

Leading Practices: How to Build Accessible Surveys

Accessible surveys are designed to be accessible to people with a diverse range of hearing, movement, sight, and cognitive ability. There are two requirements for a survey to be accessible:

1. Content that may be difficult for impaired users to navigate or that screen readers cannot interpret should be excluded.
2. Necessary messaging should be added to ensure that impaired users can understand how to use the survey.

This tutorial covers recommendations for building accessible surveys. If you wish to learn more about Alchemer's accessibility compliance visit our tutorial on [Alchemer's Accessibility Compliance](#).

When Should I Consider Accessibility?

If you're planning on sharing your survey with respondents with disabilities, you'll definitely want to follow accessibility best practices. If you're planning on sending your survey to a large group of people, and thus are not sure of respondents' abilities, we recommend following our accessibility recommendations.

Recommendations for Building Accessible Surveys

We've done the research to provide you with some best practices for creating accessible surveys.

If you'd like to learn more about accessibility best practices, please check out [Alchemer's Accessibility Compliance Tutorial](#).

1: Avoid question types that are not accessible or are difficult to use

We recommend avoiding the following question types to make for the most accessible surveys:

- **Slider (Single and List)** - Not screen reader accessible in all browsers. Sliders are also difficult for keyboard-only respondents to use.
- **Grouping (Open Card Sort)** - While we provide a [screen reader message](#) for this question, it is not easily accessible for respondents using screen readers.
- **Grouping (Closed Card Sort)** - While we provide a [screen reader message](#) for this question, it is not easily accessible for respondents using screen readers.
- **Grouping (Quick Sort)** - While we provide a [screen reader message](#) for this question, it is not easily accessible for respondents using screen readers.
- **Drag & Drop Ranking** - While we provide a [screen reader message](#) for this question, it is not easily accessible for respondents using screen readers.

- [Semantic Differential](#) - Not accessible without [Screen Reader Table Summary](#) describing the left and right labels of the table.
- [Text Highlighter](#) - While we provide a [screen reader message](#) for this question, it is not easily accessible for respondents using screen readers.
- [Image Heatmap](#) - Not accessible. There is a [screen reader message](#) that corresponds to this question type indicating that the element is not accessible. Respondents using screen readers will be instructed to proceed past it. If you choose to include this question type in your survey; 1) make sure to leave this question type unrequired and 2) review the [screen reader message](#) and customize as you see necessary.
- [Image Select \(Single and Multi\)](#) - Answer option titles are used as the alt attribute for the images thus making this question technically accessible, however, it is not inclusive for respondents with sight disabilities.
- [Date](#) - The date picker is screen reader accessible however it can be difficult for respondents using screen readers to use. We have added [keyboard controls](#) to the date question calendar to improve navigation via screenreader.
- [Audio](#) and [Video Sentiment](#) - The slider that is used in this question is not screen reader accessible in all browsers. Sliders are also difficult for keyboard-only respondents to use.
- [Continuous Sum](#) - Some browsers do not update the Total for screen readers.
- [Signature](#) - This question is accessible for screen readers but it is important to note that the screen reader will bypass the signature field. Respondents will be able to enter their name in the text field.
- [ReCAPTCHA Actions](#) - While these elements do have audio alternatives for visually-impaired users, it is difficult for visually-impaired users to use.

2: Add Screen Reader Table Summaries to grid questions

If you use grid questions (Radio Button Grid, Checkbox Grid, Ranking Grid, Drag & Drop Ranking, Dropdown Menu List)in your survey, remember to fill out a summary of the question in the **Screen Reader Table Summary** field at the bottom of the **Layout** tab of each question. Describe the structure of the table so that visually-impaired users can navigate the table.

Note, there are default [Screen Reader Messages](#) available for some of these question types that explain the general functionality of the question type. These messages will be read before your Screen Reader Table Summary so you only need to describe the contextual details of your table in the Screen Reader Table Summary field.

The following question types have a **Screen Reader Table Summary** field:

- [Radio Button Grid](#)
- [Checkbox Grid](#)
- [Ranking Grid](#)
- [Drag & Drop Ranking](#)
- [Dropdown Menu List](#)
- [Textbox List](#)
- [Star Rating Grid](#)
- [Grouping \(Open Card Sort\)](#)

- [Grouping \(Closed Card Sort\)](#)
- [Quick Sort](#)
- [Dropdown Menu Grid](#)
- [Textbox Grid](#)
- [Custom Table](#)

3: Avoid Question Logic

It's always best to avoid hiding questions with [question logic](#) as screen readers have trouble deciphering live questions from hidden questions.

4: Update validation error messages for screen readers

Validation and associated warning messages can be problematic for screen readers as they are often not visible. If you plan on having validation, such as [required questions](#), [textbox validation](#), etc, we recommend reviewing and updating your warning messages in Text & Translations to ensure that the respondent using the screen reader knows what the exact error is.

To review and customize your validation messages go to **Tools > Text & Translations**. Select the language of your survey (if you have multiple languages you'll want to review and customize each for your respondents using screen readers). On the **Messages** tab, you'll find all potential error messages in your survey. If you're not sure which are used in your survey we recommend running through a test response with the goal of returning validation errors.

5: Review/update default Screen Reader Messages

While it is best to avoid the [above-listed question types](#), many of these questions have Screen Reader Messages to assist respondents who use assistive devices in understanding and navigating these question types. We recommend that you review and modify this text as you see necessary. You should also translate these messages if you are sending out a multi-language survey.

To review and customize your Screen Reader Messages go to **Tools > Text & Translations**. Select the language of your survey (if you have multiple languages you'll want to review and customize each for your respondents using screen readers). On the **Messages** tab scroll to the **Screen Reader Messages** section.

Question Type/Action	Message Title	Default Message Text
Drag & Drop Ranking	Drag & Drop Instruction	Order the items from the following list. First select an item with the spacebar to show a menu of possible ranking positions. Next, click a ranking position to order it in the ranked list. Note the menu will display more ordering

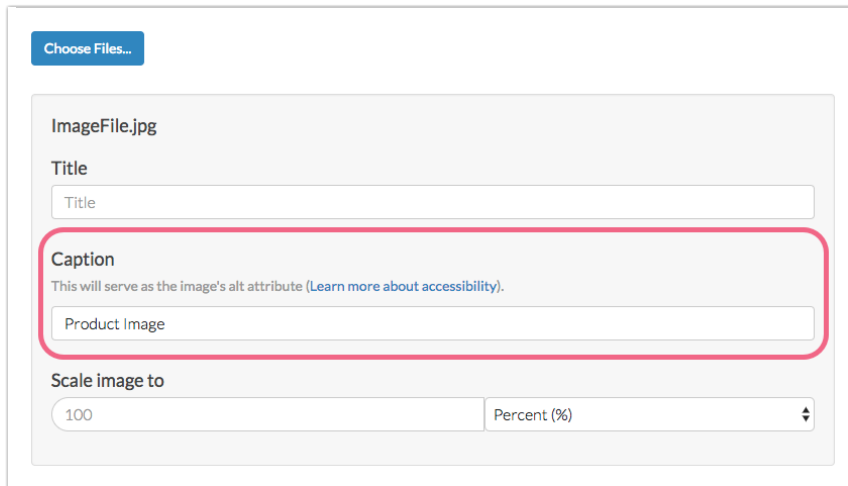
Question Type/Action	Message Title	Default Message Text
Grouping (Open Card Sort)	Open Card Sort Instructions	Group the following items into categories you define. First select an item with the spacebar to show a menu of possible categories. Next click a category to add the item to the category. Note: on your first try you will only have one available category. If you've clicked "Add new category" enter a category name into the text field.
Grouping (Closed Card Sort), Quick Sort	Closed Card Sort Instructions	Group the following items into the provided categories. First select an item with the spacebar to show a menu of possible categories. Next click a category to add the item to the category.
Page Timer Action	Page Timer Notice	This page has an initial time limit of
Page Timer Action	Suppress Future Page Timer Alerts	Would you like to disable all future page timer notifications?
Page Timer Action	Page Timer Expiration	Time limit expired. Submitting page.
Image Select (single select)	Single-Select Image Instructions	Please select one of the following images.
Image Select (multi select)	Multi-Select Image Instructions	Please select from the following images.
Ranking Grid	Ranking Grid Instructions	Note: for the following table each column is restricted to a single answer across all rows.
Cascading Dropdown Menu	Cascading Dropdown Alert	Please select from the next dropdown:
Text Highlighter	Text Highlighter Instructions	Click on a word to initiate a text selection. Click again to complete the selection. Once you have text selected, you will

Question Type/Action	Message Title	Default Message Text
		have the option to tag or comment on the selected text. Click "Save" to submit your response and return to the survey or click "Never Mind" to exit the dialogue without saving your response.
Image Heatmap	Inaccessible Survey Element	This question is unavailable for screen readers. Please proceed.
Number	Invalid Number Alert	This question requires a valid number format.
Email	Invalid Email Alert	This question requires a valid email format.
Date	Invalid Date Alert (MM/DD/YYYY)	This question requires a valid date format of MM/DD/YYYY.
Date	Invalid Date Alert (DD/MM/YYYY)	This question requires a valid date format of DD/MM/YYYY.
Date	Invalid Date Alert (YYYY/MM/DD)	This question requires a valid date format of YYYY/MM/DD.
Currency Validated Textbox	Invalid Currency Alert	This question requires a valid currency format.
Percent	Invalid Percent Alert	This question requires a valid percent format.
Grid Questions in combination with the One-at-a-time Interaction	One At A Time Table Alert	Once the following question is answered, you will be automatically advanced to the next page
Language Bar	Language Bar Description	This will open a menu below with different survey language options
Save and Continue	Save and Continue Bar Description	This will open a menu below with options to save your survey progress
Low Vision Mode	Low Vision Mode Description	This will adjust the contrast ratio, font size, and font weight. It can be toggled on and off

Question Type/Action	Message Title	Default Message Text
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6: Avoid using images in your survey

Including images in your surveys is not inclusive for respondents with sight disabilities. If you do use images make sure they are accessible. Screen readers read the "alt" attribute within the HTML of your images. On upload to our [file library](#), the text that you specify in the **Caption** field will populate the alt attribute and thus will be read by a screen reader.



The screenshot shows a file upload interface. At the top left is a blue button labeled "Choose Files...". Below it, the filename "ImageFile.jpg" is displayed. There are three input fields: "Title" (containing "Title"), "Caption" (containing "Product Image" and highlighted with a red rounded rectangle), and "Scale image to" (containing "100" and a dropdown menu set to "Percent (%)"). A small link "(Learn more about accessibility)" is visible next to the caption field's label.

7: Avoid using videos in your surveys

Including videos in your surveys is not inclusive for respondents with sight disabilities. If you do use videos make sure they are accessible.

Consider adding a YouTube video as they are the most accessible and familiar. YouTube allows you to add closed captions to your videos making them much more accessible. Learn how to [add a YouTube video](#) to your survey.

In addition, a descriptive transcript should be included with all videos. Learn how to [add text to your survey](#).

8: Use people-first language

Be mindful of the language you use when distributing your survey to people with disabilities. **People-First Language** is a linguistic practice that ensures the language and sentence structure used when addressing your audience emphasizes that they are people with a disability, and not "disabled people." People-first language avoids language that would potentially cause a person with a disability to be dehumanized. In sentence structure, name the person first and their condition second so you're emphasizing that they are people first, not just a condition.

9: Enable the Page Timer option to Allow respondent to extend time limit

The [Page Timer Action](#) has a few options that ensure that surveys with Page Timers are accessible to people with a diverse range of hearing, movement, sight, and cognitive ability. The first two options are built-in to the Page Timer for all respondents using a screen reader. The third is an

option available to you as the survey builder to make available to survey respondents as you see fit.

1. If a screen reader is being utilized, the Page Timer is paused and time remaining is read either:
 - at *50% intervals* if allocated time is less than 5 minutes
 - at *25% intervals* if allocated time is less than 20 minutes (i.e. original time is 4 minutes, time remaining is read every minute)
 - *every 5 minutes* if allocated time is greater than 20 minutes
 - in all above cases, these notifications can also be dismissed if using a screen reader.
2. If the survey page is set to automatically submit after the time is up, the survey respondent will be notified of this via screen reader *3 seconds prior to auto-submission*. This final notification is not dismissible.
3. The **Allow respondent to extend time limit** setting allows the respondent to extend the time limit once per page/survey by using the **Extend Time** link at the bottom of the survey page. *The time limit will be extended 10x i.e. if your time limit is set to 5 minutes, it will be extended to 50 minutes.*

Name

New Page Timer

Timer Functions

Timer sets one time limit for respondent to complete the survey

Timer is only for the time spent on this page

Additional Options

Automatically redirect to the following page after timer is up and disable timer:

2: Thank You!

Allow respondent to extend time limit

Time Limit

00:02:00

10: Use an accessible survey theme and/or enable Low Vision Mode

Simple, clean survey themes are most accessible. Good color contrast is important for visually impaired users. Our default survey theme has the WCAG recommended contrast ratio of 7:1.

If you choose a different theme or use tools to style your theme, consider enabling the Low Vision Mode option.

To evaluate the color contrast in your survey use this color contrast checker:

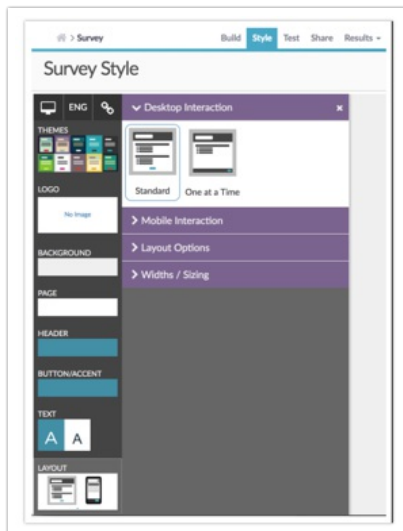
<http://webaim.org/resources/contrastchecker/>

11: Avoid the One-at-a-Time Survey Interaction

On the **Style** tab under **Layout**, you can choose both a **Desktop Interaction** and a **Mobile Interaction**.

The default desktop interaction is the Standard Interaction in which survey respondents will experience your survey much like how it is displayed on your Build tab. The default mobile interaction is the One-at-a-Time Interaction in which survey respondents will see one question at a time. When the respondent submits the question it will slide to the left and the next question will slide in from the right.

We recommend the **Standard** interaction as it is most accessible for screen readers. To change your interactions go to **Style > Layout** and customize both the **Desktop Interaction** and **Mobile Interaction**.



12: Test your survey for accessibility

Alchemer will do some basic accessibility checks for you. To see the Alchemer diagnostics, go to the **Test** tab.

If your survey has accessibility issues you'll see an option that reads "Automated diagnostics found a potential issue" below the Estimated Length, Fatigue Score, and Accessibility. Click this alert to expand and review the issues that were found. If you included question types that do not play well with assistive devices you will have a warning per question type.

A screenshot of the 'Test' tab in the Alchemer interface for a survey titled 'Employee Engagement & Workplace Happiness'. The navigation bar shows 'BUILD', 'STYLE', 'TEST', 'SHARE', 'RESULTS', and 'TOOLS'. Below the navigation, there is a text block: "We've run an inconceivable number of surveys & forms and have learned a thing or two about what makes a successful project. Part of making your project great is making sure that your participants can and will participate. Form Length, Fatigue, and Accessibility are all measures of how easy it is for your participant to make it through." Three metrics are displayed: '6 minutes Estimated Length', 'Fatigue Score' (represented by a gauge), and 'Accessibility' (represented by a gauge). At the bottom, an orange alert box contains the text: "Automated diagnostics found a potential issue".

Other Testing Tools

We recommend using the following tools to further test for 508 compliance.

Wave accessibility evaluation tool: (Firefox Plugin)

<http://wave.webaim.org/>

Validation tool

<http://validator.w3.org/>

TAWS accessibility analyzer: <http://www.tawdis.net/index.html?lang=en>

Wave accessibility evaluation tool: (Firefox): <http://wave.webaim.org/>

Color contrast checker: <http://webaim.org/resources/contrastchecker/>

Validation tool: <http://validator.w3.org/>

Related Articles