The <head> portion of an HTML page

The <head> section in an HTML page is critical because it provides metadata and resources necessary for the proper functioning and display of the webpage. Elements in the head won't be displayed on the page, but will help browsers, search engines and other tools understand the content and purpose of the page.

```
<!DOCTYPE html>
<html lang="en">
<head>

<meta charset="UTF-8">

<meta name="description" content="An in-depth guide to HTML meta tags.">

<meta name="author" content="Jane Doe">

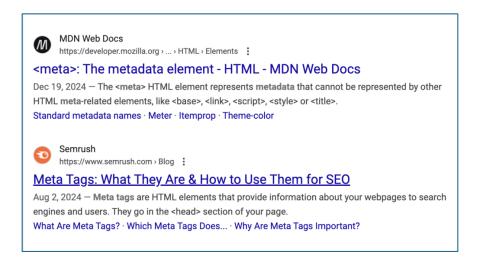
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>HTML Meta Tags Explained</title>
link rel="stylesheet" href="styles.css">
</head>
<body>
</body>
</html>
```

Meta tags are located in the head section of your webpage. The charset meta tag specifies the character encoding used to display the webpage correctly; this ensures proper display of special characters. UTF-8 is the Unicode Transformation Format – 8 bit and is the most widely used encoding character set.

The rest of the meta tags have name and content attributes. The name specifies what type of metadata the tag provides, and the content contains the actual data or information for that metadata type.

For example, search engines will use the description meta tag as the snippet displayed under a webpage's title in the search results. If you don't have this description the search engine generates its own from content on the page. Also, if the webpage link is shared on social media the description might show up alongside the link.



And the author meta tag simply serves as a way to know the author of the page.

The last meta tag shown is the viewport meta tag. Always use the viewport meta tag. This tag is crucial for responsive and mobile-friendly websites. It allows you to control how a webpage is displayed on different devices by setting the viewport's size and scale. It defaults to having your page be the same width as the device and scales it at 1 or 100%, not zoomed in. It is used alongside CSS media queries for fully responsive design.



(Image Source: Google Developers)

If there is no viewport tag the browser renders the entire site at 980px and on a phone that makes the page look very small. It attempts to fit the viewport of this desktop size into a phone sized viewport and looks very zoomed out and is often unreadable unless the user

zooms in. With the viewport meta tag the page matches the screen width to the pixels appropriate for the device.

There are other meta types that we didn't cover, but those are some of the common ones we will see in our course.

Also in the head section of our webpage is the title. It is extremely important for SEO, as it helps search engines understand the main topic of your page. The title appears in the browser tab and when the page is bookmarked. It is also often the clickable headline in search engine results. Use a different title on each page of your website.



Lastly, we have the link tag that tells which CSS file we are using to style this HTML page. The href is the path of where that CSS file is located, and the rel attribute tells which type of file we are linking, in this case a CSS stylesheet. Both attributes are needed.

So, there we have a summary of what belongs in the head section of your HTML page.