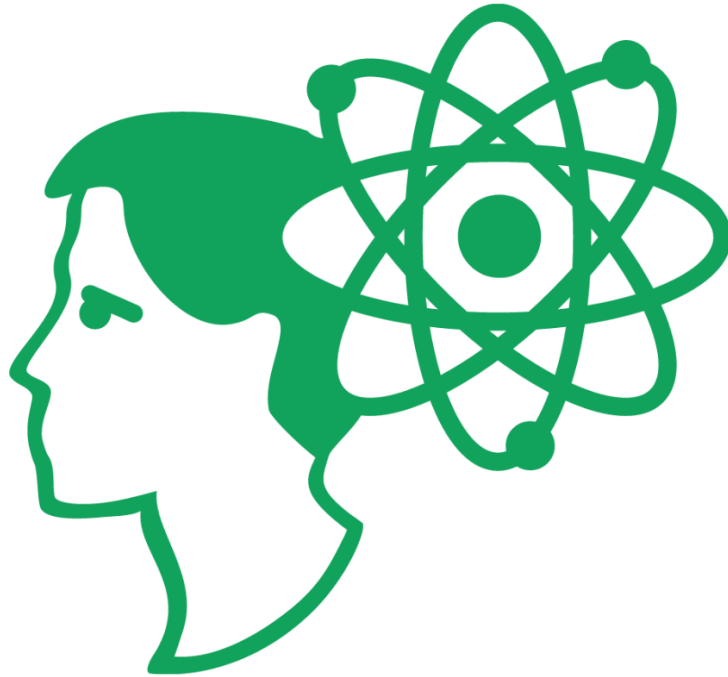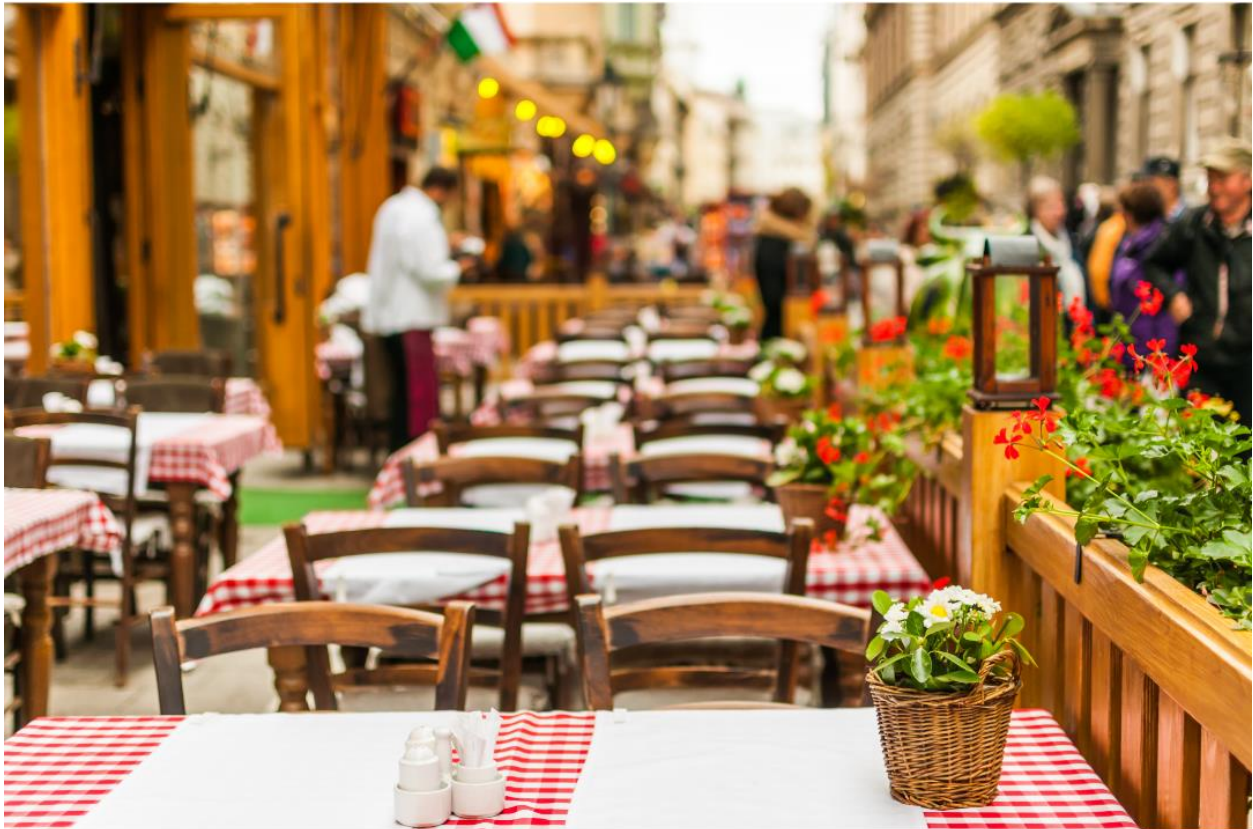# THE ULTIMATE GUIDE TO ACCESSIBILITY

CHAPTER 4 - COGNITIVE IMPAIRMENTS

Introduction

Imagine going to an elite restaurant that you dreamt of as a kid. However, the restaurant's menu has an odd cursive font that is difficult to read and waiters aren't polite either. You will surely not visit the place again and write a scathing review on Yelp.

What if the restaurant had a reader-friendly menu and waiters are always there to help you out? You would happily celebrate all your special events at that place.

People with cognitive impairments go through a similar onset of problems while visiting non-accessible websites.

Did you know that 16 million people in the US alone have some form of cognitive impairment?

According to WebAIM, Cognitive disability (also known as intellectual disability) is a nebulous term describing a person who has greater difficulty with mental tasks than the average person. In simpler terms, people with cognitive impairments find it harder to concentrate, read, make decisions, or perform daily activities.

These are the main types of cognitive disabilities

Dyslexia - Having trouble processing or recognizing letters, words and numbers.

Memory loss - Not able to recall events from past, present or both.

Autism - A complex developmental disability that inhibits social interaction and communication.

ADHD - A common neurobehavioral disorder that causes inattention and uncontrollable impulsive behaviour

# How Do Those With Cognitive Impairments Navigate The Web?

Cognitive disabilities affect the way people perceive information. Therefore, it is difficult for them to concentrate on large paragraphs of text or stay on the same webpage for a longer period. They also struggle to perform memory-based tasks.

People with cognitive impairments mostly use a mouse or keyboard to navigate the web. However, some of them also use assistive technology like screen readers and text-to-speech systems.

Now, let us see how to make your website accessible to people with cognitive impairments. The three most common elements of a website that should be taken into consideration when designing for cognitive disabilities are-

- Fonts
- Images
- Design

Fonts
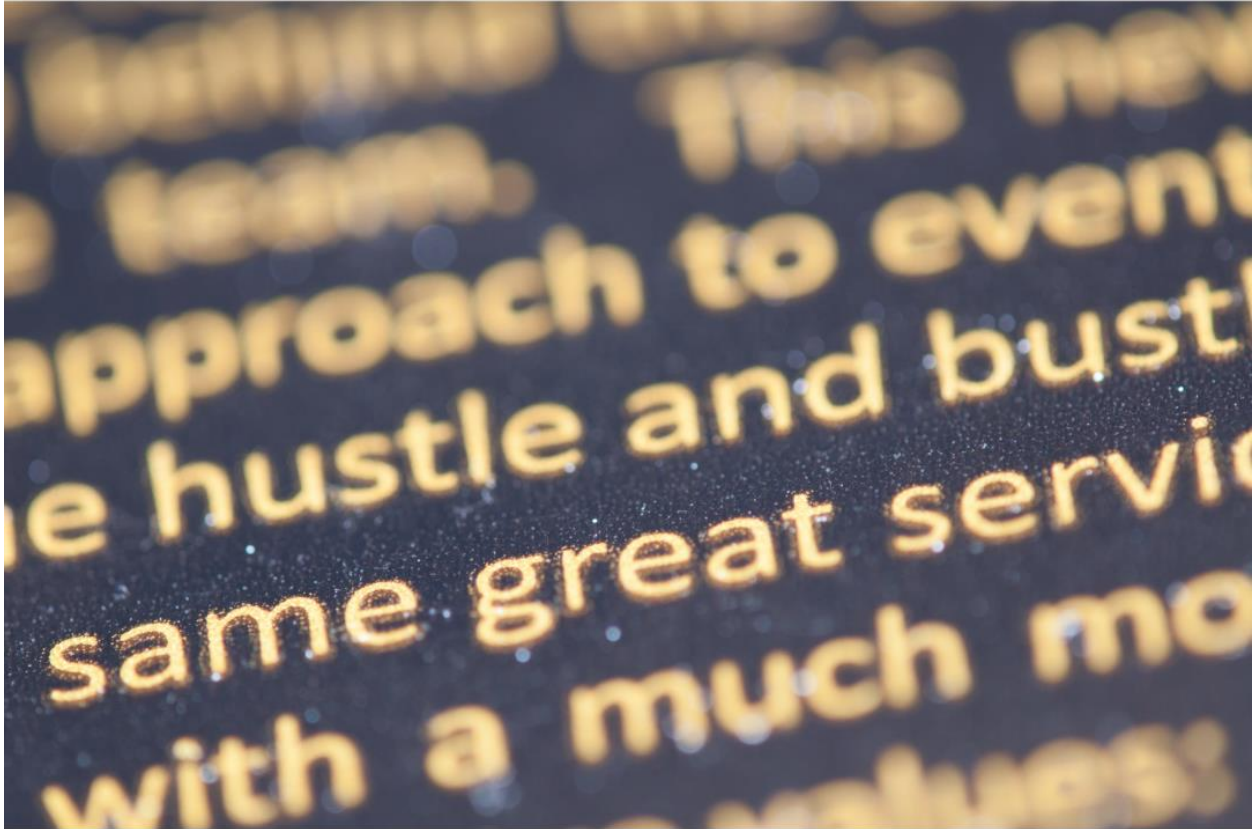
The goal is to make your text easily readable to users. The first step towards that is your font.

Avoid using fonts that are cursive or have an emphasis on style. Instead, use a font family like sans serif such as Arial or Century Gothic Tahoma. These fonts are evenly spaced and don't have any unusual design that might confuse cognitively impaired users. Lastly, the font size should be above 16px or larger.

Don't use capitals or italics to emphasize your text. Instead, make the text bold or boxes or borders around them if needed.

Images

People with ADHD and dyslexia often lose interest when the webpage has only text. As the saying goes, a picture is worth a thousand words. Try to add relevant images to your content so that it is more engaging. However, don't forget to use the alt text, as it will help users who are navigating with screen readers.

Avoid using too many HD images as they could potentially take longer to load and kill your page's performance. A faster web page will also boost your page's ranking on Google.

Design

Some websites in the pursuit of making their page attractive tend to go overboard. A famous Japanese cartoon, Pokemon, made a similar mistake in one of their episodes. The infamous episode had a scene with repetitive flashing lights for a few seconds. A disastrous animation decision that resulted in inducing photosensitive epileptic seizures in almost 700 kids.

Some of the people with cognitive impairments have heightened sensory awareness that distracts them from the cluttered web pages. A colourful website might look aesthetically pleasing to a normal user but it may not be accessible for people with low vision. Consistency is the key - try to maintain the same fonts, colours and hierarchy throughout your website. Modern UX principles revolve around minimalism and consistency rather than color-based design.

Lastly, break your long paragraphs into smaller ones and have lots of white space in between them.

The cognitive impairment checklist

Does your site have...
- Font sizes larger than 16px across the site?
- No italicized or capitalized copy?
- Helpful images with alt text?
- A simple and clean design?