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# Digital accessibility report of Hoia App



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### Introduction

By applying best practices in the design and development of websites, these will become more accessible, usable and more reliable for visitors browsers, search engines and mobile devices. This is important for your visitors, but also for you. This report describes how much of your widget is compliant to the requirements of the Web Content Accessibility Guidelines version 2.1 (WCAG). Websites that comply with these guidelines are accessible to people with disabilities as well as older individuals with changing abilities due to aging.

WCAG 2 consists of different levels. The guidelines are divided over four principles. These make up the core of WCAG 2. Every guideline is then divided into one or more measurable success criteria. Because WCAG 2 is designed independent of any specific technology, all web content, including file formats such as PDF and Microsoft Office Word can be evaluated with WCAG 2.

### Suggestions on how to use this report

Alongside the WCAG 2 document, the W3C has developed several notes to support accessibility. When processing this report, it is advisable to use the documents <a href="Understanding WCAG 2.1">Understanding WCAG 2.1</a> and <a href="How to meet WCAG 2.1">How to meet WCAG 2.1</a>.

In the document How To Meet WCAG 2.1 techniques are listed which can be used to pass the success criteria. This document also contains common failures. These can be used to recognize reoccurring problems. The techniques described in How To Meet WCAG 2.1 is used in the evaluation to determine if success criteria have been passed. Hence using these techniques will result in measurable solutions to accessibility issues.

### **Support**

If you have any questions about this report, you can contact us by telephone: +31 30 – 239 8270 or by e-mail at: <a href="mailto:toetsing@accessibility.n">toetsing@accessibility.n</a>l. Please include the date of this evaluation.



### **Evaluation data**

Report type WCAG 2.1, level AA

Client Name Priit Tohver

Evaluation date August 12, 2020

### **Evaluation score**

	Level A	Level AA	Total
Perceivable	5/9	9 / 11	14 / 20
Operable	12 / 14	3/3	15 / 17
Understandable	4/5	5/5	9 / 10
Robust	1/2	0/1	1/3
Total	22 / 30	17 / 20	39 / 50

### **Scope of the evaluation**

- All screens of the Hoia Android App (alpha test version, with COVID PORTAL EMULATOR)
- Not the real Patient Portal implementation

### **Evaluation methodology**

Web Content Accessibility Guidelines 2.1, https://www.w3.org/TR/WCAG21/

Website Accessibility Conformance Evaluation Methodology 1.0, https://www.w3.org/TR/WCAG-EM/

### **Applied standard**

EN 301 549 (PDF, 1.9 Mb). This standard contains WCAG 2.1.

### **User Agents (web browsers)**

The following user agents have been used in this evaluation:

Samsung Galaxy A60, Android 10

Iphone XR, iOS 13



### **Summary**

This accessibility audit was completed on August 11, 2020. The standard for this audit is WCAG 2.1, level AA.

This report contains examples of problems that have been found in the evaluation. This is not a complete list of all the problems that were found. When upgrading the website based on this report it is important to remember to not only solve the problems given in the report but to also look at other pages. Information about a success criterion and how their problems can be solved are available in the notes of WCAG 2.1.

It is possible that despite targeted searches not all problems have been found. These problems might come up in a future evaluation. We would therefore advise that when improving the website the focus should not be limited to the problems described in this report.

This is an app research. This report refers to websites. All references to websites can be ignored.

#### **Result research**

A large portion of the app is already accessible and compatible with assistive technology, like screenreader software, nativly installed on Android and iOS. The relative simplicity and good structure of the app certainly helps make the app more accessible.

There are a number of points for attention. The most important are:

- Buttons and other interactive elements should be announced as such.
- Some texts have to low a contrast.
- On the iPhone it is impossible to select a certain date with voiceover active.



### **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.

- 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. (Level A)
  - Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.)
  - Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for additional requirements for media.)
  - Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content.
  - Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.
  - CAPTCHA: If the purpose of non-text content is to confirm that content is being
    accessed by a person rather than a computer, then text alternatives that identify
    and describe the purpose of the non-text content are provided, and alternative
    forms of CAPTCHA using output modes for different types of sensory perception
    are provided to accommodate different disabilities.
  - Decoration, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.



The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

### Android

There is an image on the 'Fallen ill' screen. The text that is read with this image is 'fallen ill'. Below this image is also the text 'fallen ill'. Now this text is read twice with VoiceAssistant when you navigate from top to bottom. Also, this is more of a decorative image, making it better if nothing is read to the image and it can be skipped.

There is an image on the 'my data' screen. The text that is read with this image is 'my data'. Below this image is also the text 'my data'. Now this text is read twice with VoiceAssistant when you navigate from top to bottom. Also, this is more of a decorative image, making it better if nothing is read to the image and it can be skipped.



#### **Guideline 1.2 Time-based Media**

Provide alternatives for time-based media.

- 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: (Level A)
  - 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.

### The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

### The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

### The evaluated set of web pages pass this success criterion

No problems found.

1.2.4 Captions (Live): Captions are provided for all live audio content in synchronized media. (Level AA)

The evaluated set of web pages pass this success criterion



No problems found.		

1.2.5 Audio Description (Prerecorded): Audio description is provided for all prerecorded video content in synchronized media. (Level AA)

The evaluated set of web pages pass this success criterion



### **Guideline 1.3 Adaptable**

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

1.3.1 Info and Relationships: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. (Level A)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

Android

There is a visual list on the 'my data' screen. However, VoiceAssistant does not read it out as a list. See the content under the text 'The following data is stored in the app:'

There is a visual list on the 'my data' screen. However, VoiceAssistant does not read it out as a list. See the content under the text 'You device's operating system keeps the following data about you'

iOS

None of the headers are announced as headers. Some examples are:
"Keep yourself and your loved ones healthy", "Set up", "App is working"

None of the lists are announced as lists. This only occurs at the test lists on the "my data" screen.

1.3.2 Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

Android

In the settings screen, when bluetooth is off, there is an 'allow bluetooth' button. With VoiceAssistant on, the switch of 'exposure detection' is located before the 'allow bluetooth' button in the focus sequence.

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. (Level A)

Note: For requirements related to color, refer to Guideline 1.4.



### The evaluated set of web pages pass this success criterion

No problems found.

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. (Level AA)

### The evaluated set of web pages pass this success criterion

No problems found.

- 1.3.5 Identify Input Purpose (Level AA): 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.

The evaluated set of web pages pass this success criterion



### **Guideline 1.4 Distinguishable**

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

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. (Level A)

Note: This success criterion addresses color perception specifically. Other forms of perception are covered in Guideline 1.3 including programmatic access to color and other visual presentation coding.

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

#### Android

On the 'my data' screen there is a link that is only visible as a link by means of color. See the link 'Privacy Policy. Provide a second way in which this link can be recognized as a link. For example, by underlining the link.

On the 'Hoia' homescreen there is a link that is only visible as a link by means of color. See the link 'our homecare guide'. Provide a second way in which this link can be recognized as a link. For example, by underlining the link.

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. (Level A)

Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether or not it is used to meet other success criteria) must meet this success criterion. See Conformance Requirement 5: Non-Interference.

The evaluated set of web pages pass this 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: (Level AA)
  - 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.

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

IOS

The contrast of the text "You have been in contact with 2 COVID-19 carriers" has to low of a contrast (4.0:1). The minimum contrast for such texts is 4.5:1.

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. (Level AA)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

IOS

Text size is not changed when users choose a larger text size in the accessibility options of their iPhone.

- 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: (Level AA)
  - 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.

Note: Logotypes (text that is part of a logo or brand name) are considered essential.

The evaluated set of web pages pass this 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. (Level AA)

### The evaluated set of web pages pass this success criterion

#### Android

The standard VoiceAssistant focus has too low contrast in some places. See, for example, the border around the 'settings' button on the home screen. Because this is the default focus within android, this does not need to be adjusted. However, we advise to give this focus an accessible contrast.



1.4.11 Non-text Contrast (Level AA): 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.

The evaluated set of web pages pass this success criterion No problems found.

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.

Exception: Human languages and scripts that do not make use of one or more of these text style properties in written text can conform using only the properties that exist for that combination of language and script. (Level AA)

The evaluated set of web pages pass this success criterion

No problems found.

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.

Exception: The visual presentation of the additional content is controlled by the user agent and is not modified by the author. (Level AA)

The evaluated set of web pages pass 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.

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. (Level A)

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.

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques IOS

On the 'Fallen ill' screen with voiceover on it is not possible to select a date.

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. (Level A)

Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.

The evaluated set of web pages pass this success criterion

No problems found.

<u>2.1.4 Character Key Shortcuts (Level A)</u>: 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 non-printable 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.

The evaluated set of web pages pass this success criterion



### **Guideline 2.2 Enough Time**

Provide users enough time to read and use content.

2.2.1 Timing Adjustable: For each time limit that is set by the content, at least one of the following is true: (Level A)

- Turn off: The user is allowed to turn off the time limit before encountering it; or
- Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or
- Extend: The user is warned before time expires and given at least 20 seconds to
  extend the time limit with a simple action (for example, "press the space bar"),
  and the user is allowed to extend the time limit at least ten times; or
- Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or
- Essential Exception: The time limit is essential and extending it would invalidate the activity; or
- 20 Hour Exception: The time limit is longer than 20 hours.

Note: This success criterion should be considered in conjunction with Success Criterion 3.2.1, which puts limits on changes of content or context as a result of user action.

# The evaluated set of web pages pass this success criterion

No problems found.

2.2.2 Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)

- 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.



Note 1: For requirements related to flickering or flashing content, refer to Guideline 2.3.

Note 2: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.

Note 3: Content that is updated periodically by software or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.

Note 4: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.

The evaluated set of web pages pass this success criterion



#### **Guideline 2.3 Seizures**

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

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. (Level A)

Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.

The evaluated set of web pages pass this success criterion



### **Guideline 2.4 Navigable**

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

2.4.1 Bypass Blocks: A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

2.4.2 Page Titled: Web pages have titles that describe topic or purpose. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

Android

In the settings screen, when bluetooth is off, there is an 'allow bluetooth' button. With VoiceAssistant on, the switch of 'exposure detection' is located before the 'allow bluetooth' button in the focus sequence.

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. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level AA)

The evaluated set of web pages pass this success criterion



No problems found.	

2.4.6 Headings and Labels: Headings and labels describe topic or purpose. (Level AA)

The evaluated set of web pages pass this success criterion

No problems found.

2.4.7 Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)

The evaluated set of web pages pass this success criterion



### **Guideline 2.5 Input Modalities**

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

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. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

- 2.5.2 Pointer Cancellation (Level A): 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.

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

The evaluated set of web pages pass this success criterion

- 2.5.4 Motion Actuation (Level A): 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.

The evaluated set of web pages pass this success criterion



# **Principle 3: Understandable**

Information and the operation of user interface must be understandable.

### **Guideline 3.1 Readable**

Make text content readable and understandable.

3.1.1 Language of Page: The default human language of each Web page can be programmatically determined. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level AA)

The evaluated set of web pages pass this success criterion



#### **Guideline 3.2 Predictable**

Make Web pages appear and operate in predictable ways.

3.2.1 On Focus: When any component receives focus, it does not initiate a change of context. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level AA)

The evaluated set of web pages pass this success criterion

No problems found.

3.2.4 Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)

The evaluated set of web pages pass this success criterion



### **Guideline 3.3 Input Assistance**

Help users avoid and correct mistakes.

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. (Level A)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

Android

The message 'date is required for infection notification' is not a good error message. This message does not tell what went wrong (date was not filled in / selected). This occurs on the 'fallen ill' screen.

IOS

The message 'date is required for infection notification' is not a good error message. This message does not tell what went wrong (date was not filled in / selected). This occurs on the 'fallen ill' screen.

3.3.2 Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A)

### The evaluated set of web pages pass this success criterion

No problems found.

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. (Level AA)

### The evaluated set of web pages pass this 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: (Level AA)
  - 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.

The evaluated set of web pages pass 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.

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. (Level A)

Note: Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete.

The evaluated set of web pages pass this success criterion

No problems found.

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. (Level A)

Note: This success criterion is primarily for Web authors who develop or script their own user interface components. For example, standard HTML controls already meet this success criterion when used according to specification.



The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques

Android

When you start the app for the first time there is a button / link with the text 'How it works'. No role has been indicated for this button / link.

On the 'hoia' homescreen there is a clickable element with the name 'no known exposures'. This clickable element has no role. Since this clickable element is not going anywhere, it may not be a clickable element.

On the 'hoia' homescreen there is a clickable element with the name 'I've fallen ill'. This clickable element has no role.

On the 'hoia' homescreen there is a clickable element with the name 'My data'. This clickable element has no role.

On the 'hoia' homescreen there is a clickable element with the name 'How it works'. This clickable element has no role.

On the 'Fallen ill' screen there is an input field to select a date. This 'input field' has no name and role.

On the 'Hoia' homescreen there is a link 'our homecare guide'. This clickable element has no role.

IOS

The following buttons are not announced as buttons:

"EN--Jäin Haigeks"

"EN--Teavituste info edastatud. Tutvu koduse ravi juhendiga."

The status of the button "EN--Jäin Haigeks" is not announced (reported yourself as positive or not)

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. (Level AA)

The evaluated set of web pages failed to meet the success criterion, because the following situations did not pass one or more sufficient techniques



#### Android

The message that occurs when the user clicks on 'confirm via patient portal' when no date is selected, is a status message. This status message cannot be determined programmatically at this time. This occurs on the 'fallen ill' screen.

#### IOS

The message that occurs when the user clicks on 'confirm via patient portal' when no date is selected, is a status message. This status message cannot be determined programmatically at this time. This occurs on the 'fallen ill' screen.



# Pages in the sample of this evaluation

All screens within the Hoia App



# **About the Accessibility Foundation**

The Accessibility Foundation is market leader in accessibility in the Netherlands. In Europe, we are an important provider of expertise in the accessibility domain and active in many European and local projects. We research, test and develop accessibility solutions. We provide support, recommendations and inspection of websites for businesses, (local) governments and other organizations.

Read more about our foundation on our website: https://www.accessibility.nl/english.

