

HTML

HTML 수업 - 생활코딩

본 수업은 HTML에 대한 심화된 내용을 다룹니다. HTML의 기본문법과 HTML의 주요한 태그들에 대한 수업을 담고 있습니다. 본 수업을 효과적으로 수행하기 위해서는 웹애플리케이션에 대한 전반적인 이해가 필요합니다. 이를 위해서

● <https://opentutorials.org/course/2039>



해당 사이트의 내용을 기반으로 개인 스터디를 진행하였고, 진행하면서 중요하다고 생각하는 내용을 직접 정리하였습니다. 궁금하신 분들은 자유롭게 참고해주시면 될 것 같습니다 😊

Hello, HTML

basic start of web programming

HyperText

Web page link-based

Markup

Markup grammar based

Language

some protocols (between computer(especially for web browser) and people)

Tag

most important protocol

The tag will be applied between an open tag and a close tag.

<html>

Indicates that this tag contains contexts based on HTML language.

<head>

Indicates that the head tag contains additional website information (or settings).

<title>

Sets the title of website

<body>

Indicates that between body tag contains the contexts of a website.

<h1>

acronym of heading 1 (Biggest title)

<h2>

acronym of heading 2

makes text bold (emphasize text)

<a>

acronym of “anchor”

link another website

really important tag of HyperText

- attributes
- href= link attributes
- title= tooltip
- target= where to open this link

acronym of “ordered list”

used with tag → tagged with inside means they are orderly listed (with numbering)

acronym of “unordered list”

used with tag → tagged with inside means they are unorderedly listed (just with a dotted list)

often used with and , to indicate that this is a component of list

<p>

Between this tag means that it is “one” paragraph.

**
**

acronym of break

This separates lines, but not a good way to separate paragraphs → instead use CSS

Indicates that the following src attributes will contain an image (which contains an image format file)

- attributes
 - src=image file address (can be local or website image address)
 - width=width of image
 - height=height of image
 - Note that if you enter both of them, the image's ratio can be destroyed. Using only one attribute(width or height) is a better way.
 - title=title of image (appears when the mouse hovers on the image)

<table>

Indicates that data has a form of a table

- main elements
 - <tr>: between this tag will be "one" record
 - <th>: between this tag will be "one" field that is "HEAD" of table
 - <td>: between this tag will be "one" field
 - rowspan attributes: Merge cells from this cell to N rows down cell
 - colspan attributes: Merge cells from this cell to N columns right cell
- <thead>: <tr> and <th> tag inserted in this tag will be the "HEAD" of the table
- <tbody>: <tr> and <td> tag inserted in this tag will be the "BODY" of the table
- <tfoot>: <tr> and <td> tag inserted in this tag will be the "FOOTER" of the table

<input>

Allows a user to input some informations in a box (or interact with the website)

- attributes
 - type=
 - "text": text field
 - "password": text field, but all inputs are hidden

- “button”: this only makes button UI that the user can click (but nothing happens [default])
 - “submit”: button that submits the user’s input
 - “radio”: selection tools, but user can choice only one (between range of same name attributes)
 - “checkbox”: selection tools that can choose multiple options
 - “hidden”: can send information to server, but users cannot see directly on the screen (used with name and value attributes)
 - “file”: upload and send files (used with name)
- name="{name}”: data name (when you send information to server using <form>)
 - value="{value}”: sets default value which already written in the input box
 - checked: (works with “radio” and “checkbox”) default value which already chosen
 - onclick="{JavaScript}”: (works with “button”) choose what happens when button clicks

<select>

tags that can make a dropdown box (used with <option> tag)

<option>

makes options in the <select> tag

- attributes
 - value="{value}”: selection value (when you send information to server using <form>)

<textarea>

Write strings (<input> that can write really long string information)

- attributes
 - cols="{number}”: box column size
 - rows="{number}”: box row size

<label>

(mainly for information) sets label values to <input> tags

- attributes
 - for="{label_name}”: sets label’s name

<form>

all `<input>`s can interact with server with `<form>` tag

- attributes
 - `action="{URL}"`: where to send a request based on this information
 - `method=`
 - `"get"`: get method
 - get request exposes information to URL (can be dangerous)
 - `"post"`: post method
 - post request does not expose information to URL
 - `enctype="{enctype}"`: (used when input type is "file") choose encryption type

Some Useful Websites

HTML Tag History

© 2012, Martin Rinehart Prerequisite: This page was prepared for students learning from Professional HTML , Volume I of V in the Frontend Engineering series. It is most meaningful to persons currently using HTML who wish to see where HTML has been and, possibly, where it is going.

 <http://www.martinrinehart.com/frontend-engineering/engineers/html/html-tag-history.html>

HTML Study | Advanced Web Ranking

This study looks at 11 mm index pages gathered from Top 20 Google results to uncover how people write HTML markup as new web tech emerge.

 <https://www.advancedwebranking.com/seo/html-study/>



attributes

Tags can only indicate what this tag is, but if you add some attributes, you can do additional things with tags!

History of HTML

GML → SGML → SGMLguid → HTML (a tag added)

DOCTYPE

acronym of "Document type declaration"

Informs web browser what this file has been written in. (What protocol has been used)

Now it has been integrated to `<!DOCTYPE html>`

HTML as information

`` - DO NOT USE

can set some font designs to text

HTML is important for information!

design can be done with CSS, so you should not use HTML `` tags to apply font attributes

Why `` has been excluded from HTML?

HTML tags should deliver information about elements.

`` tag does not indicate any information about texts, but design.

`<meta>`

Website page static scope information.

- attributes
 - `charset="{charset}"`: sets character encoding type
 - `name=`
 - `"description"`: web page description
 - `"keywords"`: some main keywords of this page
 - `"author"`: who wrote the web page
 - `content="{content}"`: content (related to name)

Semantic element

tags only for information

`<header>`

Indicates that this is HEADER of the page

`<nav>`

Indicates that this is the navigation element of the page

`<section>`

Defines sections of the page

<article>

Defines that this is main texts


<footer>

Indicates that this is FOOTER of the page(privacy, about, etc.)

other tags

- <aside>: not related to page
- <details>: not rendered information
- <figure>: additional figure or diagram
- <main>: main contents
- <mark>: highlights or references
- <time>: time

Search Engine Optimization(SEO)

SEO 기본 가이드: 기본사항 | Google 검색 센터 | 문서 | Google Developers
온라인 콘텐츠를 소유, 관리하여 수익을 창출하거나 Google 검색을 통해 온라인 콘텐츠를 홍보하시나요? 그렇다면 이 가이드를 읽어보시기 바랍니다. 이 가이드는 성장 중인 비즈니스의 소유자, 사이트 수십 개를 관리하는 웹사이트 소유자, 웹 대행사의 검색엔진
 <https://developers.google.com/search/docs/fundamentals/seo-starter-guide?hl=ko>



use <title>

the title can be updated

use <meta name="description" content="">

This can be used as a page description

use understandable URL

URL should be short and understandable

use <canonical> if a different URL has the same contents

or use Redirection (PHP, JAVA, or Python (server))

make it easy to move between Sites(use hyperlinks)

if you use Javascript or other methods that are not based on HyperLink, the search engine may not detect all sites

use to deliver informations about an image

The search engine will use alt attributes to understand images

use tags to indicate headings

font or bold does not deliver any information.

use robots.txt

protocols that define (which) search engines should (not) access (which) websites

polite request → not for security purposes

- use sitemap.xml
 - xml file that has <url> tags → which pages that website have
 - The search engine can download xml file and understand what pages are inside the website

REF) Google Search Engine Algorithm: PageRank Algorithm

Google finds which page has been referenced more (based on hyperlinks)

Other tags

<meta name="viewport" content="width=device-width">

settings for mobile web

<iframe>

import outer web page into my web page

attributes

- src="{src}": which source to input
- frameborder="{num}": set frame border
- sandbox: for security (defends javascript code and input submit)

SECURITY ISSUE!

if you use <iframe>, you should be careful of malicious websites that contains bad javascript code! (use sandbox to prevent these)

HTML5

<video>

supports video format

attributes

- controls: can control video (play, stop...)

<source>

imports video source

attributes

- src="{source}": video source address

<input>

attributes

- type=
 - "number": integer number
 - min="{num}" max="{num}": from min to max
 - "date": date (YYYY-MM-DD)
 - "month": month (YYYY-MM)
 - "week": week
 - "time": (hh:mm AM)
 - "email": email (example@example.com)
 - "search": search bar (for accessibilities)
 - "url": URL
 - "range": range bar appears
 - min="{num}" max="{num}": from min to max
- placeholder="{string}": string to render in the input box
- required: if this input box is empty, the request cannot be sent
- pattern: choose the pattern to be submitted
 - [a-zA-Z]: one letter, alphabet only
 - [0-9]: one letter, number only
 - .: any one letter

- .+: any (more than) one letter

References

Can I use... Support tables for HTML5, CSS3, etc

Test a feature Our partnership with BrowserStack now lets you test your website for compatibility across 2,000+ real browsers and devices. Test on: Did you know? Next If a feature you're looking for is not available on the site, you can vote to have it included.



<https://caniuse.com/>