

# 김 데 레 사

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# 웹접근성과 웹표준

## (HTML5 & CSS3)

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프론트엔드 SCHOOL 2기

**INTERNET**

# INTERNET SERVICE

Telnet

IRC

e-mail

Archie

Usenet

Gopher

FTP

WWW



**World Wide Web**

Who



"Tim" Berners-Lee



Why



# Connect





**W**onder  
world

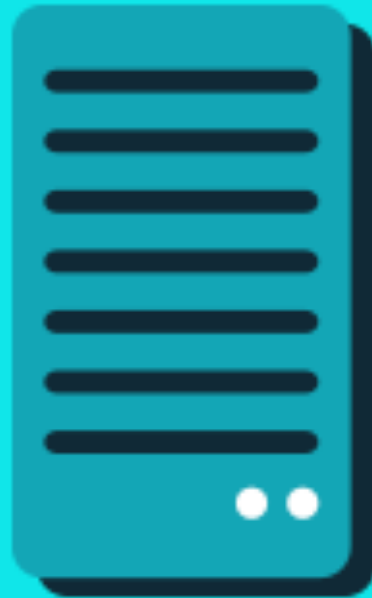
두 개의 세계 **W** 닿을 수 없는 그 곳

당신 어디에 있나요... 당신이 사는 곳은 어떤 곳이죠?



Web

# BACK-END



Server

Database

Application Layer

# FRONT-END



Client

Web Browser

Presentation Layer



# FRONT-END



HTML5



CSS3



Javascript

# Web 기술의 설정값



프론트엔드(Front End)

HTML5



건강한 신체

프론트엔드(Front End)

CSS3



근사한 스타일링

프론트엔드(Front End)

Javascript



스마트한 두뇌

The word "Web" is rendered in a stylized font. The letters "W" and "e" are composed of multiple overlapping, wavy lines in shades of red and blue, creating a sense of motion or digital connectivity. The letter "b" is a solid, light blue. The entire logo is set against a dark gray background.

Web


Standards



웹표준은  
누가 만들죠?



# World Wide Web Consortiums




Views: [desktop](#) [mobile](#) [print](#)

국가별 W3C Go


[STANDARDS](#) [PARTICIPATE](#) [MEMBERSHIP](#) [ABOUT W3C](#)

[Skip](#)

**TECHNICAL REPORTS** 

[By date](#)

[By group](#)

**WEB AND INDUSTRY** 

[Automotive](#)

[Digital Publishing](#)

[Entertainment \(TV and Broadcasting\)](#)


[Web and Telecommunications](#)

[Web of Data](#)


[Web of Things](#)

[Web Payments](#)

[Web Security](#)

**WEB FOR ALL** 

**W3C Workshop Report: Blockchains and the Web**  
26 August 2016 | [Archive](#)




W3C published today the report of the W3C Blockchains and the Web workshop held on 29-30 June, 2016, in Cambridge, Massachusetts, USA. Participants at the workshop found many topics for possible standardization or incubation, including various aspects of identity and proof-of-existence, as well as smaller blockchain primitives that could increase interoperability across different distributed ledgers.

Discussion will continue in the Blockchain Community Group, which will coordinate across different communities and groups to foster standardization where needed, as discussed in the related blog post, "Building Blocks of Blockchains". This popular workshop had over one hundred attendees, and was hosted by MIT Media Lab and sponsored by NTT, Blockstream, and other W3C Members.

**First Public Working Draft: Ethiopic Layout Requirements**  
8 September 2016 | [Archive](#)

**FPWD of Graphics Accessibility API Mappings, and updates to WAI-ARIA Graphics Module and SVG Accessibility API Mappings WD**  
8 September 2016 | [Archive](#)


The World Wide Web Consortium (W3C) is an international community that develops open standards to ensure the long-term growth of the Web. W3C operates under our [Code of Ethics and Professional Conduct](#).  
Become a [Friend of W3C](#) to support the [W3C mission](#) and free developer tools.

**W3C BLOG** 

**Dave Raggett at Industry of Things World**  
12 September 2016 by [Coralie Mercier](#)

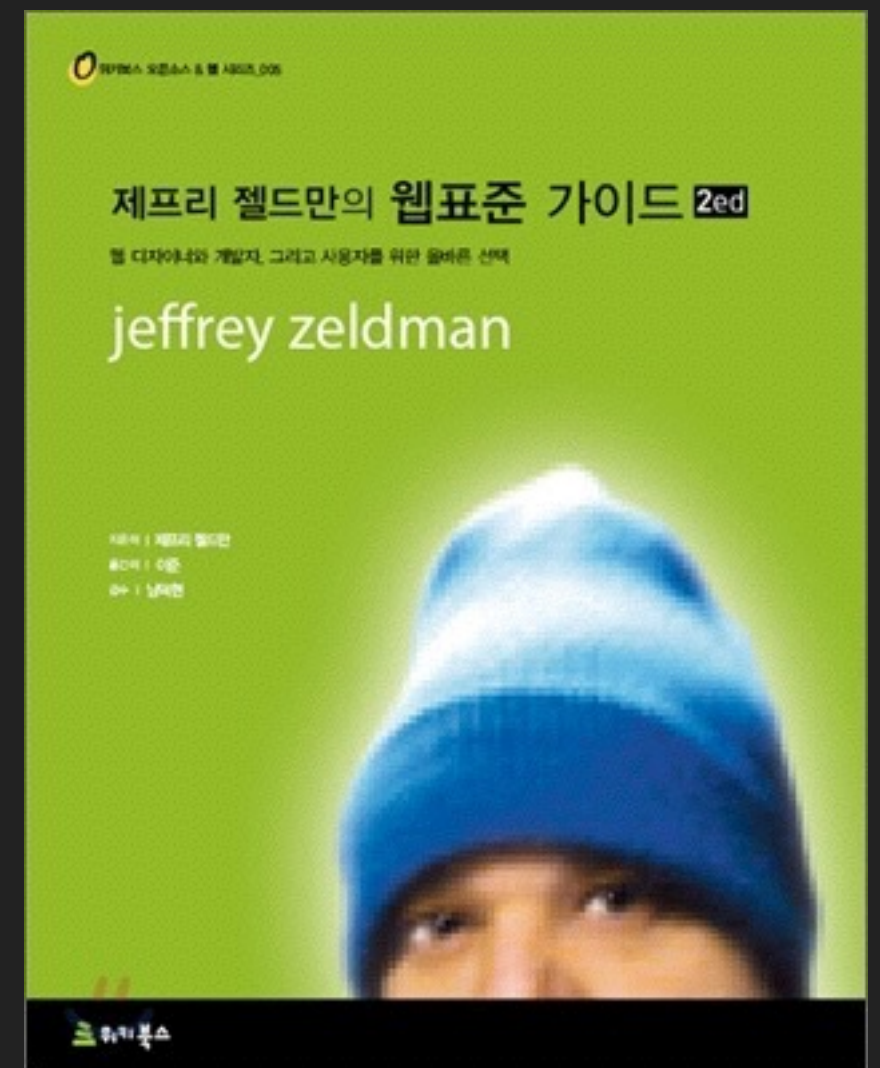
**Memento at the W3C**  
31 August 2016 by [Herbert Van De Sompel](#)

**Building Blocks to Blockchains: a Report on the W3C Blockchains and the Web Workshop**  
26 August 2016 by [Doug Schepers](#)

**JOBS** 

Open position for a [Web Accessibility Engineer](#)

# 제프리 젤드만의 웹표준 가이드



The word "Web" is rendered in a stylized font. The "W" is composed of multiple overlapping, semi-transparent layers in shades of red, orange, and yellow, creating a vibrant, multi-colored effect. The "eb" is in a solid, bright yellow color. The overall style is modern and digital.

Accessibility

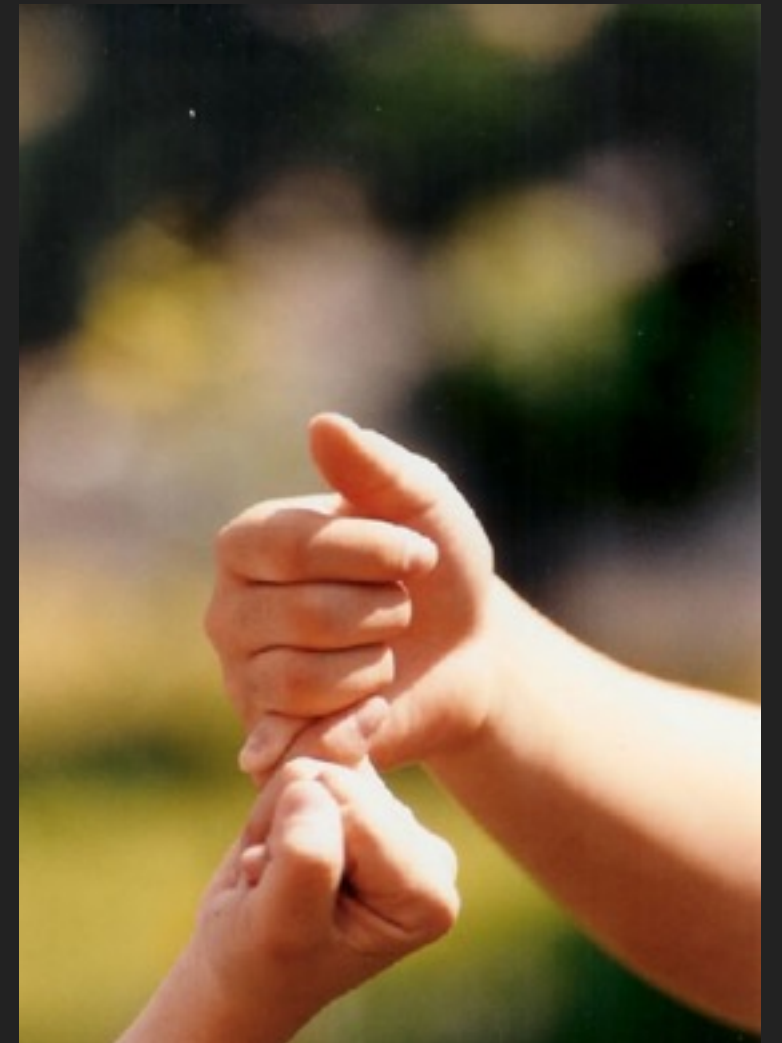


# Web Accessibility

The power of the Web is in its universality,  
access by everyone regardless of disability  
is an essential aspect.

Tim Berners - Lee

# Web Accessibility



# 장애에 대한 이해

시각 장애 - 전맹, 저시력

청각 장애

지체 장애 - 절단 및 지체기능 장애

뇌병변 장애



# "장애인에게 필요한 것은 줄기세포가 아니라 현실적인 정보기술(IT)"



## ■ 이상목 교수가 세상과 소통하는 방법

### 1 헤드 마우스

PC 카메라와 이마에 부착한 스티커 센서가 서로 교신 머리가 움직이는 방향으로 커서가 이동

### 2 전동휠체어 조정간

머리를 기울이는 방향으로 휠체어 이동

### 3 음성인식 마이크

영어로 말하면 문자로 자동 변환

### 4 입김 작동 마우스

마우스 끝을 뿔면 왼쪽 클릭, 불면 오른쪽 클릭, 두 번 뿔면 더블 클릭



# 장애는...

볼 수 없는 것이 아니라 보는 방법이 다를 뿐

걸을 수 없는 것이 아니라 걷는 방법이 다를 뿐

말할 수 없는 것이 아니라 말하는 방법이 다를 뿐

# 환경에 대한 이해

다양한 Platform

Cross Browsing

SEO

(Search Engine Optimization)

저사양 또는 저속회선

원숭이 실험

오이 VS 포도

# 장애인 차별 금지 및 권리 구제 등에 관한 법률

**제 21조** (정보통신, 의사소통에서의 정당한 편의 제공)

행위자는 장애인에게 전자 정보 및 비전자정보를 **동등하게** 접근, 이용할 수 있는 필요한 수단을 제공

**시행령 제 14조** (정보 접근, 의사소통에서의 정당한 편의 제공의 단계적 범위 및 편의의 내용)

누구든지 신체적, 기술적 여건과 관계없이 웹 사이트를 통하여 원하는 서비스를 이용할 수 있도록 **접근성**이 보장되는 웹 사이트



**3천만원 이하의 벌금**

**3년 이하의 징역**

웹접근성은 더이상

선택이 아닌 필수

# 웹접근성 보장 및 개선?

## How To ...

2가지

방법론


가이드라인 준수




Web Content Accessibility Guidelines

# Web Accessibility Initiative

[Skip to Content](#) | [Change text size or color](#)

 **Web Accessibility initiative**



WAI: Strategies, guidelines, resources to make the Web accessible to people with disabilities








W3C Home

Web Accessibility Initiative (WAI) Home

Getting Started

Designing for Inclusion

Guidelines & Techniques

- » **Web Content (WCAG)**
  - WCAG 2.0 technical
    - How to Meet (Quick Reference) 
    - WCAG 2.0 
    - Techniques 
    - Understanding 
    - Conformance Logos
    - Translations
  - WCAG 2.0 educational
    - The WCAG Documents 
    - WCAG at a Glance
    - WCAG 2 FAQ
    - Applying to Non-Web ICT
  - Transition to 2.0
    - How 2.0 Differs from 1.0
    - Comparison of 1.0 to 2.0 
    - Update Your Website
  - Submission forms
    - Submitting Techniques 
    - Commenting on WCAG
  - More WCAG 2.0 docs
  - WCAG 1.0 documents

## Web Content Accessibility Guidelines (WCAG) Overview

Web Content Accessibility Guidelines (WCAG) is developed through the [W3C process](#) in cooperation with individuals and organizations around the world, with a goal of proving a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

The WCAG documents explain how to make web content more accessible to people with disabilities. Web "content" generally refers to the information in a web page or web application, including:

- natural information such as text, images, and sounds
- code or markup that defines structure, presentation, etc.

### Who WCAG is for

WCAG is primarily intended for:

- Web content developers (page authors, site designers, etc.)
- Web authoring tool developers
- Web accessibility evaluation tool developers
- Others who want or need a standard for web accessibility

Related resources are intended to meet the needs of many different people, including policy makers, managers, researchers, and others.

WCAG is a technical standard, not an introduction to accessibility. For introductory material, see [Where should I start? in the FAQ](#).

### What is in WCAG 2.0

[WCAG 2.0](#) is a stable, referenceable technical standard. It has 12 guidelines that are organized under [4 principles: perceivable, operable, understandable, and robust](#). For each guideline, there are testable *success criteria*, which are at [three levels: A, AA, and AAA](#).

For a short summary of the WCAG 2.0 guidelines, see [WCAG 2.0 at a Glance](#).

To learn about web accessibility principles and guidelines, see [Accessibility Principles](#).

The WCAG 2.0 supporting technical materials include:

Quick links:

- [How to Meet WCAG 2.0 \(Quick Reference\)](#)
- [WCAG 2.0 Technical Standard](#)
- [WCAG 2.0 at a Glance](#)

Page Contents

- ☒ [Who WCAG is for](#)
- ☒ [What is in WCAG 2.0](#)
- ☒ [WCAG 2.0 is ISO/IEC 40500](#)
- ☒ [WCAG with other guidelines](#)
- ☒ [Who develops WCAG](#)
- ☒ [More Information](#)

# 4가지 원칙

**P**erceivable (인지, 자각)

**O**perable (운용)

**U**nderstandable (이해)

**R**obust (탄탄한, 견고한)

# 웹표준 준수



HTML5



CSS3



Javascript