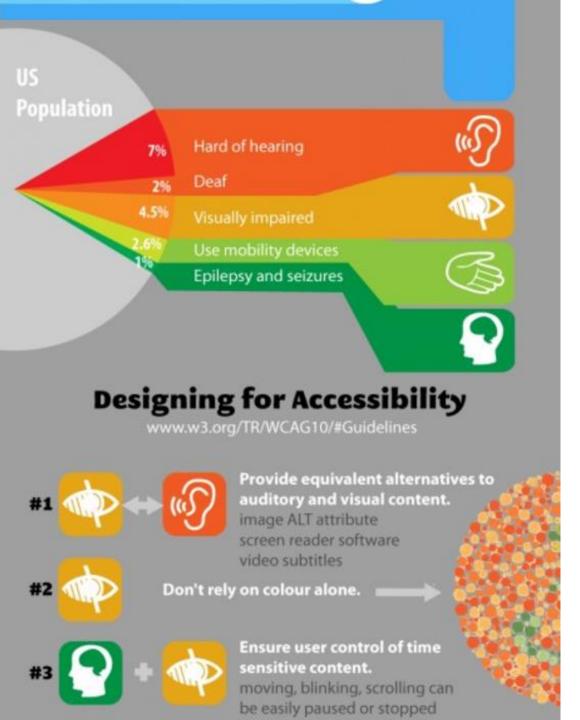


Flyers & Infographics Accessibility (A11y)



What are Infographics?

- A picture is worth a thousand words
- Use pictures to represent words
- A picture that blends data with design to communicate ideas
- Group information by colors
- Use extreme color contrast

Infographics Challenges

- Can you use infographics?
- What are the challenges with creating infographics?
 - Text is not recognized
 - Layers may interfere with Adobe Acrobat PDF tagging of flyers/infographics



Major Challenges

 Software like Adobe Photoshop or Canva, used to create infographics, embeds the text in the image, so the text is not recognized by screen readers.





 Adobe Illustrator files have multiple layers and may make it challenging to tag content in PDFs. Content may disappear when tagging it.



What are Screen Readers

Screen readers are a form of assistive technology (AT) software that *enables access* to a computer, and all the things a computer does, by attempting to identify and interpret what is being displayed on the computer screen using *text-to-speech*. Screen readers can only *access* and process **live text** (fully editable or selectable text).

- Provides access to someone who is visually impaired, has a mobility or a learning disability, to access text on the screen.
- Offers same level of independence and privacy as anyone else.



Types of screen readers





Screen reader program for Microsoft Windows that allows blind and visually impaired users to read the screen either with a text-to-speech output or by a refreshable Braille display.

NVDA screen reader can be downloaded free of charge by anyone.







Provides auditory descriptions of each onscreen element using gestures, a keyboard, or a braille display.

Adds spoken, audible, and vibration feedback to your device.

Screen magnifier for Microsoft Windows that allows you to see and hear everything on the computer.

Best conversion software and alternatives

- Create accessible flyers/infographics using InDesign,
 Word, PowerPoint, Publisher, or Acrobat Pro.
- Add selectable text instead of text in the image.
- Graphics with multiple layers must be flattened (jpg, png) before importing them into your infographic/flyer software. Canva is not accessible, but you can use it to make images to import.
- Graphics should have meaningful alternative text that describes the visuals.











Flyers & Infographics Examples





Can we email or publish to a webpage only an image?

HOW TO APPLY CSUN NCOD Check out our Complete 65+ majors and "NCOD Supplemental 55+ master's degrees Application" www.csun.edu/ www.csun.edu/ncod/ academic how-apply Go to Cal State Apply Email https://www2.calstate. ncod@csun.edu edu/apply that you completed the CSUN application Financial aid? www.fafsa.ed.gov Following these steps Department of will give you priority Rehabilitation (VR)? registration and make www.dor.ca.gov you eligible for services such as interpreting. captioning and shared SAVE THE DATE NCOD: Deaf & Hard of Hearing Services **NCOD Open House** www.csun.edu/ncod Annually on 3rd Saturday of Email: ncod@csun.edu October Telephone: (818) 677-2054 **CSUN** Applications due November 30 f 🖸 🕑 You Tube **NCODshine THRIVE at CSUN!**

THE

BEST TIMES TO POST ON

SOCIAL MEDIA

FACEBOOK



Thursday & Friday 1:00-3:00pm

The closer the weekend comes about the more people check out and check in to Facebook.

INSTAGRAM



Monday 3:00-4:00pm

This is mainly due to companies posting during this time and stirring interaction.

PINTEREST



Saturday 8:00-11:00pm

People have more time to sit back,

TWITTER



Monday-Friday 12:00-6:00pm

Click-through rates are higher during weekdays and work hours.

Three Type of Infographics Format

1. Image

- Requires a transcript (text alternative)
 - Display below or next to the infographic
 - Link to the transcript (to an accessible file or web page)
 - Hidden (accessibly) in the web page or file containing the infographic
 - Web-One custom elements

2. Webpage

Follow web best practices

3. PDF

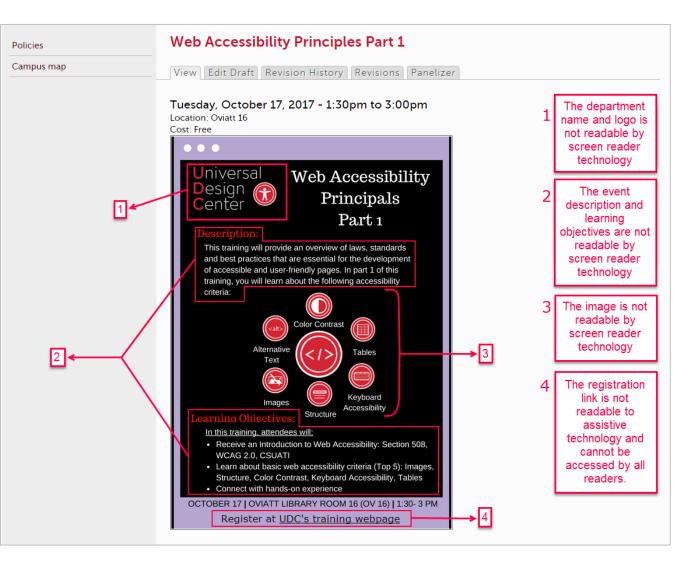
Follow PDF best practices







1. Image



The problem with flyers and infographics that are published on event pages as image files is that all text and hyperlinks are part of the image. Screen readers and other assistive technologies can't convert images into words/text.

Best Practices

Requires a transcript (text alternative)

- Display text below or next to the infographic
- Link to the transcript (to an accessible file or web page)
- Hidden (accessibly) in the web page or file containing the infographic (Full HTML Access in Web-One)
 - Web-One custom elements

Adding flyers & infographics to Calendar Event

2. Webpage - Text Alternative

Best Practices

- 1. Enter all of the event information into the Web-One post.
- 2. If the flyer is an image, add descriptive text to display below the infographic image.

 HTML Alt is "Web Accessibility Principals Part 1 Event flyer"
- 3. Add descriptive link text (avoid generic phrases like "read more", "click here", "next page")
- 4. Text alternative/description also benefits users who use **language translation** tools/apps.

Adding flyers & infographics to Calendar Event

Example of Accessible Events Page – Text Alternative



Policies

Campus map

Web Accessibility Principles Part 1 - Text Alternative (Good Example)

Tuesday, October 17, 2017 - 3:42pm to Wednesday, October 18, 2017 - 3:42pm

Location: Oviatt 16G

Cost: Free



Registration link is embedded on Web-One.

The name of the organization hosting the event and the even name have text alternatives.

The flyer description and information conveyed on the graphics has a text alternative. What appear to be headings on the flyer, has a tagged as headings on Web-One.

Descriptive link text.

Universal Design Center: Web Accessibility Principles Part 1 Training

Description:

The web accessibility principles training will provide an overview of the laws, standards and best practices that are essential for the development of accessible and user-friendly web pages. Part I of this training series is an introductory course to web accessibility criteria and standards. You will learn the 5 most common web accessibility criteria and standards including images, structures, color contrast, keyboard accessibility, and tables. For more information about upcoming trainings visit our training calendar.

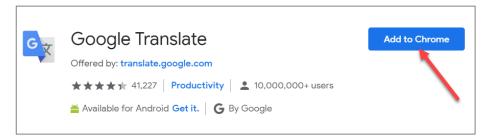
Learning Objectives:

In this training, attendees will

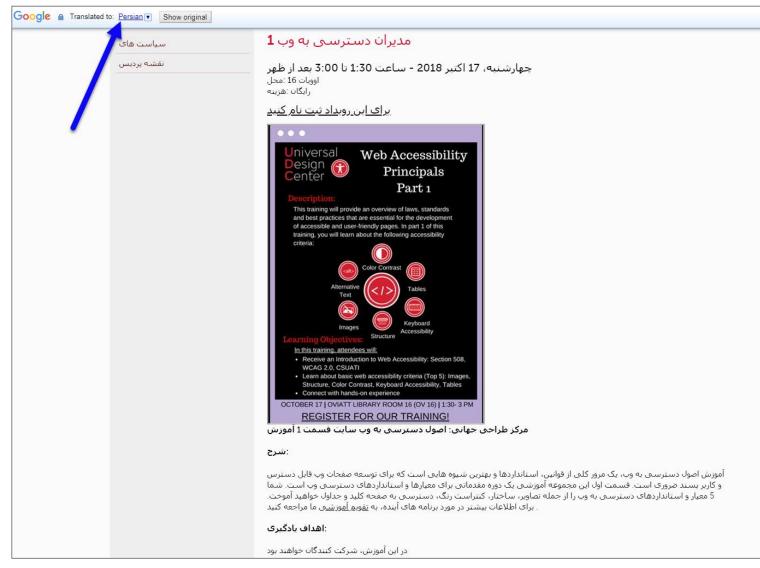
- 1. Receive an Introduction to Web Accessibility: Section 508, WCAG 2.0, CSUATI
- Learn about basic web accessibility criteria (Top 5): Images, Structure, Color Contrast, Keyboard Accessibility, Tables
- 3. Connect with hands-on experience

2. Webpage: Google Translate

Text alternative/description benefits users who use language translation tools/apps.



Infographics Webpage Example



3. Accessible PDF

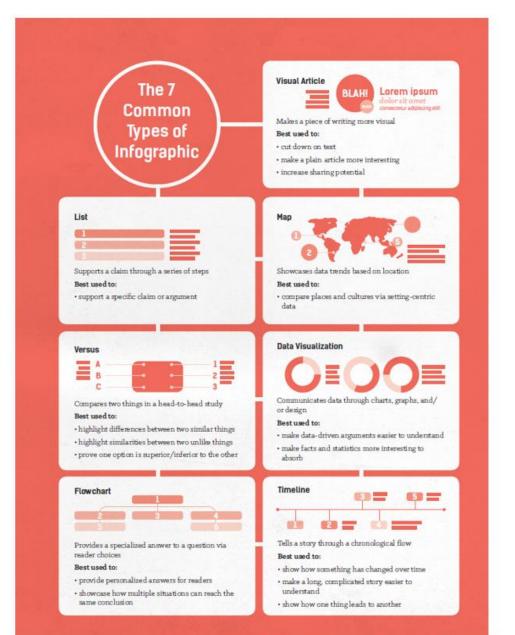
Embedding a PDF format of an infographic or flyer is also an excellent alternative. However, when adding links to PDFs on the web, content creators must ensure the PDF document adheres to all PDF accessibility requirements.

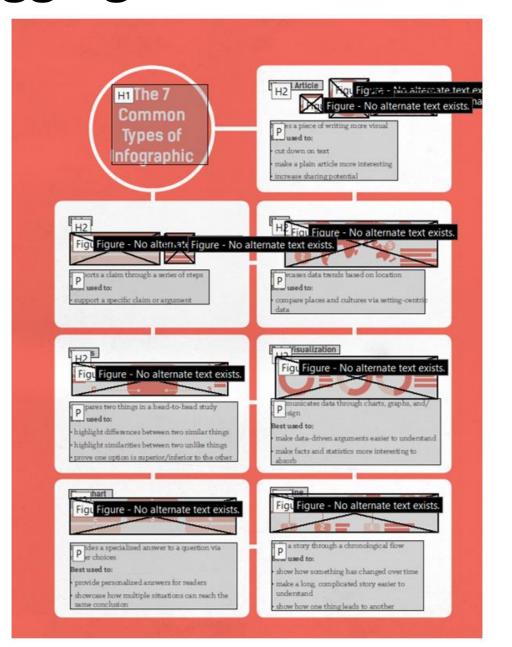
Best Practices

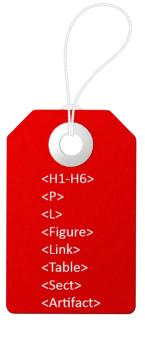
- Every piece of content must be tagged
- Structure that can easily read by screen readers
- Selectable text
- Sharable and consistent across platforms (Mac, PC, mobile, tablet)

Example of Accessible Events Page – PDF Web Accessibility Principles Part 1 (PDF) Thursday, March 15, 2018 - 9:01am Location: Oviatt 16G **Policies** Cost: Free Campus map Register for this event Registration link is Web Accessibility embedded on Web-**Principals** One. Part 1 This has a descriptive link text. training, you will learn about the following accessibility Within the link text it notifies the user about the type of document it is. Document icon is included near the link referring to the document. Learn about basic web accessibility criteria (Top 5): Images Structure, Color Contrast, Keyboard Accessibility, Tables Connect with hands-on experience OCTOBER 17 | OVIATT LIBRARY ROOM 16 (OV 16) | 1:30-3 PM REGISTER FOR OUR TRAINING! View the accessible PDF Version of this flyer

3. PDF Tagging







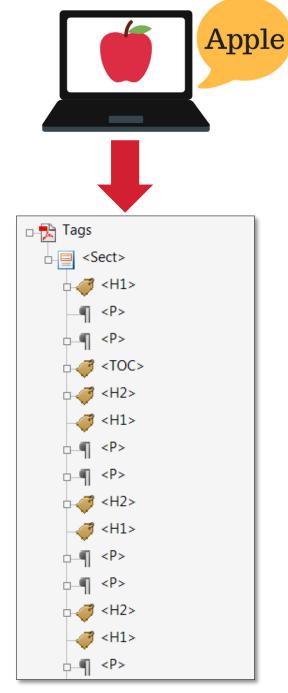
3. What is an Accessible PDF?

"Accessible PDF" means every piece of content must be tagged with the correct tag.

Tags are invisible identifiers that will tell screen readers and other assistive technology (AT) an object is...

- Paragraphs of body text: <P>
- Headings and subheads: <H1> <H6>
- Lists: <L>,
- Tables: <Table>, <TR>, <TH>, <TD>
- Graphics have Alt-Text that describe the visual: <Figure>
- Hyperlinks: <Link>
- Captions, and other parts of a document: <Caption>
- Decorative images: <Artifact>

Ensure the tags are in the correct **logical reading order** to match the document pane.



Adding QR Code

Spring 2021 Accessibility Training

Accessible Course Materials Reach More Students
Coming Together & Learning Together: Tools and Tips for
Universal Design!

- Canvas Ally: Monday, January 11, 2021 at 9:30am to 11:30am
- Equatio: Tuesday, January 12, 2021 at 10:00am to 11:30am
- Creating an Accessible Syllabus: Wednesday, January 13, 2021 at 9:30am to 11:30am
- Video Accessibility: Thursday, January 14, 2021 at 10:00am to 11:30am
- Web-One Accessibility: Wednesday, February 17, 2021 at 11:00am to 12:00pm
- Word Essentials: Friday, February 19, 2021 at 9:30am to 11:30am
- PowerPoint Essentials: Friday, March 5, 2021 at 9:30am to 11:30am
- PDF Tools: Monday, March 22, 2021 at 9:30am to 11:30am
- Email Accessibility: Wednesday, March 24, 2021 at 10:00am to 11:00am
- Screen Readers: Wednesday, April 7, 2021 at 11:00am to 12:00pm
- Social Media Accessibility: Monday, April 5, 2021 at 11:00am to 12:00pm
- Flyers & Infographics: Wednesday, April 14, 2021 at 10:00am to 11:00am





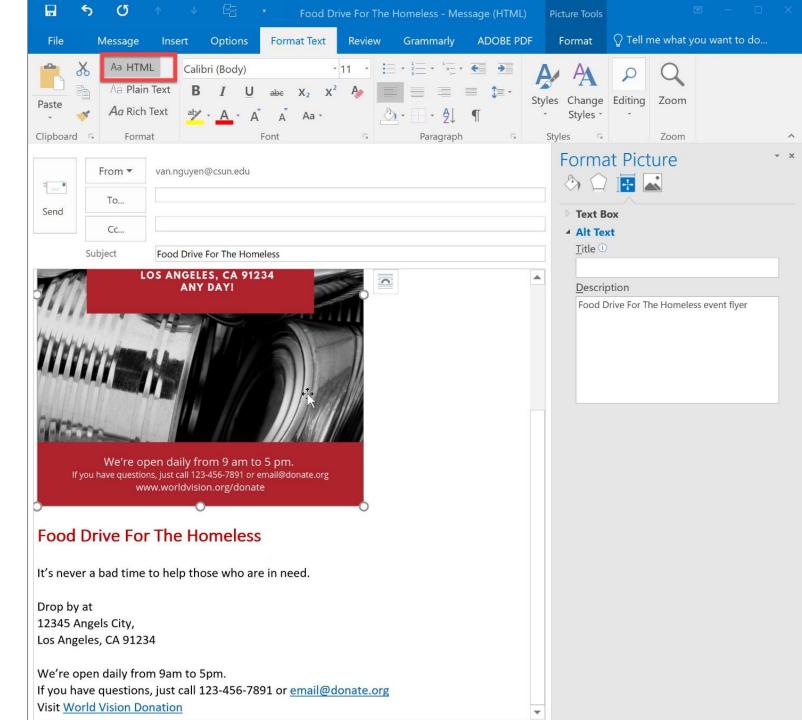
Register for Training csun.edu/udc/training



- QR Code image Alt Text e.g.
 "QR Code for UDC Training List"
- Add a short URL link to a webpage

Email Text-based Equivalent



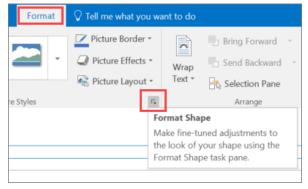


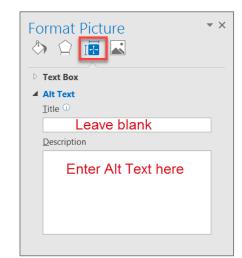
Outlook Client: Alt Text to Images



Outlook 2016

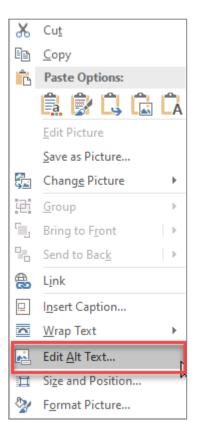
- Right-click on the image, select Format Picture, select Layout & Properties, and then select Alt text.
- 2. Add a detailed description of the image, and why the image is important to your message.





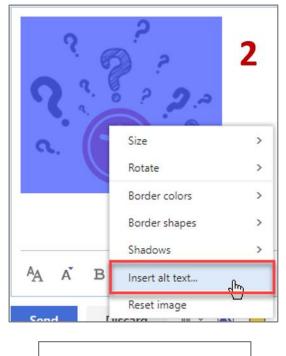
Outlook 365

- Right-click on the image, select Edit Alt Text.
- 2. Add a detailed description of the image, and why the image is important to your message.

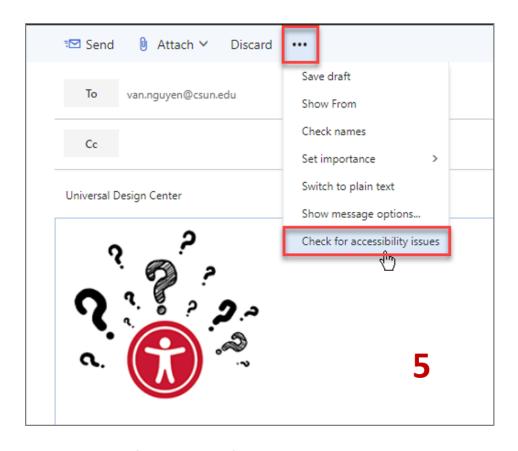


Office 365 Outlook Web App (Alt Text)









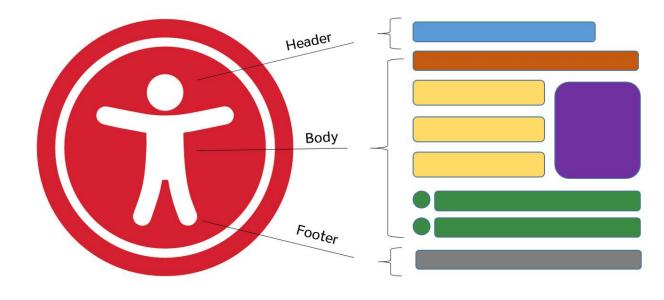
- Insert Image
- Right click on image to select **Insert alt text**
- Run Accessibility Check



Flyers & Infographics Structure

Flyers & infographics must always have a logical structure that includes titles and heading levels

- Headings: Heading 1, 2, 3, etc., or <h1>, <h2>, <h3>, etc.
- Paragraphs: body text
- Lists: bullets, numbered, outline
- Strong is the new bold
- *Emphasis* is the new italic



Organizing content with a descriptive title, headings, subheadings, lists, images, and a footer are important for usability and accessibility.

Legibility



Serif Sans-Serif
Abc Abc

Pretty fonts look good but can people read it? The inaccessible fonts can make content difficult to read and slow readers down. Fonts, text size (12 points or up) and color should be legible.

- Text should be clear and easy to read
- Avoid using difficult-to-read fonts and small text
- San-serif fonts are more suited to electronic formats (Arial, Calibri, Verdana or Franklin Gothic Book)
- Avoid <u>underlining</u> text. Underlining is interpreted by screen readers and people with low vision as linked text.
- Capitalization for the heading is fine <u>not</u> the entire paragraph. Most people have difficult to read it if all text capitalized.

Mysterious Dash or Hyphen

Screen readers do not know what the – symbol represents (minus, hyphen, en dash or em dash) so screen readers **will not** read it. *It is always a good practice to spell the word and any abbreviations or make a reference to your abbreviation when used for the first time.*

For examples:

- May 8th, 2022 from 3:30 5:00pm. The screen reader reads three, thirty five. Recommend May 8th, 2022 from 3:30 to 5:00pm.
- Final exams May 14 20, 2022, screen reader reads May 1420, 2022.
 Recommend May 14 to 20, 2022.
- Homework assignment pages 200 281 for tonight's reading material.
 Recommend pages 200 to 281.
- The fiscal year 2015-2016. Recommend The fiscal year from 2015 to 2016.
- Grading scale 95 100%, screen reader reads 95100%. Recommend 95 to 100%.
 - ❖ A + , screen reader reads A+. Recommend A plus.
 - ❖ A , screen reader reads A. Recommend A minus.
 - * Recommend to spell the word plus or minus for consistency purpose.



Minor changes can have a big effect on maintaining clarity for students using assistive technology.

Image Alternative or Alt Text



Screen readers and other AT announce that it's an "image" or "graphic", then read the alt text: "Three plants going through transformation with text quote Accessibility user-friendly document for CSUN student success."

- The purpose of **Alt Text** is to allow low vision or blind users who use text-to-speech assistive technologies (AT), such as screen readers, to understand the purpose of graphic images. Sighted users usually don't see alt text unless they use AT.
- Screen readers and other AT can't convert images into texts. So, when writing alt text, consider the following for images:
 - Describe the content and the purpose of the image clearly and concisely, in a phrase or a sentence or two. Keep alt text short 200 characters or less.
 - Image with text (for example, the CSUN wordmark) should include the words on the image.
 - "Image of...", "Photo of..." is not needed because screen readers and other AT announce that it's an "image" or "graphic".
 - When completing the alt text, use proper punctuation such as periods to indicate the end of the alt text. Without proper punctuation, some screen readers will run the alt text into the body text that follows and cause confusion to the user.
 - Don't insert hyperlinks in alt text because they are not clickable and can't create descriptive link text.

How to Describe Images?



A stair chase leading up to an entryway is painted yellow with bold black text that reads museums are now.



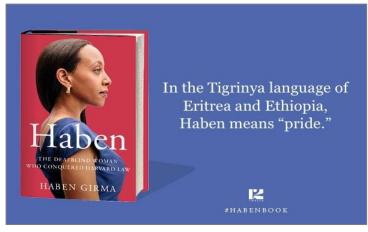
Michelle Obama claps and Barack waves.



A hand reaches out of a computer screen giving the hand gesture for stop. The screen reads 'access denied!'



Student holds a diploma hardcover up in the air during CSUN commencement. Caption text "and together, as Matadors, we will move mountains."



On the left is the book cover for Haben The Deafblind Woman Who Conquered Harvard Law, and on the right is the quote: "In the Tigrinya language of Eritrea and Ethiopia, Haben means 'pride.'"

More examples of How to Describe Images

- Document Learning Tools: Describing images
- How to Describe Images (Art, Chemistry, Diagrams, Flow Charts, Formatting & Layout, Graphs, Maps, Mathematics, Page Layout, Tables, Text-only images)
- Periodic Table of the Elements
- **UDC Best Practices for Describing Images**

Descriptive Link Text

Not Accessible – vague and redundant

CSUN News

CSUN Honors Four Exceptional Graduate Students for Thesis and Project Work

CSUN's Division of Academic Affairs has selected four exceptional CSUN graduate students as the winners of the 2020 Distinguished Thesis/Graduate Project Competition, with each receiving a \$1,000 award and recognition from the university. Read more.

CSUN Team to Tap into Power of Inouye Telescope to Study Sun's Atmosphere

With the aid of a telescope in Hawaii, a team of professors at California State University, Northridge hope to solve some of the mysteries found in the sun's atmosphere, information that could help us better understand the impact of solar flares, as well as what is happening with other stars in our solar system.

Read more.

Minimizing the COVID Slide During the Summer

In response to the COVID-19 pandemic, schools across the nation transitioned to meeting online. Given the abruptness of the transition and lack of preparation parents had in becoming in-home teachers' aides, many parents and educators are worried about a "COVID slide" or "COVID slowdown," where students fail to retain any new information learned before and during the pandemic — as well as over the summer, when students are not in school.

Click here

Screen readers read: "Read more, link" "Read more, link" "Click here, link"

Accessible – descriptive and unique

CSUN News

CSUN Honors Four Exceptional Graduate Students for Thesis and Project Work

CSUN's Division of Academic Affairs has selected four exceptional CSUN graduate students as the winners of the 2020 Distinguished Thesis/Graduate Project Competition, with each receiving a \$1,000 award and recognition from the university. Learn more about CSUN's Four Exceptional Graduate Students.

CSUN Team to Tap into Power of Inouye Telescope to Study Sun's Atmosphere

With the aid of a telescope in Hawaii, a team of professors at California State University, Northridge hope to solve some of the mysteries found in the sun's atmosphere, information that could help us better understand the impact of solar flares, as well as what is happening with other stars in our solar system. Continue reading about CSUN's Astronomy Team.

Minimizing the COVID Slide During the Summer

In response to the COVID-19 pandemic, schools across the nation transitioned to meeting online. Given the abruptness of the transition and lack of preparation parents had in becoming in-home teachers' aides, many parents and educators are worried about a "COVID slide" or "COVID slowdown," where students fail to retain any new information learned before and during the pandemic — as well as over the summer, when students are not in school.

Learn more about the "COVID Slide".

Screen readers read: The content and link text then announce the word "link"

Full URL text https://www.csun.edu/universal-design-center

(raw URL may not make sense to screen reader users or others, so make the link text descriptive i.e. Universal Design Center)

Best Practices for Accessible Links

DESCRIPTION

- Link text must always properly
 describe the purpose of the link
 and tell a user where the link will
 take them.
- Do not use text such as "click here" or "read more," nor web addresses (URLs).

PRESENTATION

- Each link on the page should be **visually different** from regular text on the website.
- Can be differentiated by color,
 bold, underline, or italics.
- Using color alone does not make it accessible.

FUNCTIONALITY

- Link functionality is about ensuring a link functions the way the user expects.
- Links must always enhance the accessibility of a webpage.
- Users must be able to access links using a mouse, keyboard, or speech recognition commands.



LINKED IMAGES

- A linked image is an image (with or without text) that is linked to another resource or webpage.
- Linked images need link descriptions as well as image descriptions (alt text).
- If the link description is different than the alt text, enter the link description in the HTML Title field.
- Visit <u>Linked Images</u> on the Best Practices for Accessible Images page for more information.



University Events Calendar

House of Fear

Monday, October 28, 2019 -12:00pm to Saturday, December 7, 2019 - 4:00pm



House of Fear is a collaborative production between visual artists and actors

that explores the role of fear in the here and now. Read more

Go with the Flow

Tuesday, November 5, 2019 - 4:00pm to 6:00pm



Let's dispel myths about menstruation and create an open, honest, stigma-

free conversation about improving periods from a personal, environmental and global perspective. This event will have a panel of experts, film screening of "Period. End of Sentence," an art exhibit, and free menstrual cup giveaways. Read more

Provide meaningful link text

UDC Scheduled Training's

PDF Scanned & OCR

Thursday, November 7, 2019 - 2:00pm to 3:00pm



This training will cover the fundamentals of Adobe Acrobat scanned

documents and Optical Character Recognition (OCR). Participants will learn to utilize the scan tool to conduct an OCR document and provide selectable text. PDF

Tools is recommended before taking this session. Read more about PDF Scanned & OCR

Flyers & Infographics

Thursday, November 14, 2019 - 2:00pm to 3:30pm



This session is an introduction of the best practices for creating accessible flyers and

infographics content. Read more about Flyers & Infographics

Accessibility Testing Tools

Tuesday, November 5, 2019 - 1:30pm to 3:00pm

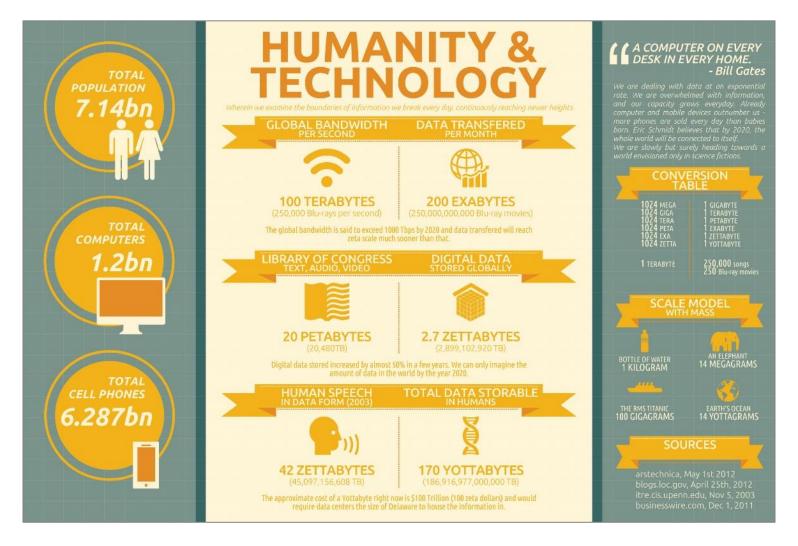


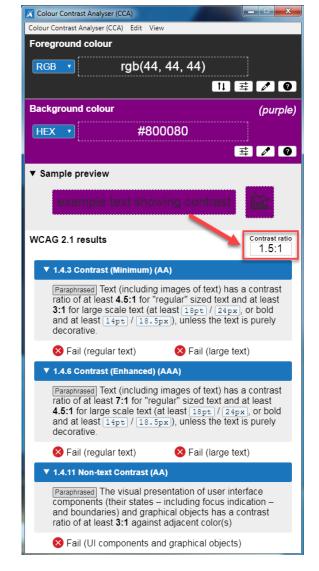
In this training, attendees will learn about accessibility

Web-One Descriptive Link Text

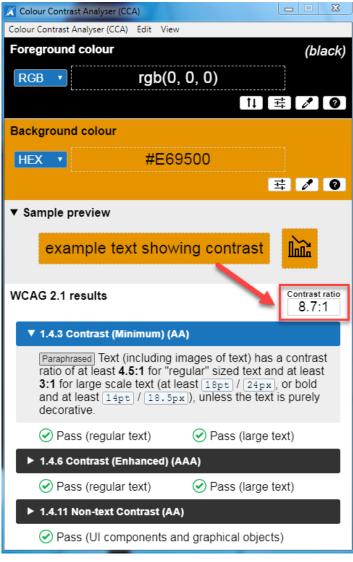
Fitle *				
Flyers & Infographics				
Event Info *	Event Weight			
Lede *	Event weight			
Deck and Body *	Use this field to show featured content higher or lower in the list Note : Range is from 1–100 Lower weight Values will show up at the to			
Misc	Banner Slideshow			
Groups *	Group's default slideshow ▼			
Invite Groups	Select the banner slideshow that should be shown on this page.			
Flags	"Read More" replacement			
Featured	Read more about Flyers & Infographics			
URL path settings Automatic alias				
URL redirects No redirects				
Revision information No revision				
Comment settings Closed				
Meta tags Using defaults				

Color Contrast





People who have low vision or are colorblind could encounter some difficulty distinguishing text color from a background color if the contrast is insufficient with a contrast ratio like 1.5:1.



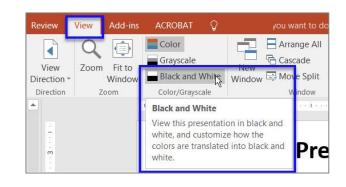
This example has a great color contrast ratio of 8.7:1. The contrast is sufficient for those who have different vision.

Check Color Contrast

Bad Examples	Good Examples	
Red on black is bad	Yellow on black is good	
Blue on orange is bad	Black on orange is ok	
Red on green is bad	White on green is good	
Grey on purple is bad	Aqua on purple is ok	

- Download <u>Colour Contrast Analyser</u> onto your computer (PC/Mac) to ensure accessible contrast or use an online contrast checker from <u>WebAIM</u>.
- WCAG Level AA requires a contrast ratio of at least 4.5:1 for regular sized text (12 or 14 pt. font) and 3:1 for large text (18 pt. font).
- Coblis Color Blindness Simulator

Meaning without Color color vs. black & white



		Wood	Reinforced concrete	Steel
Production	Raw material	renewable	mineral	mineral/recycled
	Primary energy, non-renewable [MJ]	185,0	118,4	835,4
	Green house potential [kg CO ₂ -aqv.]	-52,4	17,2	60,6
End of Life	Entsorgung	mat./therm. utilisation	recycling / utilisation / landfilling	recycling

		Wood	Reinforced concrete	Steel
Production	Raw material	renewable	mineral	mineral/recycled
	Primary energy, non-renewable [MJ]	185,0	118,4	835,4
	Green house potential [kg CO ₂ -aqv.]	-52,4	17,2	60,6
End of Life	Entsorgung	mat./therm. utilisation	recycling / utilisation / landfilling	recycling

- Color is not the sole means of conveying important information (i.e., avoid color-coding)
- Use color with pattern fill to provide an accessible version (Charts & Accessibility by Penn State)

Mobile Display

Preview your email, flyer or infographic on one or more mobile devices. Avoid making large infographics as they cannot be properly displayed on mobile devices.

Best practices for infographic sizing

- When the flyer/infographic is zoomed in, the content resizes appropriately.
- The flyer/infographic is readable using a mobile device screen reader (Voiceover for iOS and TalkBack for Android).



Credit by Visually Blog Designing Infographics for Mobile

Your **Creativity** is worth millions as long as you consider the following accessibility best practices

Learn more about Infographics Best Practices



Use a screen reader to finalize your flyer's/infographic's accessibility features

For PDF, **DO NOT** use Adobe Acrobat Pro's built-in 'Read Out Loud' tool as a screen reader. This tool is NOT a screen reader and will not capture the same information as screen readers below.



Microsoft Windows NVDA screen reader that allows blind and visually impaired users to read the screen either with a text-to-speech output or by a refreshable Braille display. NVDA can be downloaded free of charge by anyone.

nvaccess.org



Apple VoiceOver built-in provides auditory descriptions of each onscreen element using gestures, a keyboard, or a braille display.

How can we help you make a difference?





Universal Design Center Offers

- Online, self-paced training
- In-person training each semester
- Consultations
- Tools and Services