

# Web Accessibility Deep Dive

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CONF  
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GirlCode Ambassador



Google Developer Expert



Developer Relations Engineer



Accessibility Advocate

# Outline

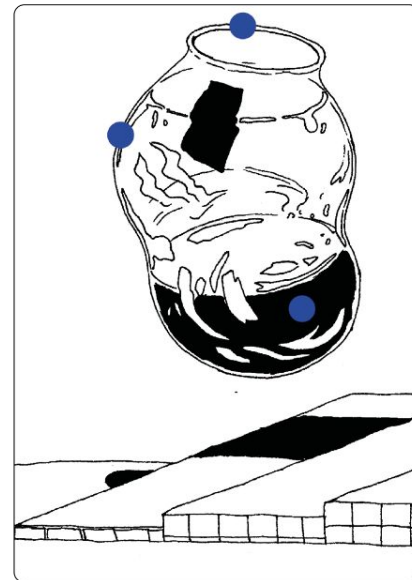
 What is Web Accessibility?

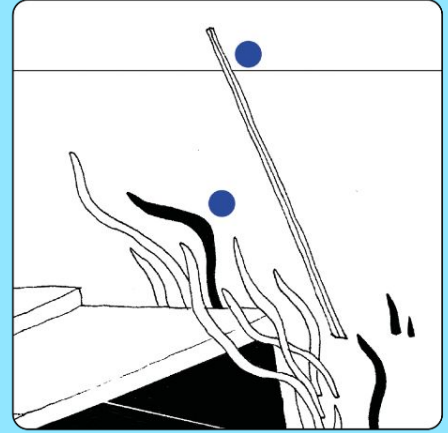
 Why should you care?

 What can you do?

 How to get started?

 How to keep going...





# What is Web Accessibility?


## WHAT IS WEB ACCESSIBILITY

**A11Y  
ACCESSIBILITY**

## WHAT IS WEB ACCESSIBILITY

# WCAG

### Web Content Accessibility Guidelines

 Internationally shared standard for web accessibility

### Different levels of Accessibility

A

AA

AAA

## WHAT IS WEB ACCESSIBILITY

# POUR Principles



**P**erceivable



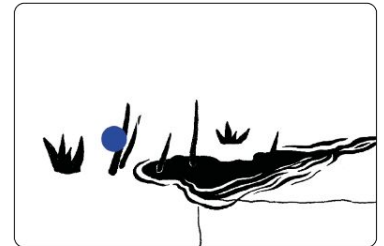
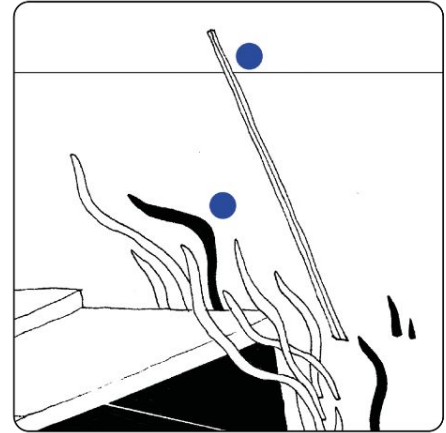
**O**perable

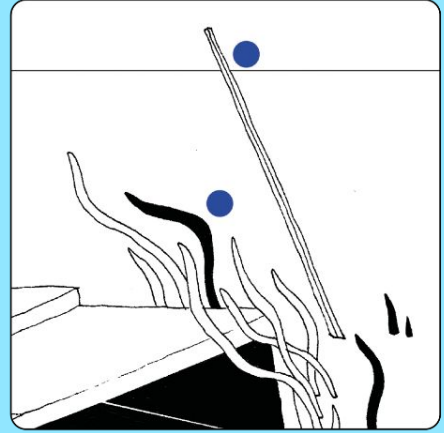


**U**nderstandable



**R**obust





# Why should you care?



## WHY SHOULD YOU CARE



Accessibility = Human Right



Accessible Code = “Good” Code



New Laws for Accessibility Compliance















Wider Audience




Accessibility benefits all of us

WHY SHOULD YOU CARE

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver




	Permanent	Temporary	Situational
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

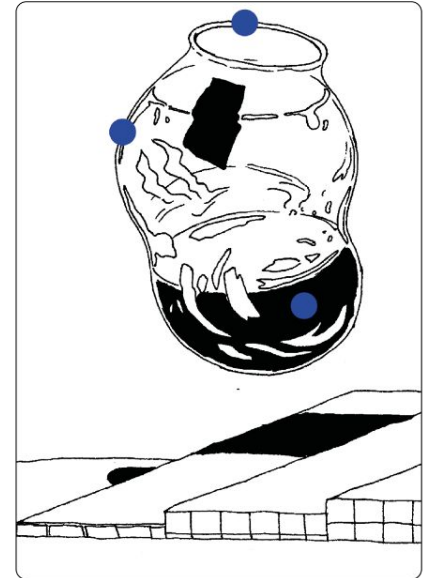
from the  
Inclusive  
toolkit  
manual by  
 Microsoft

# Let's dive in

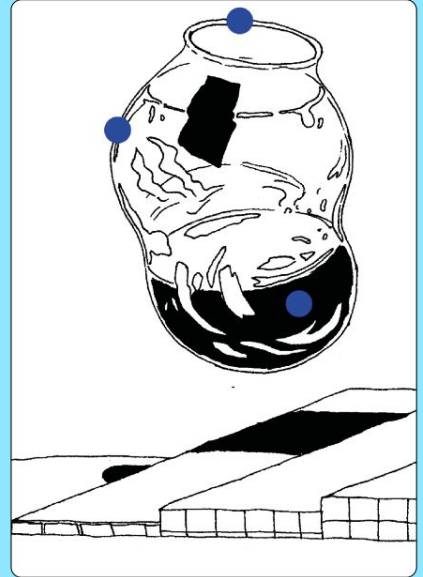


# Outline

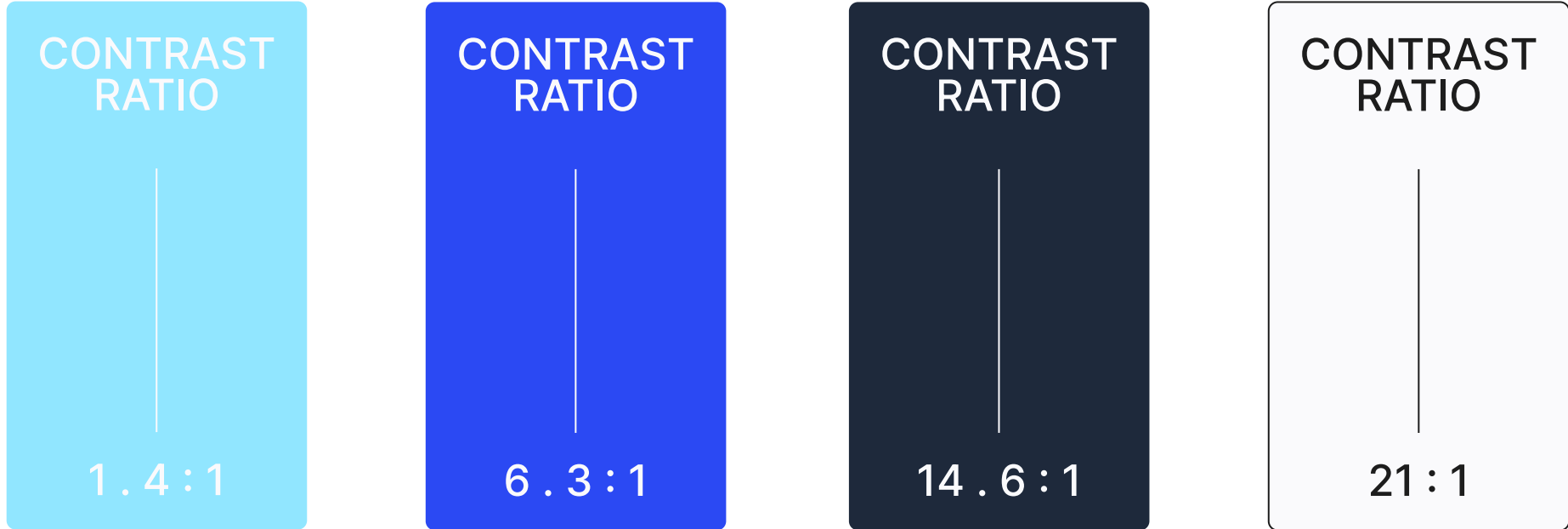
-  Color Contrast
-  Keyboard Accessibility
-  Semantic HTML



# Color Contrast

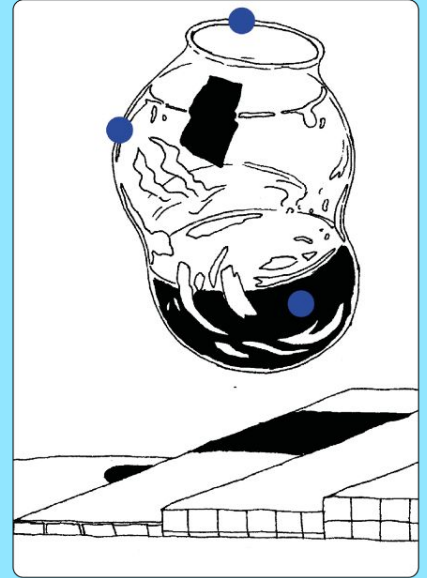


## COLOR CONTRAST



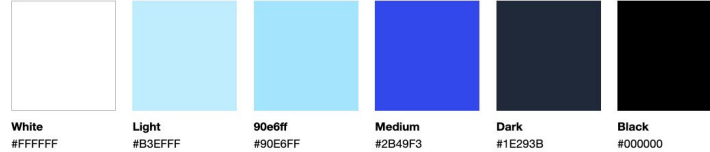
WCAG AA requires 4.5 : 1 contrast ratio

# What can you do?



## COLOR CONTRAST

## Accessible color palette builder

[Edit palette](#)

## Accessible color combinations

Please don't use these color combinations; they do not meet a color contrast ratio of 4.5:1, so they do not conform with the standards of Section 508 for body text. This means that some people would have difficulty reading the text. Employing accessibility best practices improves the user experience for all users.

	White text #FFFFFF Aa	Light text #B3EFFF Aa	90e6ff text #90E6FF Aa	Medium text #2B49F3 Aa	Dark text #1E293B Aa	Black text #000000 Aa
Black background #000000	Aa	Aa	Aa			
Dark background #1E293B	Aa	Aa	Aa			
Medium background #2B49F3	Aa	Aa				
90e6ff background #90E6FF					Aa	Aa
Light background #B3EFFF				Aa	Aa	Aa
White background #FFFFFF				Aa	Aa	Aa

<https://toolness.github.io/accessible-color-matrix/>



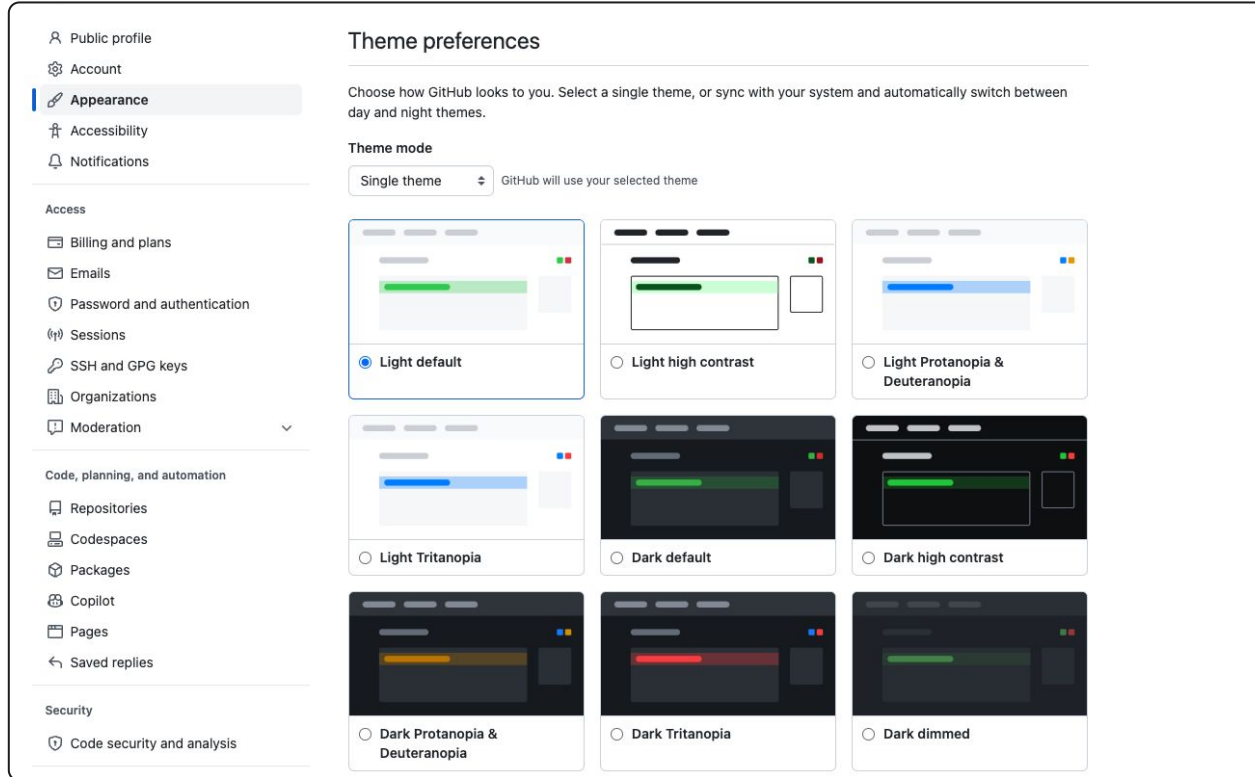
# Let's try it



## COLOR CONTRAST

- Don't use color as the only indicator of change
- Don't forget about hover & focus styles
- Think about your audience:
  - What about neurodivergent folks?

## LIGHT &amp; DARK MODE

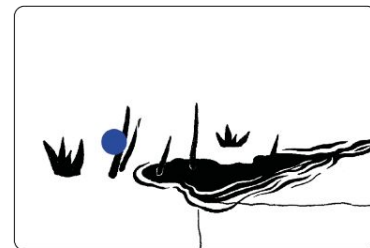


## LIGHT & DARK MODE

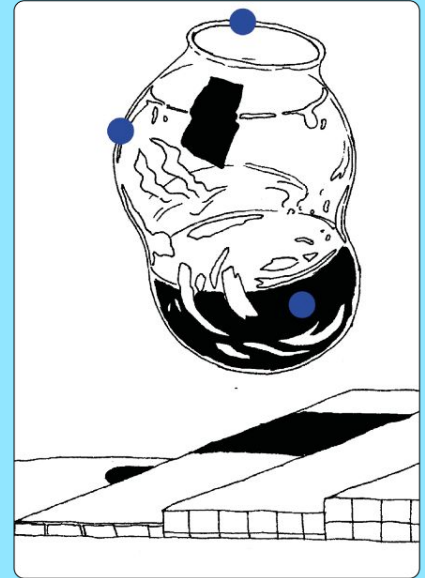
```
<header class="w-full h-24 bg-[#2b49f3] dark:bg-slate-800">
```

# TailwindCSS

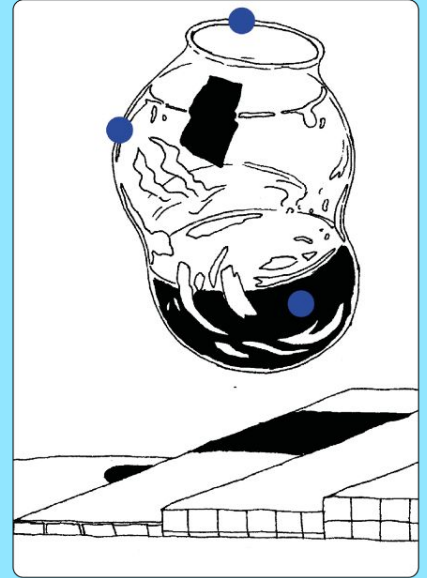
- Pre-flight mode
- Consistent styles across browsers
- 'sr-only' & 'not-sr-only'
- Some built-in support for `aria-*` attributes



# Keyboard Accessibility

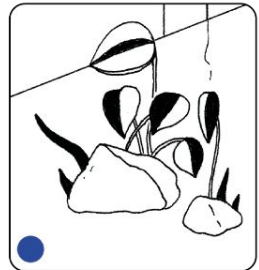


# What can you do?



## KEYBOARD ACCESSIBILITY

- Interactive elements have to be reachable via keyboard
- Tab order
- Visible focus
- Don't trap focus





# Let's try it



## SKIPLINK

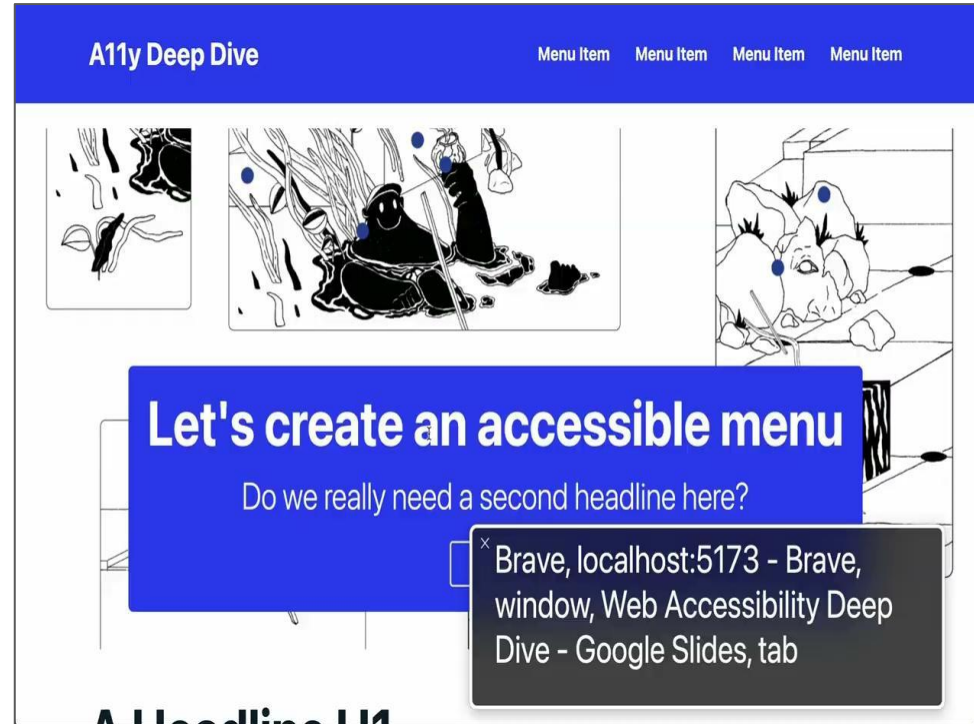
```
<a href="#main" class="skip">Skip to main content</a>

<style lang="css">
  .skip {
    position: absolute;
    left: -10000px;
    top: auto;
    width: 1px;
    height: 1px;
    overflow: hidden;
  }

  .skip:focus {
    position: static;
    width: auto;
    height: auto;
  }
</style>
```

## KEYBOARD ACCESSIBILITY

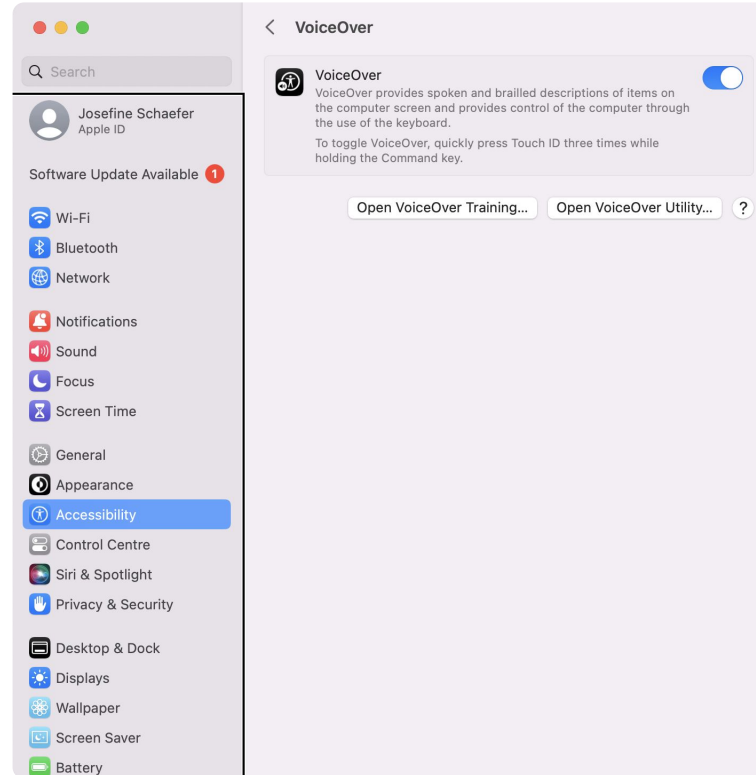
- Provide a skip link
- Hierarchical headline structure
- Aria-landmarks



## SCREEN READERS

# VoiceOver Rotor

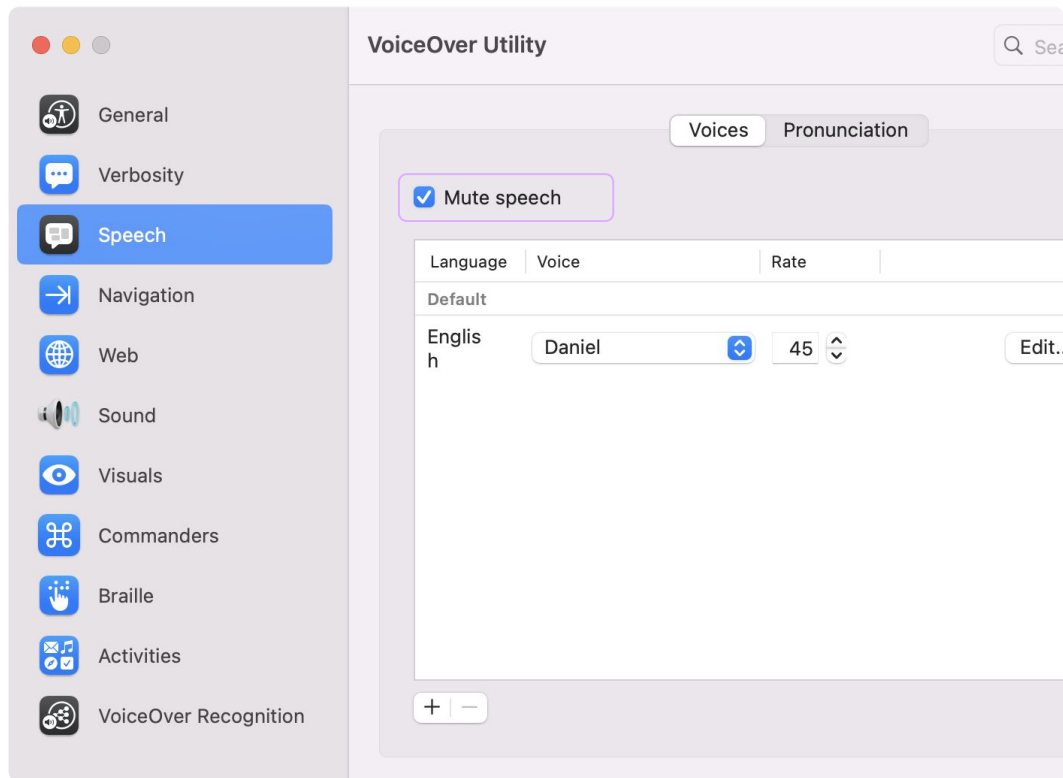
On Mac, turn on VoiceOver.



## SCREEN READERS

# VoiceOver Rotor

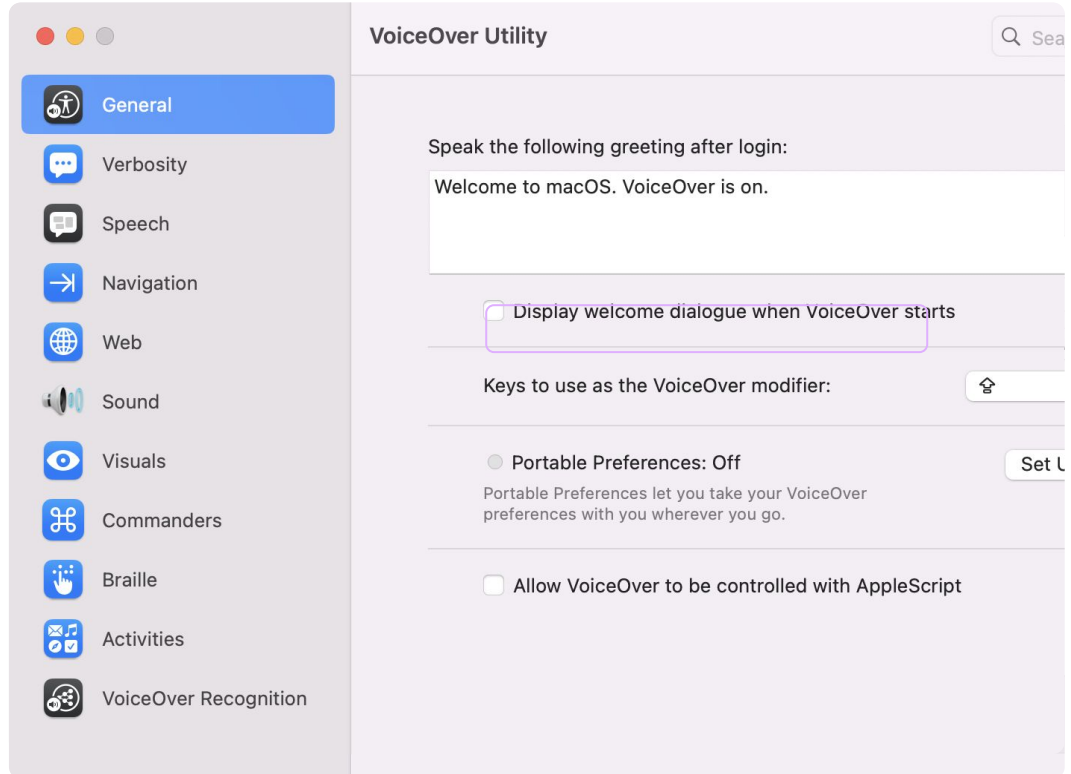
You can turn  
speech off



## SCREEN READERS

# VoiceOver Rotor

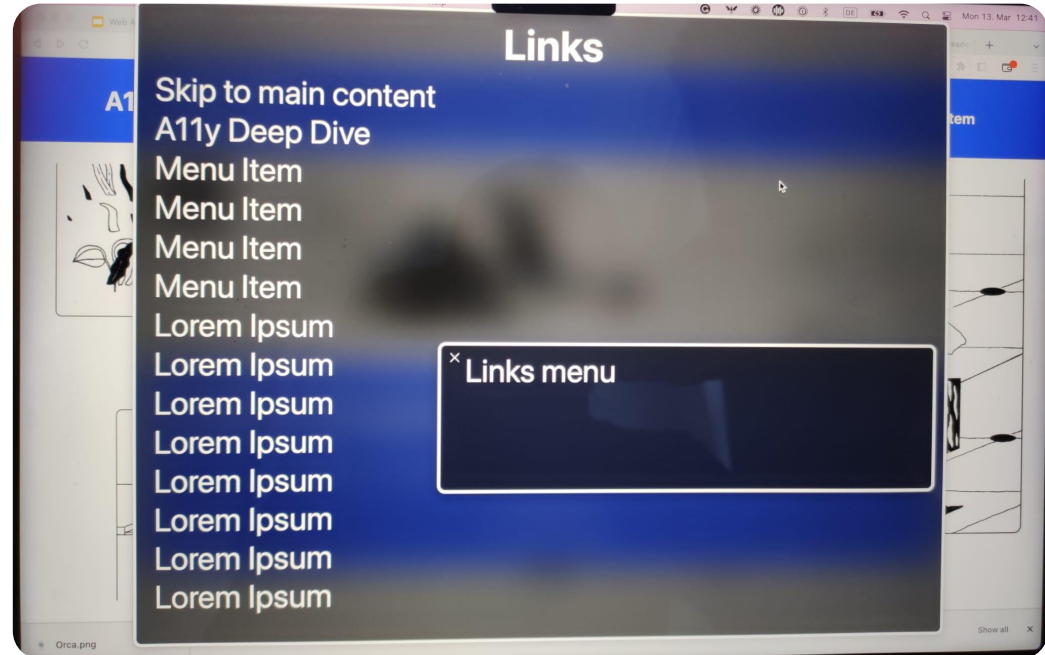
Press your  
VO command + U.



## SCREEN READERS

# VoiceOver Rotor

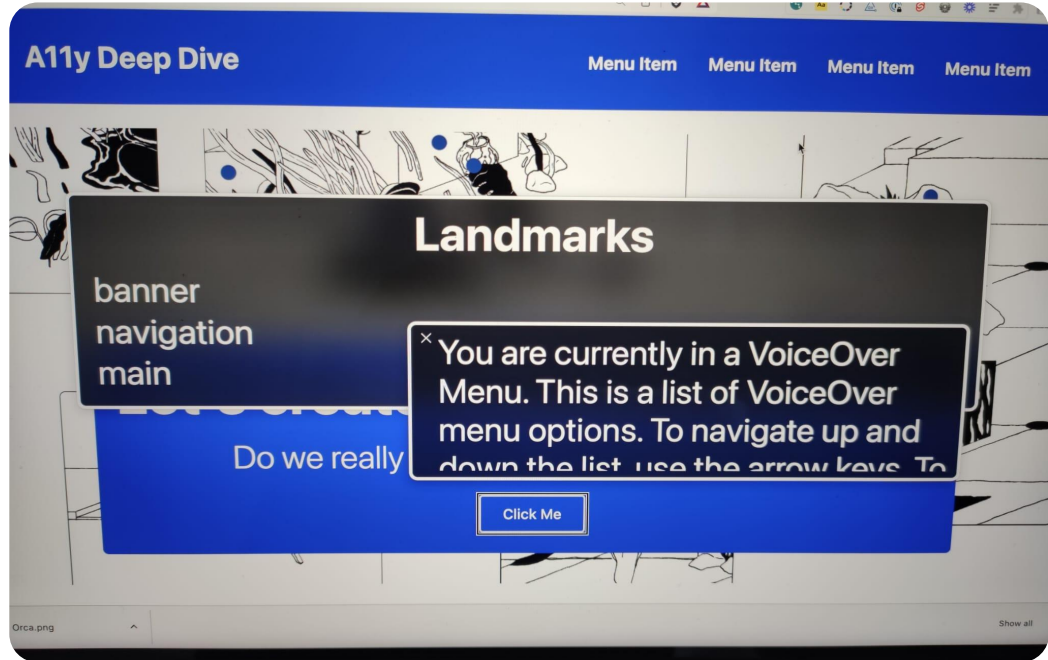
Different way to navigating web pages.



## SCREEN READERS

# VoiceOver Rotor

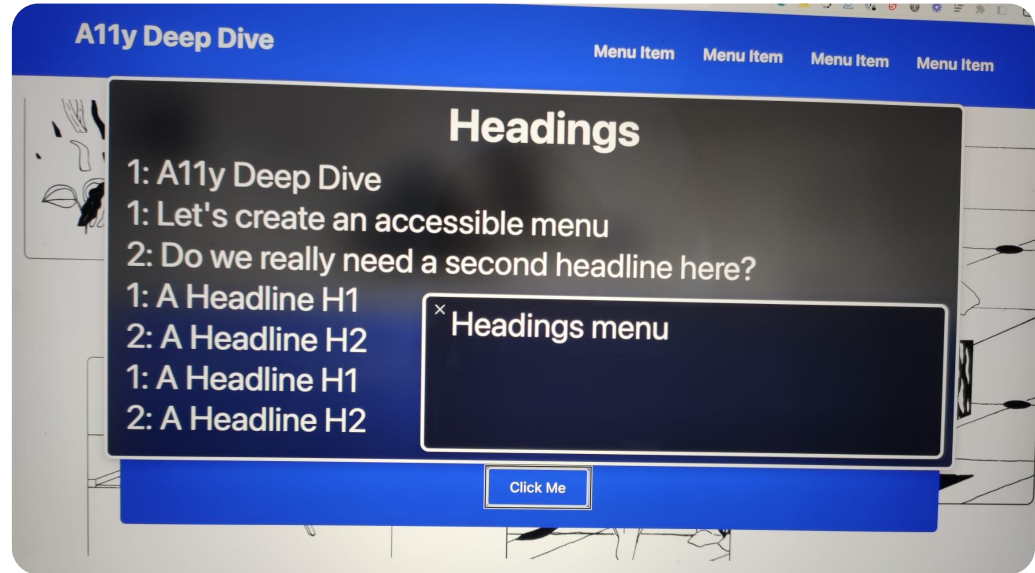
List all landmarks,  
links or headlines.



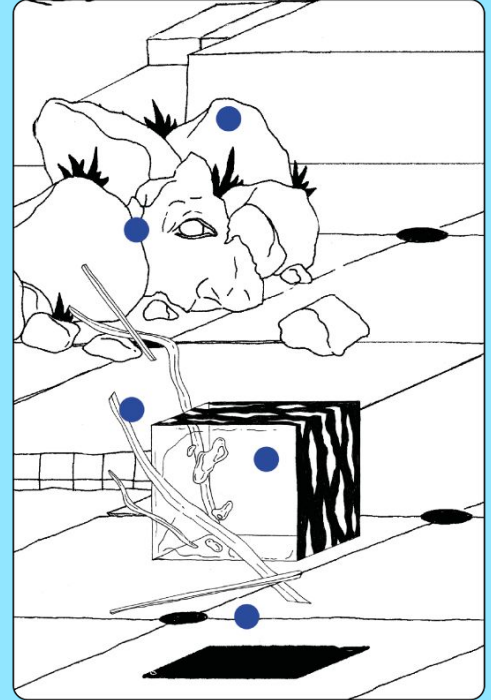


## SCREEN READERS

# VoiceOver Rotor

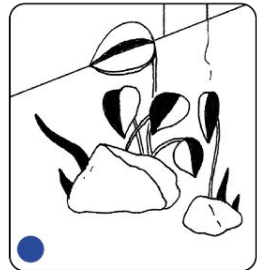


# Semantic HTML



## SEMANTIC HTML

- Alternative text
- No empty links
- Use elements for their given purpose
- Suitable input type
- Headline hierarchies



# HTML HELL



```
<p>
  • HTML
  <br>
  • CSS
  <br>
  • JavaScript
</p>
```

<https://www.htmhell.dev/>

# Let's try it



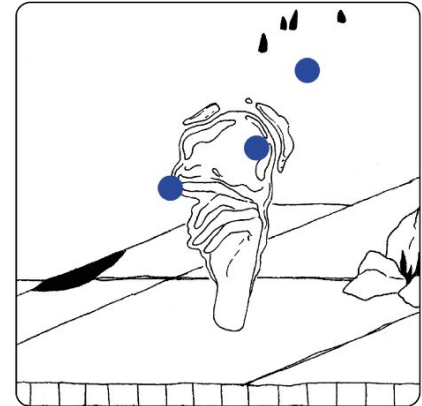
# This was a lot ...



WHAT ELSE CAN YOU DO?

# ... but of course, there is always more...

- Test for different **screen readers**



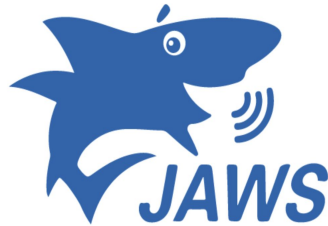
## SCREEN READERS



VoiceOver



Narrator



Jaws



NVDA



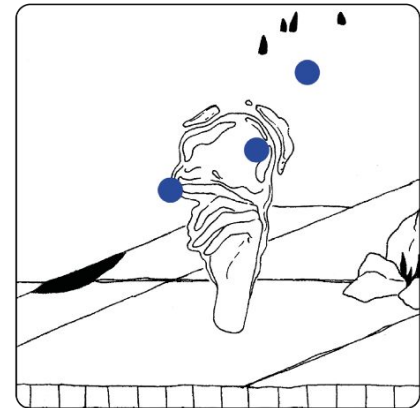
Orca



WHAT ELSE CAN YOU DO?

# ... but of course, there is always more...

- Test for different **screen readers**
- Test on **mobile**
- Accessible **Fonts**
- Audio and Video **Transcripts**
- **Language Accessibility**



## APPROACHING ACCESSIBILITY

# How to get started

- Integrate accessibility from the start
- Accessibility audit
  - Requirements & resources
- Quick wins



# Automation is your friend

- Accessibility linters & pipelines
- Educate your team
- Remove barriers
- Hire specialists, if you can



# Questions?





<https://linktr.ee/josefinesch>

CONTACT



# Thank you so much!



@JsfnSchfr



@j-schaefer



@Josefine Schfr

Beautiful illustrations by  
@nicolaidiekmann 🖌️

# Thank you so much 🙌



## Accessibility Resources



@JsfnSchfr



@j-schaefer



@Josefine Schfr



storyblok.com

<https://linktr.ee/josefinesch>

