

There are two main ways to add JavaScript code to an HTML document as a web developer:

1. Inline Script:

This method involves placing your JavaScript code directly within the HTML document using the `<script>` tag. Here's the structure:

HTML

```
<script>
  // Your JavaScript code here
</script>
```

You can place the `<script>` tag either in the `<head>` section or the `<body>` section of your HTML document. The placement can affect when the script loads relative to the rest of the page content.

2. External Script:

This approach is preferred for larger or reusable JavaScript code. You create a separate file with the `.js` extension and write your JavaScript code within that file. Then, you reference this external script file from your HTML document using the `<script>` tag with the `src` attribute. Here's the structure:

HTML file:

HTML

```
<script src="path/to/your/script.js"></script>
```

script.js file:

JavaScript

```
// Your JavaScript code here
```

The `src` attribute specifies the path to your external JavaScript file. This path can be relative or absolute.

Choosing the Right Method:

- Use inline scripts for small code snippets that are specific to a particular HTML element.
- Use external scripts for larger code bases, reusable functionality, and better code organization.

Here are some additional points to consider:

- You can specify the `type="text/javascript"` attribute within the `<script>` tag for older browsers, but modern browsers generally don't require it.
- The placement of the `<script>` tag (in `<head>` or `<body>`) can affect performance. Generally, placing scripts in the `<head>` ensures they load before the page content is rendered. However, scripts that rely on DOM elements might need to be placed in the `<body>`.

I hope this explanation helps!