

# Web accessibility in practice, more than just WCAG



Tim Damen  
6 June 2024  
FrontendNation

# Hello, I'm Tim Damen

```
{  
  "Front-end dev",  
  "Accessibility lead",  
  "www.timdamen.io"  
}
```



# WHY WEB ACCESSIBILITY

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To not exclude anyone.

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If you do not exclude anyone.

You have a larger potential user base.

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If you have a larger user base. More people will be able to use your service or buy your product.

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You have a larger potential user base.

If you have a larger user base. More people will be able to use your service or buy your product.

And everyone will have an equal experience.

# WHY WEB ACCESSIBILITY

If you do not exclude anyone



You have a potential user



If you have a larger user base. More people will be able to use your service and buy your product.



And everyone will have an equal experience.





# WHY WEB ACCESSIBILITY

It's also about energy  and time 

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Tip: include people with disabilities.

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It's also about energy  and time 

Tip: include people with disabilities.

Invite them to take part in every step of the development life cycle.

# STATS OF PEOPLE USING YOUR APP

**1.3 billion**

People experience significant disability

[www.who.int](http://www.who.int)

# STATS OF PEOPLE USING YOUR APP

**10%**

Dyslectic

[eda-info.eu](http://eda-info.eu)

**4.5%**

Colour blind

[colourblindawareness.org](http://colourblindawareness.org) (1 in 12 men, 1 in 200 women)

**9%**

Motor impairment

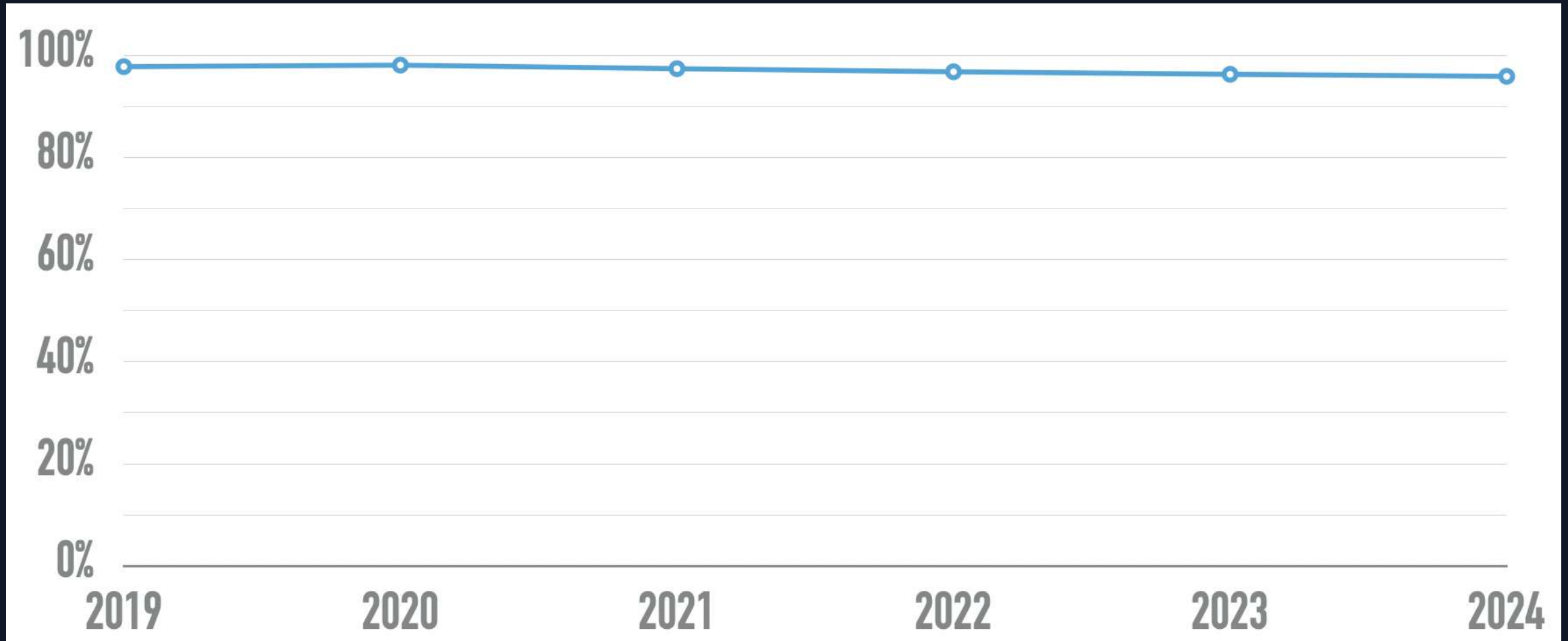
[handicap.nl](http://handicap.nl)

**6%**

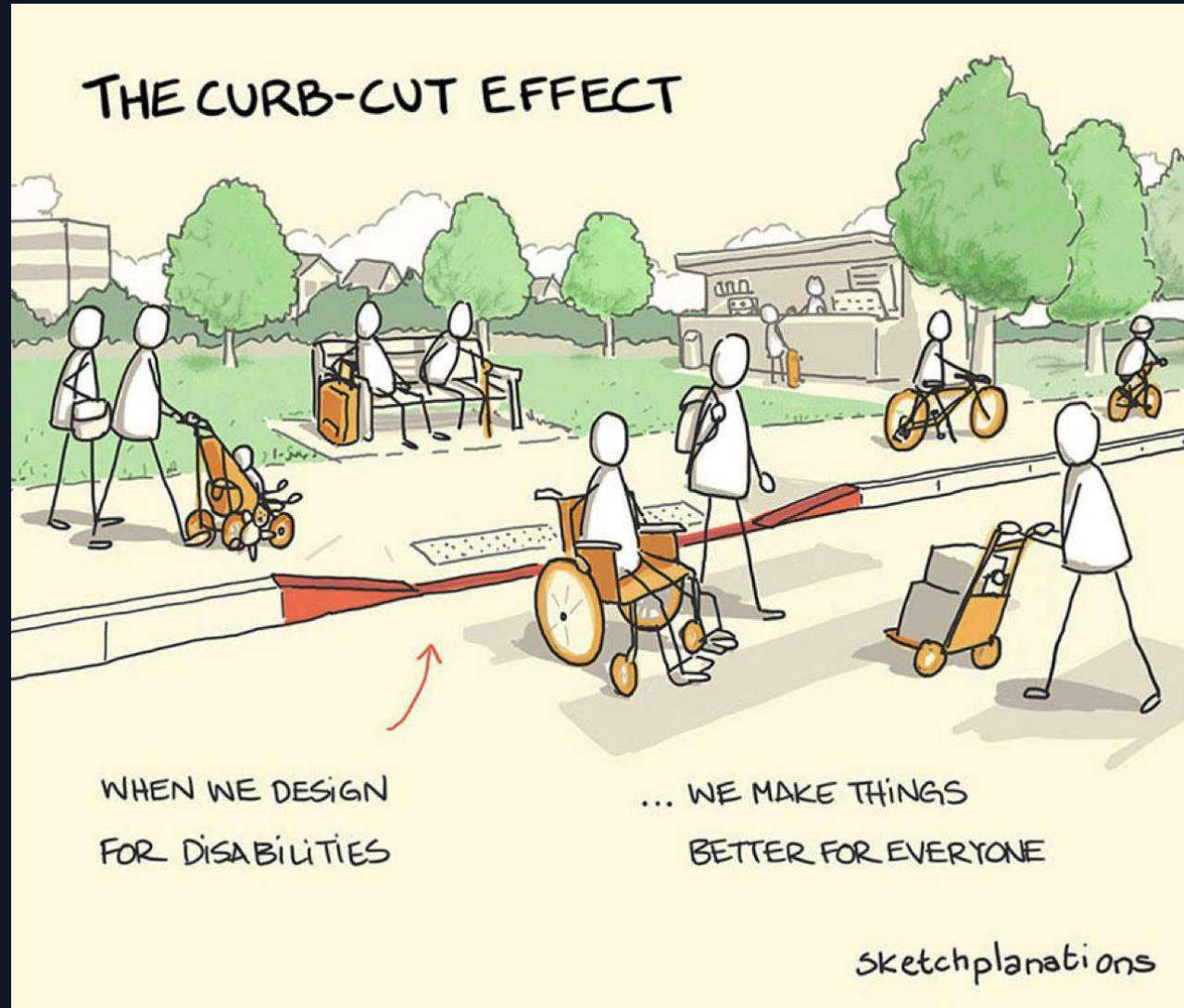
Blind/partially sighted

[euroblind.org](http://euroblind.org)

# 95.9% HOME PAGES DETECTED WCAG FAILURE



# HELPING EVERYONE



# YOU NEVER KNOW WHEN THE TIME COMES

@timdamen\_io



Pic by Nicole Ortiz Franco (<https://nicoleortizfranco.nl>) ❤️



# WHAT IS WCAG

# Web Content Accessibility Guidelines

# WCAG 2.2

Internationally defined guidelines that provide a baseline for web accessibility

# WCAG 2.2

Internationally defined guidelines that provide a baseline for web accessibility

2.2 is the latest version.

# WCAG 2.2

- Principles (4)
  - Perceivable 👁️
  - Operable ⚙️
  - Understandable 💡
  - Robust 💪

# WCAG 2.2

- Principles (4)
  - Guidelines (13)

# WCAG 2.2

- Principles (4)
  - Guidelines (13)
    - Success criteria (86)

# WCAG 2.2

- Principles
  - Guidelines
    - Success criteria <- 3 levels



# WCAG 2.2

- Principles
  - Guidelines
    - Successcriteria <- 3 levels (A, AA, AAA)
      - 58 level A + AA successcriteria

# HOW TO MEET WCAG

**How to Meet WCAG (Quick Reference)**  
A customizable quick reference to Web Content Accessibility Guidelines (WCAG) 2 requirements (success criteria) and techniques.

[Show About & How to Use](#)

**Contents** **Filter** **Hide**

**1. Perceivable**

- 1.1 Text Alternatives
  - 1.1.1 Non-text Content
- 1.2 Time-based Media
  - 1.2.1 Audio-only and Video-only (Prerecorded)
  - 1.2.2 Captions (Prerecorded)
  - 1.2.3 Audio Description or Media Alternative (Prerecorded)
  - 1.2.4 Captions (Live)
  - 1.2.5 Audio Description (Prerecorded)
  - 1.2.6 Sign Language (Prerecorded)
  - 1.2.7 Extended Audio Description (Prerecorded)
  - 1.2.8 Media Alternative (Prerecorded)
  - 1.2.9 Audio-only (Live)
- 1.3 Adaptable
  - 1.3.1 Info and Relationships
  - 1.3.2 Meaningful Sequence
  - 1.3.3 Sensory Characteristics
  - 1.3.4 Orientation
  - 1.3.5 Identify Input Purpose
  - 1.3.6 Identify Purpose
- 1.4 Distinguishable

**Selected Filters: WCAG 2.2: all success criteria and all techniques.** [Clear filters](#) [Expand all sections](#) [Share](#)

## Principle 1 – Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

### Guideline 1.1 – Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

#### 1.1.1 Non-text Content — Level A

All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. [Show full description](#)

[Show techniques and failures for 1.1.1](#)

[Understanding 1.1.1](#)

[SHARE](#) [BACK TO TOP](#)

### Guideline 1.2 – Time-based Media

Provide alternatives for time-based media.

#### 1.2.1 Audio-only and Video-only (Prerecorded) — Level A

For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such: [Show full description](#)

[Show techniques and failures for 1.2.1](#)

[Understanding 1.2.1](#)

# WCAG SIMPLIFIED

This is WCAG | Build and test

thisiswcag.com

✓ This is WCAG

Powered by CANAXESS

Web accessibility simplified

Build and test against WCAG consistently. Understand each success criterion's meaning and how to be accessible.

Need help from the accessibility experts?

We can help you apply WCAG 2.2 and best practice web accessibility.

Get in touch with CANAXESS →

Be notified when tests change and updatesubscribe

Showing 86 tests

Conformance level  
2 filters selected

WCAG version  
2 filters selected

Accessibility categories  
11 filters selected

Level and version	Success criterion	Test	Category
A 2.0	1.1.1 Non-text Content	> <img> elements have an alt attribute	Content Quick win
A 2.0	1.1.1 Non-text Content	> descriptive <img> elements have a programmatic description of the image	Content

# IN PRACTISE

# IN PRACTISE

## Contact page

\* Fill the required fields

Email \*

Phone number \*

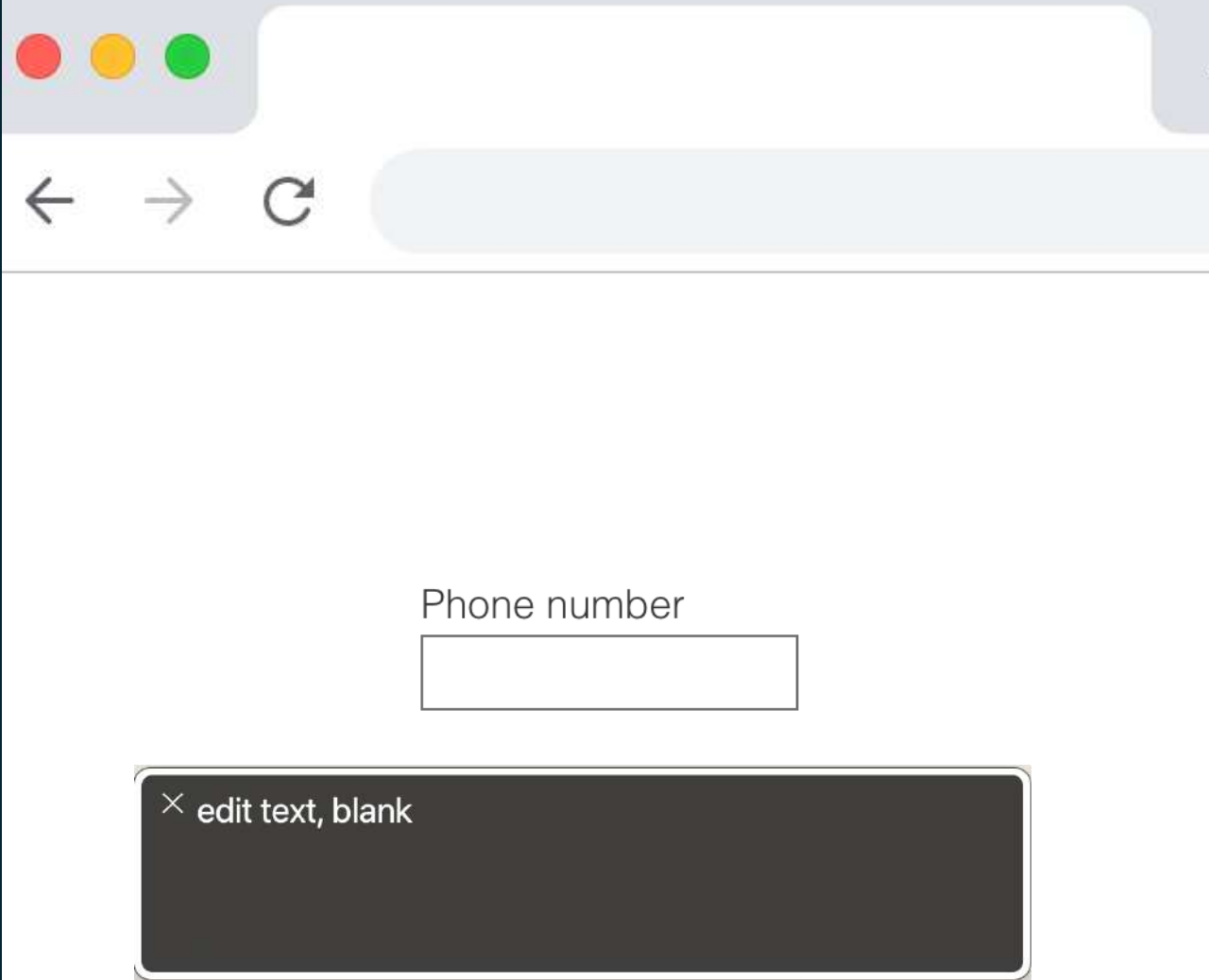
Hint: Phone number must start with 06.

Save



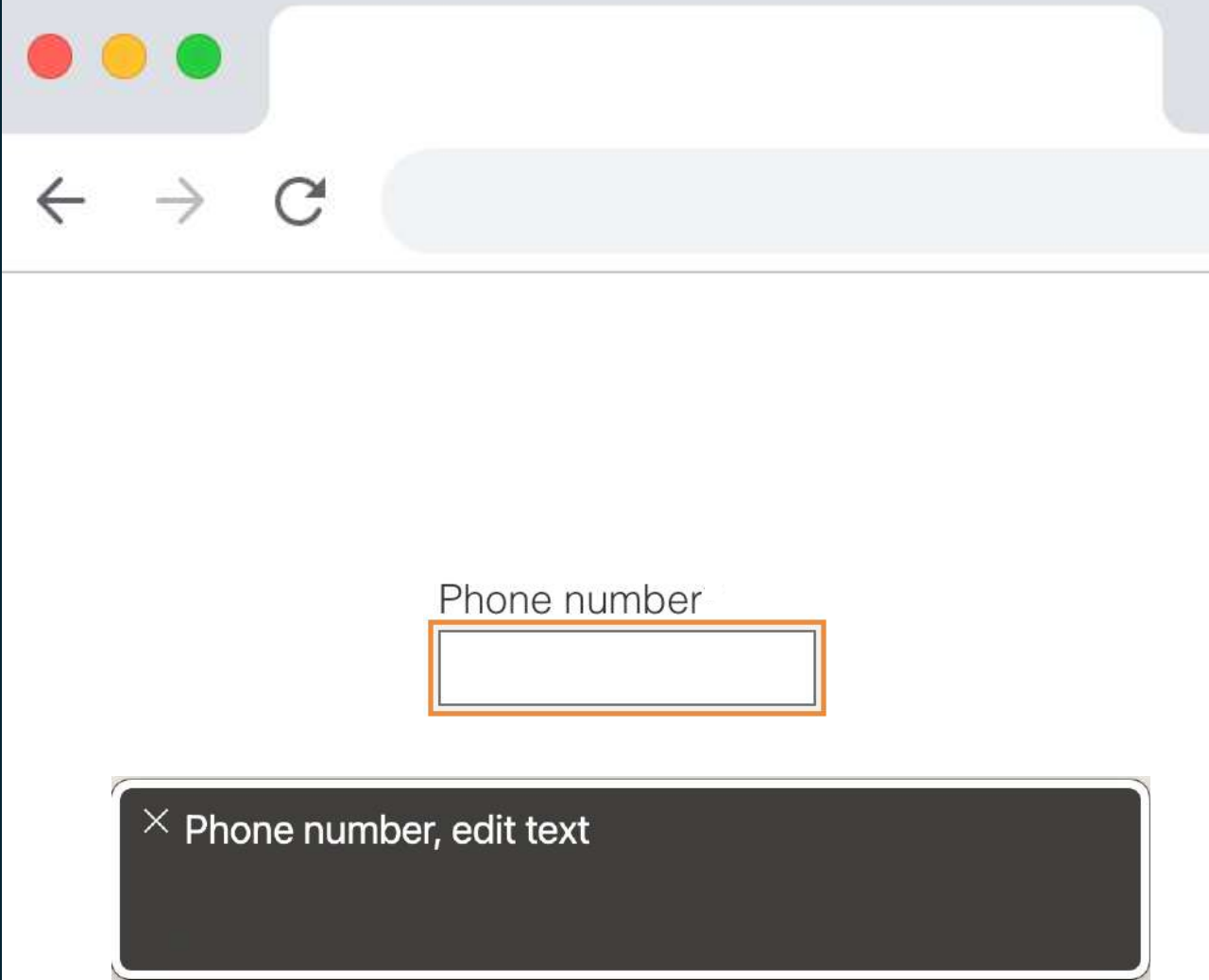


```
<label>Phone number</label>  
<input type="phone"/>
```





```
<label for="phone">Phone number</label>  
<input id="phone" type="phone"/>
```







```
<label for="phone">Phone number*</label>  
<input id="phone" type="phone"/>
```

A screenshot of a web browser window. The browser has a single tab with a light blue header bar. Below the header, there is a light gray navigation bar with back, forward, and refresh icons. The main content area is white. It contains a label "Phone number\*" in a light gray font. Below the label is a white input field with a thin gray border. Above the input field, there is a light gray tooltip with the text "\*Fill the required fields". Below the input field, there is a dark gray tooltip with a white 'X' icon and the text "Phone number\*, edit text".



```
<label for="phone">  
  Phone number<span aria-hidden="true">*</span>  
</label>  
<input type="phone" id="phone"/>
```

A mockup of a web browser window. The browser has a single tab with a white address bar. The page content includes a light gray box with the text '\*Fill the required fields'. Below this is the label 'Phone number\*' followed by a white text input field with a thin gray border. At the bottom, a dark gray error message box is displayed, containing a white 'X' icon and the text 'Phone number, edit text'.

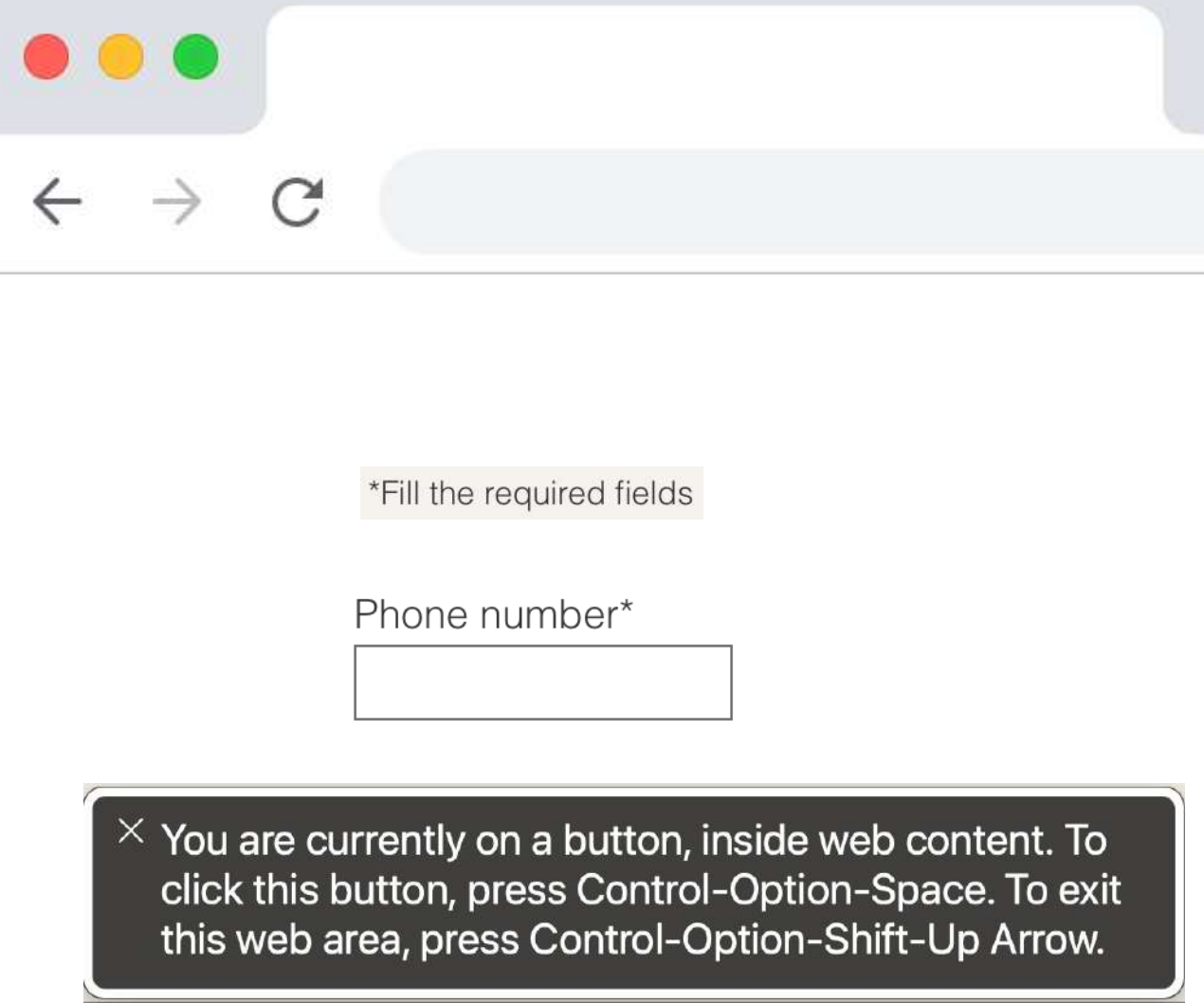
\*Fill the required fields

Phone number\*

× Phone number, edit text

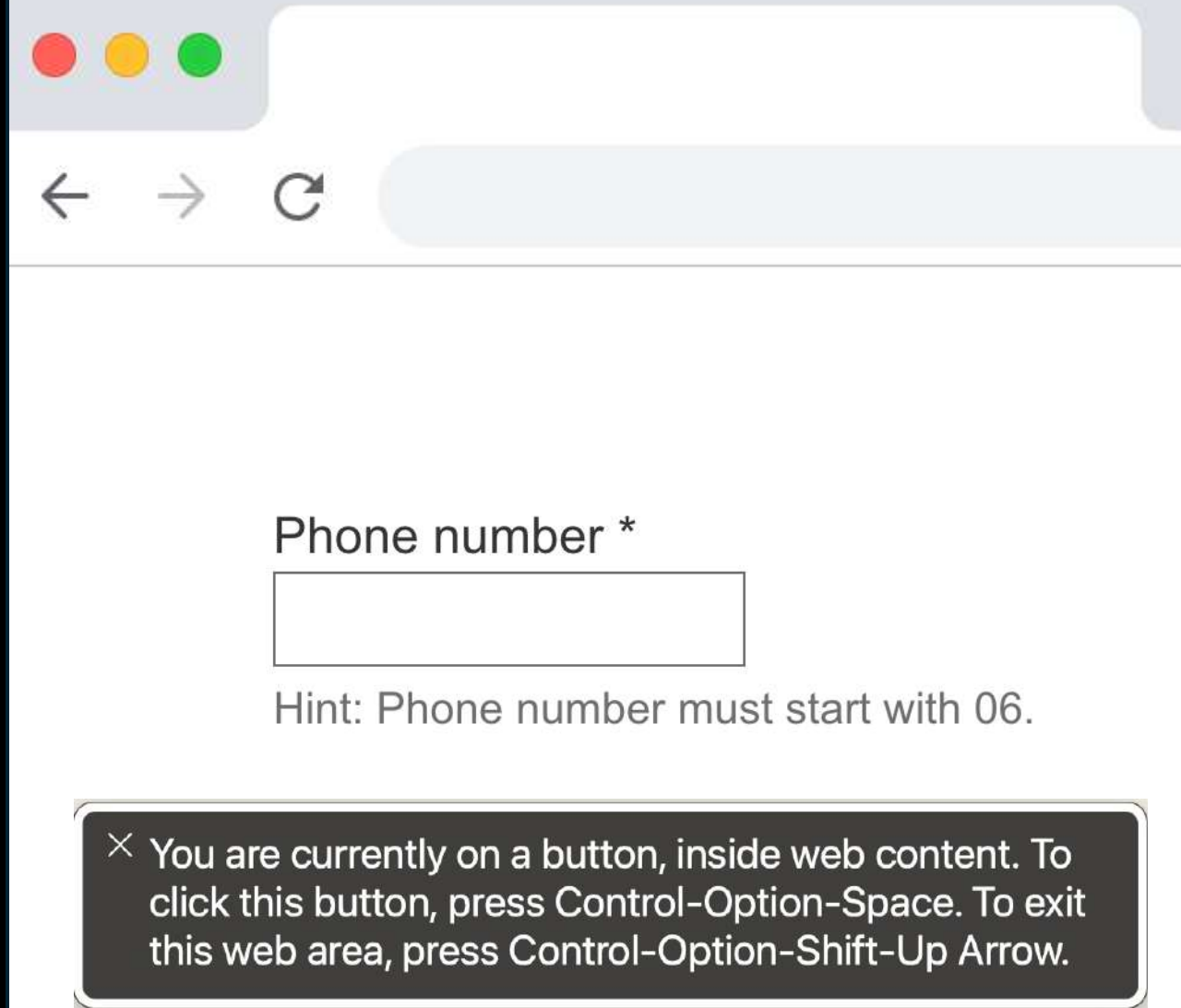


```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input type="phone" id="phone" aria-required="true"/>
```





```
<label for="phone">  
  Phone number<span aria-hidden="true">*</span>  
</label>  
<input  
  type="phone"  
  id="phone"  
  aria-required="true"  
>  
  
<p>Hint: Phone number must start with 06.</p>
```





```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-describedby="phoneHint"
/>
```

```
<p id="phoneHint">
  Hint: Phone number must start with 06.
</p>
```

The screenshot shows a web browser window with a single tab. The address bar is empty. The page content includes a label "Phone number \*" followed by a text input field. Below the input field is a hint message: "Hint: Phone number must start with 06." At the bottom of the page, there is a dark grey notification box with a white 'X' icon and the text: "You are currently on a text field. To enter text in this field, type."



```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-describedby="phoneHint"
/>

<p>Error: Phone number is required.</p>

<p id="phoneHint">
  Hint: Phone number must start with 06.
</p>
```

The screenshot shows a web browser window with a single tab. The address bar is empty. The main content area displays a form with the label "Phone number \*". Below the label is a text input field. Underneath the input field is a hint text: "Hint: Phone number must start with 06." At the bottom of the form, there is a dark grey error message box with a white 'X' icon and the text: "You are currently on a text field. To enter text in this field, type."



```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-invalid="true"
  aria-describedby="phoneHint"
/>

<p>Error: Phone number is required.</p>

<p id="phoneHint">
  Hint: Phone number must start with 06.
</p>
```

The screenshot shows a web browser window with a single tab. The address bar is empty. The main content area displays a form with a label "Phone number \*" in red. Below the label is an empty text input field. Underneath the input field, there is a red error message "Error: Phone number is required." followed by a grey hint "Hint: Phone number must start with 06." At the bottom of the form, there is a dark grey rounded rectangle containing a white "X" icon and the text "Email, required, edit text email, main".



```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-invalid="true"
  aria-describedby="phoneHint phoneError"
/>

<p id="phoneError">
  Error: Phone number is required.
</p>

<p id="phoneHint">
  Hint: Phone number must start with 06.
</p>
```

The screenshot shows a web browser window with a single tab. The address bar is empty. Below the browser window, there is a form with a label "Phone number \*" in red. The input field is empty and has a red border. Below the input field, there is a red error message "Error: Phone number is required." and a grey hint message "Hint: Phone number must start with 06.". A blue "Save" button is partially visible. A dark grey tooltip with a white 'X' icon is open, displaying the text "Phone number Error: Phone number is required. Hint: Phone number must start with 06., required invalid data, edit text".

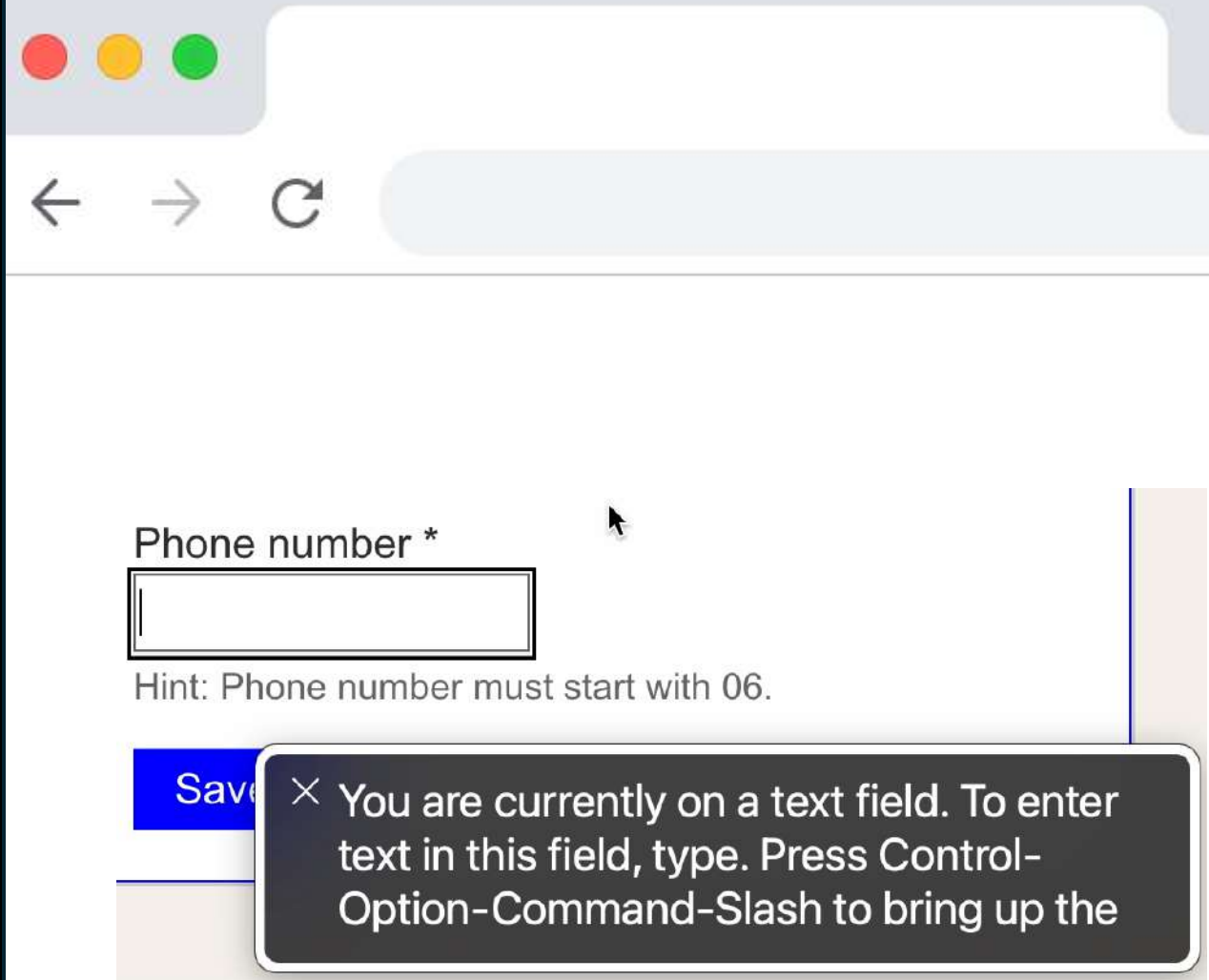




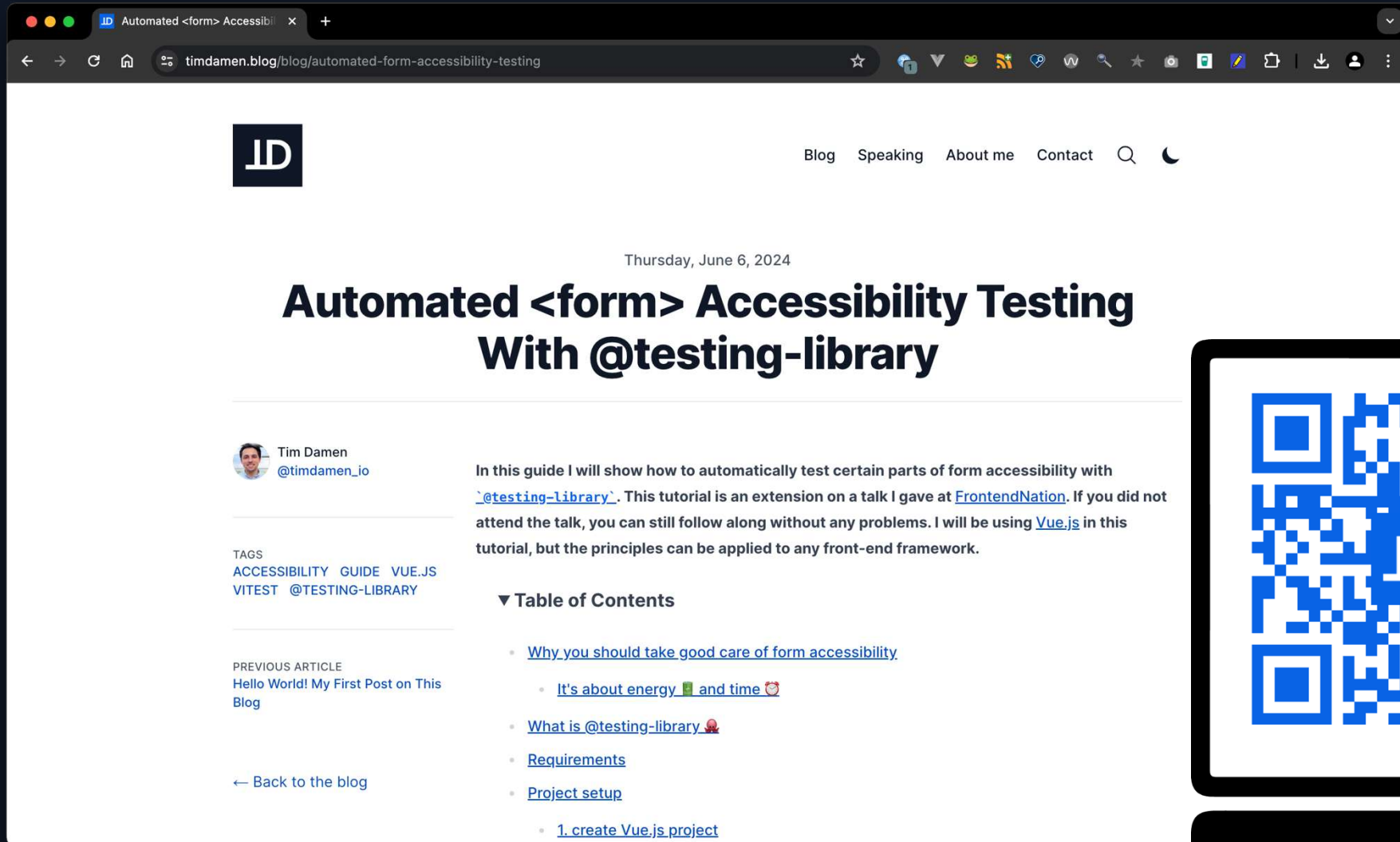
```
<label for="phone">
  Phone number<span aria-hidden="true">*</span>
</label>
<input
  type="phone"
  id="phone"
  aria-required="true"
  aria-invalid="true"
  aria-describedby="phoneHint phoneError"
/>

<p id="phoneError" aria-live="assertive">
  Error: Phone number is required.
</p>

<p id="phoneHint">
  Hint: Phone number must start with 06.
</p>
```



# AUTOMATION GUIDE



The screenshot shows a web browser window with the URL `timdamen.blog/blog/automated-form-accessibility-testing`. The page features a dark blue header with the 'ID' logo and navigation links: 'Blog', 'Speaking', 'About me', and 'Contact'. The main content area is white and displays the article title 'Automated <form> Accessibility Testing With @testing-library' in large, bold black text. Below the title, the date 'Thursday, June 6, 2024' is shown. The author's profile, 'Tim Damen @timdamen\_io', is on the left. The article text begins with 'In this guide I will show how to automatically test certain parts of form accessibility with @testing-library'. A 'Table of Contents' section follows, listing links to 'Why you should take good care of form accessibility', 'It's about energy and time', 'What is @testing-library', 'Requirements', 'Project setup', and '1. create Vue.js project'. On the right side of the browser window, there is a large QR code with the 'ID' logo in the center, and a black button with the text 'Scan me :)' below it.

Automated <form> Accessibility Testing With @testing-library

Thursday, June 6, 2024

Tim Damen  
@timdamen\_io

TAGS  
ACCESSIBILITY GUIDE VUE.JS  
VITEST @TESTING-LIBRARY

PREVIOUS ARTICLE  
Hello World! My First Post on This Blog

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Scan me :)

# Thank you!

# Let's stay connected

- I write code
- I write blogs
- I host workshops and training sessions
- [www.timdamen.io](http://www.timdamen.io)

