

Thomas Renner



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Keys & Voices

Unveiling the Invisible Evil...

Image created on openart.ai



COULD YOU PLEASE SHOVEL THE RAMP?

ALL THESE OTHER KIDS ARE WAITING TO USE THE STAIRS. WHEN I GET THROUGH SHOVELING THEM OFF, THEN I WILL CLEAR THE RAMP FOR YOU.

BUT IF YOU SHOVEL THE RAMP, WE CAN ALL GET IN!

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**Clearing a path for people
with disabilities
clears a path for everyone.**



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Здравейте!

Servus!

Hello!



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- Drupal since 2009
- Co-organizing DDD Vienna 2023
- CiviCRM
- Certified Web Accessibility Expert



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YABAS?

Yet another boring accessibility session?

- Super short “Introduction to accessibility” (I promise!)
- “UX for the blind - and Google”



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Impaired people? My audience?

- Everyone will temporarily or permanently experience disability
- Currently 1.3 billion people – about 16% of the global population
- Impaired users are proven loyal returning customers

https://www.who.int/health-topics/disability#tab=tab_1

POUR - The 4 Principles of Accessibility

- **Perceivable**
- **Operable**
- **Understandable**
- **Robust**

<https://blogs.libraries.indiana.edu/redux/2018/06/13/understanding-the-4-principles-of-accessibility/>



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Some popular automated testing tool

- **Wave from WebAIM**

is ideal for those needing detailed, visual feedback.

- **Axe Dev Tools from deque**

is suited for developers who want thorough, automated testing integrated into their development process.

- **Lighthouse from Google**

provides a broader analysis beyond accessibility, useful for overall site performance and quality.

- **Accessibility Insights from Microsoft**

- **HTML_CodeSniffer**



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Screen Readers

- **A screen reader is a software application that enables people with severe visual impairments to use a computer.**
- **Screen readers work closely with the computer's Operating System (OS) to provide information about icons, menus, dialogue boxes, files, and folders.**
- **The device provides access to the entire OS that it works with, including many common applications.**
- **Unlike a Braille display, which conveys information through tactile feedback, a screen reader uses auditory feedback to relay information to the user.**



Some popular Screen Readers

- **JAWS (Job Access With Speech)**

for Windows. Has a free version that runs for 40 minutes

- **NVDA (Non Visual Desktop Access)**

A free, open source screen reader for Windows computers.

- **VoiceOver for Apple devices**

The screen reader for Apple devices.

Pre-installed on every Mac, iPad or iPhone

Just needs to be enabled in the system settings

- **Talkback**

For Android Devices



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**Thou shalt not fear the
keyboard!**

<https://unsplash.com/photos/womans-portrait-mC852jACK1g>



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Hands on!

<https://unsplash.com/photos/closeup-photo-of-persons-hand-NMk1Vggt2hg>



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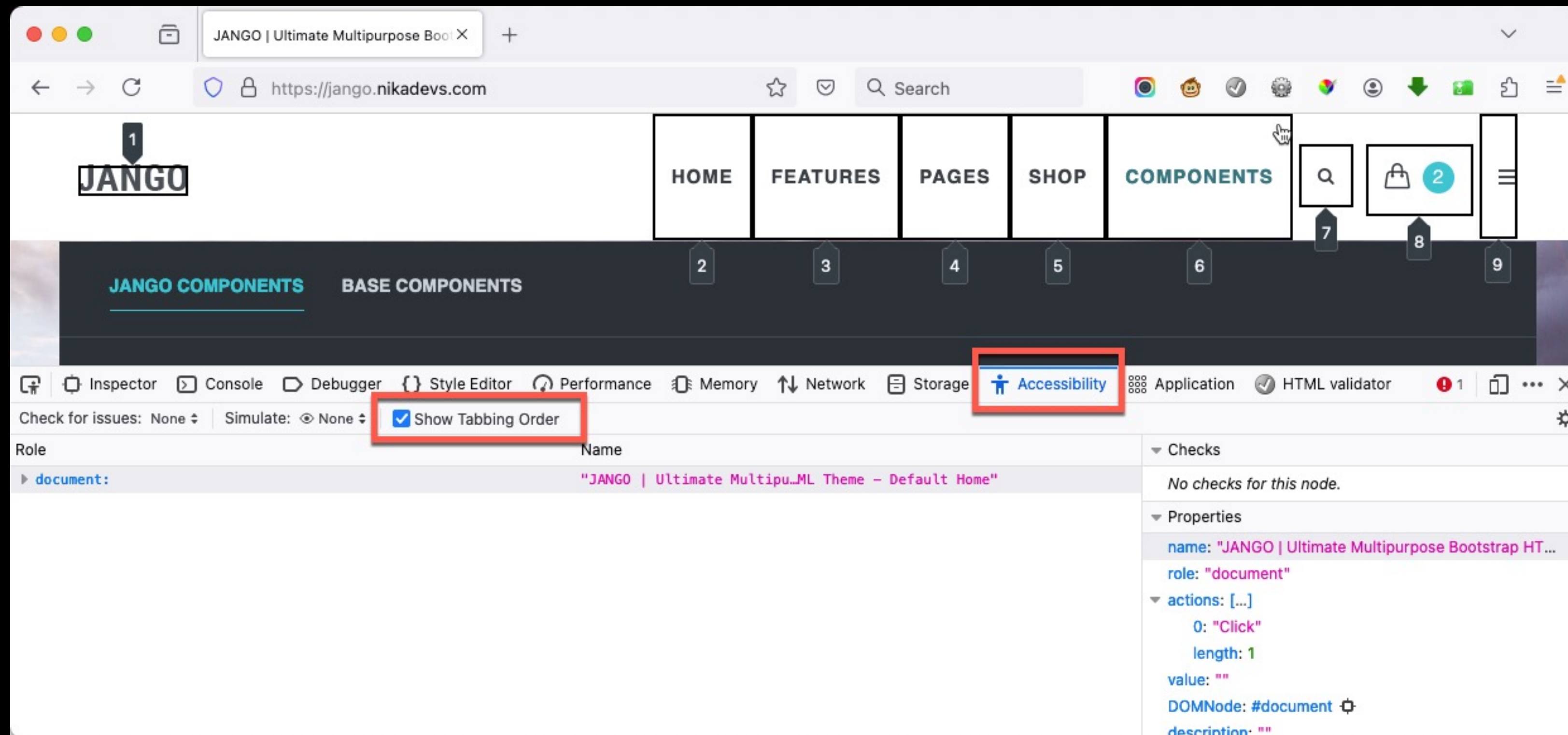
Focus Outlines

- Test your forms and interactive elements!
- Never use CSS `:focus {outline:none;}`!
- Focus outline must have good contrast with the control it surrounds and its background.
- Browser default focus outlines do not have good contrast and should not be used.
- Enhance the keyboard focus outlines of all controls using CSS `outline` and `outline-offset` properties.
- <https://pauljadam.com/guides/focus-outlines.html>

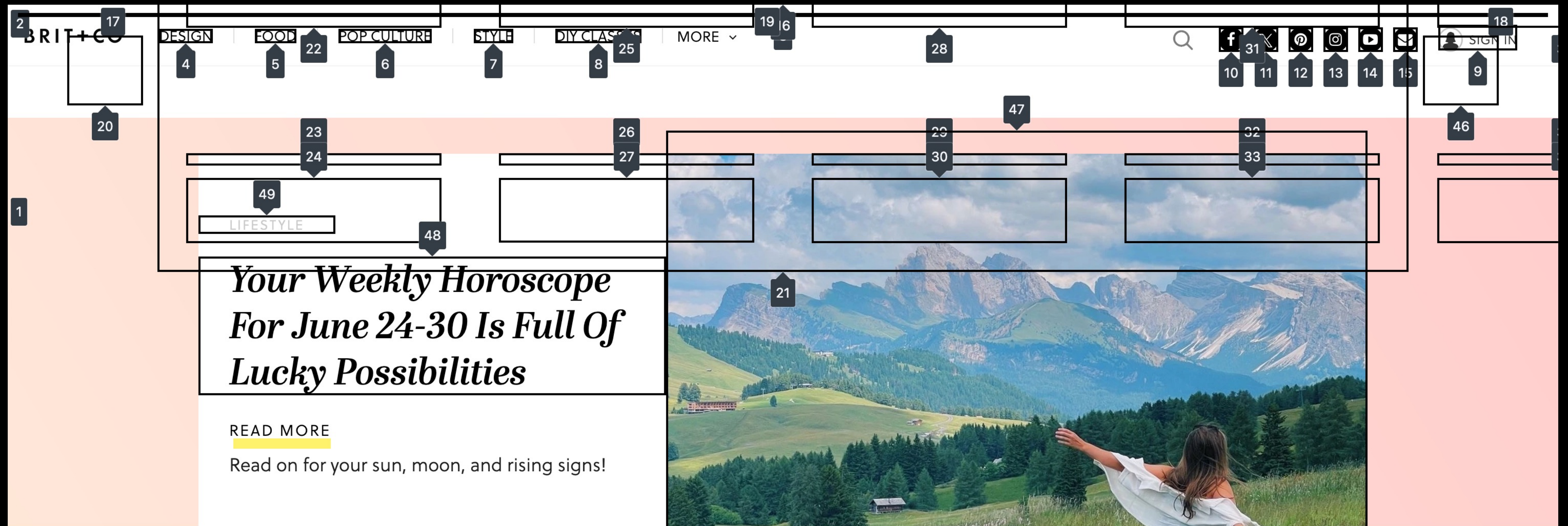


Tab Order

- Visualising Tab Order in Firefox



Tab Order



<https://www.brit.co/>



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Text Comparison #1

WAVE powered by WebAIM
web accessibility evaluation tool

Styles: OFF ON

Summary

Summary Details Reference Order Structure Contrast

0 Errors

7 Alerts

19

0 Contrast Errors

8 Features

39

HOME 🔍 ☰


SWITCH TO STRUCTURED VERSION

Accessibility refers to designing the environment in such a way that it can be used and perceived by people with disabilities without additional aids. Term: In non-German usage, the state of accessibility is referred to as ease of access (English: Accessibility, Spanish: Accesibilidad, French: Accessibilité). The term "disabled-friendly" (behindertengerecht) used in German-speaking regions is becoming increasingly uncommon, as it does not denote comprehensive accessibility and usability for all people. In a more modern and broader sense, the principle of accessibility aims to provide adequate access to all people whose abilities and capabilities do not conform to a certain norm. This includes physical and mental disabilities of all kinds, not only traditional disabilities but also the effects of youth and age, educational level and knowledge, as well as economic and social access to technical aids that would make specialized barrier-free design unnecessary. This broader perspective no longer primarily distinguishes between individual groups of people; rather, it aims to consider the needs of all people. This understanding of accessibility is therefore also called "Design for All" or "Universal Design". The extension to the cultural aspect is described by the measures of the concept of intercultural, which create cultural accessibility and thus enable institutions to interact with individuals in a society of diversity and plurality.




German source from <http://www.mudy.at/>

German source from <http://www.mudy.at/>

Text Comparison #2



powered by [WebAIM](#)
web accessibility evaluation tool







HOME   

Styles: OFF ON

[SWITCH TO NON STRUCTURED VERSION](#)

Summary

[Summary](#) [Details](#) [Reference](#) [Order](#) [Structure](#) [Contrast](#)

 0 Errors	 0 Contrast Errors
 6 Alerts	 8 Features
 22 Structural Elements	 39 ARIA

[View details >](#)

Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

Accessibility

Accessibility refers to designing the environment in such a way that it can be used and perceived by people with disabilities without additional aids.

Term:

In non-German usage, the state of **accessibility** is referred to as **ease of access** (English: Accessibility, Spanish: Accesibilidad, French: Accessibilité). The term "disabled-friendly" (behindertengerecht) used in German-speaking regions is becoming increasingly uncommon, as it does not denote comprehensive accessibility and usability for all people. In a more modern and broader sense, the principle of accessibility aims to provide **adequate access to all people** whose abilities and capabilities do not conform to a certain norm.


This includes:

- physical and mental disabilities of all kinds,
- not only traditional disabilities
- but also the effects of youth and age, educational level and knowledge,
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The extension to the cultural aspect is described by the measures of the concept of intercultural, which create **cultural accessibility** and thus enable institutions to interact with individuals in a society of diversity and plurality.

German source from <http://www.mudy.at/>



Code

Structured Text #1

- Organize your text into sections and give each of them a heading.
- Be sure the heading gives structure and context to its related content.
- Write headings that clearly and concisely describe the topic in the subsequent text section.
- Use subheadings to organize content within sections.
- Include headings and subheadings in site maps and table of contents.
- Use chapters — like a printed book — for longer blocks of text.
- <https://www.w3.org/WAI/GL/WCAG3/2020/how-tos/structured-content/>



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Structured Text #2

Teach your client to use

- Headlines `<h2>`, `<h3>`
- Lists ``, ``
- ``
- `<alt>` image descriptions



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Skip Links #1

- Skip link must be the first link(s) on the page.
- Skip link must be visible on keyboard focus. (It can be hidden until tabbing.)
- Skip link must move the keyboard focus to the main content.

<https://ddd2024.drupalcamp.bg/sessions/schedule>



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Skip Links #2

```
<nav>
  <a class="skip-link" href="#main-heading">Skip to Main Content</a>
  <a class="skip-link" href="#main-menu">Skip to Main Menu</a>
  <a class="skip-link" href="/sitemap">Skip to Sitemap</a><br>
</nav>
```

```
.skip-link {
  display: block;
  position: absolute;
  clip: rect(0 0 0 0);
}
```

```
.skip-link:focus {
  position: relative;
  clip: unset;
}
```

- <https://pauljadam.com/guides/skip-links.html>



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BOBA × ICE CREAM™

OUR STORY

BOBA × ICE CREAM™

A MAGICAL DUO

OF BOBA

AND ICE CREAM



ORDER
BOBA ICE CREAM
SET OF 6

Teasers, Teasers, Teasers!

Our priorities

Sustainable supply chains

UNIDO supports fair and responsible local industrial production and trade. Supply chains are essential to trade, and trade is essential to job creation.

[Explore](#)



Ending hunger

UNIDO shares knowledge and technology to help reduce post-harvest losses and increase food security. Agribusiness generates job opportunities for young people.

[Explore](#)



Climate action

UNIDO promotes policies, technologies and practices to reduce industrial greenhouse gas emissions. Climate action can create millions of new, decent jobs.



Text on Background Image

Contrasting Background color

Can you read this?

Lorem ipsum dolor, sit amet consectetur adipisicing elit. Repellendus praesentium labore accusamus sequi, voluptate debitis tenetur in deleniti possimus modi voluptatum neque maiores dolorem unde? Aut dolorum quod excepturi fugit.

The screenshot shows the axe DevTools interface. The top navigation bar includes 'Elements', 'Console', 'Recorder', 'Sources', 'Network', 'Performance', 'Application', 'Memory', 'Security', 'Lighthouse', 'Adblock Plus', and 'axe DevTools'. The URL bar shows 'https://a11y.webshapers.cc/contrasting-background-color'. The main content area displays 'Total Issues: 0' with a person icon. Below this, it says 'You have (0) automatic issues, nice!' and 'Catch even more accessibility issues with semi-automated guided tests.' A blue button labeled 'TRY FOR FREE' is at the bottom. The left sidebar shows a summary of issues: 'TOTAL ISSUES: 0', 'Automatic Issues: 0', 'Guided Issues: 0', 'Manual Issues: 0', 'Critical: 0', 'Serious: 0', 'Moderate: 0', and 'Minor: 0'. At the bottom of the sidebar, it indicates 'Best Practices: OFF' and 'WCAG 2.1 AA'.

Category	Count
TOTAL ISSUES	0
Automatic Issues	0
Guided Issues	0
Manual Issues	0
Critical	0
Serious	0
Moderate	0
Minor	0

Is Drupal clean?

- Drupal Core themes (Oliver, Claro) developed with accessibility in mind
- <https://www.drupal.org/docs/getting-started/accessibility>
- <https://www.drupal.org/about/features/accessibility>
- Carefully select contrib themes or code snippets!
<https://jango.nikadevs.com/>



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Jango is launch ready?

WAVE powered by WebAIM
web accessibility evaluation tool

Styles: OFF ON

Details

Summary Details Reference Order Structure Contrast

67 Errors

- 19 X Missing alternative text
- 23 X Linked image missing alternative text
- 3 X Missing form label
- 1 X Empty heading
- 4 X Empty button
- 17 X Empty link

HOME FEATURES PAGES SHOP COMPONENTS

h3 CLEAN HTML & CSS
JANGO IS LAUNCH READY

LEARN MORE

h3 SUBSCRIBE TO OUR NEWSLETTER

Code Your Email Here

<https://jango.nikadevs.com/index.html>

General Advice

- Think mobile first!
- Make all functionality available from a keyboard.
- Tools: Go mouse-less. Everything you can do with a mouse should be possible with the keyboard.
- Make use of “.sr-only” (bootstrap) and “aria-hidden=true” (everywhere)
- Train your client!



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Links Section

- **Deque University: Tons of useful information including Cheat Sheets for multiple Screenreaders**
<https://dequeuniversity.com/screenreaders/>
- **Visualising Tab Order in Firefox**
<https://www.stefanjudis.com/today-i-learned/how-to-visualize-the-tab-order-without-using-an-extension-in-firefox/>
- <https://blog.prototypr.io/common-accessibility-problems-good-and-bad-examples-in-modern-websites-a13efb7256ad>



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Links Section #2

- **Paul J. Adams: Abundant collection of quick guides and demos**
<https://pauljadam.com/guides/>
- **HTML Code Sniffer**
https://squizlabs.github.io/HTML_CodeSniffer/
- **Drupal Accessibility**
<https://www.drupal.org/docs/getting-started/accessibility>



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Questions?



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Благодаря!

Danke! Thank you!

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