

# Web Application Development for Industrial Engineers

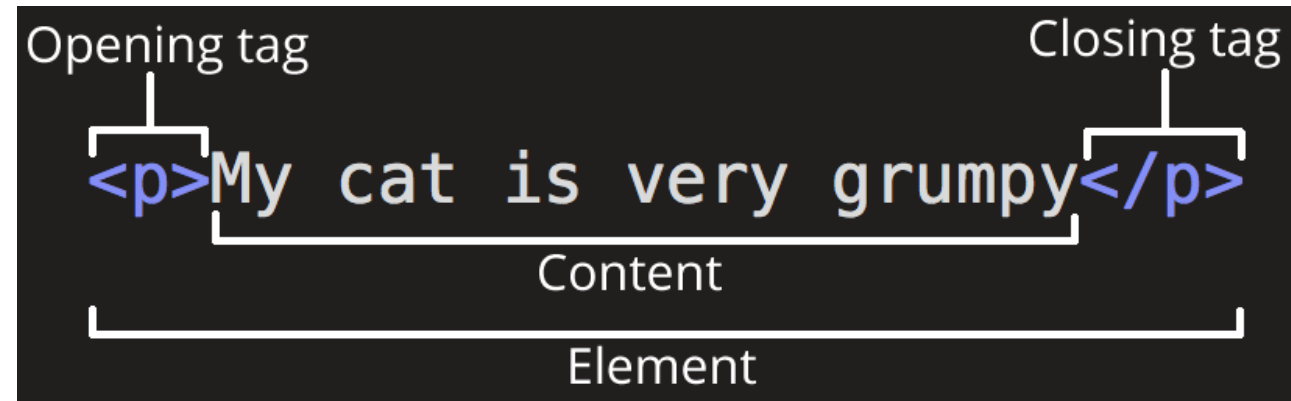
การพัฒนาเว็บแอปพลิเคชันสำหรับวิศวกรอุตสาหกรรม

# HTML

- HyperText Markup Language
- Standard markup language for documents designed to be displayed in a web browser.
- Can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

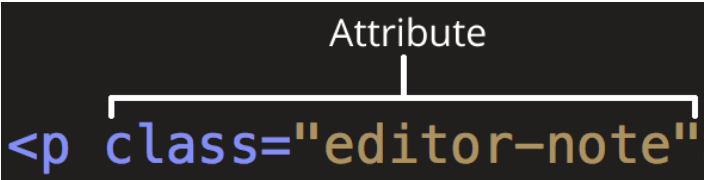
# HTML element

- Encloses parts of the content to make it appear a certain way.
- Consists of
  - Opening tag
  - Closing tag
  - Content



# Attribute

- Contain extra information about the element.



The diagram shows the word "Attribute" in white text above a dark background. A white line connects "Attribute" to the "class" attribute in the HTML code below. The code is: `<p class="editor-note">My cat is very grumpy</p>`. The "class" attribute is highlighted in blue, and the value "editor-note" is highlighted in orange.

```
<p class="editor-note">My cat is very grumpy</p>
```

# Empty element

```

```

- Two attributes
- No content
- Does not require `/` at the end.
- However, in React JS, this is required. Therefore you should write

```

```

# HTML document

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

## <!DOCTYPE html>

- A required preamble (คำนำ).

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

# <html></html>

- Wraps all the content on the entire page
- *Root element*

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```



## <head></head>

- Container for all the stuff to include on the HTML page that isn't the content you are showing to your page's viewers.

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

## <meta charset="utf-8">

- Set the *character set* of the document to *UTF-8*.
  - Includes most characters from the vast majority of written languages.
- No reason not to set this.

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

# <title></title>

- Sets the title of the page
  - Browser tab the page
  - Bookmark/favorite

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

## <body></body>

- Contains all the content shown to web users
  - Text, images, videos, games, playable audio tracks, ...

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    
  </body>
</html>
```

# Recommended VSCode extensions

- Enable `Editor: Linked Editing` in `Settings`
- Extensions: `html tag wrapper`
- Extensions: `Highlight Matching Tag`