

SCREEN READER WEB ACCESSIBILITY FACE-OFF



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March 16, 2011

LET'S HAVE A NICE CLEAN FIGHT



RULES OF ENGAGEMENT

- We are not screen readers specialists (or “hack specialists”)
- We will focus on **web** standards and accessibility
- Let’s have fun but be respectful. These are all good screen readers.

THE CONTENDERS

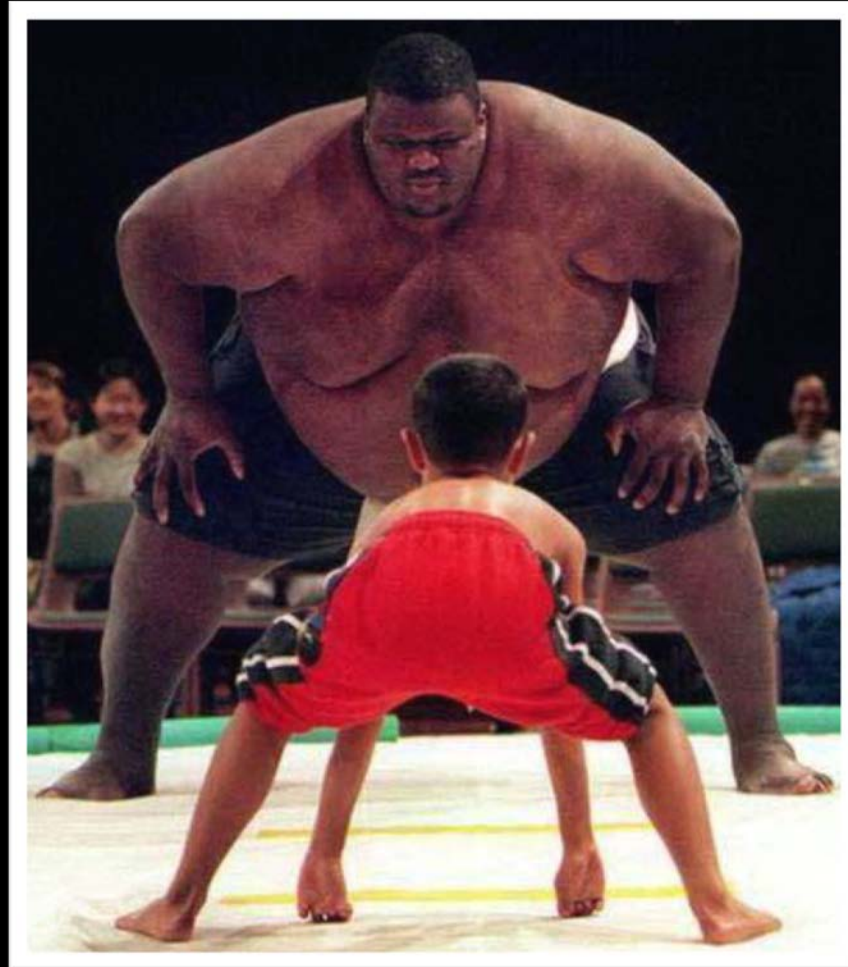
THE REIGNING CHAMPION



THE REIGNING CHAMPION

Hello, I'm JAWS. My trainer is Freedom Scientific. I have been the leading screen reader for years. I know there are other, younger screen readers that are trying to dethrone me, but I'm not worried. Some say I'm a bit stuffy and old, and maybe a bit robotic, but I prefer to be called mature and exact. Most people say that I'm the most robust, the most full-featured, and the most powerful screen reader available. I am the Lamborghini of screen readers.

THE UNDERDOG



THE UNDERDOG

I am NVDA. I am young, up-to-date, and standards compliant. Plus I have a sexy British voice by default. I am a free and open source screen reader for Windows. Because I'm created by the community, I'm not constrained by needs to follow market trends and demands. This allows me the freedom to experiment with and implement new, innovative techniques to improve accessibility for blind and visually impaired users.

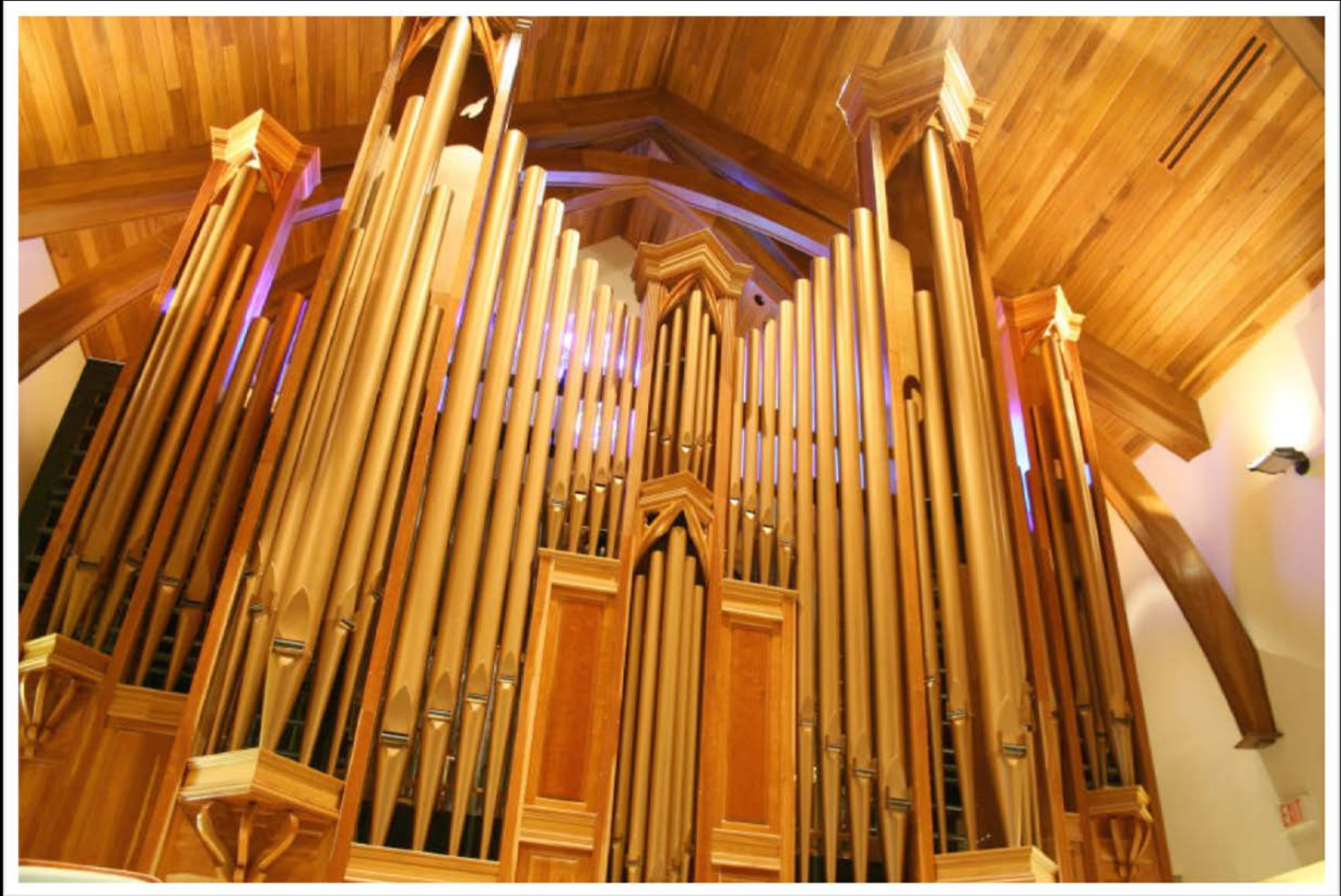
THE SMOOTH OPERATOR



THE SMOOTH OPERATOR

Hello, I'm VoiceOver. I come built into sexy, geeky Apple devices like iPhones, iPads, and MacBooks. Because I am part of the operating system, I am agile and reliable. I may not do everything, but what I do, I do well. Plus I can do something that robotic JAWS or fancy sounding NVDA, can't do...

THE SMOOTH OPERATOR



I can speak like a pipe organ!

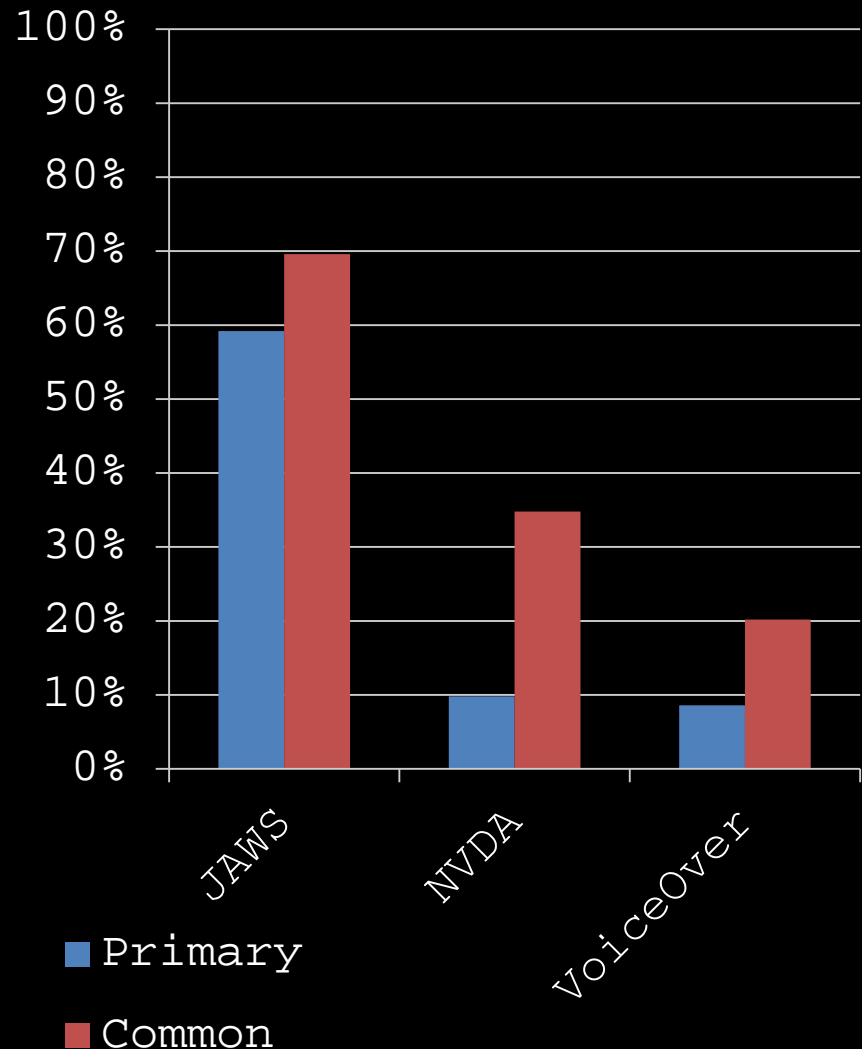
THE CONTENDERS

- JAWS 12 on IE8
- NVDA 2011.1 on Firefox 4 (yes 4)
- VoiceOver on Safari (Snow Leopard)

...and that's it. No other browsers or screen readers (sorry Window-Eyes),
no customization

SCREEN READER USE

- Primary:
 - JAWS 59%,
 - VoiceOver 10%,
 - NVDA 9%
- Commonly Used:
 - JAWS 70%
 - VoiceOver 20%
 - NVDA 35%
- Progress over time



SCREEN READER SURVEY

- Do you see free or low-cost screen readers (such as NVDA or VoiceOver) as currently being viable alternatives to commercial screen readers?
 - About half (54%) of JAWS users said yes
 - Almost all VoiceOver (95%) and NVDA (98%) users said yes

LET THE BATTLE BEGIN



HTML ACCESSIBILITY

- All three were very good overall
- Much of the implementation comes down to preference
- We will highlight some of the hits and misses

IMAGES

- Good support in all three
- Linked images with missing/null alternative text identified, but implementation varies
- Longdesc only supported in JAWS

FORMS

- VoiceOver
 - Does not read “wrapped” labels
`<label><input...></label>`
 - Reads nested fieldsets
- JAWS
 - Good support overall
 - Does not read nested fieldsets
- NVDA
 - Good, but verbose

FORMS WITHOUT LABELS

- JAWS tries to guess at missing labels
- VoiceOver and NVDA do not

TITLE ATTRIBUTE

- JAWS and NVDA read title in place of missing form labels, alternative text, etc.
- VoiceOver usually reads title attribute, unless it is the same as the alternative text, usually resulting in redundant or unnecessary information

TABLES

- JAWS has good navigation through tables and support for table headers
- NVDA has good header support but less elegant navigation
- VoiceOver has good navigation, but doesn't support row headers

SKIP LINKS

- Same page (e.g., “skip to main content”) links are not supported in VoiceOver/Safari
 - The page scrolls visually, but focus does not change

WINNER - JAWS



ARIA

- NVDA support of ARIA is very good, probably better than JAWS.
- JAWS support, while good, still has some issues
- VoiceOver has some issues. How much of this is due to Safari? Does it matter?

WINNER - NVDA



USER EXPERIENCE

VOICE QUALITY

- JAWS: Eloquence. The most popular and probably best synthesizer.
- NVDA: eSpeak. Difficult to understand. Limited speed settings.
- VoiceOver: Alex. Very pleasant sounding at low speeds, but not quite as easy to understand at high speeds.

LOSER - NVDA



KEYBOARD SHORTCUTS

- Headings
 - JAWS: H
 - NVDA: H
 - VoiceOver: Ctrl + Option + Cmd + H
- But there are often other ways to navigate in VoiceOver (e.g., Rotor)

LOSER - VOICEOVER



SPEED AND STABILITY

...do we really need any bullets
on this one?

LOSER - JAWS



And the winner is probably VoiceOver

FINAL ROUND

JAWS

- \$900+
- Most commonly used
- Large community
- Web content often optimized for JAWS
- “Enterprise-level”

NVDA

- Will always win on price
- Agile and innovative
- Excels at web accessibility and standards
- Not as powerful in the Desktop
- Open-source projects can have unreliable development cycles and funding(NVDA has been excellent)
- Give it another look!

VOICEOVER

- Bundled with Mac OS
- iPhone/iPad offers a similar experience
- Closed nature is a strength (reliability and speed) and weakness (Safari and Flash)
- Overall a pleasure to use

THE WINNER...

SCREEN READER USERS

