponding parts of the attribute in the code. The first tick mark is positioned under the "src" keyword, labeled "name" below it. The second tick mark is positioned under the quoted string "example.png", labeled "value" below it.

```

```

Attribute

name

value

SOME COMMON ATTRIBUTES

lang	<code><html lang="en"></code>	Sets the language of a document
href	<code></code>	Defines link path
target	<code></code>	Opens link in new tab
style	<code><p style="color: blue"></code>	Can be used to style tags individually
src	<code></code>	Defines image path

SOME COMMON ATTRIBUTES

width	<code></code>	Can set image dimensions
height		
alt	<code></code>	Alt text for images
id	<code><div id="mydiv"></code>	Specifies an element for styling or navigation
class	<code><p class="blue_text"></code>	Creates a class of elements to style as a specified group

FORMATTING YOUR HTML

HTML is read very simply by the computer: left to right, top to bottom, without regards to case or line breaks.

FORMATTING YOUR HTML

<HTML> = **<html>**

FORMATTING YOUR HTML

```
<body>
  <h1>Dog Breeds</h1>
  <p>There are many kind of
    dog breeds</p>
  <ul>
    <li>German Shepherd</li>
    <li>Bulldog</li>
    <li>Poodle</li>
  </ul>
</body>
```

=

```
<body><h1>Dog Breeds</h1><p>There are
many kind of dog breeds</p><ul>
<li>German Shepherd</li><li>Bulldog</li>
<li>Poodle</li></ul></body>
```

BLOCK VS INLINE

Block elements always start on a new line and by default take up the full width available. They can be formatted to have top- and bottom-margins.

BLOCK VS INLINE

Inline elements do NOT start on a new line, and take up only as much space as their content demands.

Other elements will flow around them.

BLOCK VS INLINE

BLOCK

```
<address> <article> <aside>
<blockquote> <canvas> <dd> <div> <dl>
<dt> <fieldset> <figcaption> <figure>
<footer> <form> <h1>–<h6> <header> <hr>
<li> <main> <nav> <noscript> <ol> <p>
<pre> <section> <table> <tfoot> <ul>
```

INLINE

```
<em> <strong> <span> <a> <img>
```

BLOCK

```
<!DOCTYPE html>
<html>
  <head>
    <title>Block elements</title>
  </head>
  <body>
    <h1>Blocks are full-width</h1>
    <p>Longer text will wrap internally within each block element.</p>
    <p>Other blocks will then stack underneath.</p>
    <aside>
      <p>They can still be nested.</p>
      <p>And will push down the page.</p>
    </aside>
  </body>
</html>
```

Blocks are full-width

Longer text will wrap internally within each block element.

Other blocks will then stack underneath

They can still be nested.

And will push down the page.

INLINE

```
<!DOCTYPE html>
<html>
  <head>
    <title>Inline elements</title>
  </head>
  <body>
    <h1>Inline elements flow
      <em>within</em> a block</h1>
    <p>To give it different
      <strong>meaning</strong>.</p>
    <p>Or <span style="color:
      red;">style</span> it.</p>
    <p>Or <a href="/topic/
      html">link it</a> somewhere.</
      p>
    <p>Images default  to inline.</p>
  </body>
</html>
```

Inline elements flow *within* a block

To give it different **meaning**.

Or **style** it.

Or link it somewhere.



Images default to inline.

COMMENTS

Comments are elements included in the HTML that do not show up in the display. Use these for wayfinding, notetaking, whatever you prefer.

COMMENTS

```
<!DOCTYPE html>
<html>
  <head>
    <title>Comments</title>
  </head>
  <body>
    <p>Sometimes you want to note
    something while coding.</p>
    <!-- This text will not be
    shown in the browser! -->
    <p>You can write these notes in
    comments.</p>
  </body>
</html>
```

Sometimes you want to note something while coding.

You can write these notes in comments.

BUILT-IN STRUCTURES

We talked about lists already,
but HTML also has functionality for
tables and details.

TABLES

Tables are a bit vintage (we use <div> now for most scaffolded organization) but can be good in a pinch for some information.

TABLES

```
<h1>A basic table</h1>
<table>
  <thead>
    <tr>
      <th>Header</th>
      <th>Another header</th>
      <th>Still a header</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>A cell</td>
      <td>Another cell</td>
      <td>Still a cell</td>
    </tr>
  </tbody>
</table>
```

A basic table

Header	Another header	Still a header
A cell	Another cell	Still a cell

DETAILS

Tables are a bit vintage (we use <div> now for most scaffolded organization) but can be good in a pinch for some information.

DETAILS

```
<h1>Details/summary are  
interactive</h1>  
<details>  
  <summary>Clicking this toggles the  
  element</summary>  
  <p>You can have any content  
  down here.<p>  
  <p>Multiple elements, whatever  
  you want.<p>  
</details>  
<details open>  
  <summary>They also can be open to  
  start</summary>  
  <p>This will already be visible.<p>  
</details>
```

Details/summary are interactive

- ▼ Clicking this toggles the element
- ▼ They also can be open to start
This will already be visible

USER-AGENT STYLESHEETS

We'll discuss CSS and custom stylesheets next week—so your HTML is referencing the stylesheet built-in to your browser.

USER-AGENT STYLESHEETS

This is rarely what we want,
but gives you a sense of what
the early web looked like.

QUESTIONS?

EXERCISE 1

Write a basic html webpage.

Hello, World.

Today, we learned about the basics of *HTML*.

There are two parts of any webpage:

- A head
- A body

The head contains **metadata**, while the body dictates the **content** of the webpage.



<put any image here>

Here is a link.

```
<!DOCTYPE html>

<html>
<head>
  <title>My webpage</title>
</head>

<body>
  <h1>Hello, World.</h1>
  <p>Today, we learned about the basics of <em>HTML</em></p>
  <p>There are two parts of any webpage:</p>
  <ul>
    <li>A head</li>
    <li>A body</li>
  </ul>
  <p>The head contains <strong>metadata</strong>, while the body dictates
  the <strong>content</strong> of the webpage.</p>
  <img href="yourimage.jpg">
  <p><a href="yourlink.com">Here</a> is a link.</p>
</body>
</html>
```

EXERCISE 2

Analyze an existing webpage.

EXERCISE 2

Analyze an existing webpage.

EXERCISE 2

Navigate to a random
wikipedia page and assign
elements to the content.

EXERCISE 2

 WIKIPEDIA
The Free Encyclopedia

Search Wikipedia Search

Create account Log in ...

<h1> Cosgrove Hall, Northamptonshire </h1>

Add languages ▾

Contents [hide]

Article Talk Read Edit View history Tools ▾

(Top)

From Wikipedia, the free encyclopedia

Coordinates: 52.0735°N 0.8471°W

For the animation studio, see [Cosgrove Hall Films](#).

Cosgrove Hall is an early-18th-century [Grade II listed](#) country house in [Cosgrove, Northamptonshire](#).^{[1][2]} It was built on the site of an earlier house by the Furtho family. It is not open to the public.^[3] It may have been built by John Lumley of Northampton.^[4] In the nineteenth century, the building belonged to [John Christopher Mansel](#).^{[5][6]} In May 1945, Queen [Geraldine of Albania](#), the [Queen consort](#) to King Zog I of Albania, opened a fête at the hall.^[7] The building was destroyed by fire in October 2016.^[8]

As well as the hall the other Grade II buildings on the estate are the [dovecote](#), the stable block and the [ice house](#).^{[9][10][11]} In front of the house, there is an excavated Roman bath house, viewable from the [Grand Union Canal](#).^[12]

References [edit]

1. ^ Historic England, "Cosgrave Hall and Attached Office Wing (1371636)" ↗, [National Heritage List for England](#), retrieved 7 October 2016
2. ^ "Victoria County History - Northamptonshire A History of the County of Northampton: Volume 5, the Hundred of Cleley Cosgrove" ↗. *Victoria County History - Northamptonshire*, Vol. 5. British History Online. Retrieved 29 October 2015.
3. ^ [Rights of Way, Northamptonshire](#), Northants County Council 2003, accessed 24 December 2010 ↗ [permanent dead link]
4. ^ Pevsner, Nikolaus; Cherry, Bridget (revision) (1961). *The Buildings of England – Northamptonshire*. London and New Haven: Yale University Press. pp. 159–160. ISBN 978-0-300-09632-3.
5. ^ Colburn, H. (1847). *Burke's Genealogical and Heraldic History of the Landed Gentry* ↗. Vol. 2. p. 828. Retrieved 8 October 2016.
6. ^ Burke, Sir Bernard (1871). *A Genealogical and Heraldic History of the Landed Gentry of Great Britain & Ireland* ↗. Retrieved 8 October 2016.
7. ^ Pearson, Owen (July 2006). *Albania in the Twentieth Century, A History* ↗. Vol. 2. I.B.Tauris. ISBN 9781845111045. Retrieved 8 October 2016.
8. ^ [Cosgrove Hall fire: 18th Century country mansion gutted](#) ↗, BBC, 7 October 2016, retrieved 8 October 2016


Entrance gate to the hall


The ice house at Cosgrove Hall in December 2010.

YOUR FIRST HC ENTRY

HOMEWORK FOR YOU

- > Complete Codeacademy's *Learn HTML* course, sections 1.1 (Introduction to HTML) and 1.2 (HTML Anatomy)
- > Watch *Basics of HTML* by Laurel Schwulst

Nothing needs to be submitted for either of these, but I highly recommend getting more hands-on practice before diving into your HC entry.

FOR ME

- > Finalize your Harmonic Collection theme. If it changes significantly, please send me an email.
- > Complete your first HC entry, and submit a zip folder of the files to Canvas before next class.

SESSION TWO
SEPTEMBER 5, 2023

THANK YOU