

## Overview of redesign changes

This document is an overview of the redesign of the Aikido Edinburgh website project, which represents a real-life scenario of a digital agency project, aligning with my career aspirations. The website was designed and developed for an academic project using Flask and Python. After receiving formative feedback from my lecturer, I decided to improve the overall design to enhance the user experience by following current market trends and industry standards. The following section illustrates a comparison of the original and final design, highlighting any improvements.

## 2. Comparison Before and After Changes

### 2.1 Hero and Navigation

The design included only a hero title on a dark image without any descriptive text or call to action. When users landed on the page for the first time did not have information on what the Aikido dojo offered or an easy navigation to key pages of the website, such as the trial booking form or the class schedule.

Added 2 CTA buttons to redirect users to the trial class booking form and schedule to increase conversion and improve user navigation and a navigation link on the nav bar to navigate to the trial class booking form.

BEFORE



AFTER



### 2.2 Booking Form

The original form collected personal data without obtaining the explicit consent required by GDPR.

Amended the text to clarify that the tick box is required to agree to the terms and conditions, and the form cannot be submitted without ticking it to meet current GDPR requirements.

## BEFORE

### Book your Free Trial

#### REGISTER FOR A CLASS

Full Name	Email Address
<input type="text"/>	<input type="text"/>
Phone Number	Experience Level
<input type="text"/>	Select your level
Preferred Day	
<input type="text" value="dd/mm/yyyy"/>	
<small>Classes are Wednesday or Sunday</small>	
Additional Notes	
<input type="text"/>	
<input type="checkbox"/> I consent to be contacted about scheduling a free trial class and confirm I have read the <a href="#">Privacy Policy</a> and agree to the <a href="#">Terms and Conditions</a> .	
<input type="submit" value="Submit"/>	

## AFTER

### Book your Free Trial

#### REGISTER FOR A CLASS

Full Name	Email Address
<input type="text"/>	<input type="text"/>
Phone Number	Experience Level
<input type="text"/>	Select your level
Preferred Day	
<input type="text"/>	
<small>Classes are Wednesday or Sunday</small>	
Additional Notes	
<input type="text"/>	
<input type="checkbox"/> I have read and agree to the <a href="#">Terms and Conditions</a> .	
By submitting this form, you acknowledge that we will contact you to schedule your free trial class. Please read our <a href="#">Privacy Policy</a> to see how we handle your data.	
<input type="submit" value="Submit"/>	

## 2.3 Date Selector

In the original booking form, the date input field allowed the user to book any date on the calendar, creating confusion and increasing the chances of selecting the wrong date for the user.

Amended the date field so users can only select the correct dates that reflect the timetable to avoid booking errors.

### BEFORE

### AFTER

## 2.4 Class Types

The class types section originally showed information but did not provide a call to action, such as a button element, to convert users.

Added buttons to allow users to navigate directly to the required section removing the need to search elsewhere for the form. This improves UX and reduces cognitive load for the user.

BEFORE

## Class Types

### BEGINNERS

Mandatory introduction course for complete beginners for the first 4 weeks.

#### Fees

One class per week £35 Adults and Students

#### What You Will Learn

- Basic Aikido movements and stances
- Ukemi (falling safely) Basics Striking, balance taking and control of attackers, Joint locks, throws.
- Training traditional Japanese weapons -Wooden sword (BOKKEN), sticks (JO) - after first 4 weeks. Students will have to purchase their own Bokens and Jos which we will advise on once joining.
- You can attend either Wednesday or Sunday classes.

### ALL-LEVELS CLASS

Our main weekly class welcomes practitioners who have completed the beginner course.

#### Fees

Adult £40 a month (one class a week) £55 a month (two classes a week)  
Single class £10

Student £35 a month (one class a week) £45 a month (two classes a week)

#### What You Will Experience

- Advanced techniques and deeper practice
- Step-by-step guidance in a supportive group
- Energy and experience from the larger community
- The start of your Aikido journey
- You can attend either Wednesday or Sunday classes.

AFTER

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Join Beginners class

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Join All-level class

## 2.5 White and Black colour

The original design used pure white and pure black for text elements and their backgrounds. These colour combinations are known to cause eye strain. Additionally, body text did not have a colour set and defaulted to plain black from the browser.

I have changed the pure white colour to softer tones across text and background to increase readability and accessibility for all users in accordance with current industry standards.

BEFORE

Ready to begin your Aikido Journey?

Book a Free Trial

AFTER

Ready to begin your Aikido Journey?

Book a Free Trial

BEFORE

## What is Aikido

Aikido is a blend of Morihei Ueshiba religious beliefs, philosophy, and martial studies. Aikido training is both physical and mental, focusing on the capacity to eventually calm the body and mind in stressful situations.

This is required to let the practitioner to execute the audacious enter-and-blend motions that constitute the basis of aikido techniques, when an attack is met with directness and confidence.

- Who is this for: Everyone, regardless of age or fitness level
- What will I learn: Tai-jutsu and weapons
- What to expect: Static basics first. proaressina to fluid dvnamic practice

AFTER

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- What will I learn: Tai-jutsu and weapons
- What to expect: Static basics first, progressing to fluid dynamic practice

## BEFORE

Iwama Ryu Aikido

Morihei Ueshiba founded Aikido shortly after World War II ended, in Japan. Ueshiba is regarded as one of the best martial artists in the world. He developed Aikido, the discipline that maximises self-defence with the least amount of force, after training in classical methods and gaining an extraordinary degree of spiritual awareness.

## AFTER

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### 2.6 Copyright text colour contrast

The copyright information text shown on the footer did not have enough colour contrast against its background, causing accessibility issues.

The text colour was updated to match the white colour of the improved colour palette to improve the text readability and accessibility of the website while maintaining consistency with other elements.

## BEFORE



## AFTER



### 3. Accessibility

Accessibility tests confirmed that the application met the minimum requirements of WCAG 2.1 AA level. WebAim Contrast Checker and the Google Lighthouse tool of Google Developer Tools were used for testing.

#### 3.1 WebAIM Colour Contrast Test

#### 3.2 Scores

##### 3.2.1 Black text against white background

### Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

The image shows the WebAIM Contrast Checker interface. It has two main sections: 'Foreground' and 'Background'. The 'Foreground' section has a 'Hex Value' input field containing '#1B1B1B', a 'Color Picker' showing a black color bar, and an 'Alpha' input field containing '1'. Below these is a 'Lightness' slider. The 'Background' section has a 'Hex Value' input field containing '#FDFDFD', a 'Color Picker' showing a light gray color bar, and a 'Lightness' slider. In the center, a green-bordered box displays the 'Contrast Ratio' as '16.93:1'. Below this box is a blue 'permalink' link.

#### Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

**The five boxing wizards jump quickly.**

#### Graphical Objects and User Interface Components

WCAG AA: **Pass**

The image shows a user interface component consisting of a black star icon centered above a text input field. The text input field contains the text 'Text Input'.

### 3.2.2 Navigation links against top navigation menu background

#### CONTRAST CHECKER

[Home](#) > [Resources](#) > Contrast Checker

Foreground	Background
Hex Value # FDFDFD	Hex Value # 1E1E1E
Color Picker <input type="color"/>	Color Picker <input type="color"/>
Alpha 1	
Lightness <input type="range"/>	Lightness <input type="range"/>

Contrast Ratio  
**16.38:1**

[permalink](#)

#### Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Graphical Objects and User Interface Components

WCAG AA: **Pass**



Text Input

### 3.2.3 Black text against cream background

Foreground  
Hex Value: #1B1B1B  
Color Picker  
Alpha: 1  
Lightness

Background  
Hex Value: #FAF9F6  
Color Picker  
Lightness

Contrast Ratio  
**16.35:1**  
[permalink](#)

#### Normal Text

WCAG AA: **Pass**  
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Large Text

WCAG AA: **Pass**  
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Graphical Objects and User Interface Components

WCAG AA: **Pass**

★  
Text Input

### 3.2.4 Grey text against cream background

#### Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground  
Hex Value: #4F4F4F  
Color Picker  
Alpha: 1  
Lightness

Background  
Hex Value: #FAF9F6  
Color Picker  
Lightness

Contrast Ratio  
**7.77:1**  
[permalink](#)

- Related Resources**
- [Contrast and Color Accessibility](#)
  - [Quick Reference: Testing Web Content for Accessibility](#)
  - [WebAIM Auditing & Evaluation Services](#)
  - [Web Accessibility for Designers](#)
  - [Link Contrast Checker](#)
  - [Contrast Checker Bookmarklet](#)

#### Normal Text

WCAG AA: **Pass**  
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

#### Large Text

WCAG AA: **Pass**  
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

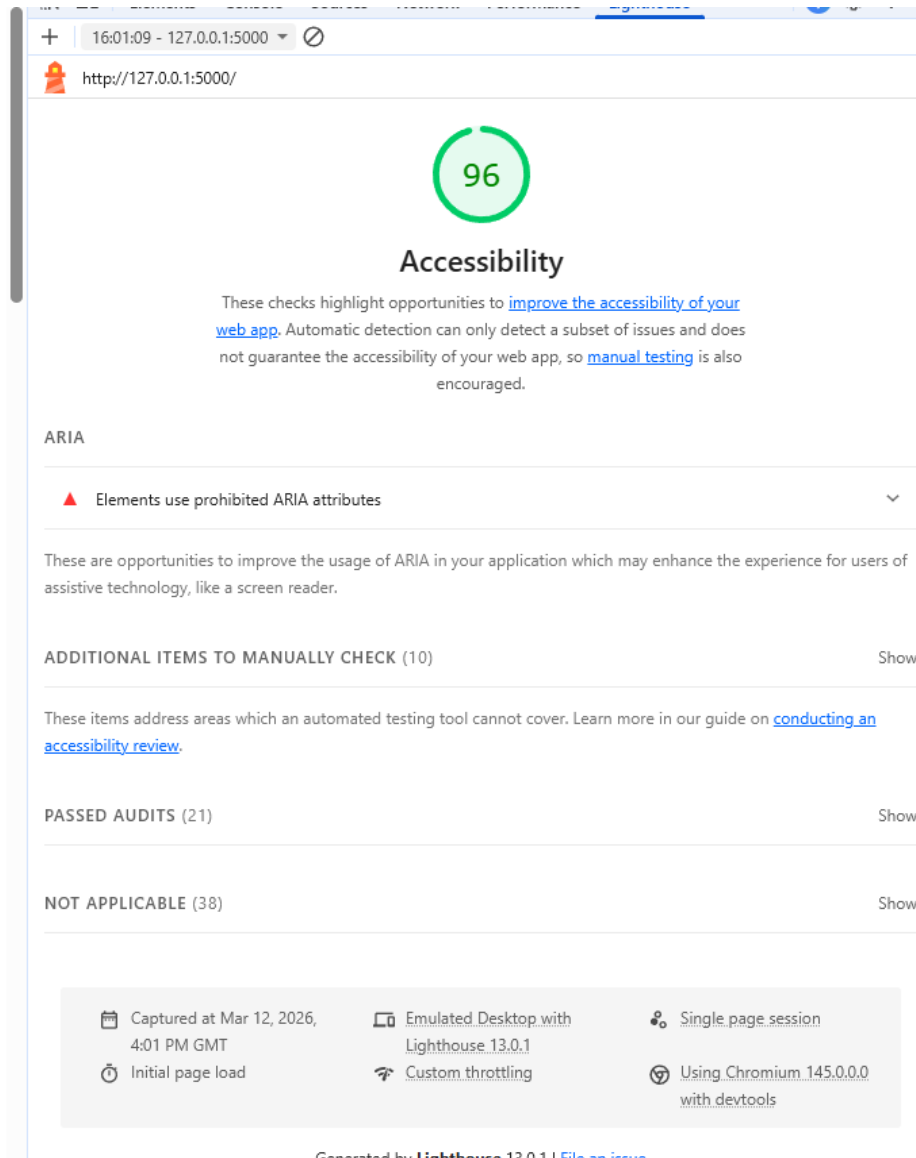
#### Graphical Objects and User Interface Components

WCAG AA: **Pass**

★

## 3.3 Lighthouse

### 3.3.1 Home



The screenshot shows the Lighthouse Accessibility report home page. At the top, a browser address bar displays the URL `http://127.0.0.1:5000/`. The main content area features a large green circle with the score **96** and the heading **Accessibility**. Below this, a paragraph explains that these checks highlight opportunities to [improve the accessibility of your web app](#), and that automatic detection does not guarantee accessibility, so [manual testing](#) is encouraged.

The report is organized into sections:

- ARIA**: A section with a red triangle icon and the heading "Elements use prohibited ARIA attributes". It includes a sub-section for "ADDITIONAL ITEMS TO MANUALLY CHECK (10)" with a "Show" link, explaining that these items address areas not covered by automated tools. Below this is a "PASSED AUDITS (21)" section with a "Show" link, and a "NOT APPLICABLE (38)" section with a "Show" link.

At the bottom, a metadata box provides details about the capture:

- Captured at Mar 12, 2026, 4:01 PM GMT
- Emulated Desktop with Lighthouse 13.0.1
- Single page session
- Initial page load
- Custom throttling
- Using Chromium 145.0.0.0 with devtools

Generated by **Lighthouse 13.0.1** | [File an issue](#)

### 3.3.2 Classes

The screenshot shows a web browser window with the address bar displaying `http://127.0.0.1:5000/classes/`. The main content area features a large green circular progress indicator with the number 95 inside, representing the accessibility score. Below this, the word "Accessibility" is written in a bold, black font. A paragraph of text explains that these checks highlight opportunities to [improve the accessibility of your web app](#), noting that automatic detection is limited and [manual testing](#) is also encouraged.

**ARIA**

▲ Elements use prohibited ARIA attributes

These are opportunities to improve the usage of ARIA in your application which may enhance the experience for users of assistive technology, like a screen reader.

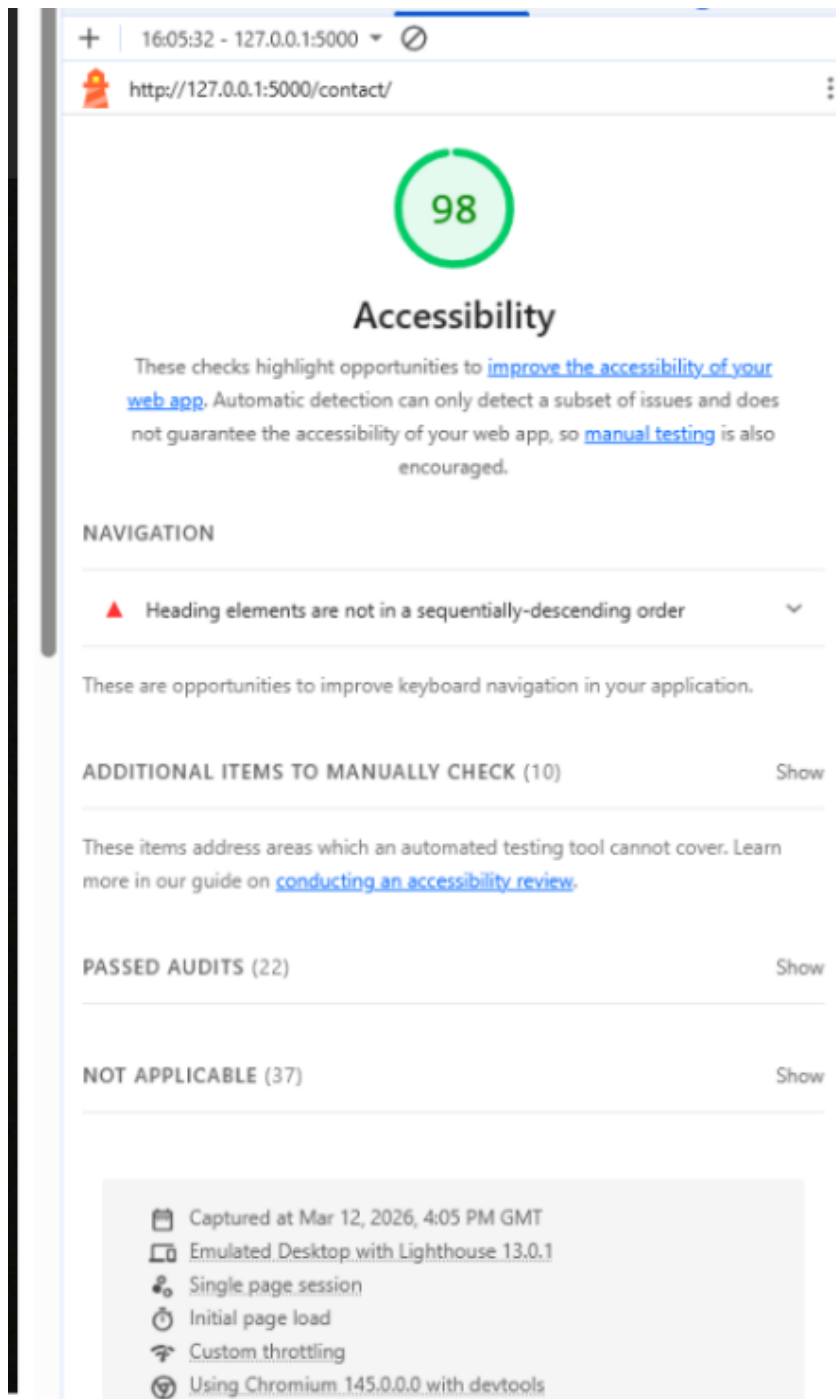
**NAVIGATION**

▲ Heading elements are not in a sequentially-descending order

These are opportunities to improve keyboard navigation in your application.

**NAMES AND LABELS**

### 3.3.3 Contact



The screenshot shows a web browser window with the URL `http://127.0.0.1:5000/contact/`. The Lighthouse report displays an overall score of 98 for Accessibility. The report includes a section for 'NAVIGATION' with one issue: 'Heading elements are not in a sequentially-descending order'. Below this, there are sections for 'ADDITIONAL ITEMS TO MANUALLY CHECK (10)', 'PASSED AUDITS (22)', and 'NOT APPLICABLE (37)'. At the bottom, a metadata box provides details about the capture process.

16:05:32 - 127.0.0.1:5000

<http://127.0.0.1:5000/contact/>

98

## Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so [manual testing](#) is also encouraged.

### NAVIGATION

▲ Heading elements are not in a sequentially-descending order

These are opportunities to improve keyboard navigation in your application.

### ADDITIONAL ITEMS TO MANUALLY CHECK (10)

Show

These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

### PASSED AUDITS (22)

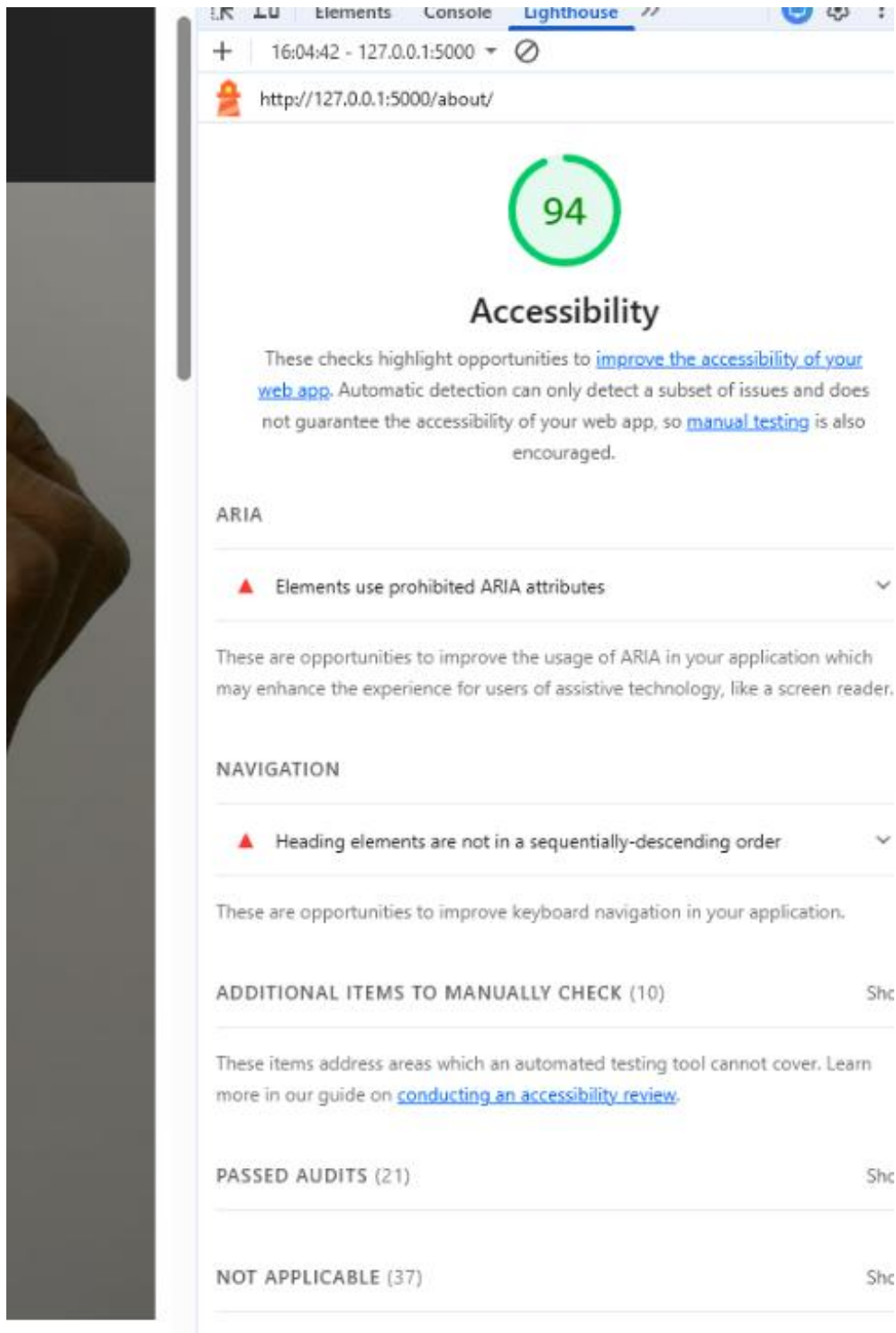
Show

### NOT APPLICABLE (37)

Show

Captured at Mar 12, 2026, 4:05 PM GMT  
Emulated Desktop with Lighthouse 13.0.1  
Single page session  
Initial page load  
Custom throttling  
Using Chromium 145.0.0.0 with devtools

### 3.3.4 About



The screenshot shows the Lighthouse accessibility audit results for a web page. The score is 94, displayed in a green circle. The audit title is "Accessibility". Below the score, there is a paragraph explaining that these checks highlight opportunities to improve the accessibility of the web app and that manual testing is encouraged. The results are categorized into sections: ARIA, NAVIGATION, ADDITIONAL ITEMS TO MANUALLY CHECK (10), PASSED AUDITS (21), and NOT APPLICABLE (37). Each section has a "Show" link.

16:04:42 - 127.0.0.1:5000

http://127.0.0.1:5000/about/

## 94

### Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so [manual testing](#) is also encouraged.

#### ARIA

▲ Elements use prohibited ARIA attributes

These are opportunities to improve the usage of ARIA in your application which may enhance the experience for users of assistive technology, like a screen reader.

#### NAVIGATION

▲ Heading elements are not in a sequentially-descending order

These are opportunities to improve keyboard navigation in your application.

#### ADDITIONAL ITEMS TO MANUALLY CHECK (10)

These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

#### PASSED AUDITS (21)

#### NOT APPLICABLE (37)