

# Basic Building Blocks for Accessible Angular Templates



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**Semantic HTML**

**CSS scoping**

**Angular attribute and template syntax**

**Alt tags, ARIA roles, and ARIA attributes**

**Semantic HTML is not an Angular concept, but it should be used when writing Angular applications**



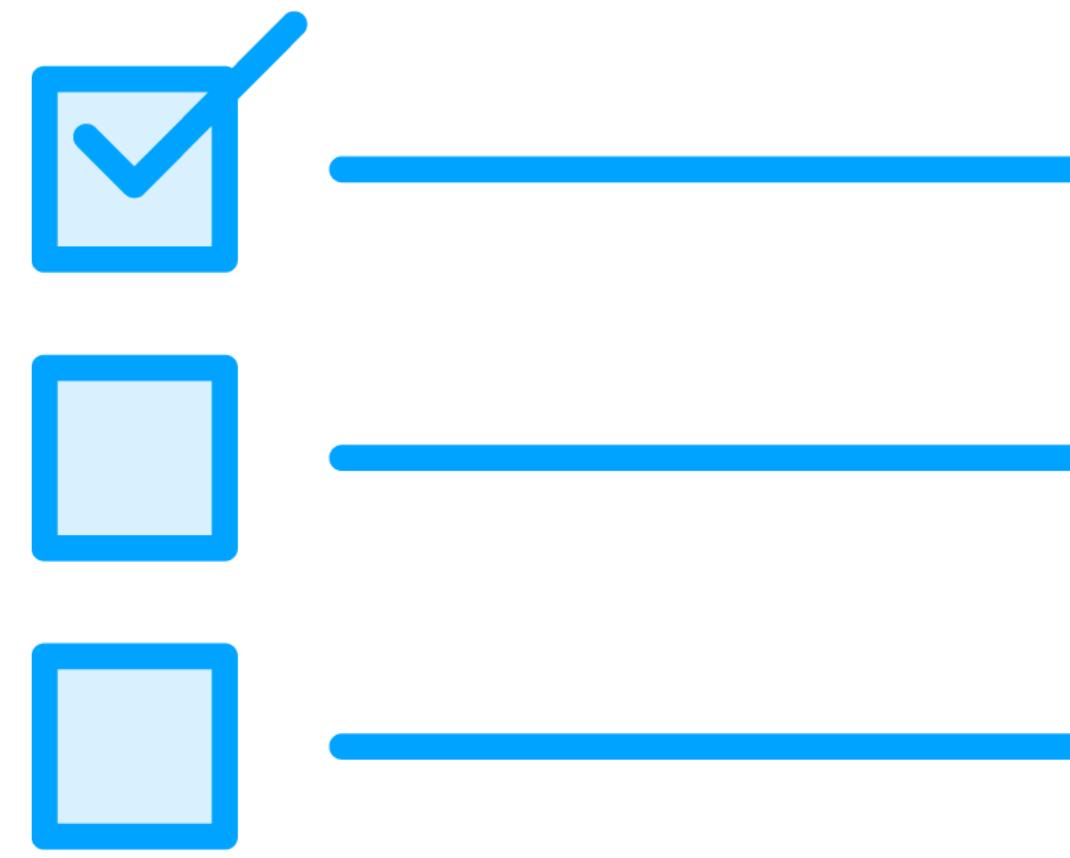
## **Accessibility: Website Structure and Comprehension**

[www.pluralsight.com/courses/accessibility-website-structure-comprehension](http://www.pluralsight.com/courses/accessibility-website-structure-comprehension)

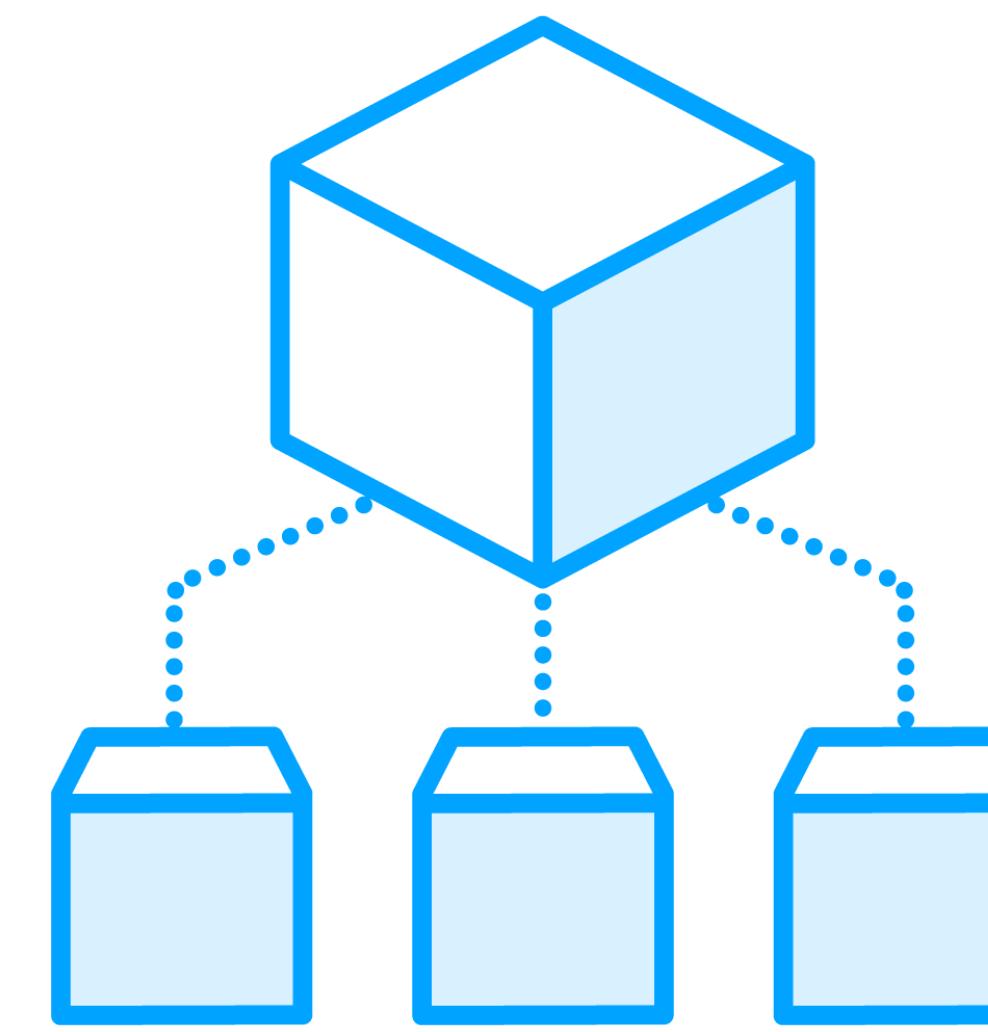
# Semantic HTML

**HTML elements that carry meaning and context**

# Semantic HTML Element Types



**Interactable Elements**



**Sectioning Elements**



**Heading Elements**



**Do not use heading elements  
for styling purposes**

**Use only one h1 element per page**

**Do not skip heading levels**



# The Results of Good HTML Structure

- Higher potential rank in search engine results**
- Easier to index and navigate**
- Better generated screen reader menus**
- Improved user experiences**

# **Building Complex Interactable Components**

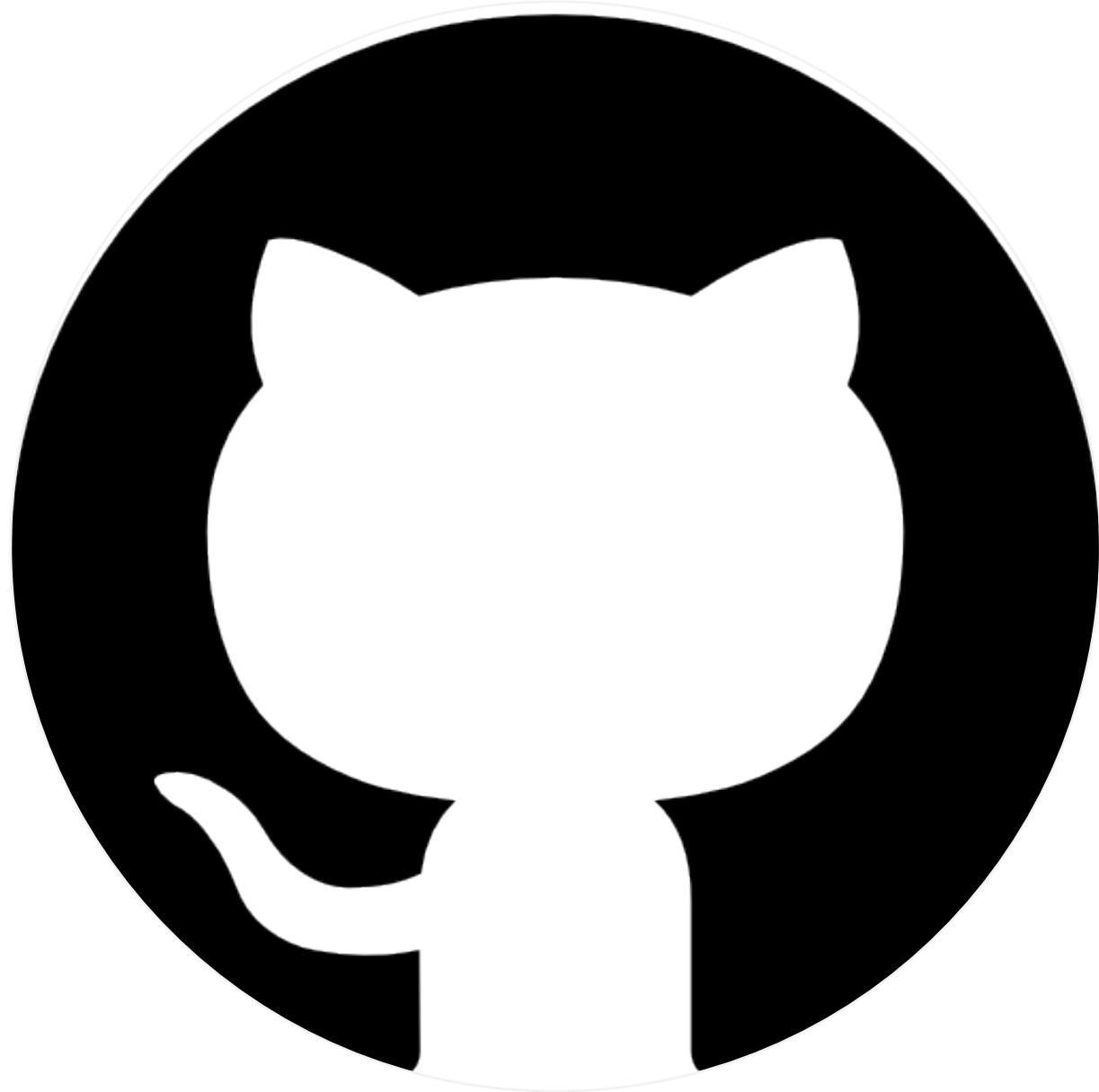
**Most websites require more sophisticated interaction than simple HTML elements**

**Complex component interactions do not have built-in browser support**

**Navigation menus are an example of a complex interactable component**

Demo

## **Semantic HTML: Step One**

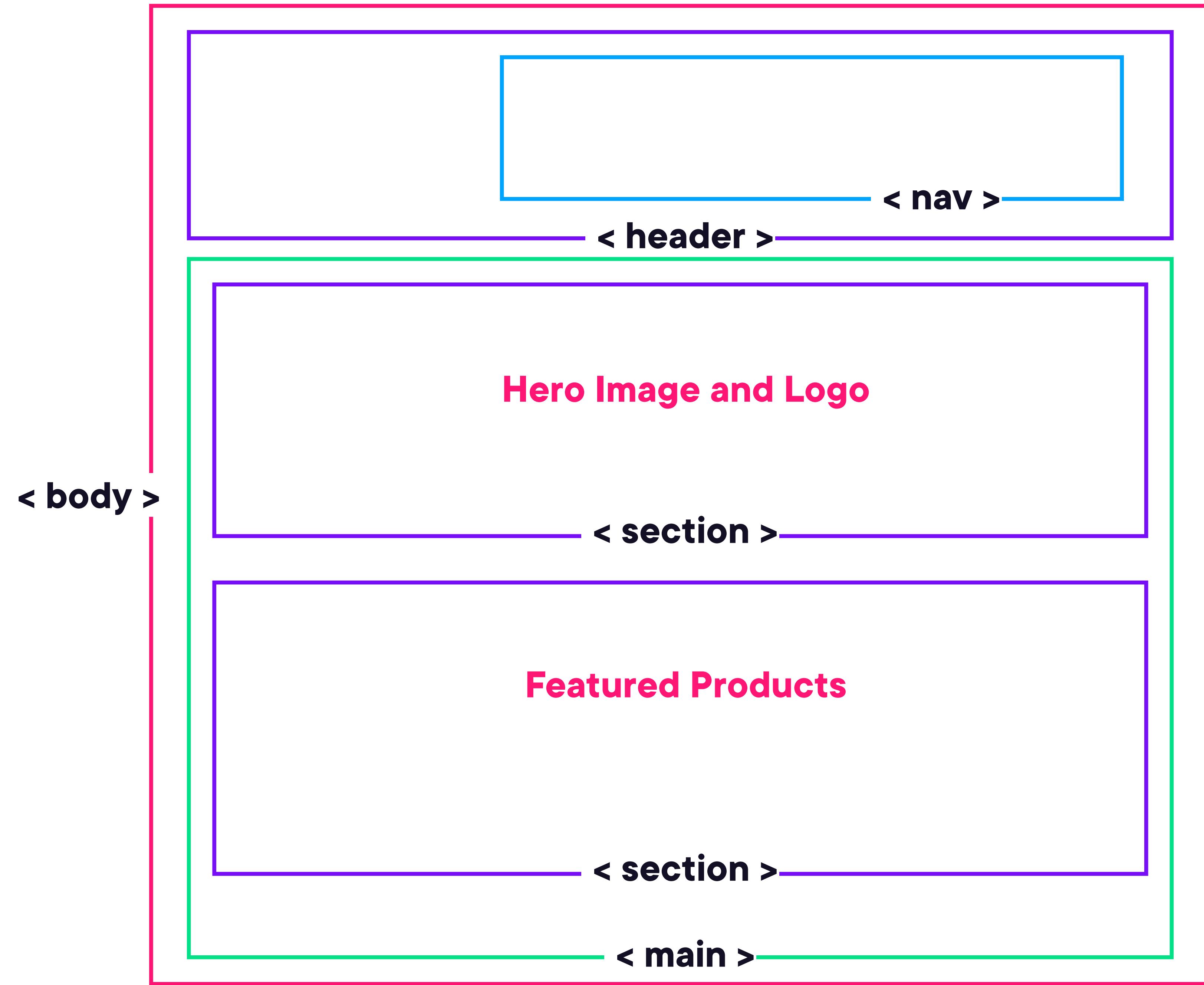


## Course Github Repository

[github.com/lara-newsom/angular-accessibility](https://github.com/lara-newsom/angular-accessibility)

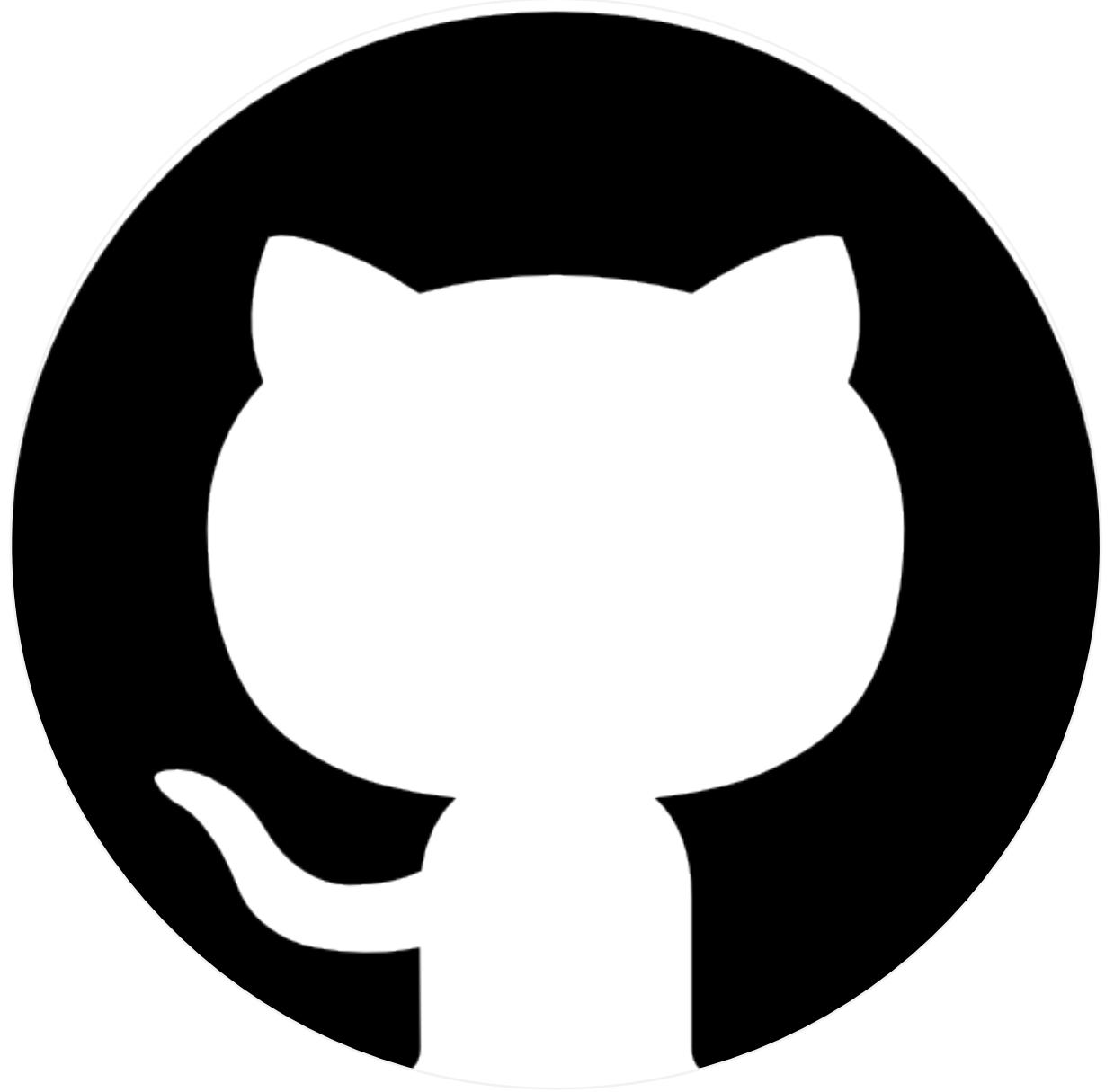
Starting branch:  
[basic-building-blocks-start](#)

Ending branch:  
[basic-building-blocks-step-one](#)



Demo

## Heading Elements: Step Two

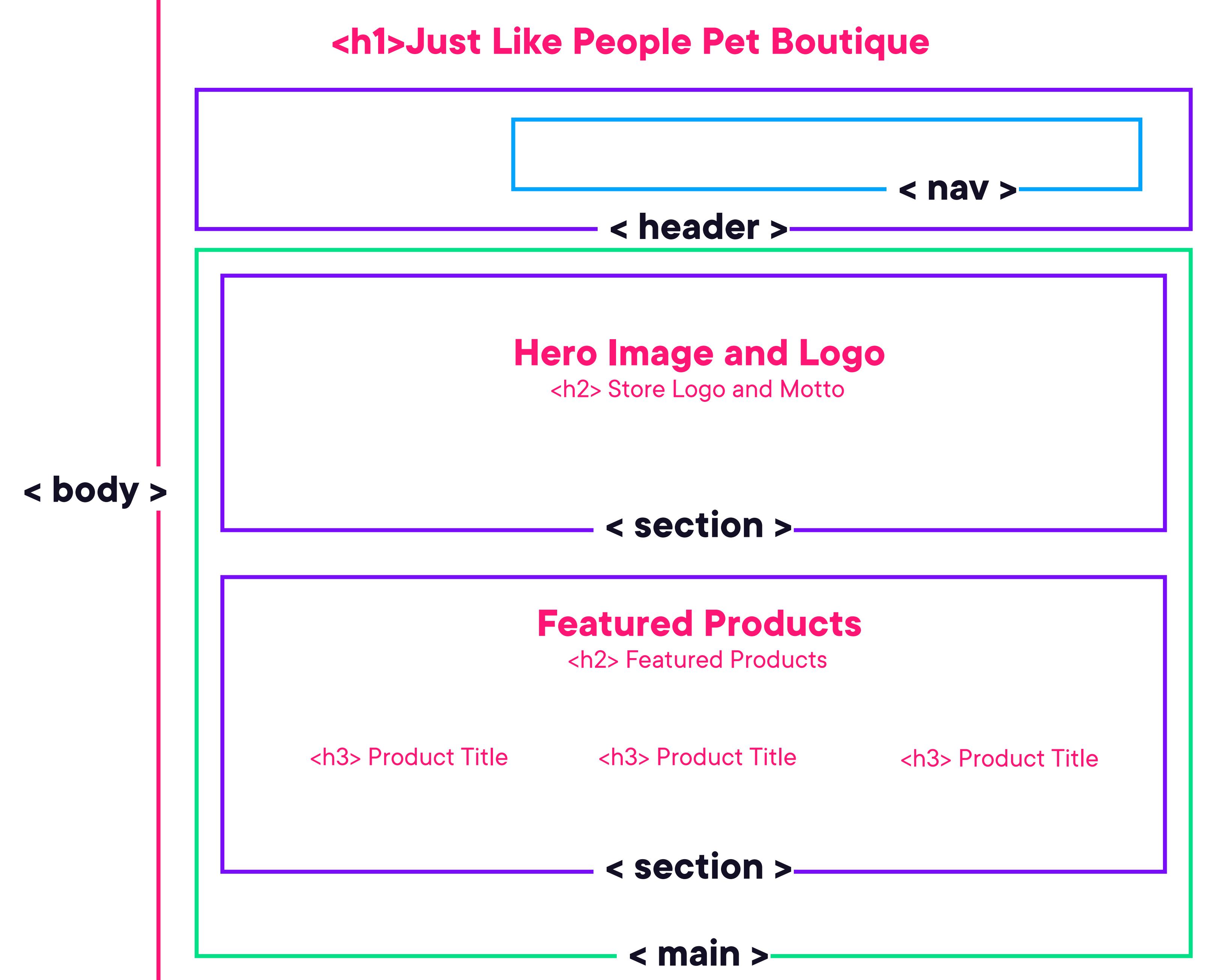


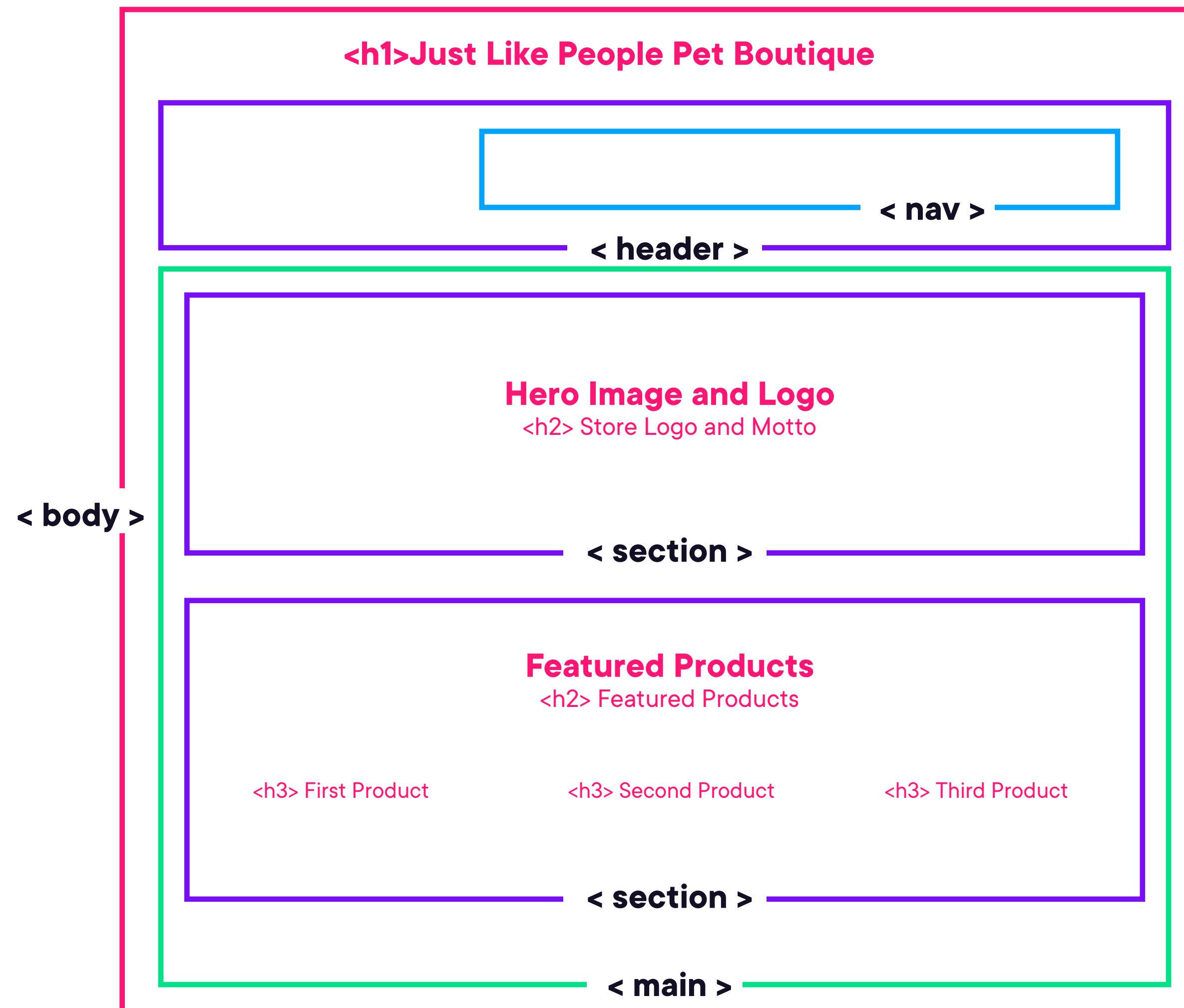
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Starting branch:  
[basic-building-blocks-step-one](#)

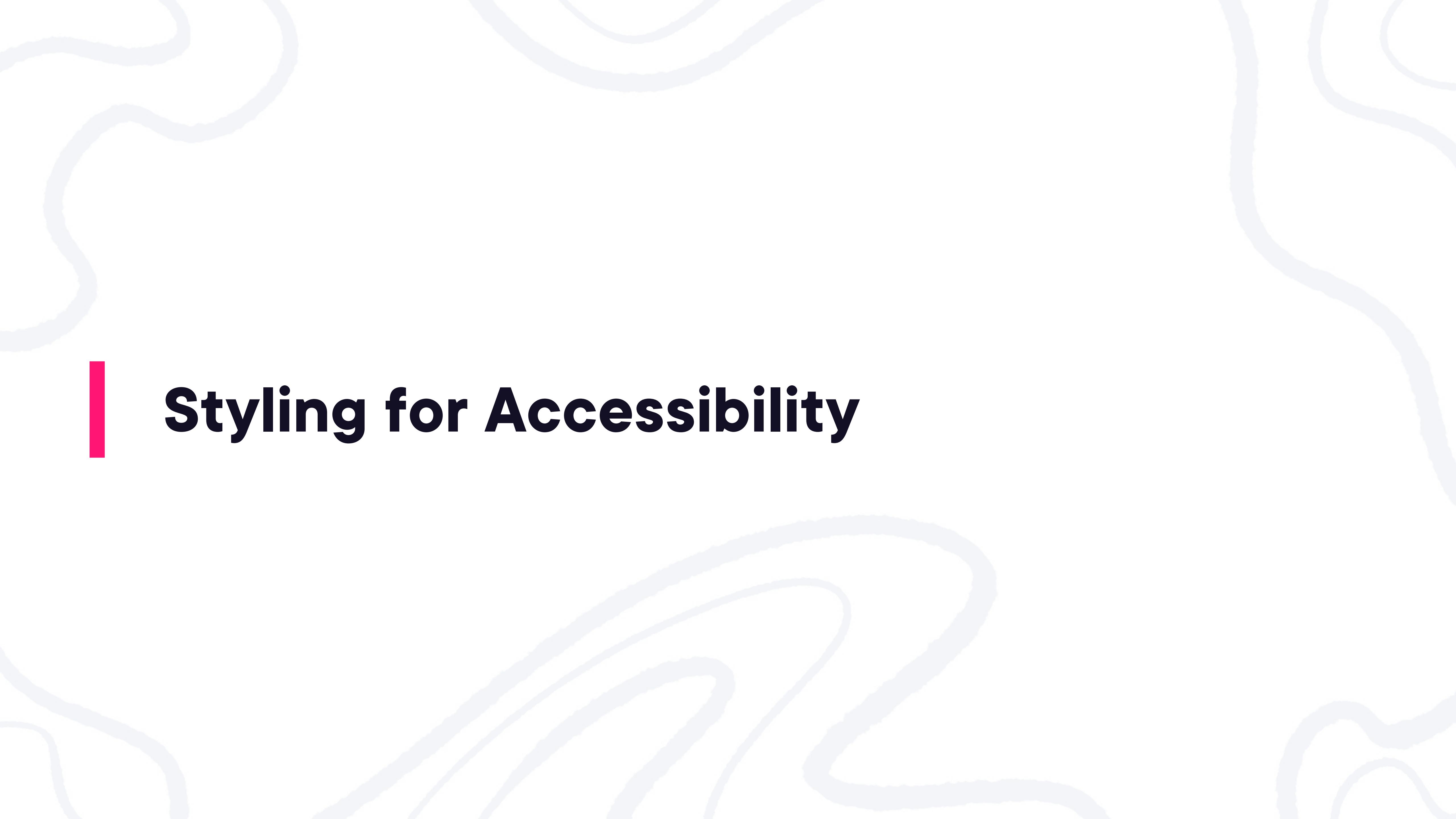
Ending branch:  
[basic-building-blocks-step-two](#)





# Headings Menu

- 1 Just Like People Pet Boutique
  - 2 Store logo and motto
  - 2 Featured products
  - 3 First Product
  - 3 Second Product
  - 3 Third Product



# **Styling for Accessibility**

**Since the styles.scss file  
is built into the index.html  
file its styles are globally  
available**

# Angular Component Style Encapsulation Behaviors

**Emulated**

**Shadow DOM**

**None**

# **Accessibility Styling Best Practices**

**Design tokens or variables**

**Size units**

**WCAG font size guidelines**

**WCAG page zoom or text reflow guidelines**

**Color contrast guidelines**

**CSS color formats**



# Benefits of Tokenized Values

**Easy to change values**

**Standardize appearance**

**Easy to share between applications**

# Using REMs for Font Size



**Default browser font size is 16px**

**REM units scale relative to the root html element font size**

**Users should be able to zoom content up to 200%**

**REM units are not recommended for margin or padding values**



## WCAG 1.4.10

Users should be able to zoom a starting width of 1280 pixels to 400% without loss of information, functionality, or requiring scroll bars in more than one direction

# Visual Contrast Matters



**Several WCAG guidelines set visual contrast expectations**

**Design variables make it easier to change colors, font weights, or font sizes**

# CSS Color Formats

## Color Keywords

white

## Hexadecimal

#FFF/#FFFFFF

## rgb/rgba

rgb(255, 255, 255)

## hsl/hsla

hsl(180, 100%, 100%)

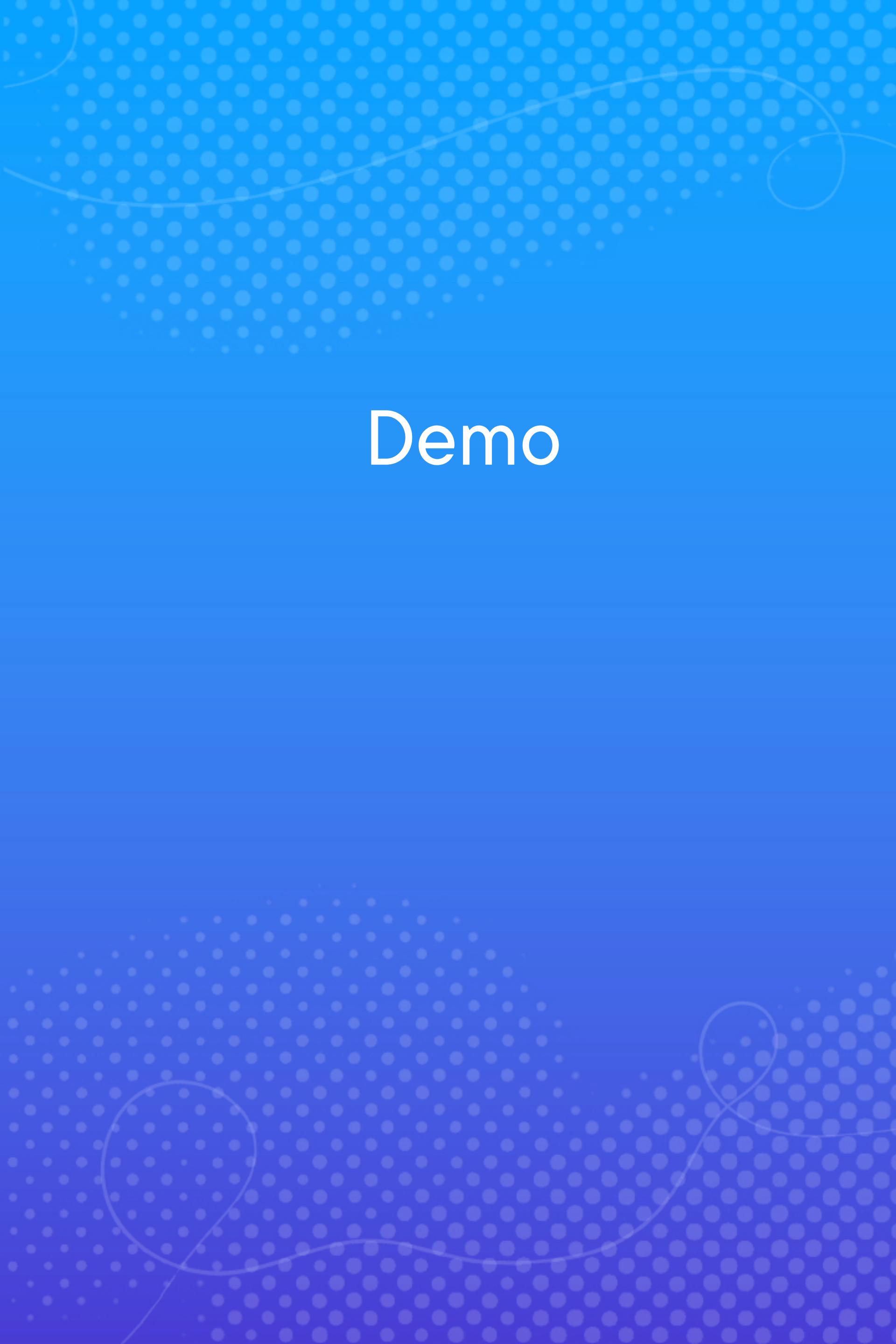
## oklch

oklch(100%, 0, 0)



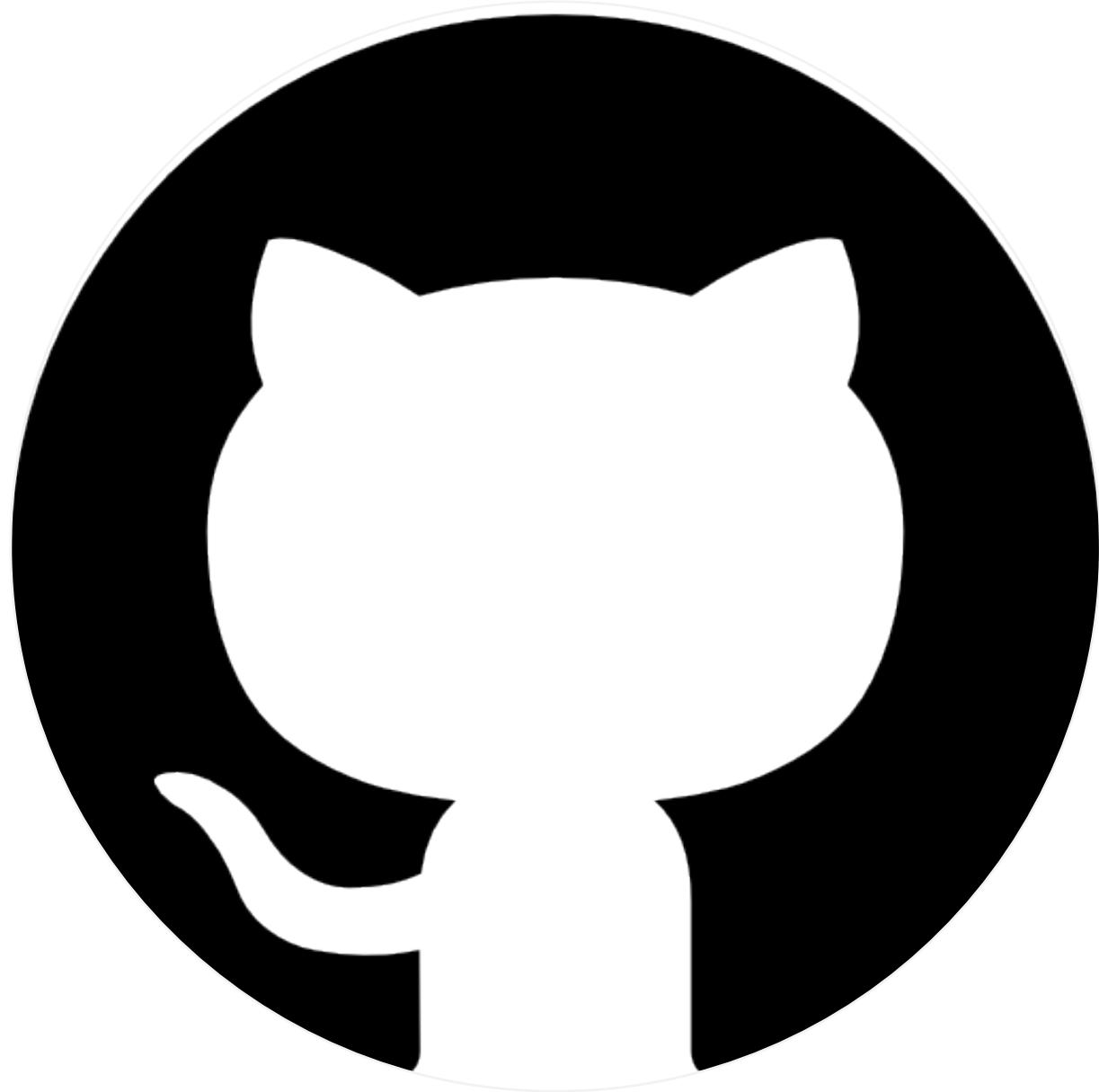
## **OKLCH in CSS: Why We Moved From RGB and HSL**

<https://evilmartians.com/chronicles/oklch-in-css-why-quit-rgb-hsl>



Demo

## **Design Variables and Styles: Step Three**

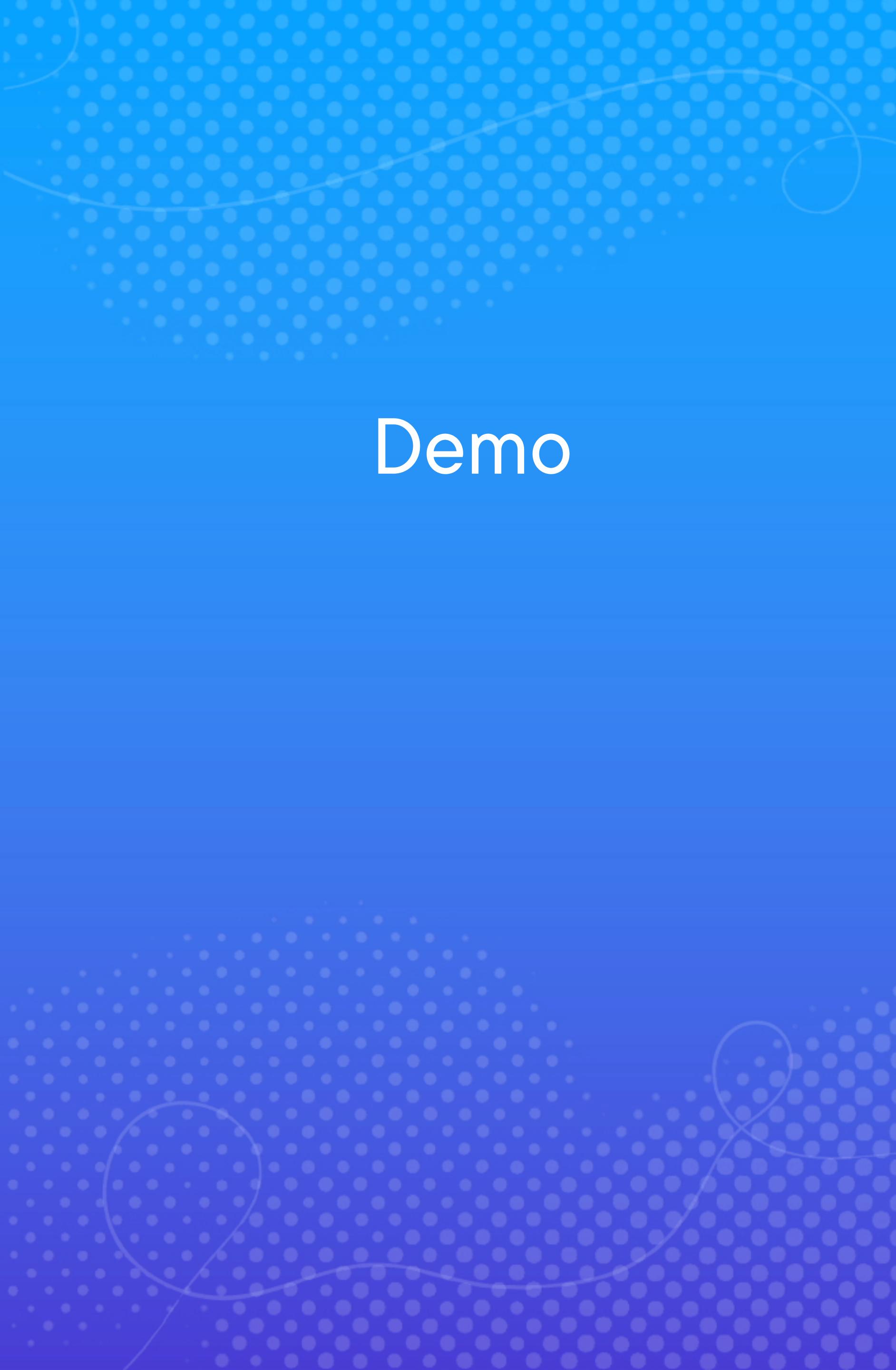


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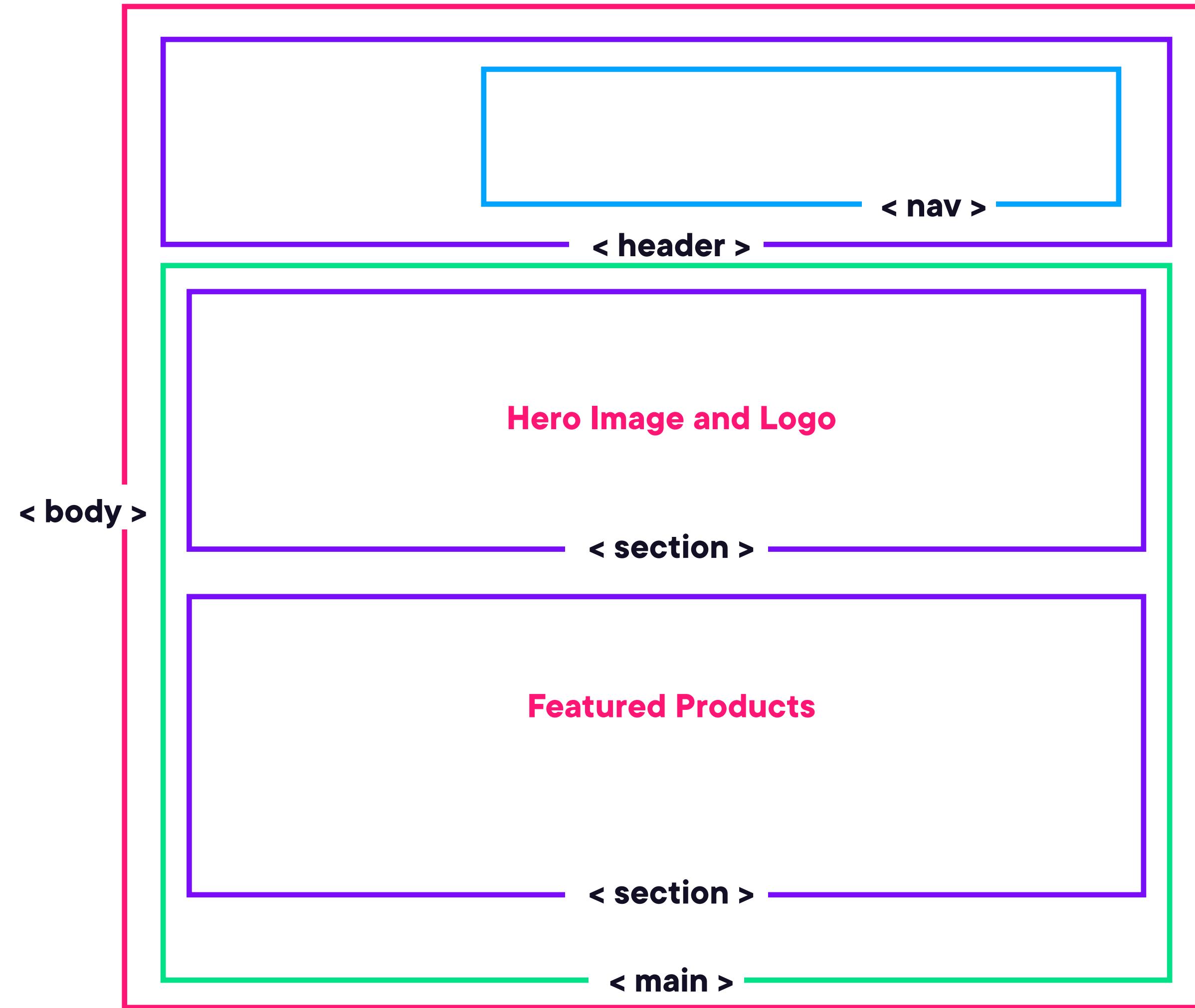
Starting branch:  
[basic-building-blocks-step-two](#)

Ending branch:  
[basic-building-blocks-step-three](#)



Demo

## **ARIA Attributes: Step Four**



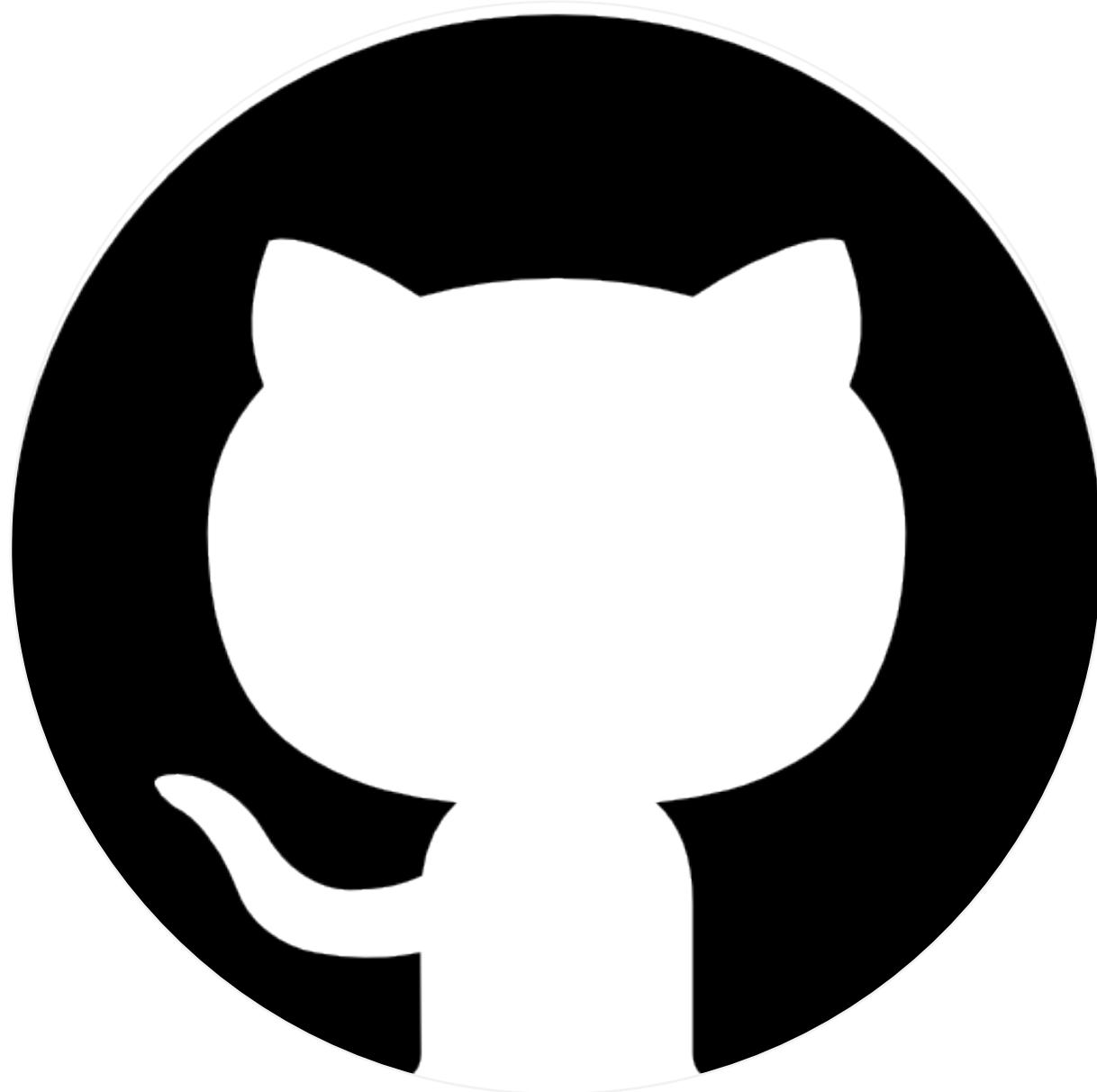
## Landmarks Menu

banner  
navigation  
main  
section  
section

???

# ARIA

**Accessible Rich Internet Applications (ARIA) is a set of roles and attributes that help make websites more accessible**

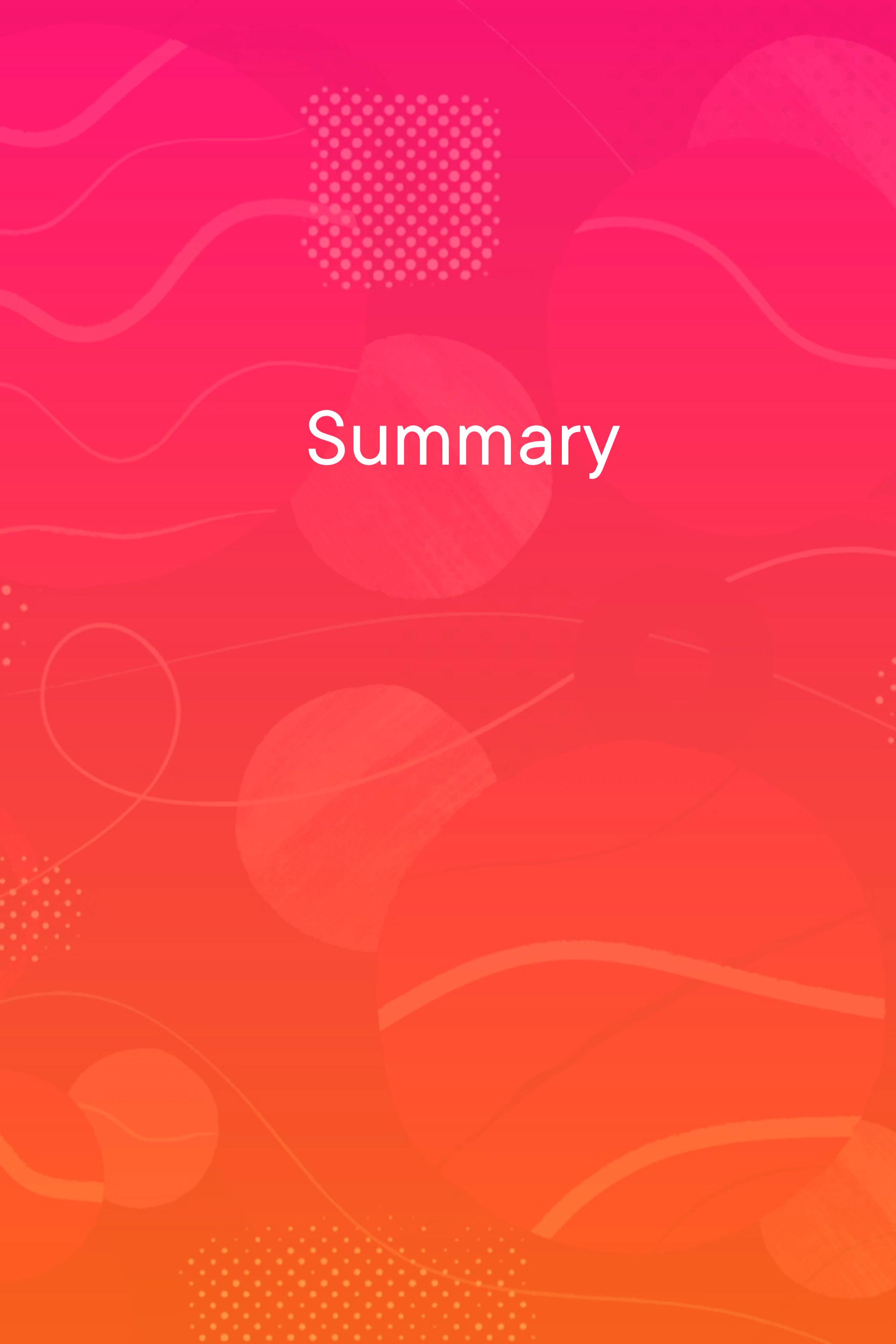


## **Course Github Repository**

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Starting branch:  
[basic-building-blocks-step-three](#)

Ending branch:  
[basic-building-blocks-step-four](#)



## Summary

**Used Angular basics to build accessible applications**

**Built templates with semantic HTML**

**Added conditional code with code flow syntax**

**Added custom event handlers with Angular event binding**

**Added dynamic ARIA attributes with Angular attribute binding**

**Implemented design variables**

**Up Next:**

# **Custom Directives and Shared Components for Angular Accessibility**

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