

A large, stylized letter 'N' is positioned on the right side of the slide. The letter is filled with a marbled pattern in shades of red, orange, and blue. The background of the slide is white.

NERDERY®

WCAG 2.2 Overview

November 15th, 2023

Agenda

- 01** **Introductions**
- 02** **Digital Accessibility Overview**
- 03** **WCAG 2.2 Updates**
- 04** **Summary**
- 05** **Q & A**

Introductions



Nerdery: A Premier Digital Product Consultancy

Nerdery ADA/WCAG 2.2 AA Offerings:

Initial Review for Compliance on Existing Site*

Nerdery QA will conduct a high-level review of the existing product for surface-level accessibility issues. The review can cover either the entire product or the core functionality. Nerdery QA will document any errors found, indicate whether remediation is needed, and indicate areas where issues appear to be most severe

Full Audit/Sweep on Existing Site*

Nerdery QA will conduct a full audit of the existing site/product and note all issues preventing ADA/WCAG 2.2 AA compliance. Nerdery will log all issues in the issue reporting system, provide a report summarizing the findings, indicate the reason for compliance failures and note their severity, and suggest remediation methods where appropriate. Nerdery can recommend a remediation vs. rebuild approach, using our UX and Development accessibility experts.

Nerdery ADA/WCAG 2.2 AA Offerings:

Planning and Design Reviews*

Nerdery QA will conduct early reviews of any client- or third-party-provided designs and functionality, to call out potential accessibility risks before they are codified.

Project Consulting and Testing*

Nerdery Accessibility Specialists work with strategists, designers, and developers so that your product is designed and built to the WCAG 2.2 AA standards. This helps to mitigate accessibility issues before they get to the testing stage to maximize accessibility while minimizing costs.

Automated Test Triage

Whether you use Monsido, SiteImprove, or something else, Nerdery QA can help triage and prioritize issues so you get the most impact for your remediation dollar. Our specialists have worked directly with these companies and are familiar with common false positives that can be ignored.

Laura Shields

Software Engineering Manager



Learn more about [Laura Shields](#)

Specialties

- Front-End Lead
- Digital Accessibility (WAS, CPACC certified)

Accessibility Experience

- Millipore Sigma
- Purina
- Google
- Fairview Health Services
- Allstate
- University of the Cumberland
- Fresno Pacific University
- Poetry Foundation

Shyla Earl

Accessibility Quality Assurance Engineer



Learn more about [Shyla Earl](#)

Specialties

- Digital Accessibility Specialist (CPACC certified)
- Accessibility Testing
- Functional Testing
- Quality Assurance Lead

Accessibility Experience

- Google
- Purina
- Mayo Clinic
- Child Care Aware MN
- Endpoint
- Volt Studios
- Boston Scientific (mobile)
- Anderson Trucking Services (mobile)

Digital Accessibility

Overview



Digital Accessibility:



Verifying digital products meet
Web Content Accessibility Guidelines
(WCAG).

POUR Principles:

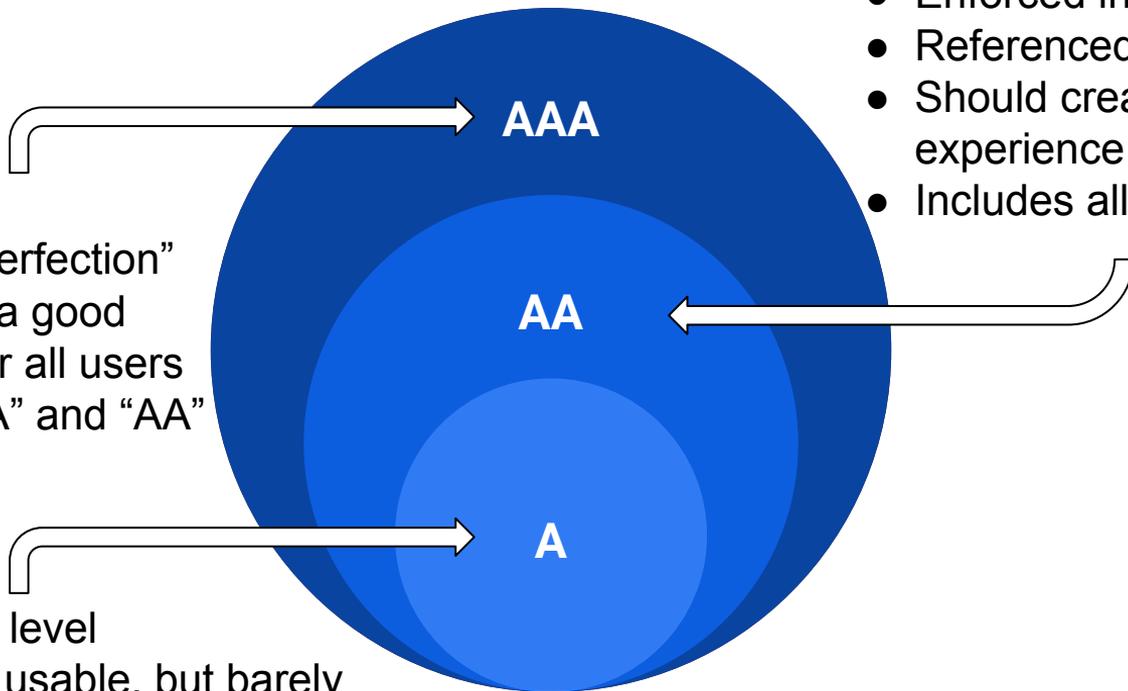
1. Perceivable
2. Operable
3. Understandable
4. Robust



WCAG Conformance Levels:

- Highest level
- “Impossible perfection”
- Goal: Create a good experience for all users
- Includes all “A” and “AA” guidelines

- Baseline level
- Makes it usable, but barely



- **International, Gold Standard**
- Enforced in ADA lawsuits
- Referenced in Section 508
- Should create a decent experience for most users
- Includes all “A” guidelines

Digital Accessibility

WCAG 2.2 Updates



WCAG 2.2 Updates:

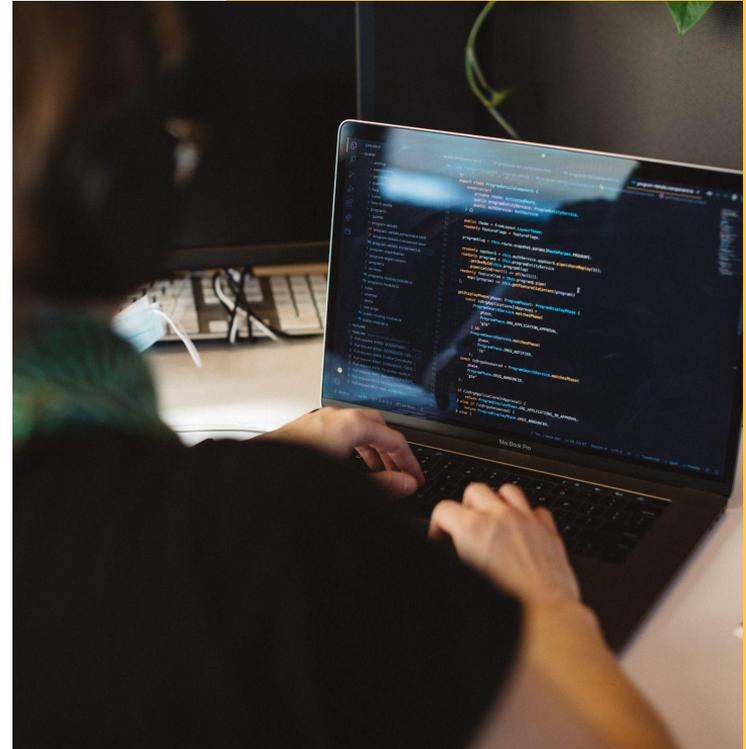
- 9 Success Criteria added
 - 2 A
 - 4 AA
 - 3 AAA
- 1 Success Criteria removed
 - 4.1.1 Parsing

9 new Success Criteria:

- **2.4.11 Focus Not Obscured Minimum (AA)**
- **2.4.12 Focus Not Obscured Enhanced (AAA)**
- **2.4.13 Focus Appearance (AAA)**
- **2.5.7 Dragging Movements (AA)**
- **2.5.8 Target Size Minimum (AA)**
- **3.2.6 Consistent Help (A)**
- **3.3.7 Redundant Entry (A)**
- **3.3.8 Accessible Authentication Minimum (AA)**
- **3.3.9 Accessible Authentication Enhanced (AAA)**

2. Operable

4. Navigable



2.4.11 Focus Not Obscured (Minimum) AA:

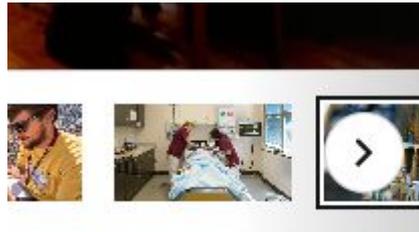
When a user interface component receives keyboard focus, **the component is not entirely hidden** due to author-created content.

2.4.11 Focus Not Obscured (Minimum) AA:

Pass



Pass



2.4.12 Focus Not Obscured (Enhanced) AAA:

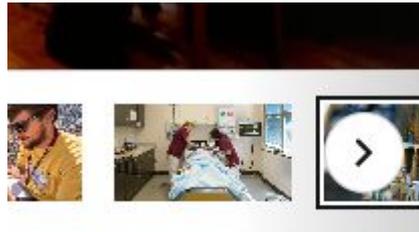
When a user interface component receives keyboard focus, **no part of the component is hidden** by author-created content.

2.4.12 Focus Not Obscured (Enhanced) AAA:

Fail



Fail



2.4.13 Focus Appearance AAA:

When the keyboard focus indicator is visible, it meets specified **size** and **color contrast** requirements.



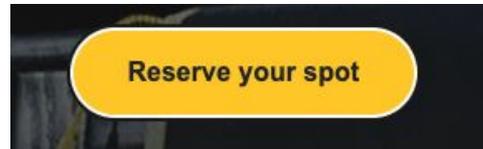
2.4.13 Focus Appearance AAA:

ASU examples:

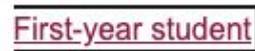
Pass



Fail: Color Contrast

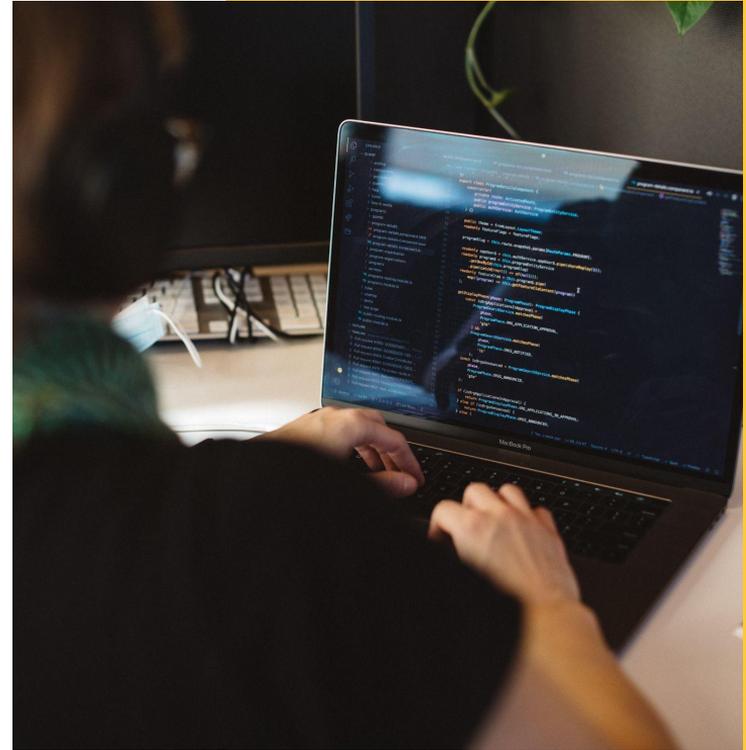


Fail: 2 px perimeter



2. Operable

5. Input Modalities



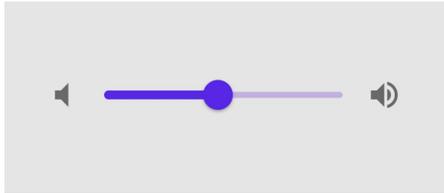
2.5.7 Dragging Movements AA:

All functionality that uses a dragging movement for operation **must also be achieved by a single pointer** without dragging, unless dragging is essential.

2.5.7 Dragging Movements AA:

Watch out for:

- sliders
- drag-and-drop interactions

A form interface with a dark border. It contains the following elements:

- Title ***: A text input field.
- State**: A dropdown menu with options: Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu.
- City**: A dropdown menu with options: Chennai, Chittoor, Coimbatore, Dharmapuri, Eluru, and Guntur.
- Add >**: A button to add an item from the dropdown to the right-hand list.
- < Remove**: A button to remove an item from the right-hand list.
- Save**: A button at the bottom right.
- Cancel**: A button at the bottom right.

Each dropdown menu is accompanied by a list box on the right, which is currently empty.

2.5.8 Target Size (Minimum) AA:



Targets have an area of at least **24 by 24 pixels**, except where:

- **Spacing:** Undersized targets are positioned so that if a 24 CSS pixel diameter circle was drawn from the center, it would not intersect another target (or its imaginary circle)
- **Equivalent:** The function can be achieved through a different control on the same page
- **Inline:** The target is in a sentence or constrained by line-height
- **User agent control:** The size of the target is determined by the user agent
- **Essential:** A particular presentation of the target is essential to the information being conveyed

2.5.8 Target Size (Minimum) AA:

Exception: Spacing

- Undersized targets' 24px circles don't overlap other targets



2.5.8 Target Size (Minimum) AA:

Exception: Inline

- The target is in a sentence or constrained by line-height.

173 x 18 px target size

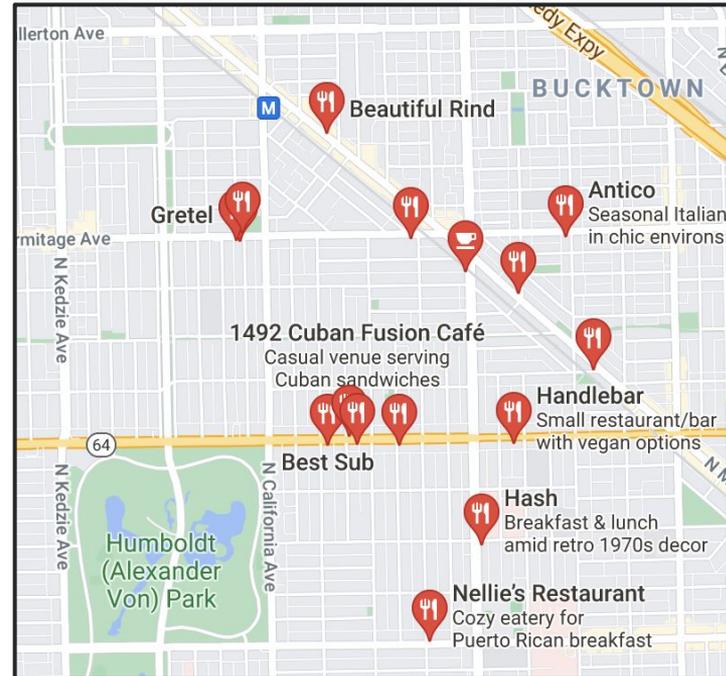
Status

This understanding document is part of the [draft WCAG 2.2 content](#). It may change or be removed before the final WCAG 2.2 is published.

2.5.8 Target Size (Minimum) AA:

Exception: Essential

- A particular presentation of the target is essential to the information being conveyed.



2.5.8 Target Size (Minimum) AA:

Or

Fields marked with an asterisk (*) are required.

*Email 16 x 18

Role button

*Password Accessible Text Show password



[Forgot Username or Password?](#)

[Don't have an account yet?](#)

Find my courses

13 x 13

In person

Online

Search by keyword

or

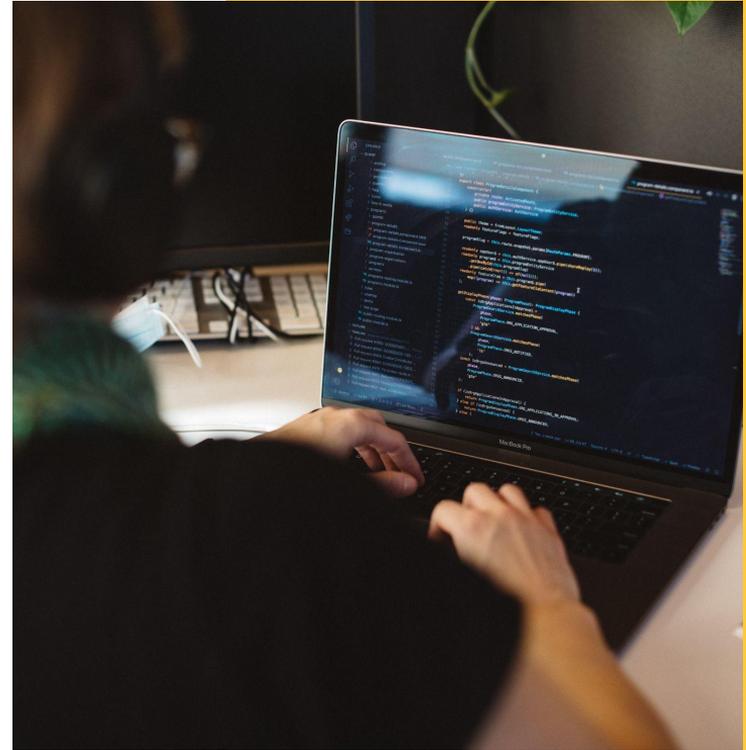
#1 in the U.S. and top 10 in the world for global impact in research, outreach and stewardship

ASU also ranked #1 in the world for research, outreach and stewardship in research, outreach and stewardship. Michigan State, Penn State and MIT ranked in the top 10. — Times Higher Education, 2023

[View all rankings](#)

3. Understandable

2. Predictable



3.2.6 Consistent Help A:

Certain help mechanisms repeated on multiple web pages **occur in the same relative order** to other page content, unless a change is initiated by the user. These are:

- Human contact details
- Human contact mechanism
- Self-help option
- A fully automated contact mechanism

3.2.6 Consistent Help A:

Maps and Locations

Jobs

Directory

Contact ASU

My ASU

Copyright and Trademark

Accessibility

Privacy

Terms of Use

Emergency

How can we help you?



Have questions?

We're available 24/7 to answer your questions via live chat or you contact us at [855-278-5080](tel:855-278-5080).

[Live chat \(available\)](#)



Access university services

Already have an ASURITE user ID? Access ASU services and updates personalized for you through My ASU.

[Visit My ASU](#)



People search

Use the ASU directory to search for faculty and staff.

[Search the ASU directory](#)

General ASU phone number: [855-278-5080](tel:855-278-5080) (available 24/7)

General ASU email: customerservice@asu.edu

General ASU address:

Arizona State University
1151 S Forest Ave
Tempe, AZ 85281

[Find the mailing address for specific departments at each location.](#)

3.2.6 Consistent Help A:

Human contact details:

General ASU phone number: [855-278-5080](tel:855-278-5080) (available 24/7)

General ASU email: customerservice@asu.edu

General ASU address:

Arizona State University

1151 S Forest Ave

Tempe, AZ 85281

[Find the mailing address for specific departments at each location.](#)

[See additional locations.](#)

3.2.6 Consistent Help A:

Human contact mechanism:



Have questions?

We're available 24/7 to answer your questions via live chat or you contact us at [855-278-5080](tel:855-278-5080).

Live chat (available)

3.2.6 Consistent Help A:

Self-help option:

Find answers to the most frequently asked questions

Type keywords to find answers or you can also browse the topics below to find what you are looking for.

Filters (0)

Choose a topic ^

[Select All](#)

Adjustments to your financial aid

Search keywords

Scholarships and grants

When is the grant going to be disbursed?

3.2.6 Consistent Help A:

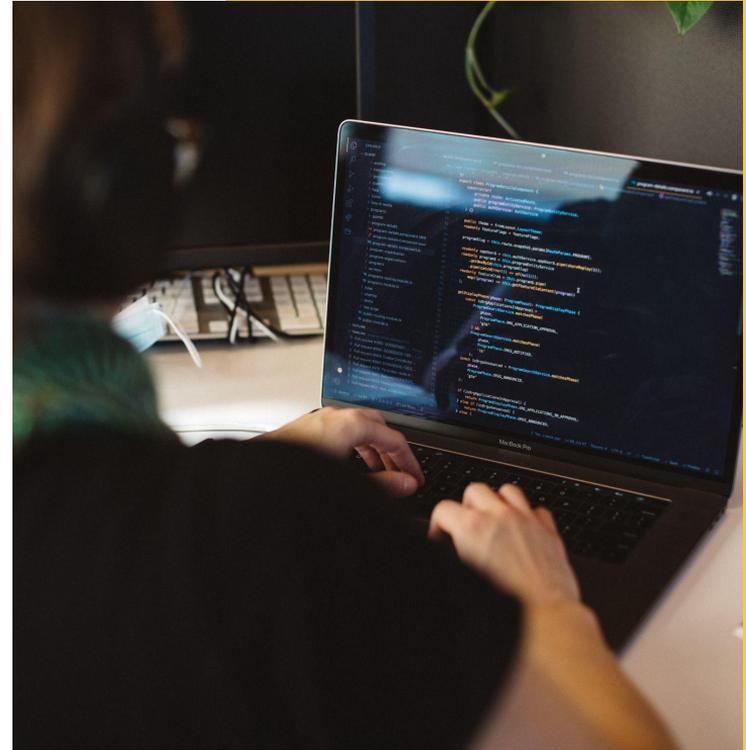
Fully automated contact mechanism:

Hi there! Welcome to M Health Fairview.
Can I help answer something for you?



3. Understandable

3. Input Assistance



3.3.7 Redundant Entry A:

Information previously entered by or provided to the user that is required to be entered again in the same process is either **auto-populated** or **available for the user to select**, with several allowable exceptions.

3.3.7 Redundant Entry A:

Except when:

- re-entering the information is essential,
- the information is required to ensure the security of the content, or
- previously entered information is no longer valid.

3.3.7 Redundant Entry A:

Billing address [Add new address](#)

Same as delivery address

Bella Vista, AR 72714

Card preferences

Set as default card

3.3.8 Accessible Authentication (Minimum) AA:

A **cognitive function test is not required** for any step in an authentication process, unless specified criteria are met.

3.3.8 Accessible Authentication (Minimum) AA:

It is permissible to require such a test, but only if at least one of these is true:

- **Alternative:** Another authentication method is available that does not rely on a cognitive function test.
- **Mechanism:** A mechanism is available to assist the user in completing the cognitive function test.
- **Object Recognition:** The cognitive function test is to recognize objects.
- **Personal Content:** The cognitive function test is to identify non-text content the user provided to the website.

3.3.8 Accessible Authentication (Minimum) AA:

Example #1

Allowing copy and paste to reduce the cognitive burden of re-typing

3.3.8 Accessible Authentication (Minimum) AA:

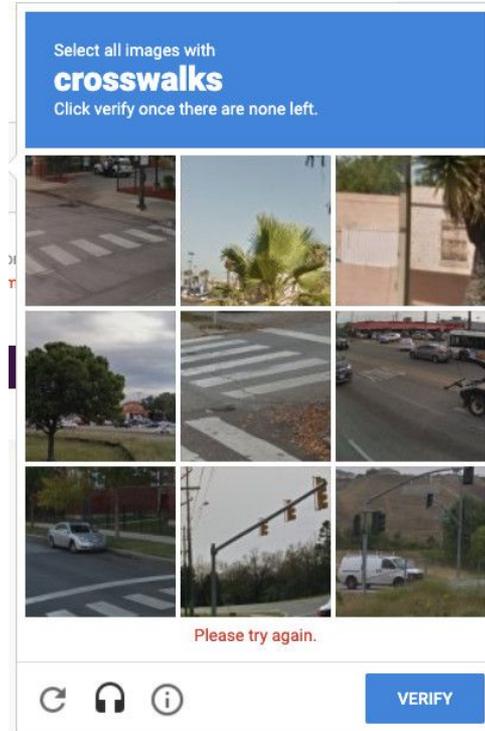
Example #2

Support for password entry by password managers to reduce memory need

3.3.8 Accessible Authentication (Minimum) AA:

Example #3

Object Recognition: The cognitive function test is to recognize objects.



3.3.8 Accessible Authentication (Minimum) AA:

Failure

Match the characters in the picture [Help](#)

To continue, type the characters you see in the picture. [Why?](#)



The picture contains 8 characters.

Characters:

Continue

3.3.9 Accessible Authentication (Enhanced) AAA:

A cognitive function test is not required for any step in an authentication process, unless there is either an **alternative method** without a required cognitive test or there is a **mechanism to assist the user**.

3.3.9 Accessible Authentication (Enhanced) AAA:

It is permissible to require such a test, but only if at least one of these is true:

- **Alternative:** Another authentication method is available that does not rely on a cognitive function test.
- **Mechanism:** A mechanism is available to assist the user in completing the cognitive function test.

3.3.9 Accessible Authentication (Enhanced) AAA:

Example #1

A web site that uses Passkey technology such as WebAuthn so the user can authenticate with their device instead of username/password. The user's device could use any available modality. Common methods on laptops and phones are facial-scan, fingerprint, and PIN (Personal Identification Number). The web site is not enforcing any particular use, it is assumed a user will setup a method that suits them.

3.3.9 Accessible Authentication (Enhanced) AAA:

Example #2

An app offers the ability to login with a 3rd party provider using an SSO (such as OAuth) method.

3.3.9 Accessible Authentication (Enhanced) AAA:

Example #3

A web site that requires two-factor authentication displays a QR code which can be scanned by an app on a user's device to confirm identity.

Summary



Summary:



- 2.4.11 **Focus Not Obscured (Minimum)** AA: Focus state at least partially visible
- 2.4.12 **Focus Not Obscured (Enhanced)** AAA: Focus state fully visible
- 2.4.13 **Focus Appearance** AAA: Focus indicators are 2 px thick and meet 3:1 contrast
- 2.5.7 **Dragging** AA: Avoid dragging or provide an alternative for click/tap
- 2.5.8 **Target Size** AA: Target size should be 24x24px or larger

Summary:



- 3.2.6 **Consistent Help A:** Provide consistent help mechanisms across a website
- 3.3.7 **Redundant Entry A:** Prefill redundant info or provide options to select it
- 3.3.8 **Accessible Authentication (Minimum) AA:** 1 of 4 conditions must exist if a cognitive test is required
- 3.3.9 **Accessible Authentication (Enhanced) AAA:** 1 of 2 conditions must exist if a cognitive test is required

WCAG 2.2 Overview

Q & A



Resources:

- [W3C WCAG 2.2 Guidelines](#)
- [DeQue WCAG 2.2 Guidelines Quick Reference](#)
- [Introduction to Digital Accessibility](#)
- [ADA and Section 508 Information](#)
- [Nerdery Blog](#)

Thank you
