Email Accessibility (A11y)
What Is Email Accessibility?

• **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 greatest amount of audience.

• Accessible emails can benefit everyone.
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
  • Etc.
Outlook Client Desktop Text Format

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 Document Structure**
best practices in **Format Text > HTML**

**Accessibility Tips**

- Text Readability
- Heading Styles
- Bulleted and Numbers Lists
- Alt Text to Images

- Descriptive Links
- Extra Spaces
- Color Contrast
FOOD DRIVE FOR THE HOMELESS

It's never a bad time to help those who are in need.

DROP BY AT 12345 ANGELS CITY, LOS ANGELES, CA 91234 ANY DAY!

We're open daily from 9 am to 5 pm.
If you have questions, just call 123-456-7891 or email@donate.org
www.worldvision.org/donate

THE ANNUAL EASTER FAIR & PARADE

This year's celebration will have you hopping for joy!

12-13 April 2020 | 9 a.m.
Los Angeles Park

Come on over and join us for a wonderful day filled with egg-citing games, booths, and surprises for the whole family!

SUMMIT FOR GAY LATINO MALE COLLEGIAINS

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.
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Visit World Vision Donation

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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
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
Heading Styles Pane

- Provide structure and make email accessible
- Easier to modify existing formatting
- Accessible to any assistive technology like screen readers
- Heading Styles (Heading 1 through Heading 6) in a logical sequence. Do not skip heading levels i.e. Heading 2 then Heading 4, headings should be in order.)
  - **Heading 1**: Document Title (one time only)
  - **Heading 2**: Major subsection titles
  - **Heading 3**: Further subsection titles, and so forth
  - **Normal**: Text or paragraph

**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.
Heading 1

- 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 or Update [Style Name] to Match Selection

• 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)
Visual Challenge

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

• 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:
  o What is its purpose?
  o Is the image important enough to be there?
  o If there is no description, what will the screen reader users miss?
  o Be concise and eliminate unnecessary words.
  o 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.

• “Image of…”, “Photo of…” is not needed because screen readers and other AT announce that it’s an “image” or “graphic”.

• There is no limit to the number of characters, but keep alt text descriptions short around 200 characters or less.

• 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
Outlook Client: Alt Text to Images

Outlook 2016
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 365
1. 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.
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.

"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
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. 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"
Descriptive Link Text, 2 of 2

Outlook Client

Office 365 Outlook Web App

Insert link
Display as:
Universal Design Center
Web address (URL):
http://www.csun.edu/universal-design-center

OK Cancel
**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.
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.
Use Ruler Tab Marker

Example: to create three columns in 1 line, set Tab Marker:

1. Highlight selected text
2. Set ruler marker position at 2.5” for second column and 4.5” for third column
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

<table>
<thead>
<tr>
<th>Assignments (overdue in red)</th>
<th></th>
</tr>
</thead>
<tbody>
<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
Create with Accessibility in Mind

Best Practices

Email Format
- Plain Text
- Rich Text
- HTML Format

Content Organization
- Headings
- Lists
- Numbers

Email
- Attachments
  - Descriptive Filename
  - Videos (transcript or captions)
- Images
  - Alternative Text
  - Caption
- Text Display
  - Font styles
  - Color
- Links
  - Link Text
  - Link Display
  - Underline Links

Email communication programs

Making digital content accessible for everyone
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