Aim: How Do We Write HTML Code?

Do Now: Compare these two screenshots of nearly identical text. How do these two screenshots of text differ? What connection exists between the two screenshots of text?

```
<u>In</u> case you haven't noticed, I'm <i>weird</i>. I'm a <i>weirdo</i>. I don't
<b>fit</b> in. And I <b>don't</b> want to fit in. Have you ever seen me without this
<s>stupid</s> hat on? That's <i><u>weird</u></i>.
```

In case you haven't noticed, I'm *weird*. I'm a *weirdo*. I don't **fit** in. And I **don't** want to fit in. Have you ever seen me without this ~~stupid~~ hat on? That's *weird*.

HTML vs Other Programming Languages

- Remember that HTML stands for HyperText **Markup Language**, HTML is not a programming language.

- Unlike languages such as Python, Java, C++, etc. HTML doesn't have conditionals, variables, functions, or even math.

- In other words, HTML is more static while other programming languages are more dynamic

Syntax of HTML Tags

- HTML works based on tags. HTML Tags follow this syntax:

`<tagname>` Some text `</tagname>`

1. HTML tags are surrounded by angular brackets < >
2. Every HTML tag has a name inside the angular brackets. Tags are not displayed on the webpage
3. In between the tags are the content that will actually be displayed on the webpage
4. The first of a pair of HTML tags is known as the start tag or opening tag
5. The second of a pair of HTML tags is known as the end tag or closing tag. It has a / before the first angular bracket

How to nest HTML tags

- When writing HTML code, you may often have to write HTML tags inside HTML tags
- Like nesting dolls, pairs of HTML tags need to be entirely inside another pair of HTML tags
- Another way to think about it is that the last tag that you open should be the first tag that you close

Correct

```
...
<body>
    <div>
        <p>This is the right way to
do this</p>
    </div>
</body>
...
```

Incorrect

```
...
<body>
    <div>
        <p>This is the right way to do
this</body>
    </p>
</div>
...
```

HTML Structure Tags

- Not all web pages look the same but even still there are a few HTML tags that need to be part of every web page

- These are known as HTML Structure Tags and are as follows:
  - The <html> tag
  - The <head> tag
  - The <title> tag
  - The <body> tag

- In addition, <!DOCTYPE html> should be included as the first line of every HTML document to declare that it is an HTML document

HTML Structure Tags: <html> tag

- The <html> tag is the outermost tag in an HTML document

- In other words, the opening <html> tag should be the first tag in the document and the closing </html> tag should be the last tag in the document

- As the tag name might imply, all HTML code inside a document should go inside the <html> tag
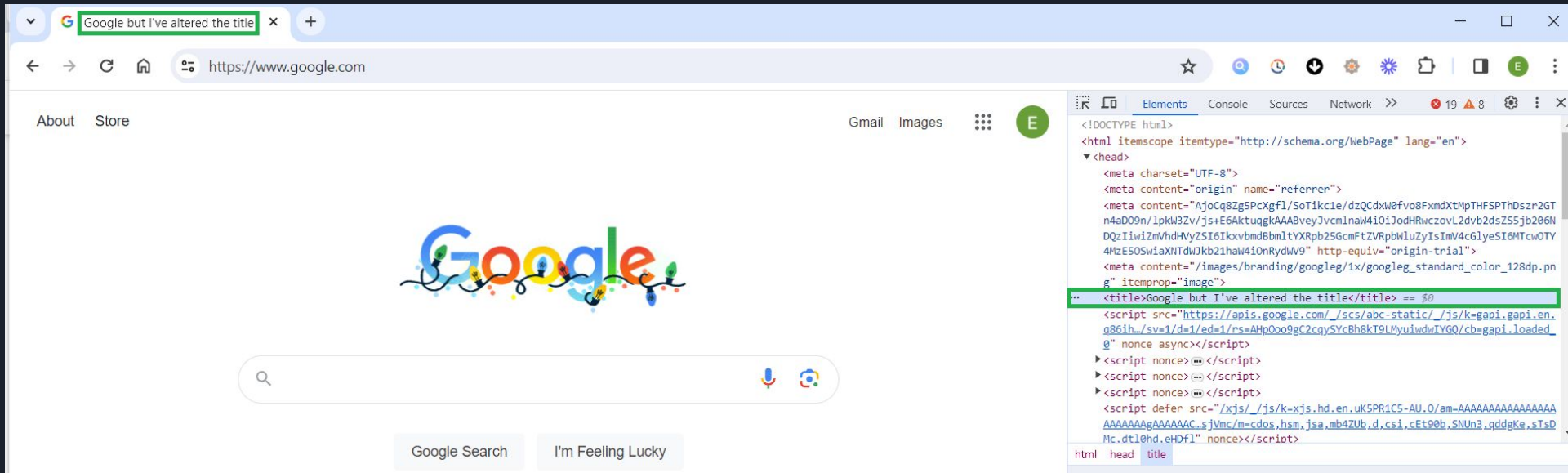
HTML Structure Tags: <head> tag

- The <head> tag should be the first tag inside the <html> tag

- The <head> tag should be used for a web page's metadata, or in other words information *about* the web page.

HTML Structure Tags: <title> tag

- The <title> tag is an example of something that would go inside the head tag.
- The <title> tag controls what displays as the tab name for the web page.

HTML Structure Tags: <body> tag

- The <body> tag goes inside the <html> tag but after, not inside, the <head> tag

- The <body> tag is used for the content that actually appears on a webpage, such as text, images, links, videos, etc.

- Most of the coding we do in HTML will go inside the body tag

Order of HTML Structure Tags

```html
<!DOCTYPE html>
<html>
    <head>
        <title>Order of HTML Structure Tags</title>
    </head>
    <body>
        . . .
    </body>
</html>
```

HTML Text Tags

- The <p> tag, which stands for the paragraph tag, is a tag that can be used for writing text in HTML. Like the name implies, it's best suited for paragraphs or longer stretches of text but it doesn't need to be used in that way exclusively.

- The <h1> tag, or the heading tag, is another tag that can be used for writing text in HTML. When compared to the <p> tag, the text of the <h1> tag is bigger and bolder. It is well suited for writing headings in a web page

- In addition to the <h1> tag, there are other tags ranging from <h1> to <h6>. These are also heading tags, but they range in size with h1 being the biggest and h6 being the smallest. These other tags are suitable for sub-headings.