Intro

Based on the Digital accessibility quick scan report provided by Harmen Lanser of Accessibility.nl on March 23th 2021, we prepared a reverse report, sharing feedback and explanation on how we resolved identified issues.

1.1.1 Non-Context Content

On page (https://api.qc.cortezaproject.org/auth/login) the Corteza logo has no alternate text in the alt = "" attribute.

Corteza logo now has an alt tag. It has to be generic, because the logo is configurable and can be replaced per-customer. (<u>Source code</u>)

The overview of the Active user(s) on page (https://qc.cortezaproject.org/admin/dashboard) is visually visible and observable. People who are blind cannot use the screen reader to observe how many active user(s) are present.

All dashboard stats are now readable with screen readers as well. (<u>Source code</u>). We're considering re-designing the whole page and making relevant numbers stand out for a quicker overview.

1.3.1 Info and Relationships

On page (https://api.qc.cortezaproject.org/auth/login) the header "Log in" is formatted with <h4> element instead of <h1> element.

Login and other authentication screens (registration, forgotten password, security, multi-factor authentication setup, profil, change password...) now have the main card title formatted with <h1> element instead of <h4>. (Source code).

We made another check of the overall heading structure using the HeadingsMap Chrome extension you suggested.

On page (https://qc.cortezaproject.org/compose/namespaces), the top right search field has no label associated with the search field. Placeholder is not sufficient for people who are cognitively impaired as placeholder disappears as soon as one starts typing.

We now display search icon next to search input, that visible even when the input is active and placeholder disappears

Low Code Namespaces Create new namespace Permissions Type here to search among all namespaces... Q List of Charts New Chart * Import Export Permissions Type here to search all charts in this namespace Q

On page (https://qc.cortezaproject.org/admin/dashboard) several elements are described with an <h1> element, while a <h1> element must be unique. On this page, the possible solution could be to describe only the name "Corteza Admin" with the <h1> element and write the child elements with <h2> or as the subhead of the <h2> with a <h3> element. If it doesn't apply, you might be able to fix it with CSS.

Structure of heading is now following the correct hierarchy (with Corteza Admin being the only title with <h1> tag applied. (<u>Source code</u>). We made another check through the whole app, making sure there is only one <h1> tag applied on every screen.

Attaching the screenshot of the new structure from HeadingsMap on Corteza admin dashboard:



On page (https://qc.cortezaproject.org/admin/dashboard) you can see a menu to the left of the page. The headings "System" and "Compose" look like headings formatted which you could solve with an <h2> element. Also, the list of possibilities under the heading "system" is not formatted as a list with an element, so that it is not known how many possibilities are present per head. The screen reader reads the number of possibilities if it is placed in an element.Both suggestions were taken into consideration and applied: titles in the sidebar now have a <h2> tag applied and content of the sidebar is structured in three main groups tagged with with sidebar elements listed as (Source code).

We're going through a re-design of sidebar navigation on Low-code application and we'll make sure to incorporate the same suggestions there as well.

On page (https://qc.cortezaproject.org/admin/compose/settings) there is a form in which the legend element is not directly below the fieldset element. Between the fieldset and legend element there is a <div> element and the auxiliary software is unable to determine the relationship

between the name of the group and the radio buttons. The <div> elements can possibly be placed in the legend. See the example on: <u>https://www.w3.org/WAI/tutorials/forms/grouping/</u>

The form wasn't structured correctly and this outcome was a result of double-nesting of the form-group component. This is now fixed so the form is structured as it has to be, without empty divs between legend and the corresponding input. (<u>Source code</u>).

We'll do another check of all the code in the Admin application applying the same updates as it hasn't been refactored for more than a year.

1.4.1 Use of Color

If the links or buttons on the page (https://qc.cortezaproject.org/compose/namespaces) receive a keyboard focus, they only change color, and no other indicators are present such as a border or an underline element. This also appears on page

(https://qc.cortezaproject.org/compose/ns/crm/admin/modules). Consider, for example, people who are color blind.

All buttons now have a shadow presented on a keyboard focus (25% of the original button color). We'll also consult our designer if we can improve the styling all together, as we're aware gray color presents a lower contrast by default.

				interdum nobis ea. Cubilia, fusce explicab	
Visit namespace	ď	Visit namespace	Ľ	Visit namespace	ď

1.4.3 Contrast

On page (https://api.qc.cortezaproject.org/auth/login) the text "version 2021.3.0-rc.2 (bottom right of the page) has insufficient contrast ratio of 3.0:1 with the background.

Version tag on bottom right, now has sufficient contrast ratio. This is used for development purposes and will be moved to the top navigation shortly, where we'll show it in a dropdown with black text color on white background.

Background image of the Login/Registration screen is configurable, hence we can't always assure the sufficient contrast, so moving it all together makes most sense.

ACCESSIBILITY		
Contrast	Aa 11.5 🧭	
Name		
Role	generic	
Keyboard-focusable	\otimes	
	version 2021.3.0-rc.3	

If the page (https://qc.cortezaproject.org/admin/dashboard) is reduced to the screen size 1024x768 and zoomed in by 200%, the text of the Dashboard is no longer legible and overlaps each other.

We changed the structure of the dashboard text, so it shows in a single line on larger screens or bigger zoom. (<u>Source code</u>). We'll do another check of behaviour of all other screens in the Admin application while using 200% - 400% zoom on smaller screens.

See the screenshot below of the new layout on the screen size 1024x768 px with 200% zoom enabled:



1.4.10 Reflow

If one page (https://api.qc.cortezaproject.org/auth/login) is reduced to size 1024 x 768 and zooms in by 400%, then one scrolls a little horizontally because the logo is not made a little smaller. It is not allowed to scroll the webpage horizontally due to user-friendliness for visually impaired people.

Logo now scales down on smaller screens and with larger zoom, so it doesn't cause a horizontal scroll. (<u>Source code</u>).Example at 500% zoom and 1024x768 px screen width:

E Corteza	
Log in	
 E-mail *	A Name
email@domain.ltd	

If one changes the format of the website on page

(https://qc.cortezaproject.org/compose/namespaces) to 1024x768 px and zooms in with 400%, one must scroll horizontally to be able to take in all the information. This will be through this success criteria will be rejecting for people working with screen magnification.

The "Create new namespace" and "Permissions" button had prevented text wrap, hence they caused horizontal scroll on zoom in. Buttons now break in 2 lines and horizontal scroll doesn't appear anymore. Example at 500% zoom and 1024x768 px screen width:

Low Code Namespaces Create new namespace Permissions Type here to search among all

If one changes the format of the website on page

(https://qc.cortezaproject.org/compose/ns/crm/admin/modules) to 1024x768 px and zooms in with 400%, one must scroll horizontally.

Horizontal scroll happened for two reasons: the same as in the case above, buttons were forced to stick in a single line. Another reason is responsive navigation on top - because we have relatively little elements in the navbar (only four), we didn't toggle mobile navigation on smaller screens. Taking 400% zoom into consideration, this is absolutely a must and is now fixed. Example at 500% zoom and 1024x768 px screen width:



2.1.1 Keyboard

In order to fully investigate the keyboard operation, it is necessary that the keyboard focus is present in order to be able to see what can be operated with the keyboard.

All links, buttons and inputs, now show shadow around the focused element when it's selected with the keyboard.

2.4.2 Page Titled TO-DO

All examined set of pages contain the same page title, namely: Corteza. Please provides a clear, descriptive title for web pages. Use the title element in HTML for this. A good title is important for visitors with various disabilities. It provides an important aid in navigating the website; people know immediately what a page is About.

Correct, currently we show in the title only "flavour" of Corteza - whether it's Crust or Corteza. The main reason for that is the fact that we use a "wrapper", called Corteza Unify and show all the apps in iFrames. With restructuring, we're getting rid of Unify and tabs navigation in Corteza and we'll be opening applications in the browser tabs. In parallel with this change, we'll improve titles and show the right content - name of the opened page, name of opened module etc. This is scheduled for a release in June 2021.

2.4.3 Focus order

On page (https://qc.cortezaproject.org/ "Edit namespace" (No URL present, manually described ")) the researcher leaves the" Short name "field blank and clicks the" Save "button at the bottom right. error message that the "Short name" input field is not filled in and that automatically disappears after 5 seconds. For people who are cognitively impaired, it is desirable to let it stand the error message. Also, the focus should be directly on the error message so that the error message is also read directly by the screen reader.

This was a bug in the system, "short name" is not a required field, only "Full namespace name" is. If this one is left empty, we highlight the input, add an exclamation point icon and disabled save button.

Edit namespace	a
Full namespace name	
Enter namespace name	0
Short name	
Enter a short name for the namesnace	

2.4.4 Link Purpose (in context)

On page (https://qc.cortezaproject.org/compose/namespaces) it contains link next to link "Visit namespace" with picture of pen on paper, no name. With the screen reader you only hear "link" but not what the link is for while we visually perceive that it is probably an edit-button.

Edit button now has an aria-label parameter to explain the difference between actions (view/edit) and to make it clear which namespace is in question. Screen reader now reads "Edit namespace CRM". (<u>Source Code</u>)

The "Visit namespace" links at (https://qc.cortezaproject.org/compose/namespaces) occurs twice and does not make the link clear to which namespace people are going. Possible solution could be: "Visit namespace CRM" and "Visit namespace Service Solution".

Visit namespace button now has an aria-label parameter to make it more clear which namespace is in question. Screen reader now reads "Visit namespaces CRM". (<u>Source Code</u>)

On page (https://qc.cortezaproject.org/admin/dashboard) the numbers of the "Active role (e) s" and "Active application (s) are a link. The screen reader only reads the number and does not clear what the link is for. This includes the links of the number "Suspended", "Deleted", "Archived" and "Total".

This was updated so the screen reader reads the whole string in a format: { number } { active/suspended/deleted/archived/total } { users/roles/application } for example "Seven active applications". (<u>Source code</u>)

The logout button at the top right of the page (https://qc.cortezaproject.org/admin/dashboard) is not described in the <a> tag, and one cannot detect with the screen reader that this link is intended to log out.

Logout button on top right now has now been described and can be read by the screen reader. (<u>Source code</u>)

2.4.6 Headings and Labels

On page (https://qc.cortezaproject.org/admin/dashboard) some headings contain only a number. The headings and labels (in a form) should always provide a good description of the purpose or topic. This is important for visitors with various limitations: good headlines and labels are essential to be able to understand the content (quickly). For example, blind visitors can request an overview of all headings on the page and thus quickly get a picture of the content. A headline with only a number is not a good description. A possible solution could be: "12 Active user (s)" As above, this was updated to the whole sentence in the format { number } { active/suspended/deleted/archived/total } { users/roles/application } for example "Eight suspended users". (Source code)

2.4.7 Focus visible

The keyboard controls are not visible on page (https://qc.cortezaproject.org/). If you navigate through the web page with the tab key, it is not visible where you are because the focus visibility is missing.

All links, buttons and inputs, now show shadow around the focused element when it's selected with the keyboard.

On page (https://qc.cortezaproject.org/compose/ns/crm/admin/modules) the keyboard focus is not visible everywhere when onebody navigates with the tab key.

All links, buttons and inputs, now show shadow around the focused element when it's selected with the keyboard.



3.1.1 Language of Page:

Approved

3.3.1 Error Identification

On page (https://qc.cortezaproject.org/admin/system/settings) you can enter an email address next to the label "Sender's address". If you enter a wrong format and press the Submit button, you will not receive an error message that the email address has been entered incorrectly.

We added email form validation; if the format is not correct, we now present an error message as seen in the screenshot below.

Authentication email sender mail

Sender's address

example.tld

Please enter valid email address.

3.3.2 Labels or Instructions

Provide clear labels and instructions with form input fields, so that it is clear to all visitors what needs to be completed. Instructions must be retrievable for both sighted visitors and blind visitors, such as the input field on page (https://gc.cortezaproject.org/),

(https://qc.cortezaproject.org/compose/ns/crm/admin/modules) and "Edit namespace webpage".

As part of the solution for this feedback, we implemented an option for low-code admin to add extra instructions to every field, which is shown on the UI as a "description" field. Description field is readable by the screen reader. Different description fields can be defined for view and for edit/create forms, to really make sure all the necessary additional details are provided.

Opportunity Detail
Opportunity Name
This is a description.

3.3.3 Error Suggestion TO-DO

If possible, it is good to offer suggestions when a form has been filled in incorrectly. In addition to a well-identifying error message (see SC 3.3.1), a suggestion for improvement must therefore also be offered. For e-mail addresses, a message can be given if an incorrect e-mail address has been entered.

E-mail verification has been addressed with the proposed solution in section 3.3.1 Error Identification. We'll go through all the forms and apply additional verification rules and improve error messages displayed on the form (or improve behaviour of the application - for example disable "Save" button along with explanation). With new functionalities, this is going to be an ongoing task, the initial implementation is scheduled for version 2021.6 release at the end of June.

4.1.2 Name, Role, Value

On page (https://qc.cortezaproject.org/) the "+" button (in the top left tab) has no name. With the screen reader you only hear the word "button" and receive no idea what the button is for. **These tabs are now deprecated and every Corteza application is opened in the new browser tab instead.**