

Web Development and Accessibility

EDUC-128

Universal Design

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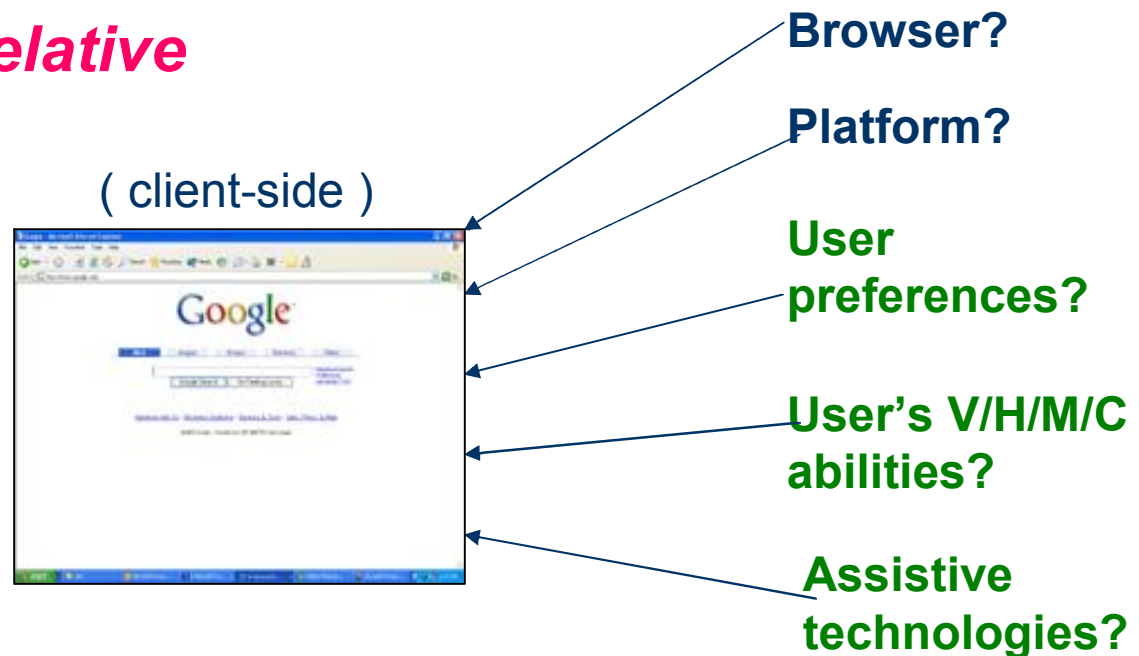
Web Development & Accessibility

- What is an accessible web site?
- Why is it important?
 - What does it afford a web developer?
 - What does it afford the end-user?
- How is a web site made accessible now?
- What can be done to increase accessibility on the web?

anytime, anywhere, anyone!

What is an accessible web site?

- A web site that can be accessed by *people* and *devices*.
- Accessibility is *relative*



Why make web sites accessible?

- **Expanding your audience expands your wallet**

- Reach more people through a variety of devices

- **Standards are a good thing** 

- Universally accepted guidelines ease production

- **It's the law (Bruce Maguire vs SOCOG)**

- Accommodation is actively required worldwide
- Americans with Disabilities Act
- Section 508
- Web Content Accessibility Act of 1999

“Inaccessible technology interferes with an individual's ability to obtain and use information quickly and easily.” (Section 508)

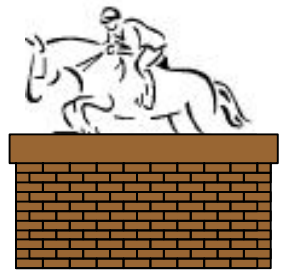
**Reach
20%
more!**



**It's a
basic
human
right!**

Why make web sites accessible?

- **Access to instant information**
- **Adaptations for individual needs**
- **Independence**



Impediments and Adaptations

Abilities	Impediments of the Web	Adaptations Needed
Visual	<u>Buttons as images</u> Videos/animations <u>Layout</u> <u>Font size</u> <u>Color contrast</u>	Screen readers Screen magnifiers Alt tags <u>Single column layout</u> Relative sizing
Hearing	Videos/animations	Closed captioning Text alternatives
Motor	Using a mouse Using a keyboard Flash web sites (<u>1</u> , <u>2</u>)	Adapted keyboards Clean code to ensure accurate click-through
Cognitive	<u>Distracting media</u> Pop-ups Learning styles	Allow the user to set their own preferences

DRAW DIAGRAM ON BOARD

How do you know your audience?!

You DON'T!!



You cannot control the experience of the user!!

LEARN TO LET GO!

Standards ease accessibility & productivity

Stop **compensating**, and start **standardizing**...

- Section 508's Checklist
- Web Content Accessibility Guidelines



(see previous chart for examples)

How is an accessible site made?

Pass the test, and get a stamp of approval!

- W3C's code validators (“unusual”)
- Bobby Approval



Authoring tools (WYSIWYG)

have built-in features

- Adobe's accessibility test
- Macromedia's considerations



81% of web sites fail to pass Priority 1 accessibility standards – Disability Rights Commission, April 2004

Why aren't more sites accessible?

- Change the **web development process**
 - design firms make it an internal policy and an embedded part of the
- Embed accessibility features into **web authoring tools**
(Current research)
- Developers must **“learn to let go”** (1, 2)
 - Allow users to reorganize and stylize content to suit their needs with “stylesheet switchers”
- **Update** the Guidelines (May 1999)
- **CC/PP** (composite capabilities/preference profiles)
- Provide a **“Universal Google”**
- **Developers and users need to meet halfway**
 - Improve and standardize assistive technologies too!

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