

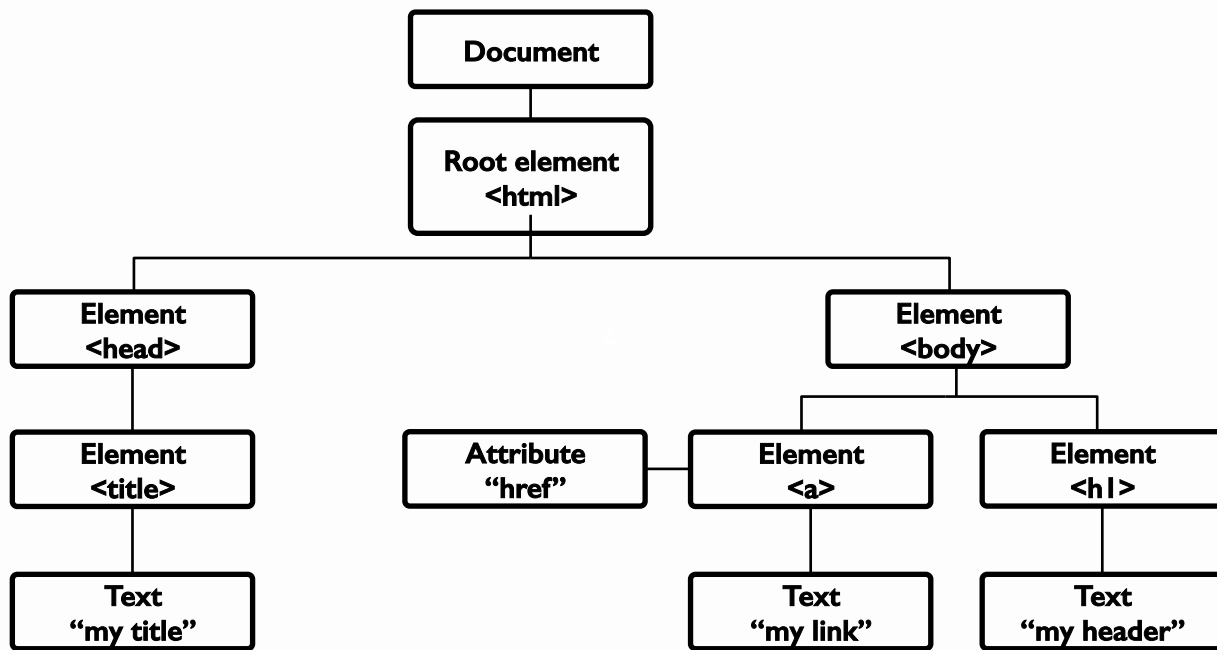
Document Object Model

Writing clean code

The Document Object Model (DOM)

- Basis of HTML5 is “*New features should be based on HTML, CSS, the DOM, and JavaScript...*”
- **DOM provides common tree-like structure that all pages should follow**
- Computer Scientists love trees (the mathematical kind) because you can test them.

HTML is built on the DOM



Adapted from w3Schools.com

Three parts of a well-formed document

- **Doctype**
 - **Version** of HTML that you will be using
- **Head**
 - **Metadata**
- **Body**
 - Displayable **content**

Doctype

- **HTML5**
 - `<!DOCTYPE html>`
- **Previous versions dictated backwards compatibility**
 - `<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">`
 - `<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">`

Head

- Additional information used by the browser
 - **Meta data** – language, title
 - **Supporting files** – JavaScript, Styling, Add-ons
- Other than title, meta-data is not displayed

Body

- **Bulk of your page**
- **Important to write well-formatted (tree-like) code.**
- **Most of the content is displayed by the browser, but there may be some meta-data too**

Example

- Example: template.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>My First Page</title>
</head>
<body>
  This should be displayed by the browser.
</body>
</html>
```

← Doctype

Head

Body



Validate the Code

→ 코드 작성 후 반드시 validation check

W3C[®] Markup Validation Service
Check the markup (HTML, XHTML, ...) of Web documents

Validate by URI Validate by File Upload Validate by Direct Input

Validate by URI


Validate a document online:

Address:

▸ [More Options](#)

[Check](#)

This validator checks the [markup validity](#) of Web documents in HTML, XHTML, SMIL, MathML, etc. If you wish to validate specific content such as [RSS/Atom feeds](#) or [CSS stylesheets](#), [MobileOK content](#), or to [find broken links](#), there are [other validators and tools](#) available. As an alternative you can also try our [non-DTD-based validator](#).

 **W3C VALIDATOR Suite**

[Try now the W3C Validator Suite™](#) premium service that checks your entire website and evaluates its conformance with W3C open standards to quickly identify those portions of your website that need your attention.

Success!!

This document was successfully checked as HTML5!

Result: Passed, 2 warning(s)

Address :

Encoding : utf-8

Doctype : HTML5

Root Element: html

Review

- Well-formed pages use the DOM structure
 - Use beginning and end tags
 - Close inner tags before outer ones
 - Use valid attributes
- Browsers will “fix” bad code, but not always well. Use a validator to check your code

(그냥 browsers에서 잘 보니까 100% 맞는 것은 아니기 때문에 validator를 쓴다)

Acknowledgements/Contributions

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