# **ACCESSIBILITY SCAN MAPCOMPLETE**

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### 1 INTRO

This report shows the results of an accessibility scan of MapComplete, done by HAN University of Applied Sciences.

#### **Method of testing**

The auditing team at HAN includes students, researchers and lecturers in the field of IT and UX Design. Most of the testing is done manually with the use of a few tools, such as a screen reader. <u>Here's a list of</u> <u>the (free) testing tools we use</u>.

This is a quickscan, which is a check of the most common accessibility issues in a sample of pages/screens. The scan doesn't cover all accessibility criteria, so it is not a replacement for an official audit. If we find an issue we report it only once, this means that the issue might occur in other places. We follow the criteria as described in the international standard for web accessibility: <u>WCAG 2.2</u> guidelines, level AA.

#### Scope of this quickscan

OS & browser used: Windows, Chrome

For this scan we used the 'Restaurant and fast food' map as a test sample. We checked:

- The intro page
- The map
- The menu
- Restaurant detail info (and its functionalities, like rating a restaurant)

#### Summary

Overall, the website is fairly accessible. Most actions can be completed using a screen reader and the map itself works well with keyboard and screen reader. There is also room for improvement. In the next chapter, we describe the issues we found.

### 2 ISSUES

Nr	Issue	Location	Example	Guideline
Nr 1	<ul> <li>Issue</li> <li>The contrast between foreground and background is not sufficient for: <ul> <li>the grey placeholder text in the search bar</li> <li>the blue text links on a restaurant info page</li> <li>in areas where there are</li> </ul> </li> </ul>	Location Different locations	ed by Mangrove Reviews and are available under <u>CC-BY 4.0</u>	Guideline <u>1.4.3</u> <u>Contrast</u> ( <u>minimum</u> )
	many results: the copyright button			

	OpenStreetMap button			
	and the text 'zoom in			
	further'			
2	The ' <i>Please log in to add a</i> <i>picture</i> '-button doesn't have a visible focus (is highlighted) when it receives focus using the keyboard. (Maybe this is because it has a white focus indicator, and the button is against a white background.)	Restaurant info page	Reserve log in to add a picture	2.4.7 Focus Visible
3	The 'share' and 'copy' buttons don't have a name (label). A screen reader will read 'button' but doesn't say what happens if you click on it. This same issue goes for the opening hours ' <i>During a</i> <i>public holiday, this is</i> ' edit input field. The screen reader will only read 'combo box collapsed'	Different locations	Share this map by ht During a public holiday, this is open	<u>4.1.2 Name,</u> <u>Role, Value</u>
4	<ul> <li>By using 'tab' on your keyboard, you should be able to cycle through all interactive elements on the page. This is currently not the case for: <ul> <li>the function of rating a restaurant with half stars (0.5). This is only possible using mouse input. People using a keyboard to navigate can only give full stars.</li> <li>the QR-code on the 'share this map' page of the intro page.</li> <li>The exit button at the top right corner of the intro page</li> <li>The button that brings the displayed location on the map back to the current</li> </ul> </li> </ul>	Different locations	How would you rate Restaurant A How was your el Rate 3 stars	<u>2.1.1 Keybo</u> ard

	restaurant on a restaurant			
	detail page			
5	<ul> <li>The status message</li> <li>displaying that a review is</li> <li>successfully saved, is not</li> <li>announced by the screen</li> <li>reader. Let assistive</li> <li>technology notify users about</li> <li>status changes that don't take</li> <li>focus. This same issue occurs</li> <li>when the site displays</li> <li>messages like:</li> <li>Searching</li> <li>Loading data</li> <li>There are no relevant</li> <li>features</li> </ul>	Different pages	Review saved. Thanks for sharing! ★★★☆☆	4.1.3 Status Messages
6	User interface components and meaningful graphics must have a colour contrast ratio of at least 3:1 to their background. The green 'Openstreetmap.org' button and the clock icon don't meet the minimum colour contrast ratio threshold. This is also seen on the map where the clock icons have various backgrounds that don't provide enough contrast.	Restaurant detail page	Pier Du ebab ye	<u>1.4.11 Non-</u> text Contrast
7	<ul> <li>All images that aren't decorative need a text alternative, so that people using screen readers can hear what the image or icon means. This is not the case for:</li> <li>The clock with current opening hour</li> <li>the QR-code on the 'share this map' page of the intro page</li> </ul>	Restaurant detail page	21:00	<u>1.1.1 Non-</u> text content
8	When opening a tab in the menu pages, the keyboard focus selects the whole tab first, before focusing on the	Menu page		2.4.3 Focus Order

	first interactive element in the			
	tab. This whole screen is not			
	an interactive element itself,			
	which may cause confusion			
	for people who use a			
	keyboard to navigate.			
9	The input field 'What kind of	Restaurant	What kind of food is served here?	1.3.5 Identify
	food is served here?' doesn't	detail page	O This is a pizzeria	Input
	provide feedback of the		O This is an Italian restaurant (which serves more than pasta and pizza)	Purpose
	autocomplete when typing,		This place mostly serves coffee	
	which makes it impossible for		Cancel	
	people who use a screen			
	reader to know that the			
	options change. Use code to			
	indicate the purpose of			
	common inputs.			
10	Headings and labels describe	Restaurant	The name of this business is Plaats1	2.4.6
	their topic or purpose in order	detail page	A restaurant, focused on creating a nice experience where one is served at	<u>Headings</u>
	to let people who use a		Located on the ground floor	and Labels
	screen reader navigate		This place mostly serves international	
	themselves (what happens			
	when a button is pressed, for			
	example). There is currently			
	no clear description for:			
	• the editable options on a			
	restaurant detail page,			
	like 'Coffee is served			
	here'.			
	• the button next to ' <i>located</i>			
	on the ground floor' which			
	lets users edit the			
	restaurant's floor			
11	The purpose of each link	Restaurant	ttps://www.collectiedegroen.nl/eng/cafe	2.4.4 Link
	should be understandable	detail page		<u>Purpose (In</u>
	from its own text or immediate			<u>Context)</u>
	context, in order to let users			
	understand the purpose of			
	each links. This is not the			
	case for the links to a			
	restaurant's website and their			
	email address			
12	Using a screen reader, it is	Restaurant	What are the opening hours of Restaurant De Waagh ?	3.3.2 Labels
	not clear what type of	detail page	Mon Tue Wed Thu Fri Sat Sun	or
	information is required in the		00.00	Instructions
	input field above the opening			

13	hours schedule. Provide labels or instructions for inputs to let users know what information to enter. The form element under 'On what level is this feature located?' doesn't have a label. People who use a screen reader need a label to hear what the element is for. Placeholder text is not allowed as label.	Restaurant detail page	Located on the level (a number) th floor	<u>1.3.1 Info</u> and <u>Relationship</u> <u>s</u>
14	If an image isn't decorative, it needs a text alternative, so that people using screen readers can hear what the image means. The image for Restaurant Landhaus Walter doesn't have an alternative text. If this image is decorative, it needs an empty alt attribute (alt="") so screen readers will ignore the image. Note that also user generated content need text alternatives. One option could be that users add a description to their image.	<u>Restaurant</u> <u>detail page</u>	Hamburg Stadgurk Lindhaus welke wel User vitweinhart. Worlgang Menhart, Hamburg Colyrad 30	<u>1.1.1 Non-</u> text content

#### **3 OTHER FINDINGS**

- 1. There is no audible feedback when using the zoom buttons on the map, even though we see changes visually. We suggest that the buttons provide some sort of feedback to people who use a screen reader about what is currently happening. Perhaps this feedback could be the zoom level or a description of what is shown of the map, such as the available restaurants within the current view.
- 2. When changing the language in settings, some parts aren't translated. This is okay, as long as those parts have a lang attribute that tells screen readers in which language that part is written (see: <u>3.1.2 Language of Parts</u>). This doesn't seem to happen everywhere, meaning some Dutch parts are voiced with an English voice.
- 3. When typing an invalid input in the "What are the opening hours of restaurant xx" input field (that is, without using the mouse slider underneath), there is no visual or audible feedback that the input is wrong or any suggestions on how to correctly type opening hours. This fails WCAG guideline 3.3.3 Error Suggestions. A screen reader user that selects hours and then presses enter is also not informed that they have to log in to submit the hours. We suggest that the option to add anything is not shown for users that are not logged in.

#### **4 REFERENCES**

- Web Content Accessibility Guidelines (WCAG) 2.2
- How to Meet WCAG 2.2 Quick Reference
- HAN NGI website
- List of free tools HAN uses for accessibility testing