



# **Basic Principles of Accessible Web Content**

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# 1) Accessibility Statement



## Purpose:

- Set visitor expectations

## Includes:

- Technology Standards
- Known Issues
- Accessible Alternatives
- Contact Information

Reviewed by Legal Department

The Georgia Institute of Technology is committed to providing both physical accessibility and access to information resources and technologies to individuals with disabilities.

The Institute's vision is to create a culture of access for an inclusive learning and working environment. The Institute's commitment to accessibility for all is highlighted in the numerous support, research, and product development centers on campus for students and employees with disabilities.

The Office of Disability Services, located in the Dean of Students Office, provides support and resource information for students with disabilities at the Institute. The Office of Disability Services serves Georgia Tech students with documented qualifying disabilities and operates under the guidelines of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act and its amendments (ADA/AAA).

Similarly, Employee Relations – located in the Office of Human Resources – provides support and resource information for employees and visitors with disabilities. Services are available to ensure that individuals with disabilities have an equal opportunity to pursue education and employment and to have access to campus programs, activities, and services.

In addition to the Georgia Tech Office of Disability Services and Employee Relations, the Institute is committed to adhering to accessibility legislation for publishing electronic information, as noted in Section 504 of the Rehabilitation Act of 1973.

### Accessibility Contact

For any accessibility issue please contact GT Accessibility.

Email: [gtaccessibility@gatech.edu](mailto:gtaccessibility@gatech.edu)

### Accessibility News

#### Presidential Committee to Oversee Campus Accessibility

May 13, 2013 — To ensure that none of the more than 26,000 students, faculty, and staff that make up the Georgia Tech community is deprived of the chance to fully participate in the Institute's offerings, President G.P. "Bud" Peterson has established a new committee.

[Read more](#)

## 2) Readability

### Book



### What makes it readable?

- Title
- Language
- Navigation (consistent)
- Skip to main content
- Structure
  - Headings
  - Lists
- Font clarity
- Images
- Whitespace

## Websites



## Electronic Documents



## Language

### Page Titles

### Skip to Main Content

### Navigation

- Consistent

### Structure

- Headings
- Lists (chunk information)
- Reading sequence

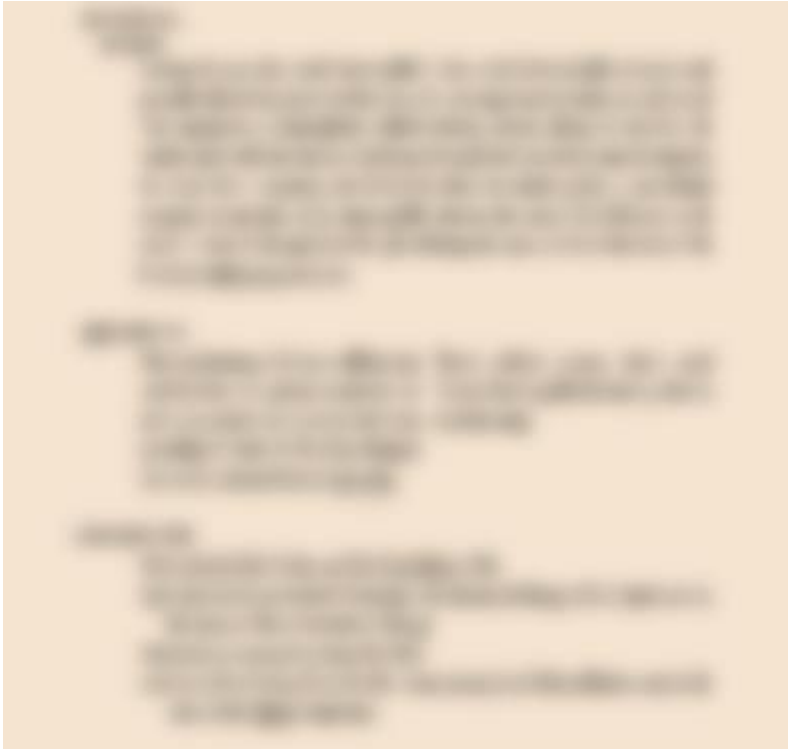
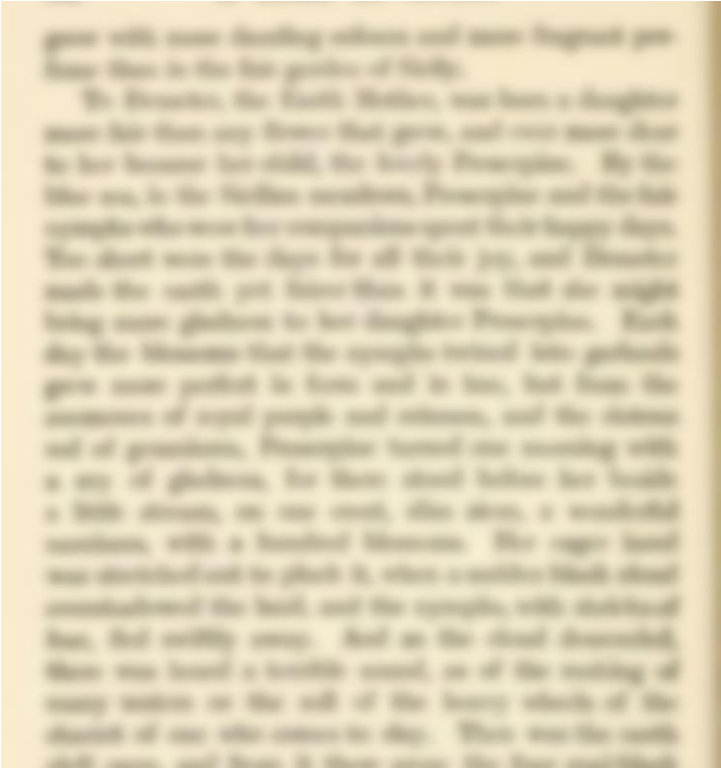
## Font

- Consistent
- Left-justified
- Magnified 200%
- Simple
- Standard
- True Text

## Images

## Whitespace

# Headings



## Semantic headings

### Heading 1

Normal text

- Hyperlink
- Image

Normal text

### Heading 2

Normal text

- Hyperlink
- Normal text
- Hyperlink

### Heading 3

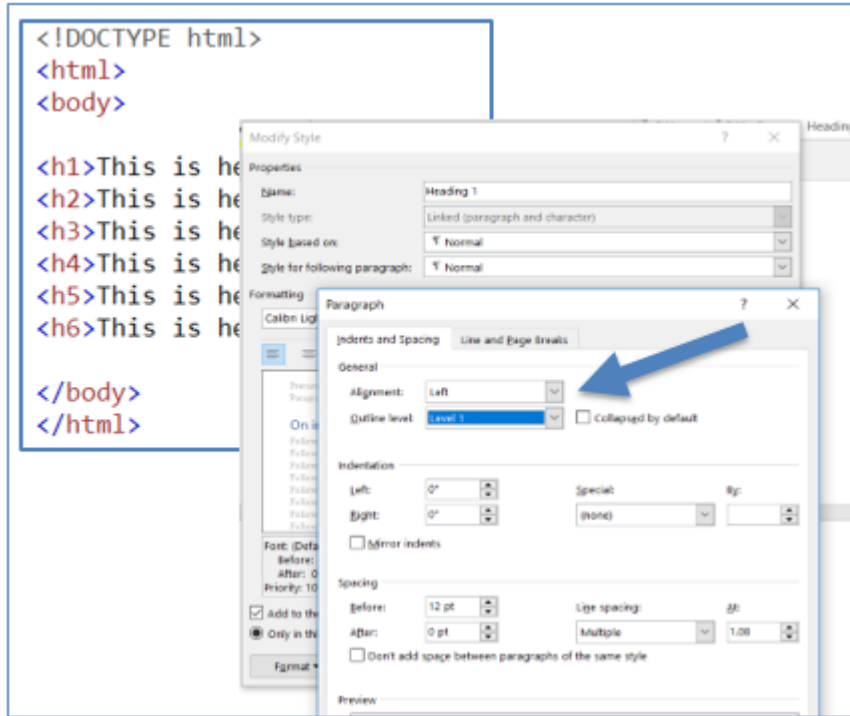
Normal text

Normal text

## Visual-only

text text text link text text text text text  
text text link text text text text text text  
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text text link text text text text text text  
text text text text text link text text text  
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# Use Heading Styles



The screenshot shows a code editor with the following HTML code:

```
<!DOCTYPE html>  
<html>  
<body>  
  
<h1>This is heading 1  
<h2>This is heading 2  
<h3>This is heading 3  
<h4>This is heading 4  
<h5>This is heading 5  
<h6>This is heading 6  
  
</body>  
</html>
```

Two dialog boxes are overlaid on the code:

- Modify Style dialog:** Shows properties for a style named "Heading 1". The style type is "Linked (paragraph and character)", it is based on the "Normal" style, and it is applied to the following paragraph.
- Paragraph dialog:** Shows formatting options for a paragraph. The "Outline level" is set to "Level 1", which is highlighted by a blue arrow. Other options include alignment (Left), indentation (Left: 0", Right: 0"), spacing (Before: 12 pt, After: 0 pt), and line spacing (Multiple, 1.00).

- Provide document structure
- Detectable by screen readers
- Useful for navigation
- Can easily be modified
- Not the same as visual changes in font size or color
- Should use “levels” sequentially



# 3) Alt Text

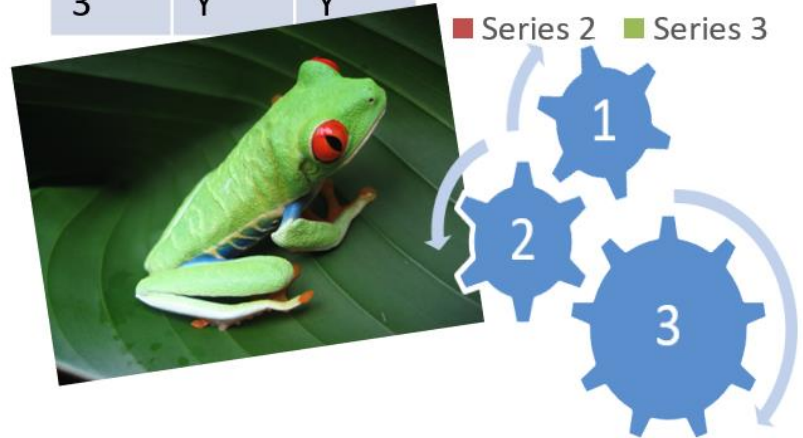
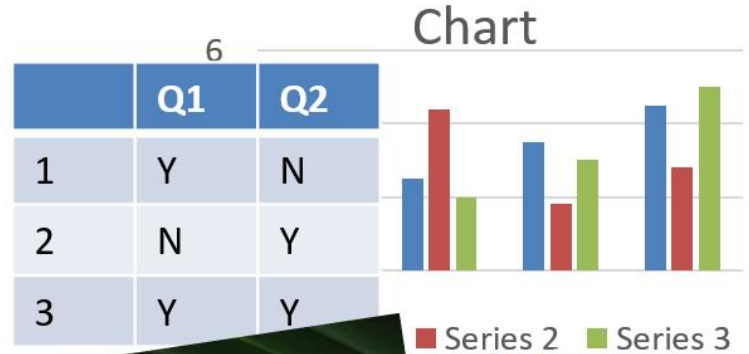
*Provide a text equivalent for every non-text element*

## Alt text:

- Clear, concise description
- Approx. 120 *characters* or less
- Conveys function, purpose, or meaning

## Long Description (in addition to alt text):

- When alt text alone isn't enough
- Surrounding text or link to a separate, accessible document



# Consider Context and Function

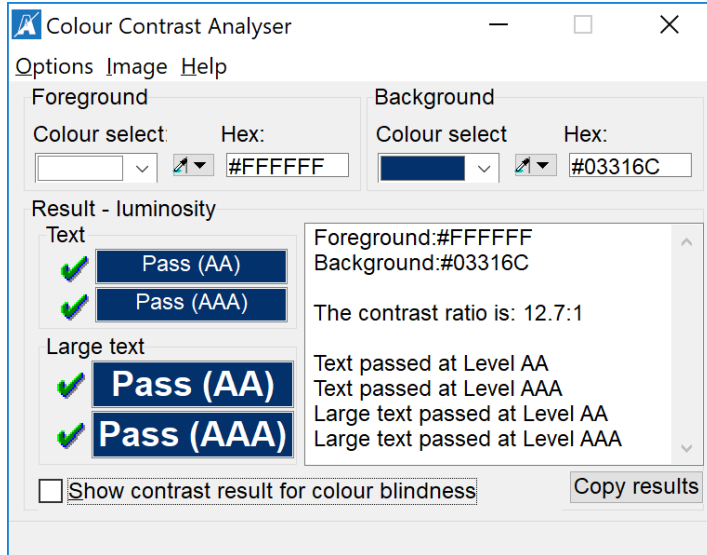
- **1) Website Content**  
alt = "Yellow tulips blooming in the Spring"
- **2) Horticulture Class**  
alt="Tulipa gesneriana"
- **3) Image is a Link**  
alt="Tulip Society of America"
- **4) Image is Decoration**  
alt=""



## 4) Color and Contrast

- **Use a high contrast color scheme**
  - Make sure background does not overpower text
- **Use color schemes consistently**
- **Provide alternatives for color coding**

# Colour Contrast Analyser



## Basic Principles of Accessible Web Content

November 9, 2017  
Linda S. Gilbert

# Use Color Schemes Consistently



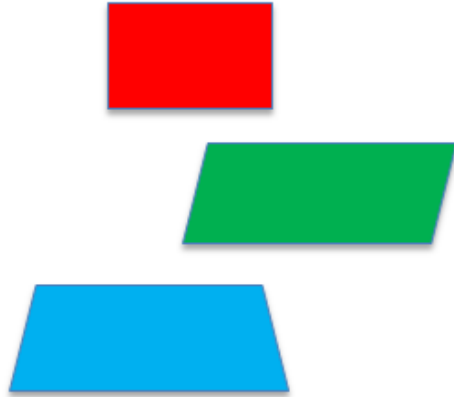
# Alternatives for Color Coding Example 1

Color alone



Example 1: Which is the parallelogram?

- Red
- Green
- Blue
- Don't know

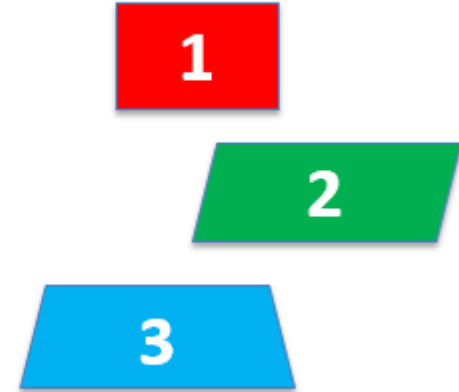


Color plus labels



Example 1: Which is the parallelogram?

- Red (1)
- Green (2)
- Blue (3)
- Don't know



# Alternatives for Color Coding Example 2

## Technical Standards (Subpart B)

The standards provide criteria specific to various types of technologies, including:

- **Software Applications and Operating Systems**
  - web-based information or applications
  - telecommunication products
  - video and multimedia products
  - **Information Kiosks, Calculators, and Fax Machines** (e.g., information kiosks, calculators, and fax machines)
  - desktop and portable computers

This section provides technical specifications and performance-based requirements, which focus on the functional capabilities of covered technologies. This dual approach recognizes the dynamic and continually evolving nature of the technology involved as well as the need for clear and specific standards to facilitate compliance. Certain provisions are designed to ensure compatibility with adaptive equipment people with disabilities commonly use for information and communication access, such as screen readers, Braille displays, and TTYs.

### Software Applications and Operating Systems (1194.21)

Most of the specifications for software pertain to usability for people with vision impairments. For example, one provision requires **alternative keyboard navigation**, which is essential for people with vision impairments who cannot rely on pointing devices, such as a mouse. Other provisions address animated displays, color and contrast settings, flash rate, and electronic forms, among others.

### Web-based Intranet and Internet Information and Applications (1194.22)

The criteria for web-based technology and information are based on access guidelines developed by the Web Accessibility Initiative of the World Wide Web Consortium. Many of these provisions ensure access for people with vision impairments who rely on various assistive products to access computer-based information, such as screen readers, which translate what's on a computer screen into automated audible output, and refreshable Braille displays. Certain conventions, such as verbal tags or identification of **graphics and format devices**, like frames, are necessary so that these devices can "read" them for the user in a sensible way. The standards do not prohibit the **use of web site graphics or animation**. Instead, the standards aim to ensure that such information is also available in an accessible format. Generally, this means use of text labels or descriptors for graphics and certain format elements. (HTML code already provides an "Alt Text" tag for graphics which can serve as a verbal descriptor for graphics). This section also addresses the usability of multimedia presentations, image maps, style sheets, scripting languages, applets and plug-ins, and electronic forms. The standards apply to Federal web sites but not to private sector web sites (unless a site is provided under contract to a Federal agency, in which case only that

## Technical Standards Software Applications

- Software
- Operating Systems
- Web-based Graphics

## Web based Content

- Internet and Intranet

## Self-contained

- Closed products
- Kiosks
- Fax Machines

## 5) Hyperlinks

### Link text should:

- make sense out of context
- describe the destination
- unique for each unique destination

### Avoid

- Click here
- Email me
- URL text <http://www.gtlllo-b59-go2376c.html>



# Aggregated Links - Vague

## Vague

Logo

Image

WAI

WAI

WAI

Link

Link

Link



# Aggregated Links - Descriptive



## Vague

Logo  
Image  
WAI  
WAI  
WAI  
Link  
Link  
Link

## Descriptive

W3C  
Web Accessibility Initiative  
WAI Develops...  
WAI Welcomes...  
WAI Home  
Guidelines and Techniques  
Planning and Implementation  
Evaluation

## 6) Accessible Multimedia, Part 1

### Audio-only



- Text Transcript



### Video-only



- Video Description



## 6) Accessible Multimedia, Part 2

### Audio+Video



- Closed Captions
- Text Transcript + Video Description



### Accessible Media Player



# 7) Tables

**Data Tables**

**Logical Reading Order (i.e. Linearized)**

**Simple vs. Nested**

**True Tables**

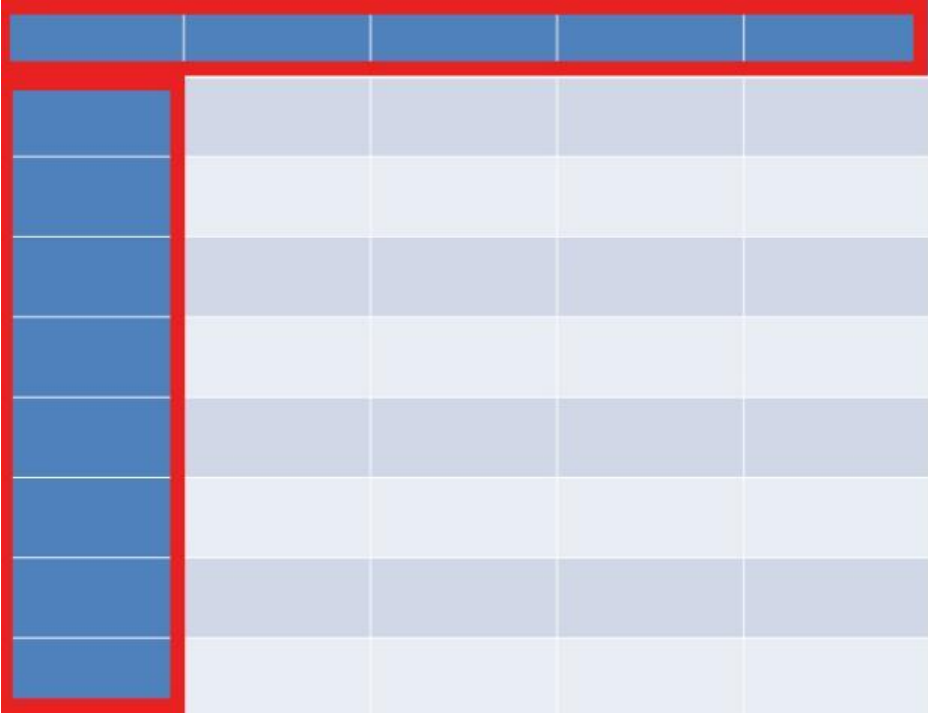


# Reading Order, Part 1

Makes sense when read from top to bottom and left to right



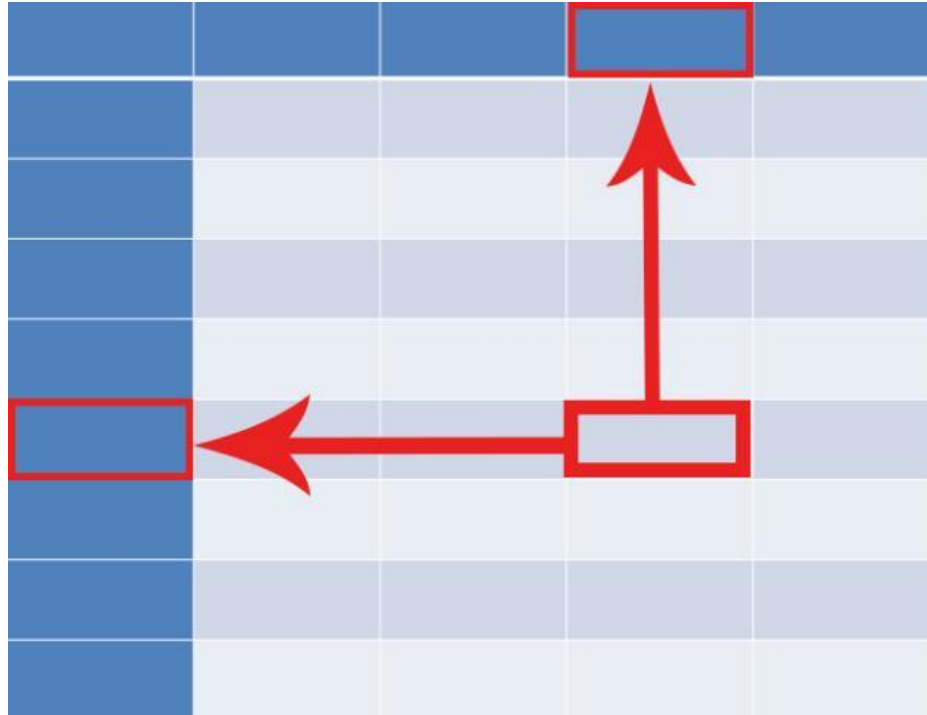
# Row and Column Headers







# Define Relationships





# Tables Properly Coded



## Caption

- Title

## Headers

- Column Headers
- Row Headers

## Data Cells

## Summary

- Describes organization of table

## True Tables



**Accessibility Statement**

**Readability and Structure**

**Alt Text**

**Color and Contrast**

**Hyperlinks**

**Multimedia**

**Tables**



# Perspective Videos: W3C-WAI, Part 2

## Perspectives Videos



Keyboard Compatibility



Clear Layout and Design



Large Links, Buttons, and Controls



Customizable Text



Understandable Content



Colors with Good Contrast



Text to Speech



Video Captions



Voice Recognition



Notifications and Feedback



## Questions?, Part 3