Web Application Development for Industrial Engineers
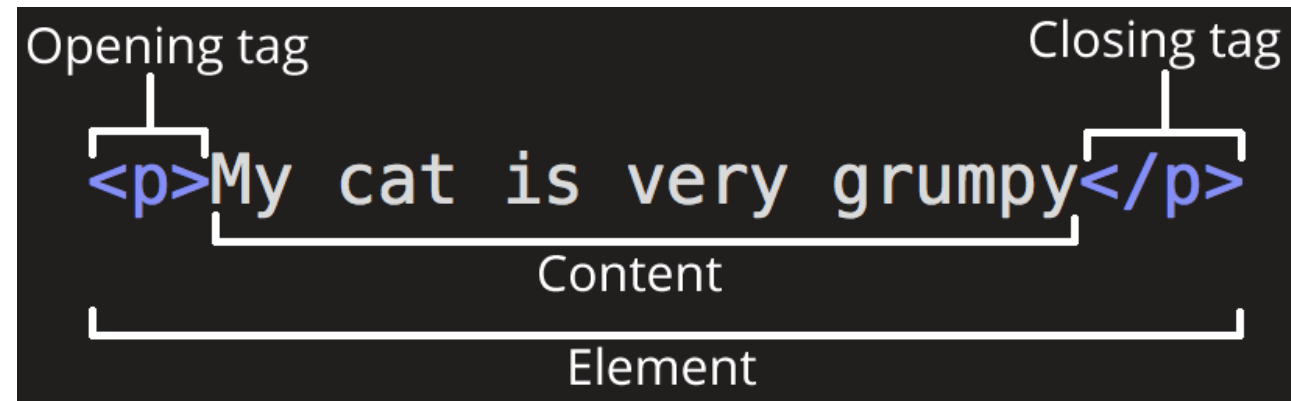
การพัฒนาเวปแอปพลิเคชันสำหรับวิศวกรอุตสาหการ

HTML

- 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.

Empty element

```
<img src="images/firefox-icon.png" alt="My test image" />
```

- Two attributes

- No content

- Does not require `/` at the end.

- However, in React JS, this is required. Therefore you should write

```
<img src="images/firefox-icon.png" alt="My test image" />
```

HTML document

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    <img src="images/firefox-icon.png" alt="My test image" />
  </body>
</html>
```

`<!DOCTYPE html>`

- A required preamble (คำนำ).

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    <img src="images/firefox-icon.png" alt="My test image" />
  </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>
    <img src="images/firefox-icon.png" alt="My test image" />
  </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.

```html
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8" />
    <title>My test page</title>
  </head>
  <body>
    <img src="images/firefox-icon.png" alt="My test image" />
  </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>
    <img src="images/firefox-icon.png" alt="My test image" />
  </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>
    <img src="images/firefox-icon.png" alt="My test image" />
  </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>
    <img src="images/firefox-icon.png" alt="My test image" />
  </body>
</html>
```

Recommended VSCode extensions

- Enable `Editor: Linked Editing` in `Settings`

- Exensions: `html tag wrapper`

- Extensions: `Highlight Matching Tag`