What Does Accessibility Look, Sound and Feel Like?

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AMAC Accessibility
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Today's Agenda

- Introductions
- Overview of AMAC Accessibility
- Overview of People with Disabilities and Assistive Technology Solutions
- Screen Reader Demonstration
- The Legal Landscape in Digital Accessibility
- Brief Overview of WCAG 2.0/2.1 and Concrete Examples
- Before/After Examples of Web Accessibility
- Mobile Accessibility Overview & Testing
- Q&A

AMAC Accessibility

- AMAC Accessibility provides practical solutions for challenges faced daily by individuals with disabilities.

- We focus on solutions that offer utility, usability, and durability.

- AMAC offers services including disability compliance consultation, braille, captioning, accessible digital content, and assistive technology.
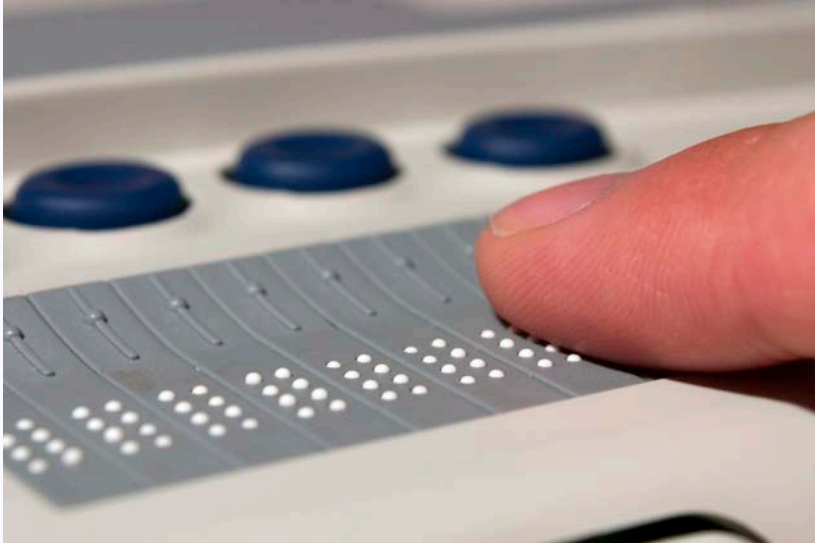
AMAC Services

- [Accessibility Compliance Consultations](#) offer training, technical assistance, customer support, and evaluation of overall website accessibility and usability testing
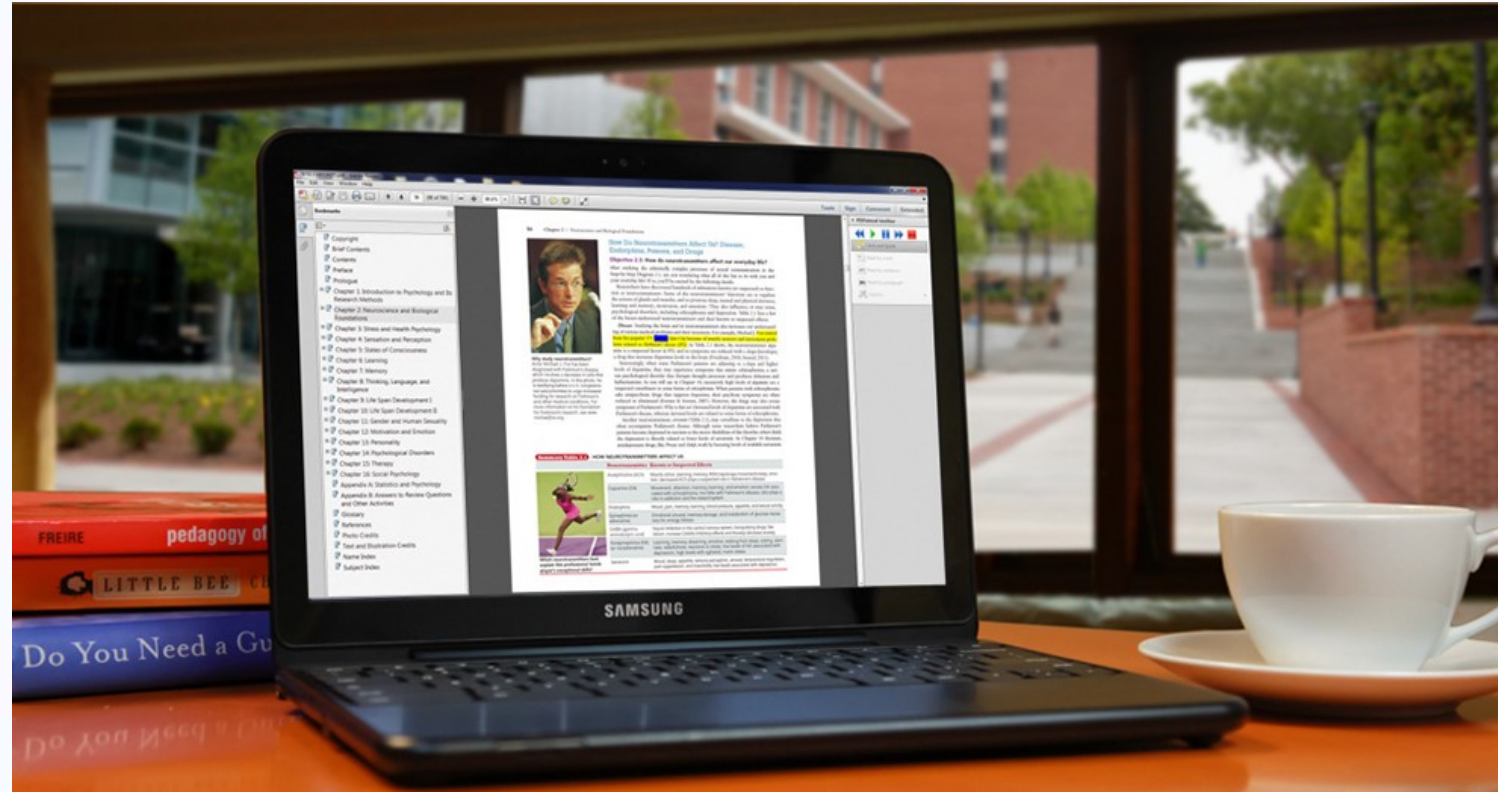
Print and Text Services

- [Braille Services](#) produce high-quality electronic or embossed braille and custom tactile graphics.

E-text Services

- [E-text Services](#) produce and [provide](#) high-quality e-text in formats such as PDF, DOC, PPT, DAISY, EPUB, and HTML.

Captioning Services

- [Captioning Services](#) provide **real-time remote live-captioning** for college lectures, seminars, and labs, as well as special events such as conferences, graduations, and workshops.

- We also provide professionally edited **post-production transcription and closed captioning** for pre-recorded content.
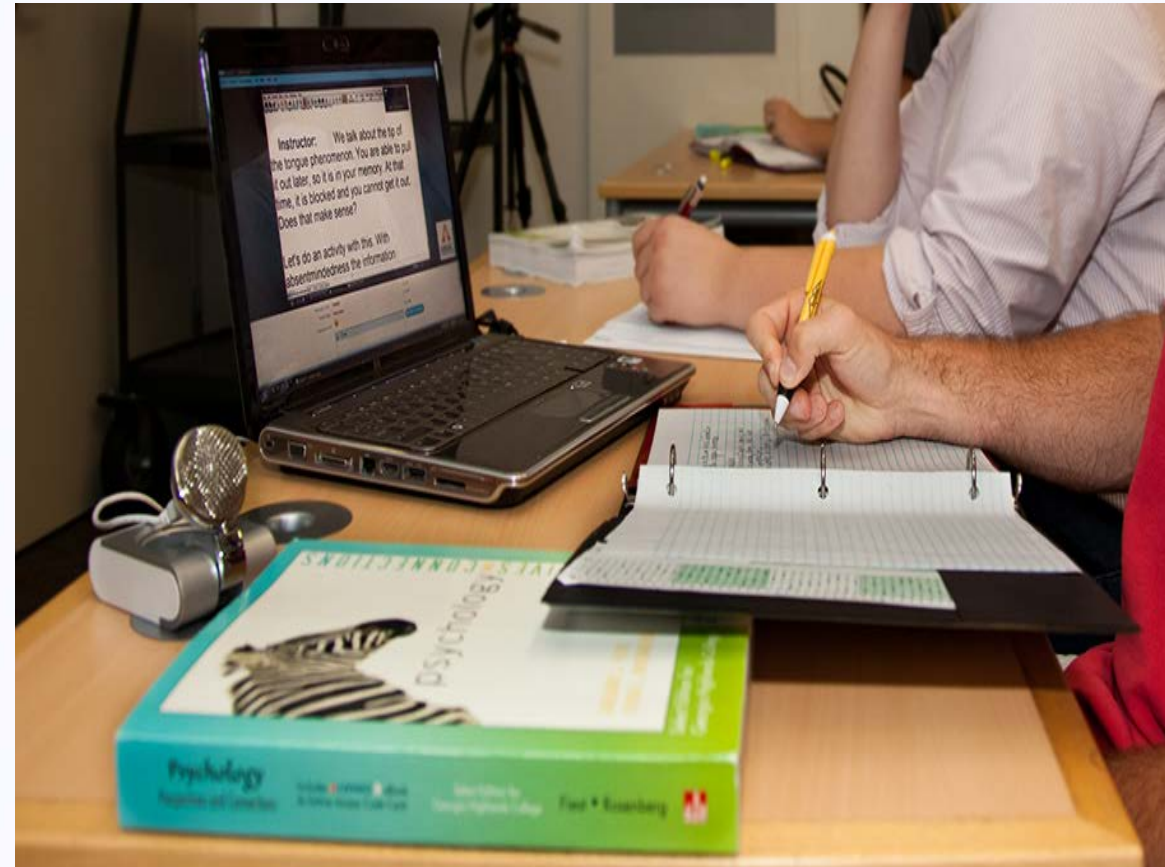
Audio Description Services

- AMAC Accessibility's Audio Description Services narrate and describe the visual components in multimedia to accommodate persons who are blind or low-vision.

Tools for Life

- The Certified Assistive Technology Team conducts on-site or remote assessments and offers demonstrations, training, and assistive technology for learning, work, and daily living.

- The AT team hosts Georgia's Assistive Technology Act program, Tools for Life.


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Accessibility Research

- Our research primarily focuses on students with disabilities, who are traditionally underrepresented in higher education.

- Disability spans across all age, gender, ethnic, racial, cultural, and socio-economic boundaries.

- AMAC Accessibility also studies how corporate, government, and non-profit organizations support customers and employees with disabilities.

Web Accessibility Group for Higher Education (WAG)
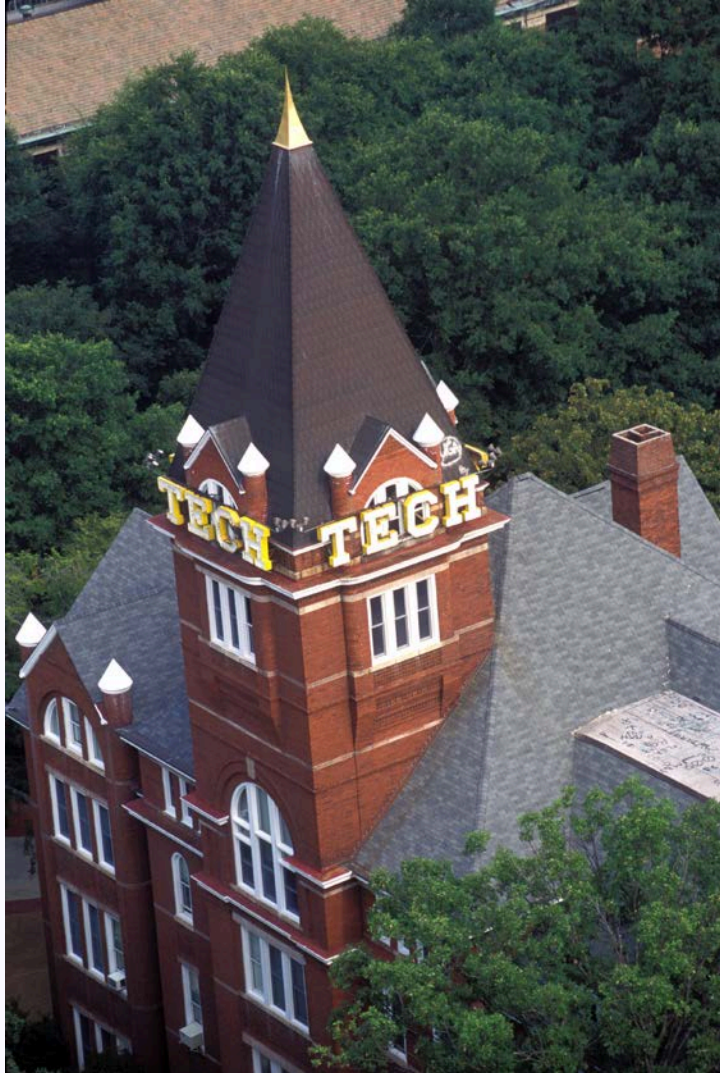
- The Web Accessibility Group (WAG) is housed at AMAC Accessibility at Georgia Tech.

- We help bring together individuals in higher ed to collaboratively navigate the complex requirements of state and federal accessibility standards and guidelines.

- WAG is funded and supported by the State of Georgia ADA Coordinator's Office, as part of the broader AccessGA Initiative, a statewide partnership of government agencies, technical colleges, and universities.

What is AccessGA?

AccessGA
Georgia's Accessible ICT Initiative

- [AccessGA](#) is a joint initiative of the State of Georgia ADA Coordinator's Office, AMAC Accessibility, and the [Georgia Technology Authority](#) (GTA).

- The objective is to support Georgia state agencies that strive to provide equitable and timely access to their employees, students, and clients with a wide range of disabilities.

Benefits and services include…

- Access to live monthly webinars and archived [webinars](#)

- Technical assistance and hands-on training

- Web accessibility evaluations and resources

- Periodic [newsletters](#)

- Up-to-date [wiki](#) of ICT accessibility resources and information

- Special events

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Defining People with Disabilities

How People with Disabilities Use the Web, Emerging Markets and Assistive Technology Solutions

How People with Disabilities Access Digital Content

- Auditory
- Cognitive and Neurological
- Physical
- Speech
- Visual

Digital Accessibility

- Accessibility is **not compliance**
- Accessibility overlaps with **user experience**: A page is accessible when a person with a disability can use it as effectively as people without disabilities.
- Accessibility is **distributed** across documents, Website and Web Applications, AT, Operating Systems, Devices, and people.

➢ Accessibility applies to all types of content: Images, forms, tables, navigation, components, multimedia, etc.
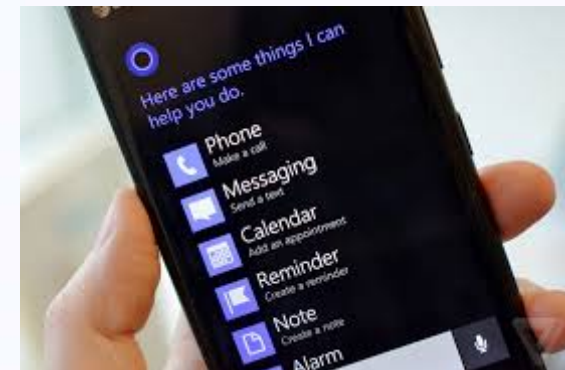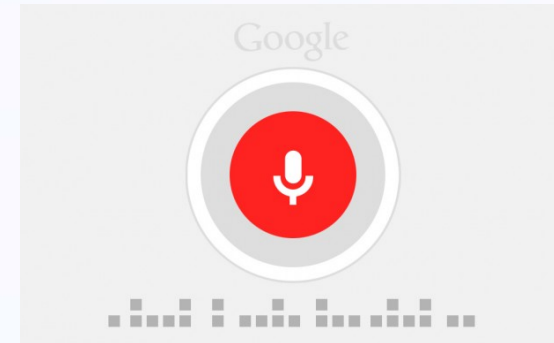
More than Just Phones & Tablets

- Car interfaces
- Videogame controllers
- Smart watches
- Emerging Markets

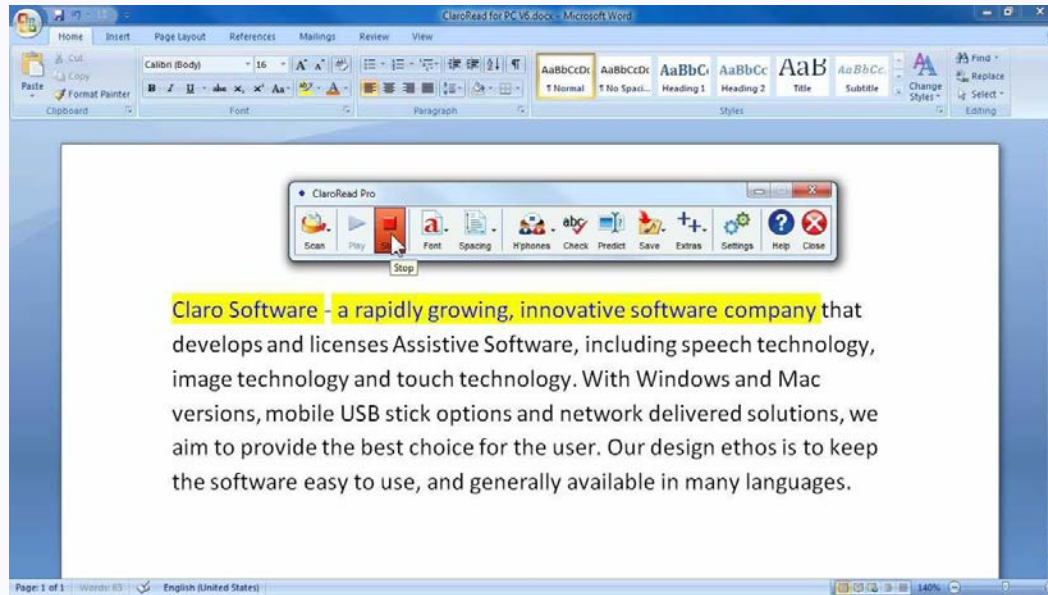HomePod, Echo, and Home size comparison

Speech Recognition Software

- Turn spoken words into text

- Connect with the timing of your thoughts

- Dictation speed 70 to 100 words per minute
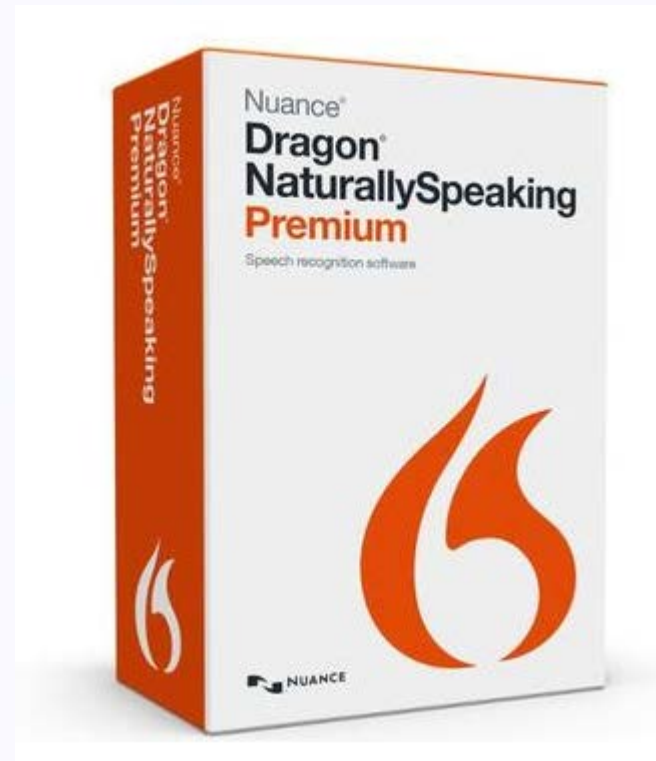
ClaroRead

- Text-to-Speech
- Visual Highlighting
- Read back any on-screen text and program commands
- High Quality Screen Reader
- Keyboard Echo
- Save to Audio

Read & Write Gold

- Text-to-Speech software

- Reads Word, PDF files and web pages as long as they're accessible

- Text Highlighting

- Allows for creation of audio version

- Provides customizable toolbars
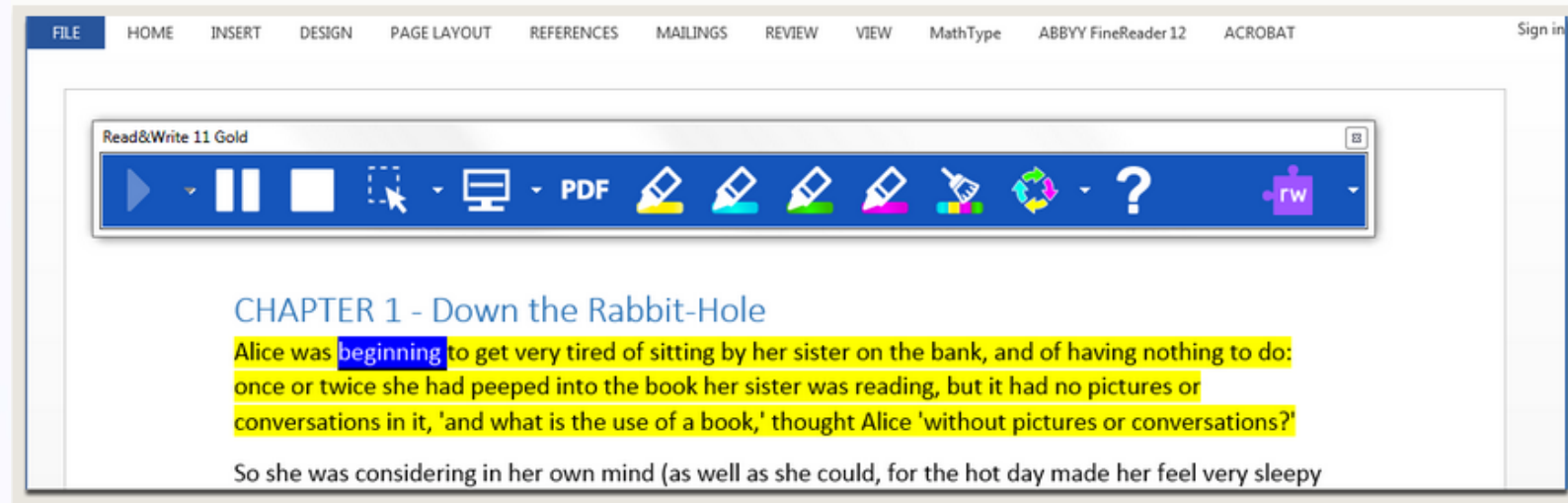
Screen Readers

- JAWS
- NVDA
- VoiceOver (Mac)
- VoiceOver (iOS)
- TalkBack for Android
- Window-Eyes

Refreshable Braille Displays

- **The World of Digital Touch**

Screen Magnification Programs

- MAGic

- ZoomText

- Windows Magnifier

- Mac Zoom

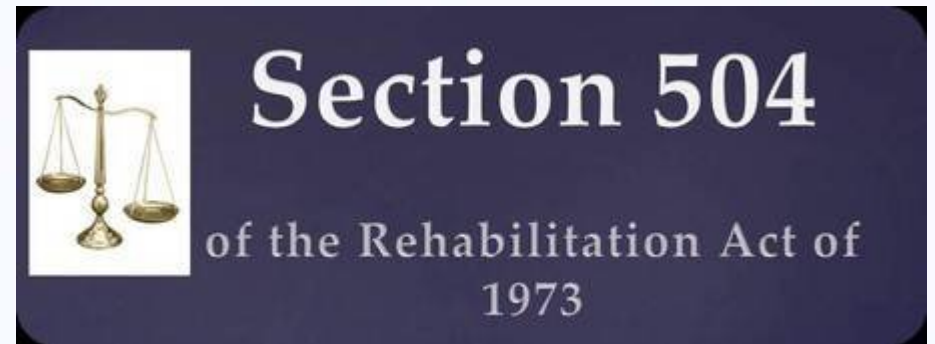- Zoom and Magnifier
  (iOS & Android)

Screen Reader
Demonstration

The Legal Landscape

- A civil rights law to prohibit discrimination on the basis of disability in programs and activities, public and private, that receive federal financial assistance.

Americans with Disabilities Act (ADA)

- Signed into Law in 1990
- Civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.
- Applies to Information and Communication Technology (ICT) Accessibility

- **1998 Amendment to the United States Workforce Rehabilitation Act of 1973, a federal law mandating that all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities.**

Section 508 Refresh Continued…

- **Section 508 of the Rehabilitation Act, as amended in 1998**

- **Section 508 *Refresh* (ICT Refresh)**
  - **U.S. Access Board Final Rule published Jan. 18, 2017**
- **Compliance Date/Safe Harbor Provision**
  - **Comply by Jan. 18, 2018**
  - **Safe Harbor: Legacy ICT that has not been altered after compliance date**

Who Enforces the Law?

The DOJ in conjunction with Office of Civil Rights (OCR) enforces Titles II of the ADA, and Section 504 of the Rehabilitation Act of 1973.

21st Century Communications and Video Act (CVAA)

- Twenty-First Century Communications and Video Accessibility Act – signed into Law Oct. 8, 2010
- Updates federal communications law to increase the access of persons with disabilities to modern communications
- Title I: addresses communications access to make products and services using Broadband fully accessible to people with disabilities
- Title II: Makes it easier for people with disabilities to view video programming on television and the Internet

Overview of DOJ Settlements

- High Profile Settlements
- Requirements
  - WCAG 2.0 (Level AA) Applied
  - Web Accessibility, which includes captioning
  - Mobile Accessibility
  - Appoint Web Accessibility Coordinator
 - Adopt Web Accessibility Policy

WCAG 2.0 vs WCAG 2.1

- The goal of WCAG 2.0 is to provide a standard for Web content accessibility.
- These standards are in place to meet the needs of various users (individuals, organizations, and governments)
- It was constructed with the intent for it to be applied to several different web technologies.

- WCAG 2.0 was introduced in 2008
    - Builds on WCAG 1.0
    - Organized around four design principles of web accessibility.
        - Perceivable
        - Operable
        - Understandable
        - Robust

WCAG 2.0 Principles
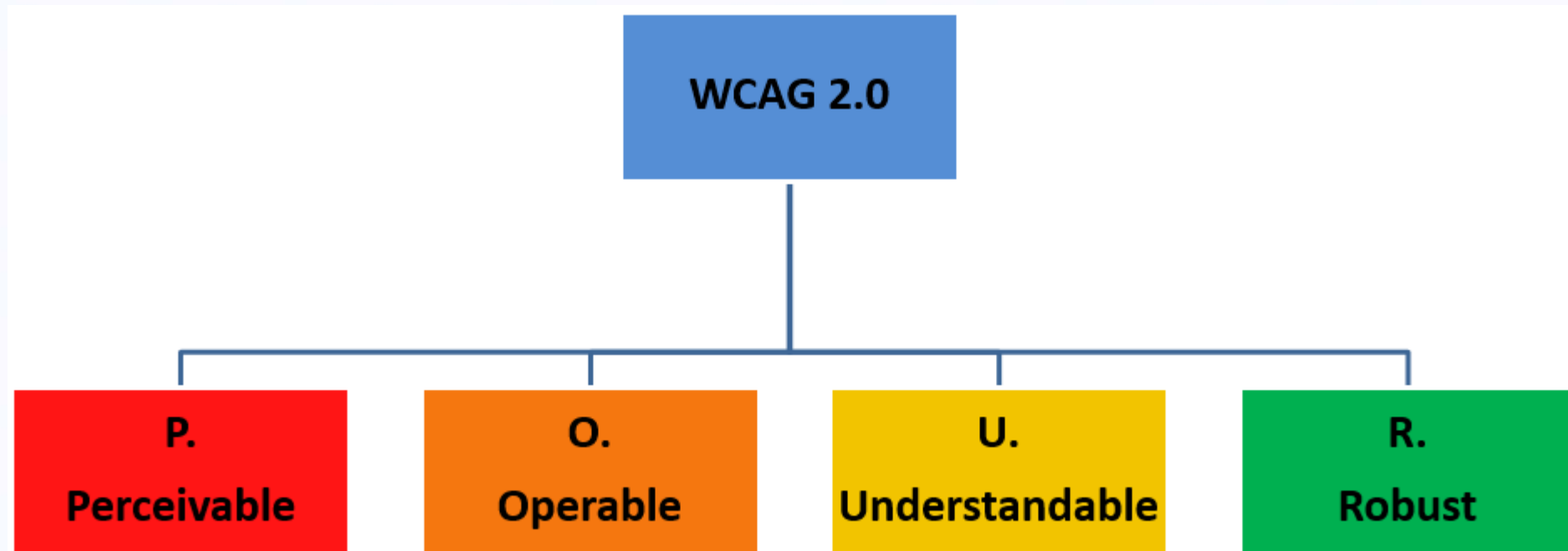
- Perceivable
  - 1.1 Non-text content
    - Images missing alt text
  - 1.2 Time-based media
    - Inaccurate /inadequate captions and/or transcripts

WCAG 2.0 Guidelines

- Perceivable
  - 1.3 Adaptable content
    - Illogical reading order for content
    - Heading content not marked up as such
  - 1.4 Distinguishable content
    - Insufficient color contrast for regular text and links
    - Images of text

WCAG 2.0 Guidelines

- Operable
  - 2.1 Keyboard accessible
    - Hover-only menus
    - Keyboard traps
  - 2.2 Enough time
    - Websites with session timeouts

WCAG 2.0 Guidelines

- Operable
  - 2.3 Seizures
    - Content flashing for longer than three seconds
  - 2.4 Navigable
    - Missing 'Skip to Main Content' link
    - Visible focus indicator
    - Focus order

- # Understandable
  - ## 3.1 Readable content
    - Missing language attribute in HTML code
  - ## 3.2 Predictable content
    - Inconsistent navigation
    - Context changes on input
  - ## 3.3 Input Assistance
    - Inaccessible error message
    - Visible labels

- Robust
  - 4.1 Compatible content
    - Incorrect formatting
    - Duplicate IDs
    - Duplicate attributes on the same element

WCAG 2.0 vs WCAG 2.1

- WCAG 2.1 added new success criteria to address:
  - Mobile accessibility
  - Users with low vision
  - Users with cognitive and learning disabilities

WCAG 2.0 vs WCAG 2.1

- There are 17 new success criteria under the following guidelines:
    - 1.3 Adaptable
    - 1.4 Distinguishable
    - 2.1 Keyboard Accessible
    - 2.2 Enough Time
    - 2.3 Seizures and Physical Reactions
    - 2.5 Input Modalities
    - 4.1 Compatible

Before and After WCAG

- [Before and After Demo](#)

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