

WCAG Compliance Guide for L^AT_EXDocs

Sergio García-Vergara

sergiodotgarcia@gmail.com

Abstract. This document details the steps for generating L^AT_EX documents to be WCAG compliant. The goal is for screenreaders to accurately handle the compiled documents. Namely, this means reading the document in order, and handling the math equations and section headings accurately.

1 Introduction

Web Content Accessibility Guidelines (WCAG) are a set of recommendations for making Web content more accessible. For a document to be considered to be WCAG compliant, the following need

- * **Use semantic markup:** Make sure to use semantic markup in your L^AT_EX document. This means using the appropriate L^AT_EX commands for headings, lists, tables, and other elements. This will help screen readers and other assistive technologies to understand the structure of the document.
- * **Provide alternative text for images:** Use the *includegraphics* command to include images in your L^AT_EX document, and provide alternative text for each image using the alt parameter. The alternative text should describe the content or function of the image.
- * **Use accessible colors:** Choose colors that have sufficient contrast for people with color vision deficiencies. You can use online tools such as the WebAIM Contrast Checker to check the contrast ratio of your color combinations.
- * **Use appropriate font sizes:** Use a minimum font size of 12pt for body text, and larger sizes for headings and other important elements. This will ensure that the text is legible for all users.
- * **Add metadata:** Add metadata to your document, including title, author, and language information. You can do this using the hyperref package in L^AT_EX.

This guide describes the steps that authors should follow to generate accessible documents using L^AT_EX. Namely, this guide will walk you through correctly handling:

- * section and subsection headers
- * embedded URLs
- * math equations
- * figures and images
- * tables

1.1 tex4t: Command-line Tool

Overall, while PDF documents can be made WCAG compliant, HTML is often a more accessible format for online content. By using the `tex4ht` package to convert your L^AT_EX document to HTML, you can make your content more accessible to a wider audience.

2 Document-level Instructions

The following sections describe what authors need to do in their *.tex* files such that documents are WCAG compliant. The instructions for generating the appropriate HTML files (once the *.tex* file is complete), are described in Section 3: *Compiling .tex file to HTML*.

2.1 Images and Figures

Figure and images included in your document need to be accompanied by alternative text.

The following is an example:

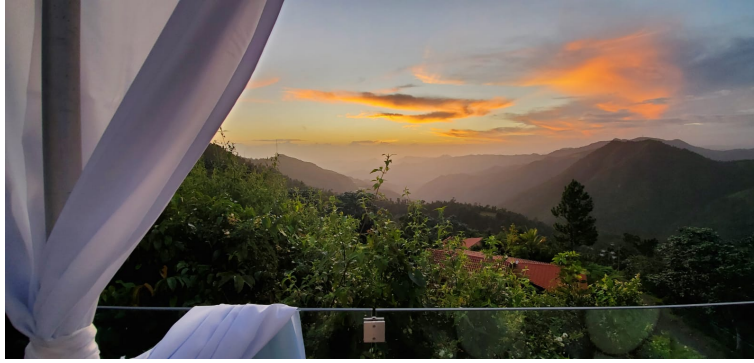


Fig. 1: Cayey, PR

2.2 Equations

The following is a math equation:

$$y = \frac{1 + \sqrt{5}}{2} \tag{1}$$

3 Compiling .tex file to HTML

3.1 Ubuntu

3.2 Widows

4 Other Methods

As I worked on putting together this guide, I found several tools for automatically tagging PDFs