Email Accessibility (A11y)
Email Client, 1 of 2

Software client
Outlook
  • Plain text
  • Rich text
  • HTML

Web/browser
  • Gmail, Yahoo, etc.
  • Email Marketing
    • MailChimp
    • Campaign Monitor
    • Constant Contact
Plain Text Format
• No structure but widely compatible

Rich Text Format
• Follow Word best practices
• Not compatible with every client

HTML Format
• Follow web best practices
Email Client, 2 of 2

Outlook Desktop
Microsoft Word features

Outlook Web Mail
Basic features
Creating Accessible Email

Use the same strategies as Word Essentials best practices in Format Text > HTML

Accessibility Tips

• Text Readability
• Heading Styles
• Bulleted and Numbers Lists
• Descriptive Links

• Extra Spaces
• Alt Text to Images
• Color Contrast
Forwarding Image-Only Email

SUMMIT FOR GAY LATINO MALE COLLEGIANS

SATURDAY, FEBRUARY 17, 2018
10AM TO 4PM
USC UNIVERSITY PARK CAMPUS,
FERTITTA HALL 125 LL
LOS ANGELES, CA
Avoid Image-Only Email

Creating email to send text on image of the event poster/flyer. Two major drawbacks:

1. Text on image will not be accessible to readers who have visual impairments rely on screen readers or braille writers.
2. Readers may be blocking images from their email client if they use plain text format.

Best practices

Provide a text-based equivalent to the information contained in the image. Email with all of the relevant information typed in text then add image with Alt Text.
Summit for gay Latino male collegians

Saturday, February 17, 2018
10AM to 4PM
USC University Park Campus,
Fertitta Hall 125 LL
Los Angeles, CA

From: van.nguyen@cnn.edu
To: 
Cc: 

Subject: Summit for gay Latino male collegians

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Summit for gay Latino male collegians

Saturday, February 17, 2018
10AM to 4PM
USC University Park Campus,
Fertitta Hall 125 LL
Los Angeles, CA
What is Assistive Technology?

Assistive Technology (AT) are “products, equipment, and systems that enhance learning, working, and daily living for persons with disabilities.”
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.

- Provides access to someone who is visually impaired, mobility or has 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](https://nvaccess.org/) 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.
Text Readability

• Text should be clear and easy to read
• Font size of 12 points or larger
• San-serif fonts are more suited to electronic formats *(Arial, Calibri, Verdana or Franklin Gothic Book)*
• Avoid difficult fonts, fancy script, or decorative fonts with curly edges
• Ensure there is enough contrast between the foreground color and background color
Documents Structure Example

**Example 1:** Reading long, dense text documents can be a daunting task for learners

As part of our commitment to excellence through diversity and inclusion, California State University, Northridge (CSUN) strives to ensure that campus communication and information technology is accessible to everyone. The California State University system statement on accessibility is articulated in California State University - Executive Order 1111, in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) and Section 508 of the U.S. Rehabilitation Act.

Need assistance or have a question not answered here? Please contact the Universal Design Center (UDC) at UDC@csun.edu or, during business hours (Monday through Friday, 8am to 5pm Pacific time), at (818) 677-5898.

In this context, “accessibility” means that people with disabilities have access — to facilities, to information and to technology.

“Universal design” takes this concept one step further, to ensure that everyone can perceive, understand, engage, navigate and interact regardless of ability or preference.

The UDC supports the campus community in their efforts to make it possible for individuals to learn, communicate, and share via information and communication technology. One way we do this is by assisting the campus community to ensure their information and communication technology is interoperable, usable and accessible, so that individual learning and processing styles and/or physical characteristics are not barriers to access.

The role of the UDC is to help CSUN implement business practices which enable the campus to meet policy standards under the Accessible Technology Initiative Coded Memoranda. What does this mean to me?

Everyone has a part in creating accessible and usable information. The responsibility of creating and maintaining accessible content falls to the entire campus community.

**Example 2:** Well-structured documents help students organize and process texts

As part of our commitment to excellence through diversity and inclusion, California State University, Northridge (CSUN) strives to ensure that campus communication and information technology is accessible to everyone. The California State University system statement on accessibility is articulated in California State University - Executive Order 1111, in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) and Section 508 of the U.S. Rehabilitation Act.

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Headings Navigation Menu

Heading 1
Heading 2 ..................................................1
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Heading 2 ..................................................8
Heading 3 ..................................................10
Heading 3 ..................................................12
Heading 3 ..................................................16
Heading 3 ..................................................18
Heading 2 ..................................................19
Heading 2 ..................................................53
Heading Styles

• Use Heading Styles in a logical sequence
• Heading Styles (Heading 1 through Heading 6)
  • Heading 1: Document Title (one time only)
  • Heading 2: Major subsection titles
  • Heading 3: Further subsection titles, and so forth

Headings are styles to give a document structure by category or topic.

Without headings, a person using assistive technology like a screen reader cannot navigate by sections, subsections, or scan section titles to understand the document structure.
Click the Format Text tab and select an appropriate heading from the “Styles” block.

Use Heading 1 only once as the title of the email.
Sub Heading 2, 3, ...

• Each sub-heading of Heading 1 will be a “Heading 2”. Sub-headings of a “Heading 2” will be “Heading 3”, and so forth.
Modify Style

• To modify the way a heading looks, highlight the heading text, right click the heading icon in the “Styles” block, and choose “Modify.”

• In the “Modify Style” window, make your desired changes under “Formatting” and click “OK.”
Email Marketing Headers/Styles

Mail Chimp: Templates have heading levels 1-4 to organize the content in a hierarchical structure. Headings are located under the “styles tab” in WYSIWIG.

Campaign Monitor: There are heading levels 1 - 3. In addition, creators can choose from normal text, numbered or bulleted lists, and block quotes.

Refer to Email Marketing Accessibility
Bulleted and Numbers Lists

• Use list to organize information by ideas or processes
• Use Outlook’s built-in functionality to create
  • Bulleted List (order of list items does not matter)
  • Numbers List (order of list items does matter)
Descriptive Hyperlinks, 1 of 2

Not Accessible – vague and redundant

CSUN News

Woman of the Year for the 18th Senate District

California State University, Northridge President Dianne F. Harrison has been named Woman of the Year for the state’s 18th Senate District by Sen. Robert Hertzberg. Read more.

Important Dates for CSUN Commencement 2019

For graduating seniors, CSUN GradFest 2019 will take place from 9 a.m. to 6 p.m., March 13 and 14, at the CSUN Campus Store Complex. The event gives students the opportunity to make their final preparations for graduation, including renting caps and gowns, information on ceremony schedules, reserving guest tickets, purchasing souvenirs and taking graduation portraits. Read more.

Blinky the Friendly Hen: 40th Anniversary Exhibition

Comprised of a Relic Chamber, a Blinky Theatre, Blinky book editions (1979-2019), chapel, gift shop, stained glass, and historical artifacts, this fourth retrospective exhibition celebrates historical and contemporary works relating to four decades of the Blinky phenomenon. Read more.

Accessible – descriptive and unique

CSUN News

Woman of the Year for the 18th Senate District

California State University, Northridge President Dianne F. Harrison has been named Woman of the Year for the state’s 18th Senate District by Sen. Robert Hertzberg. Continue reading about CSUN’s President Dianne F. Harrison.

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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)
When creating hyperlinks, make sure the text associated with the link is understandable out of context.

• Avoid this: You may find this tutorial here.
• Do this: You may find this tutorial on creating accessible Word document on our website.

For Printing
• If the document is likely to be printed, include the full URL. If the URL is long, consider creating a shorten URL (tinyurl.com or bitly.com or other URL services)

You may find this tutorial on creating accessible Word document on our website (www.csun.edu/udc/word)

• Do not use click here or here or read more or continue or email me.
• Do not use different link text to refer to the same resource.
• Do not to use the same link text to refer to different resources.
• Be unique for unique destinations.
• Best practice is to bold or underline links.
• Do not use color links as the only method to convey important information.
• Tab order should read from the upper left to the lower right, and make sense to both sighted and visually impaired users.
Avoid Extra Spaces

- Screen readers will read blank or multiple spaces created using the space bar, empty line, empty tab, empty paragraphs or carriage returns as “Blank”.

- This can be very irritating for someone using assistive technology to listen multiple blank characters and may assume they’ve reached the end of a document.

- Use Outlook’s built-in formatting, alignment, tab stops position in paragraph options to create whitespace instead of repeating blank characters.
Turn on the ruler when composing an email message

In Outlook, a horizontal ruler is available across the top of the message body to help align text, graphics, tables, and other elements.

1. From the **Home** tab, in the **New** group, click **New Email**.
2. In the Message window, click **Customize the Quick Access Toolbar**, and then click **More Commands** to display the **Outlook Options** dialog box.
3. In the **Choose commands from** list, click **Commands Not in the Ribbon**.
4. Choose the **Ruler** command, and then click **Add**.
5. The ruler is added to the Quick Access Toolbar on top.
Example: to create three columns in 1 line, set Tab stops:

1. Select Ruler to set indents
2. Set Tab Stops
To create three columns in one line, set Tab Stops.

1. View tab then select Ruler
2. Select text to create tabs
3. **Format Text** tab then open **Paragraph Settings**
4. In the lower left of the Paragraph Settings is the button for Tabs
5. Clear All existing Tab Stops for the selected text
6. Set new Tab Stops
Visual Challenge

Normal vision  Low vision  Color blindness  Blind or deaf-blind

What’s the best way to make images accessible to everyone?
Alternative or Alt Text

• A written description of images and/or objects that can be read by a blind or low vision using screen reader technology.

• Screen readers and other assistive technologies **can’t** convert images into words/texts.

• Captions are universal and accessible for everyone.

• “Image of…”, “photo of...” is not needed.

• Recommend brief descriptive text within 8 to 80 characters long.

• Best practices for accessible images

Tiny turtle eating a ripe strawberry.
How to Describe Images?

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

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

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.’”

Michelle Obama claps and Barack waves.

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

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
Add Alt Text to an image in an email

1. 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 Client: Adding an image in Email Signature (Alt Text)

Outlook 2016

1. After adding Alt Text to an image, select the entire email signature to copy.
2. Open email signature box (File | Options | Mail | Signatures) then paste in signature box.

Outlook 365

1. Open email signature box (File | Options | Mail | Signatures).
2. Add an image, right-click to select Pictures then Alt Text tab.

Right-click the image, select Format Picture, select Layout & Properties, and then select Alt text.

"Image of...", "photo of..." is not needed.
Office 365 Outlook Web App (Alt Text)

1. Insert Image
2. Right click on image to select **Insert alt text**
3. Add alternative text to image
4. Run Accessibility Check

- Insert Image
- Right click on image to select **Insert alt text**
- Run Accessibility Check
Office 365 Outlook Web App Email Signature (Alt Text)

- At the top Settings
- Your app Settings > Mail
- Layout > Email Signature

Add alternative text to image
Provide descriptions if using color to convey meaning

Example 1: Inaccessible color highlights in red
May 11-17, 2019

Example 1: Accessible with a description
May 11-17, 2019* (final exams)

Example 2: Inaccessible table

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>(overdue in red)</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Chapter 1</td>
<td></td>
</tr>
</tbody>
</table>

Example 2: Accessible table

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Overdue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Yes</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>No</td>
</tr>
</tbody>
</table>

Example 3: Inaccessible color shape
Color identical may not be recognized by colorblind users

Example 3: Accessible color and number
People who have low vision or colorblind could encounter some difficulty distinguishing text color from a background color if the contrast is insufficient contrast ratio 1.5:1.

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

• Download Colour Contrast Analyser onto your computer (PC/Mac) to ensure accessible contrast or use an online contrast checker from WebAIM.

• 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
Attachments

• Files attached to an email must also be accessible.
• Use a descriptive and distinct file name.
• Videos in emails must be captioned.

Unclear / Vague File Name
• 00123345667987.pdf
• Resume.pdf
• Reports.docx
• Excel_2019.xlsx

Descriptive File Name
• Accessible_Email_Infographics.pdf
• Nguyen_Van_Resume.pdf
• UDC_Captioning_2018.docx
• UDC_Budget_2019.xlsx
Accessibility Checker

Office 365 Outlook Client

Office 365 Outlook Web App

Outlook 2016/2013 - No Accessibility Checker
Email Communication Programs

**Email Accessibility** relates to the creation of email content that is accessible, usable and readable so that the email can reach the greatest amount of readers including readers with disabilities.

Best Practices

- **Email Format**
  - Plain Text
  - Rich Text
  - HTML Format

- **Content Organization**
  - Headings
  - Lists
  - Numbers

- **Text Display**
  - Font styles
  - Color

- **Images**
  - Alternative Text
  - Caption

- **Attachments**
  - Descriptive Filename
    - Videos (transcript or captions)

- **Links**
  - Link Text
  - Link Display
  - Underline Links

or any email communication programs
Resources

- UDC Email Accessibility
- Creating Accessible Emails: Outlook 2013 & 2016
- Improve Email Accessibility
- Improve Image Accessibility in Email
- Add Accessible Tables and Lists to Email
- Accessibility Challenges in Email
  an infographic about accessible email with text-based equivalent
- Email 508 Checklist by HHS.GOV
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

*Universal Design means design for everyone*