Email Accessibility (A11y)

Why Accessibility for Emails?

- **Email Accessibility** is the creation of email content that is accessible, usable, and readable for all people including readers with disabilities.

- Removing barriers to reach the largest audience.

- Accessible emails can benefit everyone.

EMAIL format

Email Platform vs. Email Client

Platform

- Emma (Broadcast Email)
- Exchange + Outlook
- MailChimp, etc.

Client

- Mobile apps
- Web browser
- Desktop

Email Formats
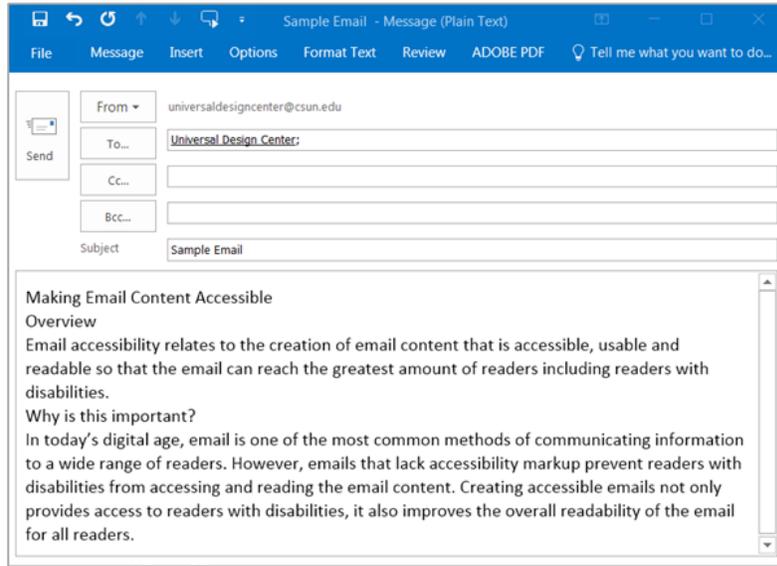
Plain Text Format

- No structure but widely compatible
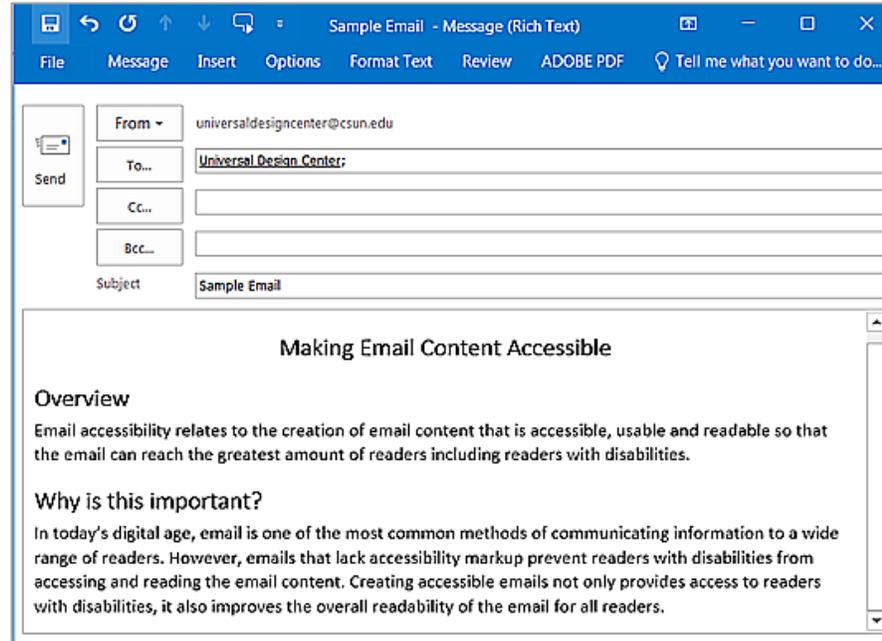
Rich Text Format

- Outlook
- Follow Word best practices
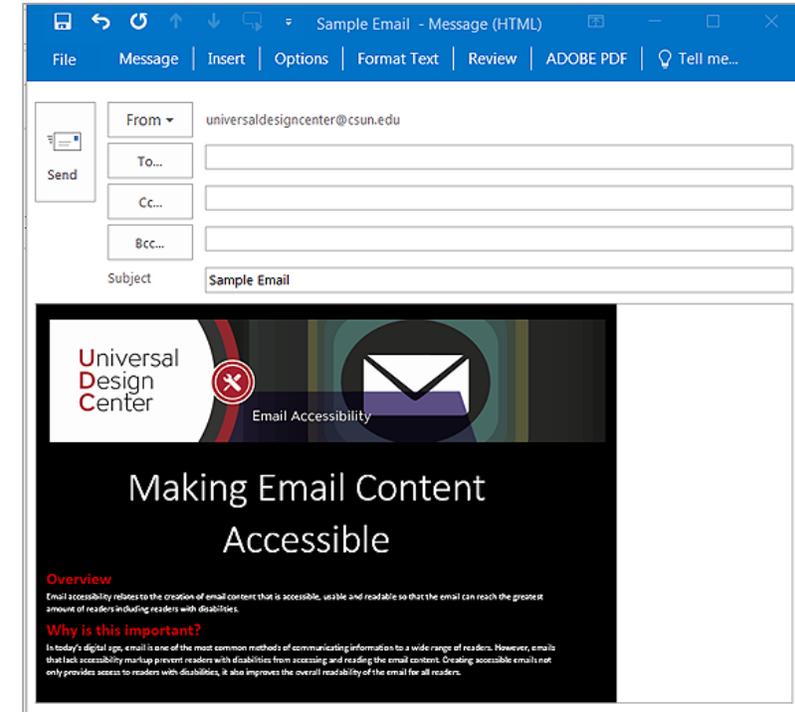
HTML Format

- Follow web best practices

Creating Accessible Emails

Accessibility Tips

- Attachments
  - Flyers
  - Other
- Images
  - Descriptions: alt text

- Text Readability
- Heading Styles
- Bulleted and Numbered Lists
- Descriptive Links
- White Space
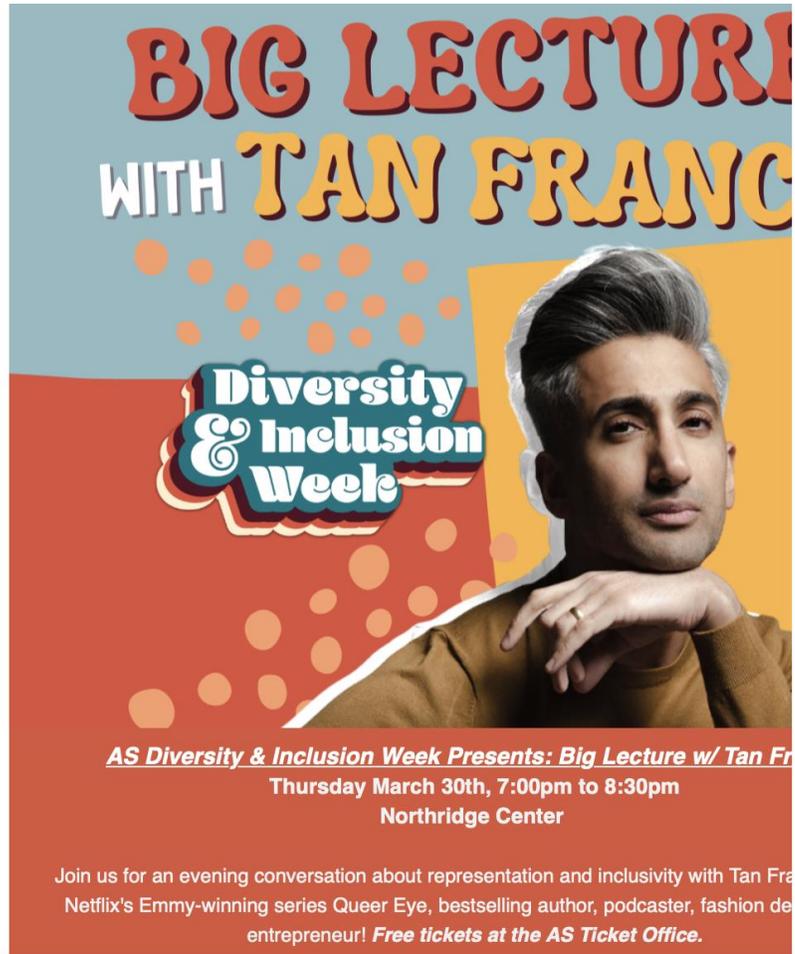
Image Flyers

- Image files (gif, jpg, png) are not accessible

- Images are fine to use and share as long as the content is presented in an accessible format too

Avoid Image-Only Emails

Creating email to send only an image of the event poster/flyer.

Two major drawbacks:

1. Text within an image will not be accessible to readers who have visual impairments and rely on **screen readers** or **braille writers**.
2. Readers or the email client may be **blocking images**.

Best practice

Provide all of the information contained in the image as text in the email (plus alt text for the image).

Text-based equivalent

PDF Flyers

- Unlike images, PDF files *can be* accessible
- PDF flyers/attachments to emails *must be* accessible
- Text equivalent to the PDF is **not** an acceptable alternative

Flyers: Image vs. PDF

Image: provide text equivalent
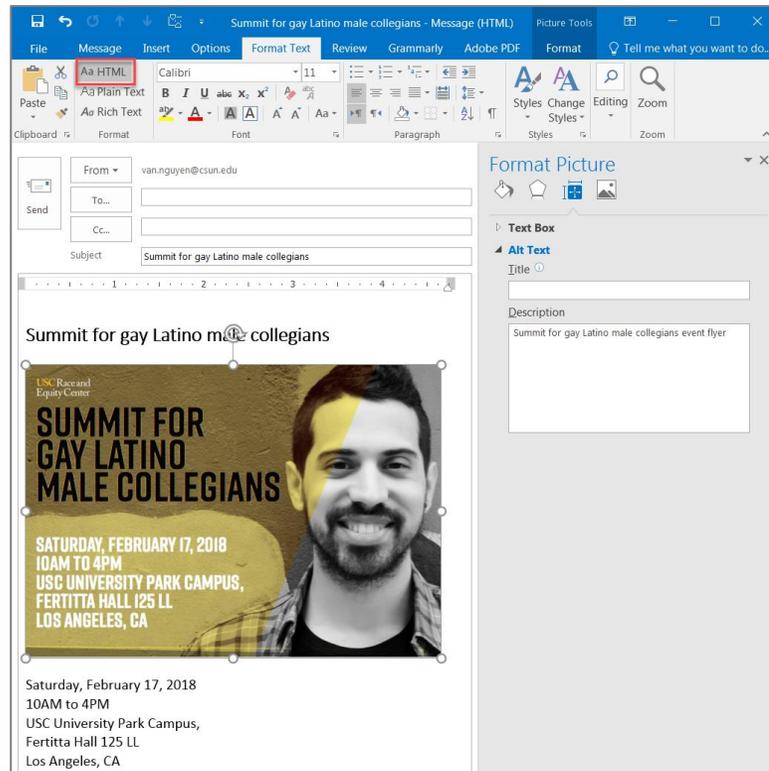
PDF: provide accessible PDF

Other Attachments

- Files attached to an email must also be accessible.

- Use a descriptive and distinct file name.

- Videos in emails must be captioned and audio described.

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

www.csun.edu/captioning

Visual Challenge

Normal vision
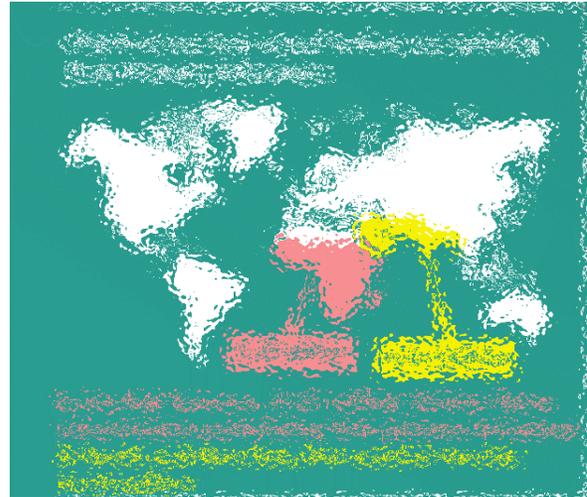
Low vision

Color blindness

Blind or deaf-blind

What's the best way to make images accessible to everyone?

Image Description or Alt Text

[[Staff]] Test Email Post 📒 Inbox x

Service Desk <forums@channeladvisor.com>
to me ▾

Service_Desk
April 18
This is a test email post with an image
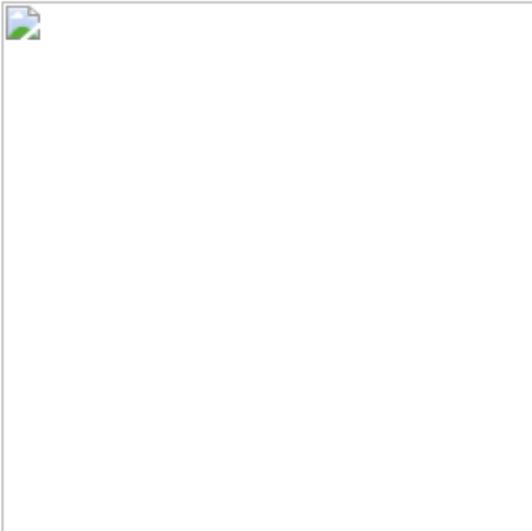
- **Alt Text** allows visually impaired or blind users who use text-to-speech assistive technologies (AT), such as screen readers, to understand the purpose of graphic images.

- Sighted users usually don't see alt text unless they use AT, however, emails may show alt text instead of the image.

Alt Text Best Practices

C. S. U. N. Universal Design Center.

- 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.

- Images with text 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".

- Use proper punctuation such as periods to indicate the end of the alt text.

- 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.

A hand reaches out of a computer screen giving the hand gesture for stop. The screen reads 'access denied!'
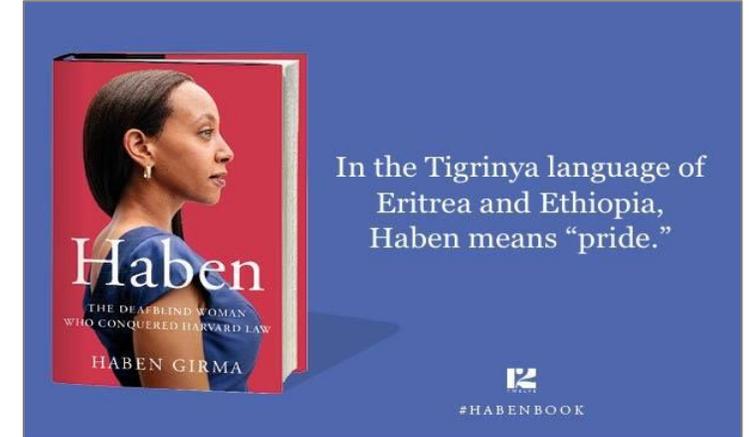
On the left is the book cover for Haben The Deafblind Woman Who Conquered Harvard Law, and on the right is the quote: "In the Tigrinya language of Eritrea and Ethiopia, Haben means 'pride.'"

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](#)

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

Check Color Contrast

Colour Contrast Analyser (CCA) — Example 1

Foreground colour
RGB ▾ | rgb(44, 44, 44)

Background colour *(purple)*
HEX ▾ | #800080

▼ Sample preview
example text showing contrast

WCAG 2.1 results

Contrast ratio 1.5:1

▼ 1.4.3 Contrast (Minimum) (AA)
Paraphrased Text (including images of text) has a contrast ratio of at least **4.5:1** for "regular" sized text and at least **3:1** for large scale text (at least 18pt / 24px, or bold and at least 14pt / 18.5px), unless the text is purely decorative.
❌ Fail (regular text)   ❌ Fail (large text)

▼ 1.4.6 Contrast (Enhanced) (AAA)
Paraphrased Text (including images of text) has a contrast ratio of at least **7:1** for "regular" sized text and at least **4.5:1** for large scale text (at least 18pt / 24px, or bold and at least 14pt / 18.5px), unless the text is purely decorative.
❌ Fail (regular text)   ❌ Fail (large text)

▼ 1.4.11 Non-text Contrast (AA)
Paraphrased The visual presentation of user interface components (their states – including focus indication – and boundaries) and graphical objects has a contrast ratio of at least **3:1** against adjacent color(s)
❌ Fail (UI components and graphical objects)

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.

Colour Contrast Analyser (CCA) — Example 2

Foreground colour *(black)*
RGB ▾ | rgb(0, 0, 0)

Background colour
HEX ▾ | #E69500

▼ Sample preview
example text showing contrast

WCAG 2.1 results

Contrast ratio 8.7:1

▼ 1.4.3 Contrast (Minimum) (AA)
Paraphrased Text (including images of text) has a contrast ratio of at least **4.5:1** for "regular" sized text and at least **3:1** for large scale text (at least 18pt / 24px, or bold and at least 14pt / 18.5px), unless the text is purely decorative.
✅ Pass (regular text)   ✅ Pass (large text)

▶ 1.4.6 Contrast (Enhanced) (AAA)
✅ Pass (regular text)   ✅ Pass (large text)

▶ 1.4.11 Non-text Contrast (AA)
✅ Pass (UI components and graphical objects)

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

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 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

Headings

- Provide structure and make email accessible
- Easier to modify existing formatting
- Accessible to any assistive technology like screen readers
- Use a logical sequence. Do not skip heading levels, i.e., Heading 2 then Heading 4; headings should be in order.)
    - **Heading 1:** Document title or main content heading/title (just one time only). *Font size i.e. 20pt – 18pt.*
    - **Heading 2:** Major section heading. *Font size 18pt – 16pt.*
    - **Heading 3:** Sub-section of the Heading 2. *Font size 16pt – 14pt*
    - **Heading 4:** Sub-section of the Heading 3, and so on, ending with Heading 6. *Font size 14pt – 12pt.*
   - **Normal:** Text or Paragraph. *Font size 12pt or up.*
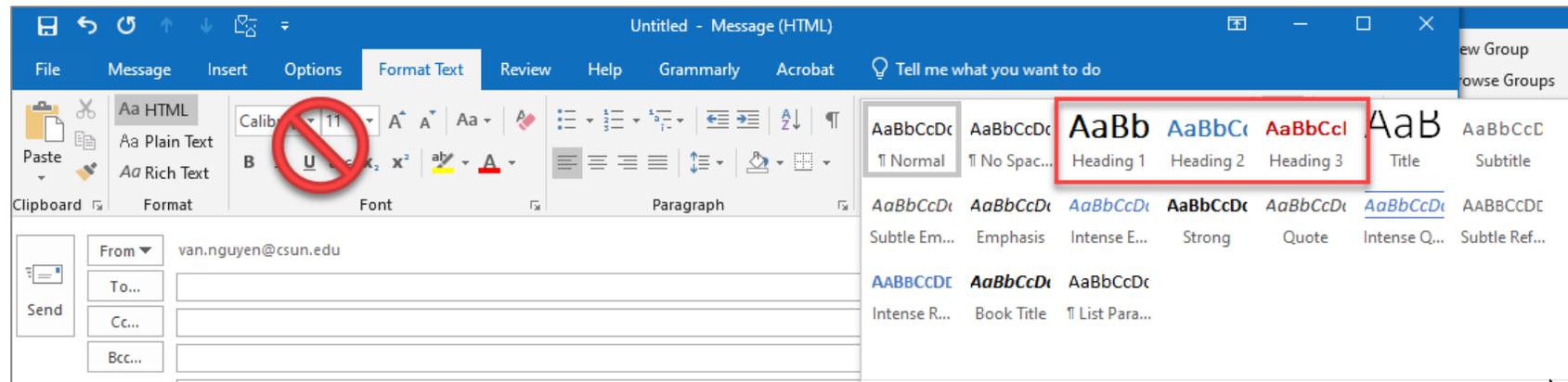
Email Marketing Headings/Styles

Emma: Add a Title block. In the Content panel, under the Title field, select heading levels 1 to 3.
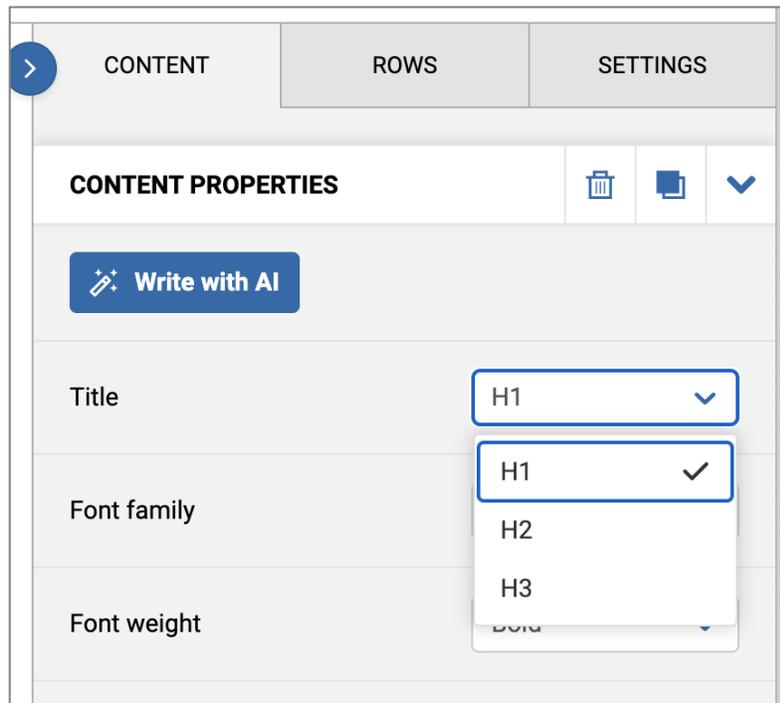
Mail Chimp: Templates have heading levels 1 to 4 to organize the content in a hierarchical structure. Headings are located under the "styles tab" in WYSIWIG.
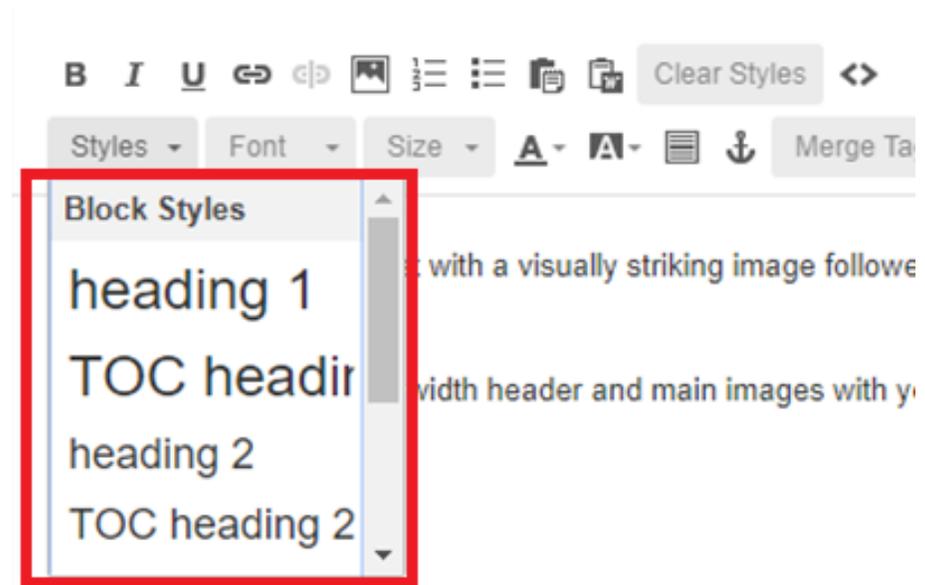
Refer to Email Marketing Accessibility

Email with Heading Structure

Bulleted and Numbered Lists

- Use lists to organize information
- Use platform's built-in functionality to create
  - Bulleted List (order of list items **does not** matter)
  - Numbered List (order of list items **does** matter)
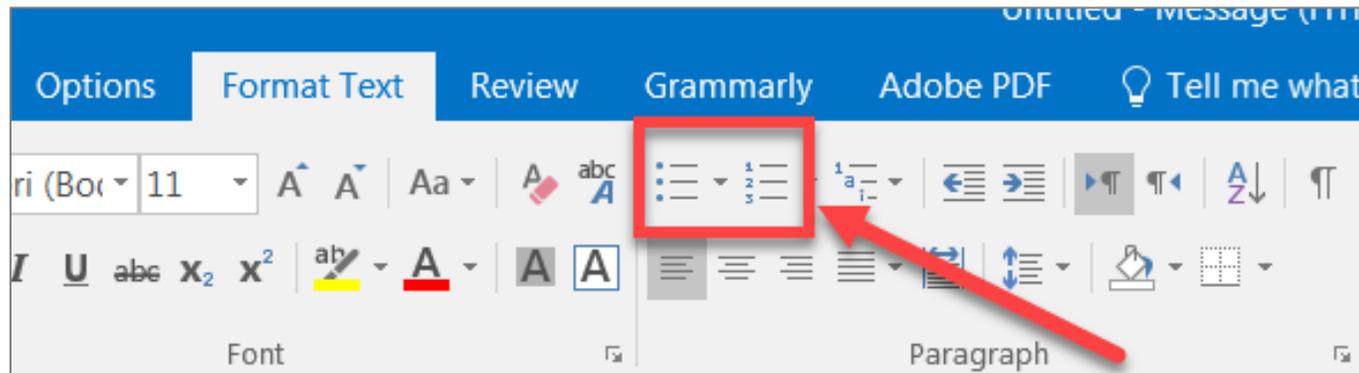
Best Practices for Accessible Links

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 Linked Images on the Best Practices for Accessible Images page for more information.

Best Practices for Links in Emails

- Use descriptive text, not a URL

- Use each link once

- Put each link at the end of the line of text

- **Do not** use URL shorteners (bit.ly, etc.)

White Space
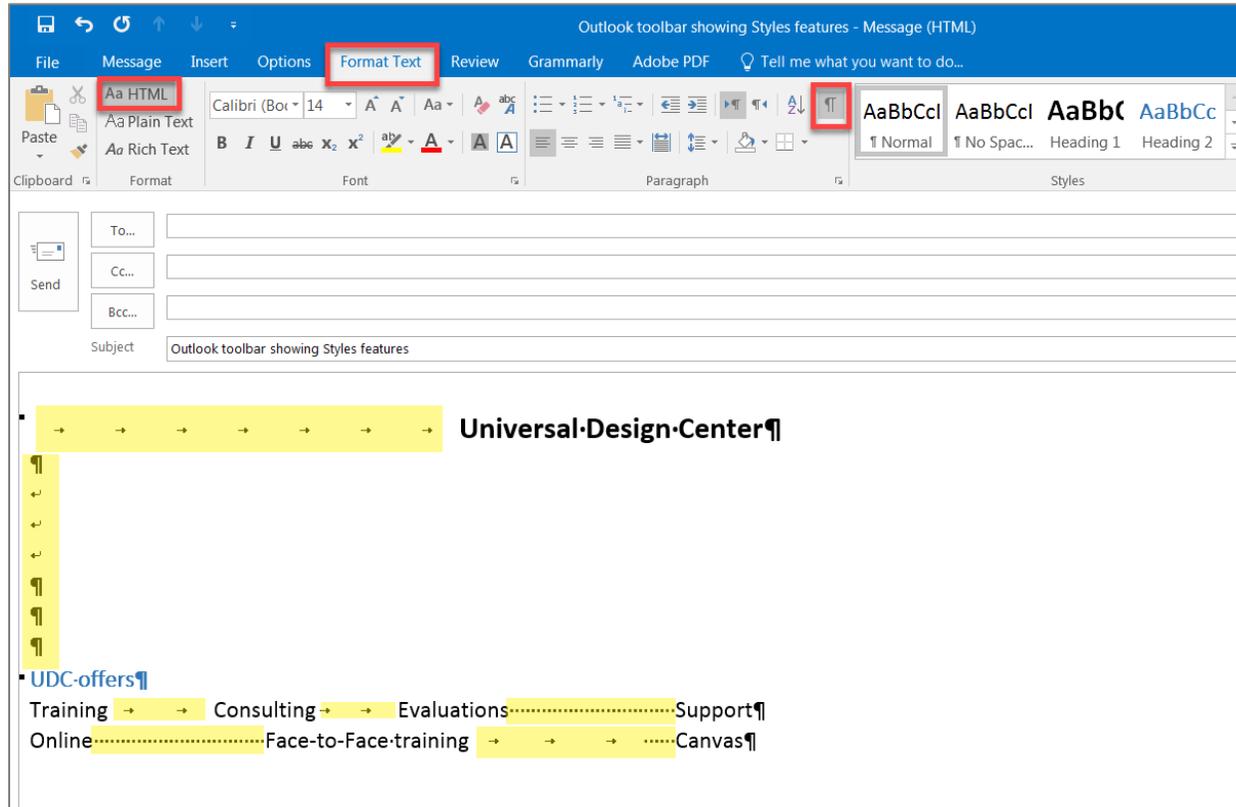
- Avoid excessive spaces, tabs, etc.
  - Screen readers may read "blank."
- Use built-in formatting to create white space instead of repeating blank characters.

Check (Test) Email

On the web

On mobile

Universal **D**esign **C**enter

csun.edu/udc

Accessibility Checker

Office 365 Outlook Client
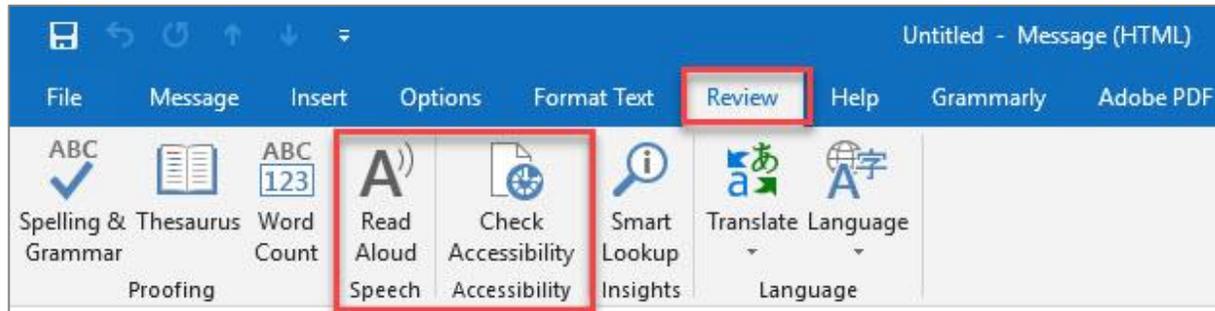
Office 365 Outlook Web App
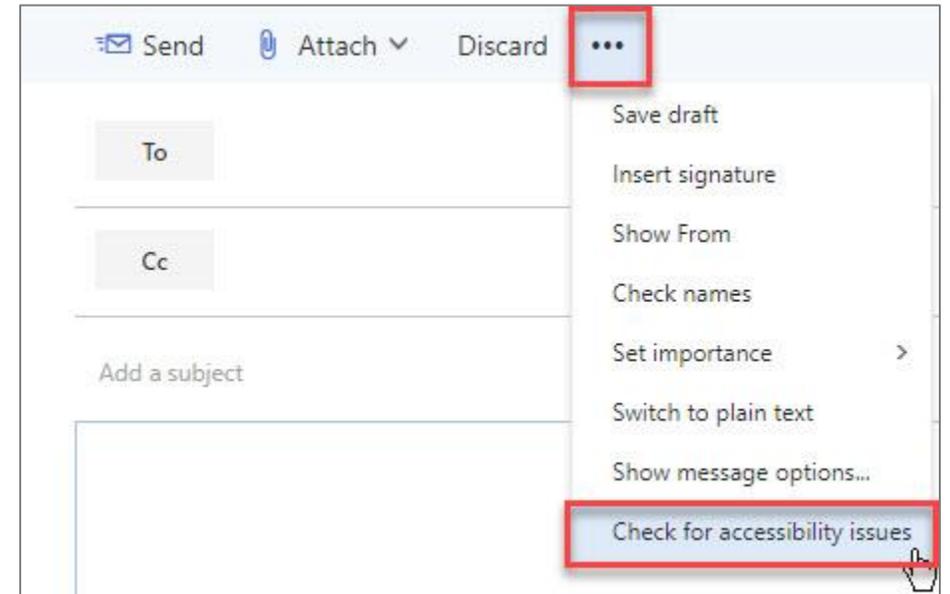
Create with Accessibility in Mind
Best Practices

Email communication programs

Making digital content accessible for everyone

EMAIL format

Best Practices

Email Format
- Plain Text
- Rich Text
- HTML Format

Content Organization
- Headings
- Lists
- Numbers

Text Display
- Font styles
- Color

Links
- Link Text
- Link Display
- Underline Links

Images
- Alternative Text
- Caption

Attachments
- Descriptive Filename
- Videos (transcript or captions)

How can we help you make a **difference**?

Make **one** design that fits everyone

Documents

Website

Media with captioning

UNIVERSAL

DESIGN *means design for everyone*

Universal Design Center Offers

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

Universal **D**esign **C**enter

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