

# ANIMATE RESPONSIBLY

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# Minimum Requirements



- Flash Player 6 or older
- Windows 98, 2000 and XP
- Microsoft IE 5 or later
- Screen Readers
  - ▣ GW Micro Window Eyes 4.2 or later
  - ▣ Freedom Scientific JAWS 4.5, 6.1 or later
  - ▣ IBM Home Page Reader 3.0.4
  - ▣ Dolphin HAL 6.50
  - ▣ KDS PC Talker (Japan)

# Known Compatibility Issues



- Vista issues: must have Flash Player 9.0.28 installed to work properly

# Controls

- Labels – What is it?
- Role – What's it do?
- State – Is it on or off?
- Structure – What is the relation with the other controls?



# Best Practices



- ❑ Provide text equivalents
- ❑ Provide Context
- ❑ Control Reading Order
- ❑ Control Animation
- ❑ Ensure Keyboard Access
- ❑ Progressive Disclosure
- ❑ Enable Component Accessibility
- ❑ Provide Captions
- ❑ Provide Control over Audio Playback
- ❑ Use Color Wisely
- ❑ Support Users with Low Vision

# Text Equivalents



- ❑ Can be accomplished through the accessibility panel in Flash or with ActionScript
- ❑ Placed in the name field
- ❑ Small movies = single text equivalent + child objects inaccessible
- ❑ Large movies = long description
- ❑ Do not provide text equivalents when
  - Element contains no content, repetitive or are purely decorative
- ❑ Auto-labeling

# Provide Context



- Describe the movie
  - Site Info link
  - Expose state
    - Dynamic text field

# Control Reading Order



- Keep the physical size of the movie small.
  - ▣ < 300 px wide and single column/row
- Accessibility panel or ActionScript
  - ▣ Tab index values
  - ▣ ActionScript at root level in first frame
- Reading order should reflect the structure of the screen.
- Screen reader detection
  - ▣ Attach to first button in the movie

# Control Animation



- Hide Child Objects
  - Accessibility Panel: deselect “Make Child Objects Accessible”
  - ActionScript: `.forcesimple=true`
- Settle Motion
- Avoid Blinking
  - Photo-sensitive epilepsy

# Ensure Keyboard Access



- Avoid empty hit areas
- Assign keyboard shortcuts for most essential controls
- ActiveX Controls
  - ▣ Flash 6 or older will not let you tab out of a Flash movie to the HTML. Update to Flash 7 or newer.

# Progressive Disclosure



- Limited number of options at the top
- Multiple options at the bottom
- Hide multiple controls under a single control

# Enable Component Accessibility

Enable the accessibility object by using the command `enableAccessibility()` to first frame of movie.

- Simple button
- Check box
- Radio Button
- Label
- Text Input
- Text Area
- Combo box \*
- List box\*
- Window
- Alert
- Data Grid \*

\*Issues with Flash Player 7

# Provide Captions



- Importing audio content that is already captioned
- Placing text directly on the stage
  - ▣ Hi-Software – third-party tool that facilitates delivering captions
- Streaming XML caption data
  - ▣ Hi-Caption SE or MAGpie from the National Center for Accessible Media.

# Provide Control over Audio Playback



- ❑ Audio from a Flash movie may interfere with the ScreenReader.
- ❑ Provide the user ability to start, pause and stop the audio.
- ❑ Volume

# Use Color Wisely



- Don't use color as the sole means of providing information
- Contrast

# Support Users with Low Vision



- Options that allow users to modify text size of an application

# Resources



- <http://www.osflash.org/>
- <http://www.actionscript.org/>
- <http://www.aralbalkan.com/>
- [Flash Paper: Best Practices to Accessible Flash Design](#)

# Questions?



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