

# WCAG 2.2 audit level AA wb-salesdemo.qmatic.cloud/qmaticwebbooking/#

Client: Qmatic Holland B.V. Website: wb-salesdemo.qmatic.cloud/qmaticwebbooking/# Report version: 1.1 Tilburg, 26 August 2024

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# Introduction

On behalf of Qmatic Holland B.V. the extent to which the website wb-salesdemo.qmatic.cloud/ qmaticwebbooking/# conforms to the Web Content Accessibility Guidelines (WCAG) 2.2 has been audited. This audit is based on the European standard for accessibility requirements, EN 301 549.

WCAG defines how to make web content more accessible to people with and without disabilities. Accessibility involves a wide range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities. The guidelines aim to make web content more usable by older individuals with changing abilities due to aging and to improve usability for users in general.

At the top of the WCAG 2.2 are four principles that provide the foundation for web accessibility: Perceivable, Operable, Understandable and Robust. The accompanying guidelines provide the basic goals that authors should work toward in order to make content more accessible to users with different disabilities. For each guideline, testable success criteria are provided to allow WCAG 2.2 to be used where requirements and conformance testing are necessary. In order to meet the needs of different groups and different situations, three levels of conformance are defined for the success criteria: A (lowest), AA, and AAA (highest). For each of the guidelines and success criteria in the WCAG 2.2 document itself, the working group has also documented a wide variety of techniques. The techniques are informative and fall into two categories: those that are sufficient for meeting the success criteria and those that are advisory.

Auditing the extent to which a website conforms to the WCAG 2.2 is a process involving several steps. The activities carried out within these steps are influenced by many aspects such as: the type of website (e.g. static, dynamic, responsive, mobile, etc.); its size, complexity, and the technologies used to create the website (e.g. HTML, WAI-ARIA, PDF, etc.); how much knowledge the auditor have about the process used to design and develop the website; and the main purpose for the audit (e.g. to issue an accessibility statement, to plan a redesign process, to perform research, etc.).

This report only provides examples of problems found; however, this is not a complete overview. The audit is indicative of the different types of problems found. It is therefore possible that one type of problem occurs in more than one place, but only a few examples have been mentioned.

Because the audit consists of a sample, a problem may not be identified. Naturally, we try to sample in such a way that this is minimized, but it can never be ruled out. It can then be noticed during a subsequent audit.

When improvements are made, keep in mind that they may create new accessibility issues.

## **Questions?**

This report presents all the findings of the audit of the selected sample of web pages. If you have any questions about the report or the findings, please contact us by e-mail: <u>contact@cardan.com</u>.

# **Evaluation specifics**

## **Evaluation data**

Client: Evaluated website:

Evaluation type: Report version: Report date: Audit organization: Evaluator: Senior Consultant: Qmatic Holland B.V. wb-salesdemo.qmatic.cloud/ qmaticwebbooking/# WCAG 2.2 audit level AA 1.1 26 August 2024 Cardan Nicole de Zeeuw Sacha Bogaers

## **Evaluation scope**

• All pages on wb-salesdemo.qmatic.cloud/qmaticwebbooking/# (URI base)

The reason for including or excluding a part is shown above between the parentheses. This conforms to the rules for identifying the scope according to the evaluation methodology WCAG-EM.

## **Evaluation sample**

5 pages (See appendix 1 for the complete sample)

## **Evaluation methodology**

This audit was carried out in accordance with the <u>WCAG-EM evaluation method</u>. This method is recommended by <u>DigiToegankelijk (Logius)</u>, the Dutch supervisory authority.

## Applied norm

WCAG 2.2 (www.w3.org/TR/WCAG2.2).

## **Used techniques**

During the evaluation it is assumed that all W3C techniques are supported and can be used. See: <u>https://www.w3.org/WAI/WCAG22/Techniques/</u>

## Accessibility support baseline

Common web browsers and assistive technologies.

## **User Agents**

During the evaluation the following user agents were used:

- Google Chrome, version 128 (primary)
- Mozilla Firefox, version 129
- Microsoft Edge, version 128

- 5
- NVDA with Mozilla Firefox

## Web technologies relied upon

- HTML
- · CSS
- · WAI-ARIA
- JavaScript
- SVG
- · DOM

## Inspection body

This audit was carried out by Cardan.

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# Summary

The audit into the accessibility of website wb-salesdemo.qmatic.cloud/qmaticwebbooking/# was completed on 26 August 2024. The standard used is WCAG 2.2 level AA.

Not all success criteria are currently met. Improvements can be made using the findings and advice from our report.

## Result WCAG 2.1: Does not comply

Currently, 39 of the 50 success criteria comply to WCAG 2.1, levels A and AA.

## Result WCAG 2.2: Does not comply

Currently, 44 of the 55 success criteria comply to WCAG 2.2, level A and AA.

## Feedback from auditor

The re-inspection of accessibility has shown that the website has become a bit more accessible. Some of the previously found problems have now been resolved.

However, several accessibility issues have also been found. For example, some information is hidden for users of assistive technology, making it not available to them. There are also a few elements on the website that do not work with the keyboard. Furthermore, there is a contrast issue with some of the text.

# **Evaluation results**

An overview of all WCAG 2.2 success criteria of level A and AA, divided over the 4 principles Perceivable, Operable, Understandable and Robust, can be found below. A short description, the level and the result is given for each success criterion. An overview of all the evaluation findings for each success criterion that fails can be found in the next chapter.

## Perceivable

Criterium	Description	Level	Result
1.1.1	Non-text Content	A	Passed
1.2.1	Audio-only and Video-only (Prerecorded)	А	Passed
1.2.2	Captions (Prerecorded)	A	Passed
1.2.3	Audio Description or Media Alternative (Prerecorded)	A	Passed
1.2.4	Captions (Live)	AA	Passed
1.2.5	Audio Description (Prerecorded)	AA	Passed
1.3.1	Info and Relationships	А	Failed
1.3.2	Meaningful Sequence	А	Passed
1.3.3	Sensory Characteristics	A	Passed
1.3.4	Orientation	AA	Passed
1.3.5	Identify input purpose	AA	Failed
1.4.1	Use of Color	А	Passed
1.4.2	Audio Control	A	Passed
1.4.3	Contrast (minimum)	AA	Passed
1.4.4	Resize text	AA	Failed
1.4.5	Images of Text	AA	Passed
1.4.10	Reflow	AA	Failed
1.4.11	Non-text contrast	AA	Passed
1.4.12	Text spacing	AA	Failed
1.4.13	Content on hover or focus	AA	Passed

' Criterium	Description	Level	Result
2.1.1	Keyboard	А	Failed
2.1.2	No Keyboard Trap	A	Passed
2.1.4	Character key shortcuts	А	Passed
2.2.1	Timing Adjustable	А	Passed
2.2.2	Pause, Stop, Hide	А	Passed
2.3.1	Three Flashes or Below Threshold	A	Passed
2.4.1	Bypass Blocks	A	Passed
2.4.2	Page Titled	A	Passed
2.4.3	Focus Order	А	Failed
2.4.4	Link Purpose (In Context)	А	Failed
2.4.5	Multiple Ways	AA	Passed
2.4.6	Headings and Labels	AA	Failed
2.4.7	Focus Visible	AA	Passed
2.4.11	Focus Not Obscured (Minimum)	AA	Passed
2.5.1	Pointer gestures	A	Passed
2.5.2	Pointer cancellation	A	Passed
2.5.3	Label in name	A	Passed
2.5.4	Motion actuation	А	Passed
2.5.7	Dragging Movements	AA	Passed
2.5.8	Target Size (Minimum)	AA	Passed

## Operable

## Understandable

Criterium	Description	Level	Result
3.1.1	Language of Page	A	Passed
3.1.2	Language of Parts	AA	Passed
3.2.1	On Focus	А	Passed
3.2.2	On Input	А	Failed
3.2.3	Consistent Navigation	AA	Passed
3.2.4	Consistent Identification	AA	Passed
3.2.6	Consistent Help	А	Passed
3.3.1	Error Identification	А	Passed
3.3.2	Labels or Instructions	А	Passed
3.3.3	Error Suggestion	AA	Passed
3.3.4	Error Prevention (Legal, Financial, Data)	AA	Passed
3.3.7	Redundant Entry	А	Passed
3.3.8	Accessible Authentication (Minimum)	AA	Passed

## Robust

Criterium	Description	Level	Result
4.1.1	Parsing	A	Passed
4.1.2	Name, role, value	А	Failed
4.1.3	Status messages	AA	Passed

## **Evaluation scores**

Because WCAG 2.2 is not yet part of the legal standard (EN 301 549), we have split the evaluation scores into two overviews. The results are shown per principle and per level. In WCAG 2.2, success criterion 4.1.1 has been deleted. As a result, there are a total of 5 more success criteria in WCAG 2.2 than in WCAG 2.1.

## WCAG 2.1 level A + AA

	Level A	Level AA	Total
Perceivable	8/9	7/11	15/20
Operable	11/14	2/3	13 / 17
Understandable	4/5	5/5	9 / 10
Robust	1/2	1/1	2/3
Total	24 / 30	15 / 20	39 / 50

### WCAG 2.2 level A + AA

	Level A	Level AA	Total
Perceivable	8/9	7/11	15 / 20
Operable	11/14	5/6	16/20
Understandable	6/7	6/6	12 / 13
Robust	0/1	1/1	1/2
Total	25 / 31	19 / 24	44 / 55

# Principle 1: Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

## **Guideline 1.1: Text Alternatives**

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

#### level A

#### Success criterion 1.1.1: Non-text Content

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### **Evaluation Findings**

The following is not a failure, but it can be improved:

On the bottom of all pages, except for the accessibility page, there is a footer containing the Qmatic logo. The logo contains the alternative text 'Company logo.' but the visible text is 'Qmatic'. This means that what is visible is not the same as what is presented by assistive software. It is necessary to provide the logo with the correct alternative text. Since the image also functions directly as a link and there is no other textual information within this link, it is recommended to set the alternative text to 'Qmatic' only. This issue does not lead to a failure, because there is an alternative for this image and link in the logo at the top of each page. wb-salesdemo.gmatic.cloud/gmaticwebbooking/#

## Guideline 1.2: Time-based Media

Provide alternatives for time-based media.

#### level A

#### Success criterion 1.2.1: Audio-only and Video-only (Prerecorded)

For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such:

- **Prerecorded Audio-only**: An alternative for time-based media is provided that presents equivalent information for prerecorded audio-only content.
- **Prerecorded Video-only**: Either an alternative for time-based media or an audio track is provided that presents equivalent information for prerecorded video-only content.

#### Result

Pass: none of the techniques of this success criterion are applicable.

#### level A

#### Success criterion 1.2.2: Captions (Prerecorded)

Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such.

#### Result

Pass: none of the techniques of this success criterion are applicable.

#### level A

#### Success criterion 1.2.3: Audio Description or Media Alternative (Prerecorded)

An alternative for time-based media or audio description of the prerecorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labeled as such.

#### Result

Pass: none of the techniques of this success criterion are applicable.

#### level AA

#### Success criterion 1.2.4: Captions (Live)

Captions are provided for all live audio content in synchronized media.

#### Result

✓ Pass: none of the techniques of this success criterion are applicable.

#### level AA

## Success criterion 1.2.5: Audio Description (Prerecorded)

Audio description is provided for all prerecorded video content in synchronized media.

#### Result

Pass: none of the techniques of this success criterion are applicable.

## Guideline 1.3: Adaptable

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

### level A

## Success criterion 1.3.1: Info and Relationships

Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.

#### Result

Fail: the evaluated sample of web pages fails this success criterion.

### **Evaluation Findings**

Structure and relations between items is important for assistive software. This way, the software can present the information of a website fully to the user.

On <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/ there are 4 steps, made visible by green circles with a number inside of them. This number is hidden with aria-hidden, making this information not available to users of assistive technology. Furthermore, it is currently not clear where a new step starts. This can be solved by using headings. The texts such as "1 Select branch", can be made into headings, so that it is clear when a new step is started.

The same issue occurs only one more time on the page <u>https://wb-salesdemo.qmatic.cloud/</u> <u>qmaticwebbooking/#/confirmation</u>. The text "Additional information" has also been marked with a **<strong>** element. This should be a heading instead.

On the second step at <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/ there are two checkboxes, belonging to "Group A - B" so these two checkboxes have a relation with each other and with this label above them. This relationship is currently not made clear in the code. This can be solved by adding a **<fieldset>** element or role="radiogroup" attribute on their shared parent. It has been added correctly at the radio buttons on step 1, but not on step 2.

On the third step, "Select date and time" a calendar view is presented. This view is made out of an element. All table elements inside the table have obtained an aria attribute to declare its row or column. Unfortunately, the aria-colindex attributes start with the value 0. They should start with 1 and not with zero. For more information on the use of aria-colindex, see

#### https://www.w3.org/WAI/ARIA/apg/practices/grid-and-table-properties/.

On page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/, in step 2, adults or children can be added to the booking. The number which is currently selected has been hidden with ariahidden. Because of this, the amount of people selected is not available to users of assistive technology.

On page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/confirmation</u> there is an overview of the information of the booking with sets of data, for example "Booking number:" and "4901700". Visually, the relation between the bold text and the text behind it is clear. In the code, however, this relationship is not clear now, because the page just consists of div-elements. This can be solved by using dl-elements (description lists). Other solutions are possible, such as using a table.

The following is not a failure, but it can be improved:

At the middle of the <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/confirmation</u> page, there is a line made by the minus character (-). Each and every character will be presented by assistive software as "Minus". This means that, for example, people with voice software will hear "Minus minus minus minus minus minus minus" etc.. This can be improved by replacing this line with the hr tag, for example.

#### level A

### Success criterion 1.3.2: Meaningful Sequence

When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level A

#### Success criterion 1.3.3: Sensory Characteristics

Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

### level AA

#### Success criterion 1.3.4: Orientation

Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 1.3.5: Identify input purpose

The purpose of each input field collecting information about the user can be programmatically determined when:

- The input field serves a purpose identified in the Input Purposes for User Interface Components section; and
- The content is implemented using technologies with support for identifying the expected meaning for form input data.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

On the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/ at step 4, users can fill in their personal data. Fields should have autocomplete attributes to facilitate data entry. Two of the fields don't have a autocomplete-attribute, Date of Birth and Mobile number, but do need one. The other fields do have the necessary autocomplete attributes.

## Guideline 1.4: Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

#### level A

### Success criterion 1.4.1: Use of Color

Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level A

### Success criterion 1.4.2: Audio Control

If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level.

### Result

Pass: none of the techniques of this success criterion are applicable.

#### level AA

#### Success criterion 1.4.3: Contrast (minimum)

The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following:

- Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;
- **Incidental**: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement.
- **Logotypes**: Text that is part of a logo or brand name has no minimum contrast requirement.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

### level AA

#### Success criterion 1.4.4: Resize text

Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality.

#### Result

Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

When the website is viewed at a width of 1280 pixels and the page is magnified to 200 percent, some content or functionality is no longer available.

On the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/search</u> there is a field with the label "Country code". The word "Code" disappears. All the visible information on usual screen resolutions should still be visible on smaller screen resolutions or when zoomed in.

#### level AA

#### Success criterion 1.4.5: Images of Text

If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following:

- · Customizable: The image of text can be visually customized to the user's requirements;
- **Essential**: A particular presentation of text is essential to the information being conveyed.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 1.4.10: Reflow

Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:

- · Vertical scrolling content at a width equivalent to 320 CSS pixels;
- Horizontal scrolling content at a height equivalent to 256 CSS pixels; Except for parts of the content which require two-dimensional layout for usage or meaning.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

On a screen resolution of 320px wide, all elements should still be operable and visible without the need to scroll horizontally.

On the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/search</u> there is a field with the label "Country code". The part "ntry Code" disappears. All the visible information on usual screen resolutions should still be visible on smaller screen resolutions.

#### level AA

#### Success criterion 1.4.11: Non-text contrast

The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent color(s):

- User Interface Components: Visual information required to identify user interface components and states, except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author;
- **Graphical Objects:** Parts of graphics required to understand the content, except when a particular presentation of graphics is essential to the information being conveyed.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 1.4.12: Text spacing

In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all of the following and by changing no other style property:

- · Line height (line spacing) to at least 1.5 times the font size;
- · Spacing following paragraphs to at least 2 times the font size;
- · Letter spacing (tracking) to at least 0.12 times the font size;
- Word spacing to at least 0.16 times the font size.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

The style properties as described in this success criterion are important for people with dyslexia, for example. These properties allow them to read the text better. However, the application of these style properties should not lead to loss of content or functionality.

On the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/search</u> there is a field with the label "Country code". The letters "de" at the end of the label disappear. All the visible information needs to remain visible in all situations.

## level AA

### Success criterion 1.4.13: Content on hover or focus

Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:

- **Dismissable**: A mechanism is available to dismiss the additional content without moving pointer hover or keyboard focus, unless the additional content communicates an input error or does not obscure or replace other content;
- **Hoverable**: If pointer hover can trigger the additional content, then the pointer can be moved over the additional content without the additional content disappearing;
- **Persistent**: The additional content remains visible until the hover or focus trigger is removed, the user dismisses it, or its information is no longer valid.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

# Principle 2: Operable

User interface components and navigation must be operable.

## Guideline 2.1: Keyboard Accessible

Make all functionality available from a keyboard.

### level A

#### Success criterion 2.1.1: Keyboard

All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. **Note 1**: This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path-dependent input but the underlying function (text input) does not.

**Note 2**: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

At the second step of the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/, when Group A - B is expanded, Service A and Service B are visible with chevrons pointing downwards on their right. These chevrons are buttons made with a **<button>** element. They can be used to collapse and expand the expandable element. This feature is not accessible by keyboard.

At the fourth step of the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/ there is a custom calendar function created next to the "Date of Birth" field. This functionality can not be used by keyboard users. It is necessary that all functionalities can be used by keyboard users. It is recommended to remove the custom functionality and change the fieldtype into "date". A default calendar function will be added by the browser.

#### level A

#### Success criterion 2.1.2: No Keyboard Trap

If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

### level A

### Success criterion 2.1.4: Character key shortcuts

If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:

- Turn off: A mechanism is available to turn the shortcut off;
- **Remap**: A mechanism is available to remap the shortcut to use one or more nonprintable keyboard characters (e.g. Ctrl, Alt, etc);
- Active only on focus: The keyboard shortcut for a user interface component is only active when that component has focus.

#### Result

✓ Pass: none of the techniques of this success criterion are applicable.

## Guideline 2.2: Enough Time

Provide users enough time to read and use content.

#### level A

#### Success criterion 2.2.1: Timing Adjustable

For each time limit that is set by the content, at least one of the following is true: turn off, adjust, extend, real-time exception, essential exception, or 20 hour exception.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level A

#### Success criterion 2.2.2: Pause, Stop, Hide

For moving, blinking, scrolling, or auto-updating information, all of the following are true:

- **Moving, blinking, scrolling**: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and
- Auto-updating: For any auto-updating information that (1) starts automatically and (2) is
  presented in parallel with other content, there is a mechanism for the user to pause,
  stop, or hide it or to control the frequency of the update unless the auto-updating is part
  of an activity where it is essential.

#### Result

Pass: none of the techniques of this success criterion are applicable.

## Guideline 2.3: Seizures

Do not design content in a way that is known to cause seizures.

#### level A

### Success criterion 2.3.1: Three Flashes or Below Threshold

Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds.

Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

## Guideline 2.4: Navigable

Provide ways to help users navigate, find content, and determine where they are.

#### level A

#### Success criterion 2.4.1: Bypass Blocks

A mechanism is available to bypass blocks of content that are repeated on multiple Web pages.

Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

level A

#### Success criterion 2.4.2: Page Titled

Web pages have titles that describe topic or purpose.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level A

#### Success criterion 2.4.3: Focus Order

If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

Whenever a user changes the language on the top right of the screen, the focus indicator transfers back to the first element on the page, the "skiplink". The focus indicator should stay on the language button because the user is still on the same page, only in a different language. If this would trigger a page refresh, then it is only common to place the focus indicator back at the beginning, but this is not the case here. Currently, this also causes an issue for success criterion 3.2.2.

### level A

### Success criterion 2.4.4: Link Purpose (In Context)

The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

On top of every page, there is the logo of Qmatic. The logo functions as a link and contains the alternative text "QMATIC Logo". The text of a link must define its purpose only by its own context. Because the link has no text on its own, the alternative text of the image counts as the linktext. Now the link tells the user that this link makes the user navigate to the QMATIC homepage and not to the dashboard of this system. Therefore, it is necessary to change the image's alternative text so that it simultaneously reflects the visible text and the link purpose.

On the bottom of all pages, there is a footer containing the Qmatic logo. The logo has the alternative text "Company logo". Because the logo's alternative text is the only textual information on this link, people expect to navigate to the Company logo, instead of navigating to the homepage. Therefore, it is recommended to set the alternative text to reflect both the visible text "QMATIC" and the link purpose.

#### level AA

#### Success criterion 2.4.5: Multiple Ways

More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 2.4.6: Headings and Labels

Headings and labels describe topic or purpose.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

On the second step of the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/, when Group A - B is expanded, Service A and Service B are visible with chevrons pointing downwards

on their right. These chevrons are buttons made with a **<button>** element. These buttons have the accessible name "true" through the aria-label. This is not a good label for these buttons, as it does not indicate the function properly.

#### level AA

#### Success criterion 2.4.7: Focus Visible

Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

### level AA

#### Success criterion 2.4.11: Focus Not Obscured (Minimum)

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

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### WCAG 2.2

Success criterion 2.4.11 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

## Guideline 2.5: Input modalities

Make it easier for users to operate functionality through various inputs beyond keyboard.

#### level A

#### Success criterion 2.5.1: Pointer gestures

All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential.

#### Result

```
Pass: none of the techniques of this success criterion are applicable.
```

#### level A

#### Success criterion 2.5.2: Pointer cancellation

For functionality that can be operated using a single pointer, at least one of the following is true:

- **No Down-Event**: The down-event of the pointer is not used to execute any part of the function;
- Abort or Undo: Completion of the function is on the up-event, and a mechanism is available to abort the function before completion or to undo the function after completion;
- · Up Reversal: The up-event reverses any outcome of the preceding down-event;
- **Essential**: Completing the function on the down-event is essential.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

### level A

### Success criterion 2.5.3: Label in name

For user interface components with labels that include text or images of text, the name contains the text that is presented visually.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

### level A

#### Success criterion 2.5.4: Motion actuation

Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:

- **Supported Interface**: The motion is used to operate functionality through an accessibility supported interface;
- **Essential**: The motion is essential for the function and doing so would invalidate the activity.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 2.5.7: Dragging Movements

All functionality that uses a dragging movement for operation can be achieved by a single pointer without dragging, unless dragging is essential or the functionality is determined by the user agent and not modified by the author.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### WCAG 2.2

Success criterion 2.5.7 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

#### level AA

#### Success criterion 2.5.8: Target Size (Minimum)

The size of the target for pointer inputs is at least 24 by 24 CSS pixels, except where:

- **Spacing:** Undersized targets (those less than 24 by 24 CSS pixels) are positioned so that if a 24 CSS pixel diameter circle is centered on the bounding box of each, the circles do not intersect another target or the circle for another undersized target;
- **Equivalent:** The function can be achieved through a different control on the same page that meets this criterion;
- Inline: The target is in a sentence or its size is otherwise constrained by the line-height of non-target text;
- User agent control: The size of the target is determined by the user agent and is not modified by the author;
- **Essential:** A particular presentation of the target is essential or is legally required for the information being conveyed.

### Result

Pass: The evaluated sample of web pages passes this success criterion.

## WCAG 2.2

Success criterion 2.5.8 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

# Principle 3: Understandable

Informatie en de bediening van de gebruikersinterface moeten begrijpelijk zijn.

## Guideline 3.1: Readable

Make text content readable and understandable.

### level A

#### Success criterion 3.1.1: Language of Page

The default human language of each Web page can be programmatically determined.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 3.1.2: Language of Parts

The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

## Guideline 3.2: Predictable

Make Web pages appear and operate in predictable ways.

#### level A

### Success criterion 3.2.1: On Focus

When any component receives focus, it does not initiate a change of context.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level A

#### Success criterion 3.2.2: On Input

Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

While navigating through the website, users can press the arrow up or down buttons on the language selector located in the upper right part of the screen. When these buttons are pressed, the value inside the language input field changes. Simultaneously, the entire website changes to the selected language and the focus is moved. This is a change of context. This is only allowed if the user is informed beforehand. It can also be solved by only changing the content of the page and not the context, or by adding a button to confirm one's choice.

#### level AA

#### Success criterion 3.2.3: Consistent Navigation

Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

### level AA

### Success criterion 3.2.4: Consistent Identification

Components that have the same functionality within a set of Web pages are identified consistently.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

### level A

#### Success criterion 3.2.6: Consistent Help

If a Web page contains any of the following help mechanisms, and those mechanisms are repeated on multiple Web pages within a set of Web pages, they occur in the same order relative to other page content, unless a change is initiated by the user: Hide full description

- · Human contact details;
- Human contact mechanism;
- Self-help option;
- A fully automated contact mechanism.

#### Result

✓ Pass: none of the techniques of this success criterion are applicable.

#### WCAG 2.2

Success criterion 3.2.6 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

## Guideline 3.3: Input Assistance

Help users avoid and correct mistakes.

#### level A

### Success criterion 3.3.1: Error Identification

If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

level A

#### Success criterion 3.3.2: Labels or Instructions

Labels or instructions are provided when content requires user input.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### level AA

#### Success criterion 3.3.3: Error Suggestion

If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

### level AA

## Success criterion 3.3.4: Error Prevention (Legal, Financial, Data)

For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true:

- 1. **Reversible**: Submissions are reversible.
- 2. **Checked**: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.
- 3. **Confirmed**: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.

#### Result

Pass: The evaluated sample of web pages passes this success criterion.

#### level A

### Success criterion 3.3.7: Redundant Entry

Information previously entered by or provided to the user that is required to be entered again in the same process is either: Hide full description

- auto-populated, or
- $\cdot\;$  available for the user to select.

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.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### WCAG 2.2

Success criterion 3.3.7 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

### level AA

### Success criterion 3.3.8: Accessible Authentication (Minimum)

A cognitive function test (such as remembering a password or solving a puzzle) is not required for any step in an authentication process unless that step provides at least one of the following:

### Alternative

Another authentication method 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 Web site.

#### Result

✓ Pass: none of the techniques of this success criterion are applicable.

### WCAG 2.2

Success criterion 3.3.8 is part of WCAG 2.2. This success criterion is not yet a legal standard for government websites and apps. We recommend that you already meet the requirements of this success criterion.

# Principle 4: Robust

Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

## Guideline 4.1: Compatible

Maximize compatibility with current and future user agents, including assistive technologies.

#### level A

#### Success criterion 4.1.1: Parsing

In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features.

#### Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

#### WCAG 2.2

Success criterion 4.1.1 has been removed from WCAG 2.2. This success criterion has therefore not been audited. For WCAG 2.1, this success criterion is automatically met.

#### level A

#### Success criterion 4.1.2: Name, role, value

For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies.

#### Result

X Fail: the evaluated sample of web pages fails this success criterion.

#### **Evaluation Findings**

On the second step of <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/, there are expandable items with text such as "Group C-D". These items contain aria-controls attributes as part of a custom tab functionality. However, the div element that the attributes are on does not have any role. The button within the div does have a role, but the aria-controls attribute now does not have any proper function. This also goes for the aria-multiselectable attribute, which is also not appropriate to use in this situation, as this is something to be used when using listbox roles.

On the second step of the page <u>https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/</u>#/, when Group A - B is expanded, Service A and Service B are visible with chevrons pointing downwards

on their right. These chevrons are buttons made with a **<button>** element. Since these buttons are used to collapse or expand the expandable element, the status should be indicated. This can be solved by using the aria-expanded attribute.

#### level AA

#### Success criterion 4.1.3: Status messages

In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus.

Result

✓ Pass: The evaluated sample of web pages passes this success criterion.

# Appendix 1: Sample

This research was carried out on the basis of a sample. The way in which the sample is determined is prescribed in the evaluation document WCAG-EM. If a process is included in the evaluaton, all process pages in the sample are also listed.

## Full sample

- https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/
- https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/confirmation
- https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/accessibility.html
- https://wb-salesdemo.qmatic.cloud/qmaticwebbooking/#/search
- https://wb-salesdemo.qmatic.cloud/ qmaticwebbooking/#/a3b5b6849ba5ea83415edf47ea9ee65ca112e183ac759e41b192724b41e25 d2f