Designing for Accessibility

Brian Treese

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pluralsight

96 <h1>One more for good measure.</h1>
97 Cras justo odio, dapibus ac facilisis in, egestas eget quam.
98 .
99 <a class="btn btn-lg btn-primary" href="#" role="button"
100
101
102
103 <a class="left carousel-control" href="#myCarousel" role="button"
104 <span class="glyphicon glyphicon-chevron-left" aria-hidden="true"
105 Previous
106 </a>
107 <a class="right carousel-control" href="#myCarousel" role="button"
108 <span class="glyphicon glyphicon-chevron-right" aria-hidden="true"
109 Next
110 </a>
111 <!-- /.carousel -->
112
113 <!--Featured Content Section-->
114
115
116
117
118 <h2> FEATURED CONTENT </h2>
119

Responsive Web Design

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Good Color Choices

pluralsight

Good Typography

pluralsight

Simple, Understandable Forms

pluralsight

Easy to Touch

pluralsight

Subtle Motion

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Responsive Design & Accessibility

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Accessibility Pie
My Favorite!
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Microsoft

For home

BACK-TO-SCHOOL DEALS
Shop for tablets, laptops, phones, and more.

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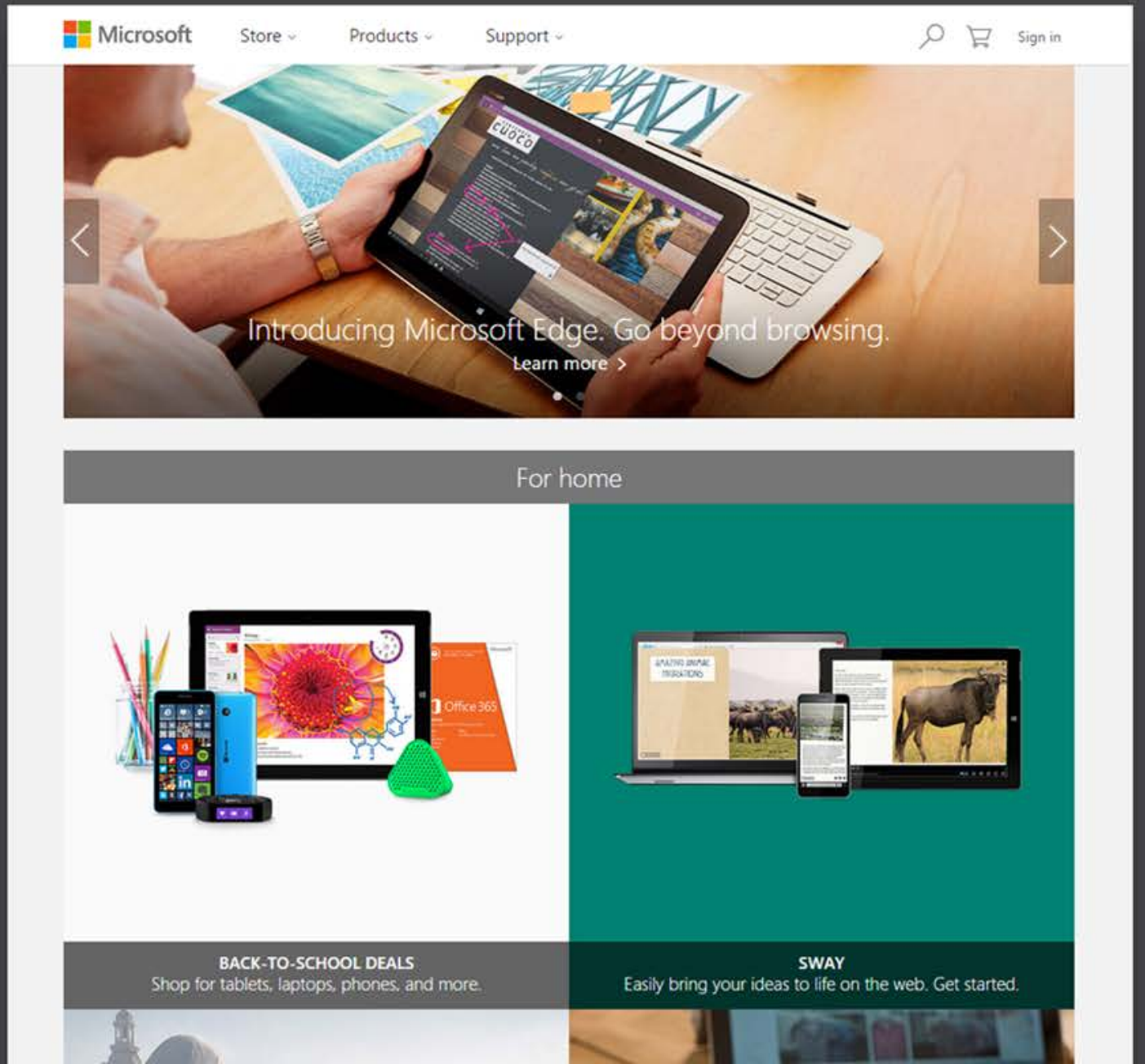
Microsoft
Store
Products
Support
Sign in
Introducing Microsoft Edge. Go beyond browsing.
Learn more
For home
Office 365
BACK-TO-SCHOOL DEALS
Shop for tablets, laptops, phones, and more.
SWAY
Easily bring your ideas to life on the web. Get started.

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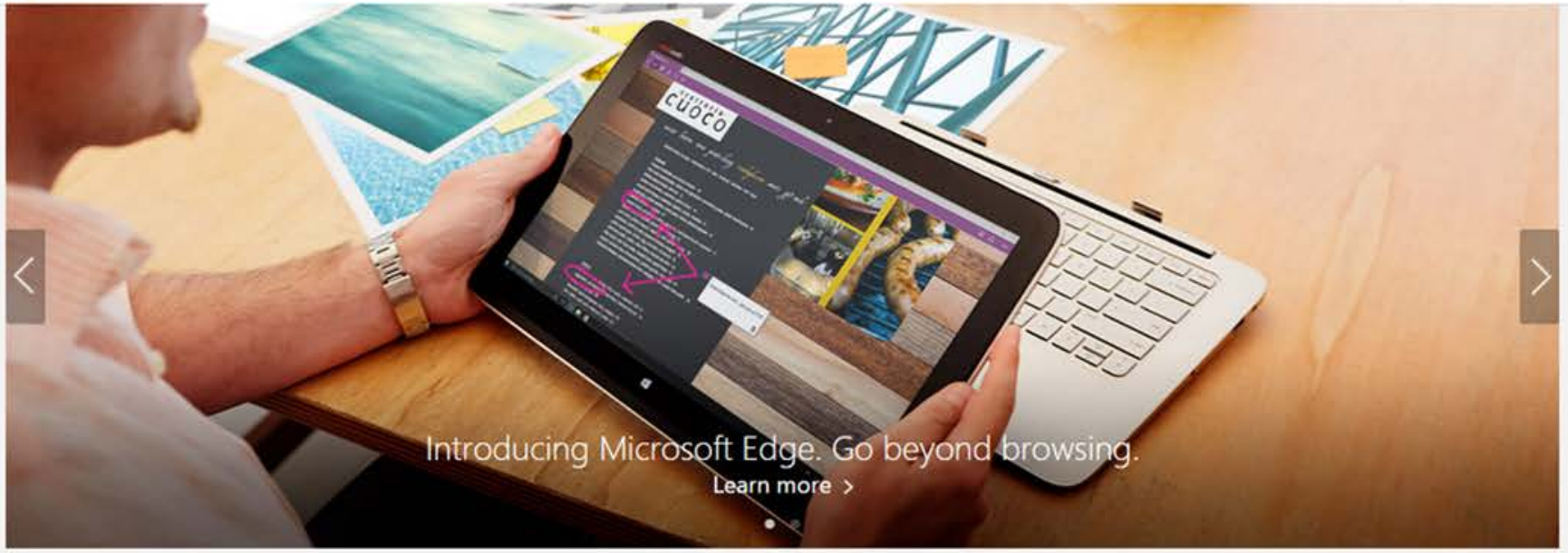
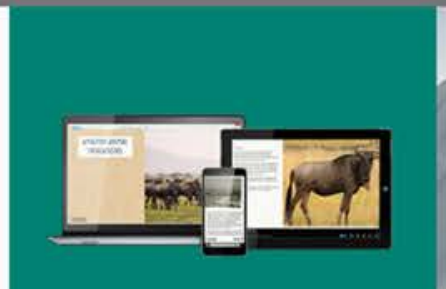


For home

BACK-TO-SCHOOL DEALS
Shop for tablets, laptops, phones, and more.



SWAY
Easily bring your ideas to life on the web. Get started.

XBOX LIMITED-TIME OFFER
Buy an Xbox, get Assassin's Creed Unity free. Terms apply.

LUMIA 640
Edit, share, and collaborate from anywhere.

For work

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Responsive Design Is an Accessible Design Practice

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Other Considerations

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Bright light makes it difficult to see

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Contrast can help make it easier to see

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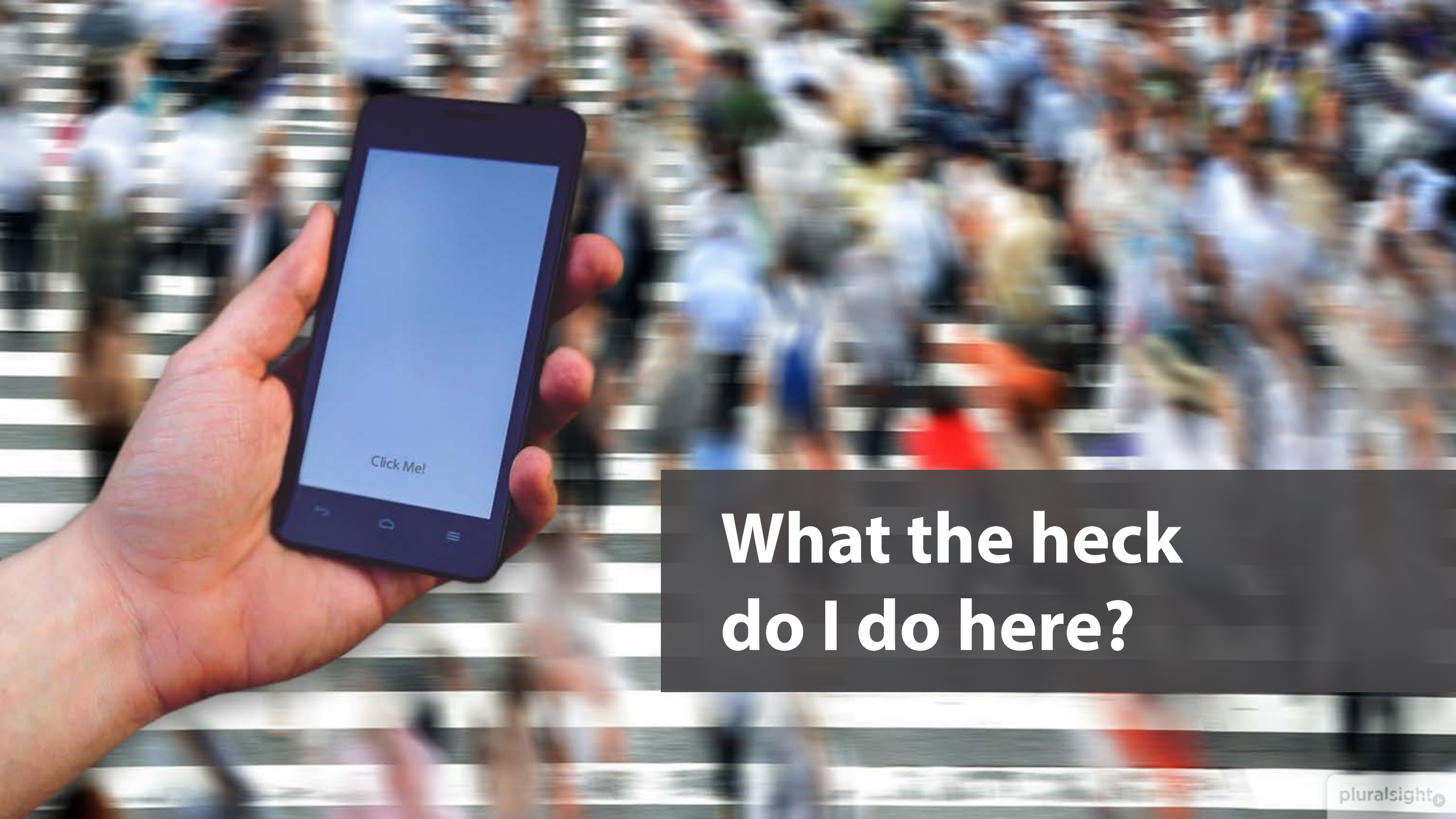
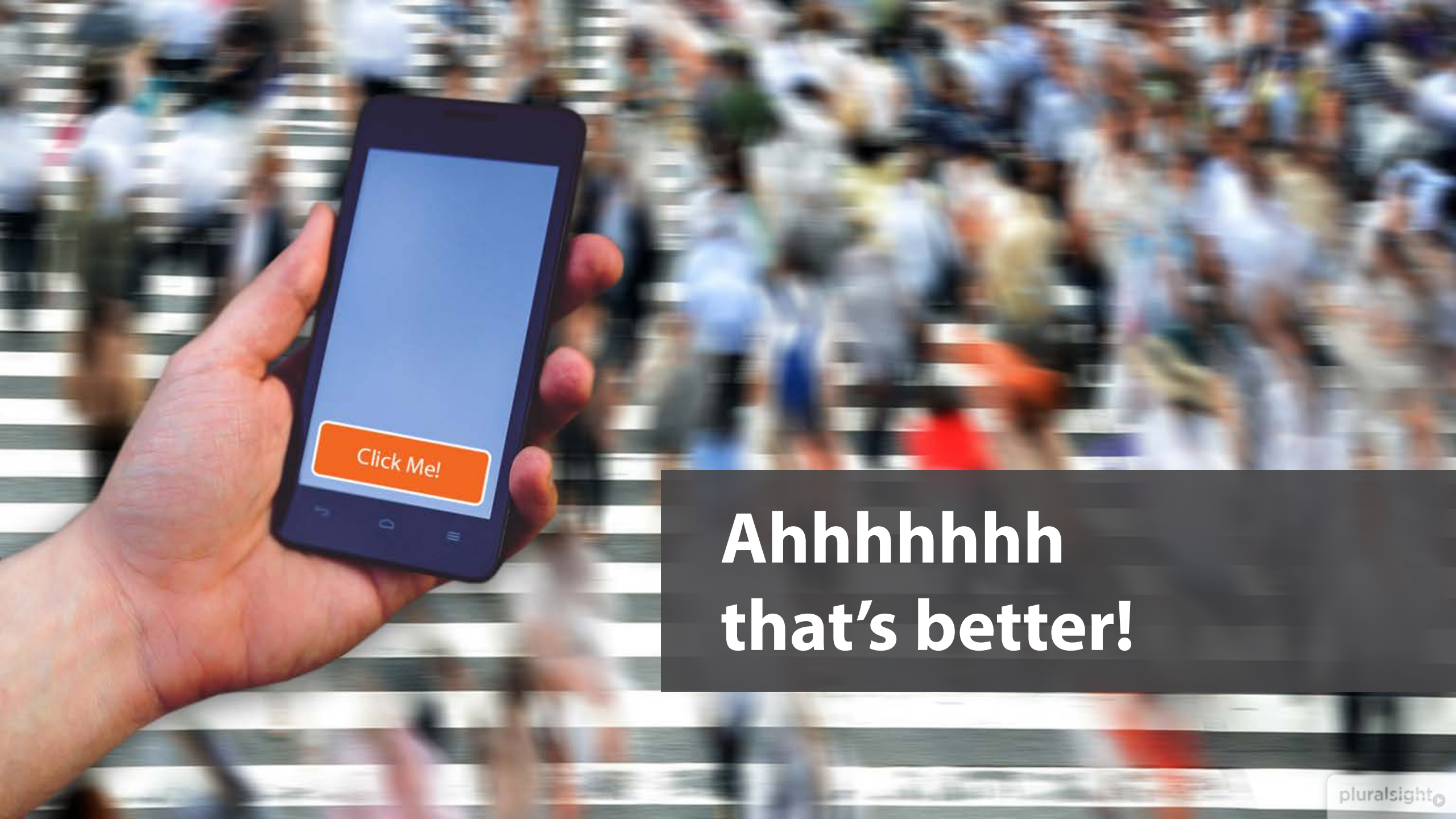

Click Me!
What the heck
do I do here?
pluralsight


Click Me!
Ahhhhhhh
that's better!

Not Designing
Responsive Sites?

pluralsight

That's Not OK!

pluralsight

Not Designing Accessible Sites?

pluralsight

That's Not OK!

pluralsight

Color & Accessibility

pluralsight

Color Blindness

- 1 in 12 men

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Color Blindness

- 1 in 12 men
- 1 in 200 women

pluralsight

Color Blindness

- 1 in 12 men
- 1 in 200 women
- 5% of the population

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How Is Color Perceived?

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Difficulty Distinguishing Between Certain Color Combinations

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Red/Green

Deficiencies

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Red Deficiencies

Protanopia and Protanomaly

pluralsight

Normal

Red Deficiency

pluralsight

Green Deficiencies

Deuteranopia and Deuteranomaly

pluralsight

pluralsight

Blue Deficiencies

Tritanopia

pluralsight

Normal

Blue Deficiency

pluralsight

No Color

Rod Monochromacy or Achromacy

pluralsight

Normal

No Color

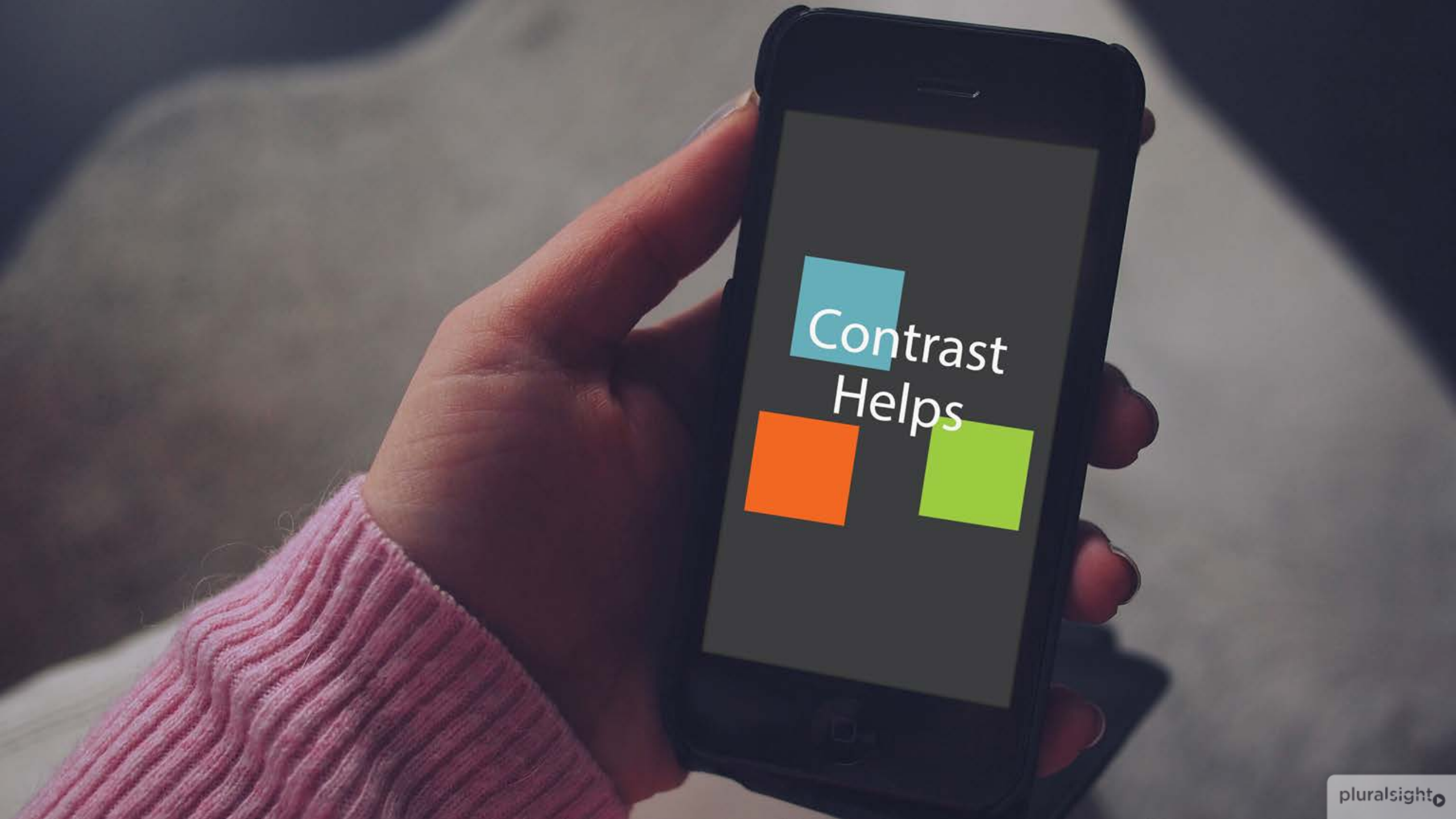
pluralsight

Don’t Rely Solely on Color

pluralsight

Different
Displays

Display
Color
Differently


Contrast
Helps

Environment
Lighting

Can Impact
Color

Again,
Contrast
Helps

Typography & Accessibility

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Typefaces

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Hierarchy

pluralsight

Readability

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They All Play a Role

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Font Size

pluralsight

Characters Are Distinguishable

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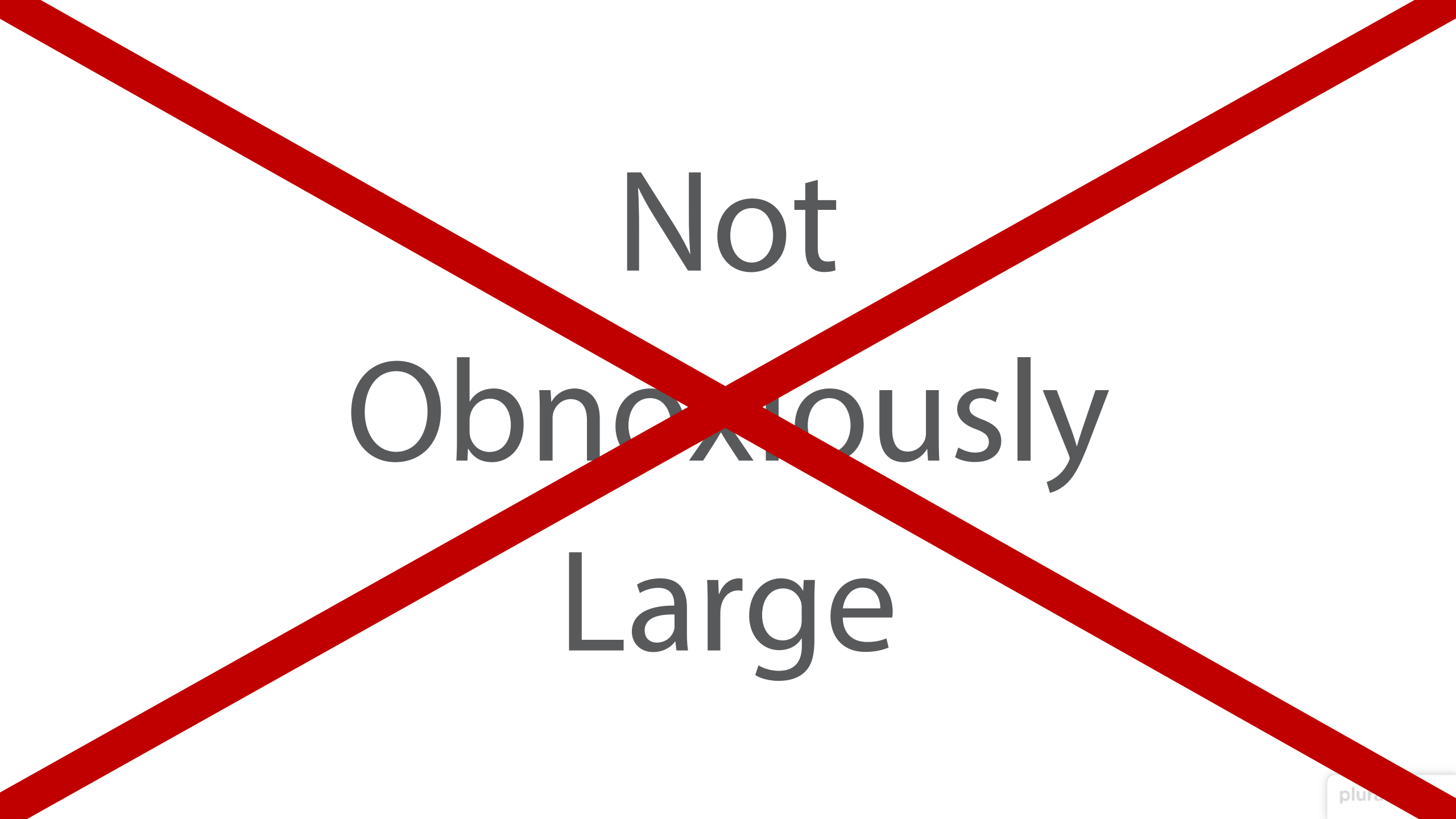
Not
Obnoxiously
Large

16px – 20px

pluralsight

Should Use Relative Units

pluralsight

em

pluralsight

rem

pluralsight

Contrast

pluralsight

This Is a Heading, It Should Be Larger

This is the content. Right now the content and the header are much too close in size to tell the difference between the two.

pluralsight

This Is a Heading, Now It's Much More Clear

This is the content. Now the content and the header are much different in size making it much easier to tell the difference between the two.

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Not **Bold** Enough…

pluralsight

Be More **Bold!**

pluralsight

Line Length

pluralsight

Too Long

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

pluralsight

Too Long

Far far away, behind the word mountains, far fr countries Vokalia a sonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the ntics, a lar guage ocean. A small river named Duden flows by their place and supplies it with the necessary

Too Short

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

pluralsight

Too Sho

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the ne

Just Right

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

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Just Right

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pluralsight

Just Right

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45 – 75 Characters

pluralsight

Just Right

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

66 Characters = Ideal

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Line Height

pluralsight

Bad Line Height

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

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Bad Line Height

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

Good Line Height

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

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Text Justification

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Justified

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

pluralsight

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Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

Left Aligned

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

pluralsight

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Rivers of White Space

Left Aligned

Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary

pluralsight

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Ragged Right Edge

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Take Extra Care With ALL CAPS!

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These Are Just Suggestions

pluralsight

Not Rules

pluralsight

Accessible Form Design

pluralsight

Clear

pluralsight

Organized

pluralsight

Easy

pluralsight

Identify Required Fields

pluralsight

Email Address

Password

Occupation

Create Account

pluralsight

Email Address *Required*

Password *Required*

Occupation *Optional*

Create Account

pluralsight

Email Address *Required*

Password *Required*

Occupation *Optional*

Create Account

pluralsight

Email Address *Required*

Password *Required*

Occupation *Optional*

Create Account

pluralsight

Identify Special Formatting Requirements

pluralsight

Email Address *Required*

Password

Must be at least 8 characters *Required*

Occupation *Optional*

Create Account

pluralsight

Email Address *Required*

Password

Must be at least 8 characters *Required*

Occupation *Optional*

Create Account

pluralsight

Add Clear, Descriptive Form Labels

pluralsight

Enter Your Email Address

Required

Choose A Password

Required

Whats Your Occupation?

Optional

Create Account

pluralsight

Enter Your Email Address *Required*

Choose A Password

Must be at least 8 characters *Required*

Whats Your Occupation? *Optional*

Create Account

pluralsight

Place Holder Text Is Not a Replacement for a Label

pluralsight

Required

Enter Your Email Address

Required

Choose A Password

Optional

What's Your Occupation?

Create Account

pluralsight

Required

John

Required

Choose A Password

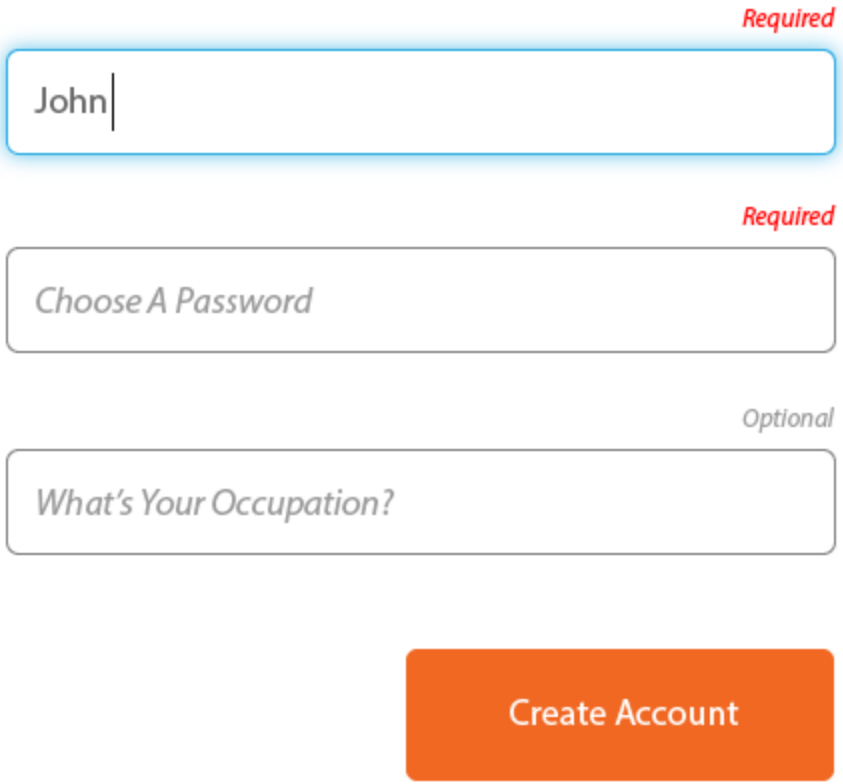
Optional

What's Your Occupation?

Create Account

pluralsight

Wait, What Was This?



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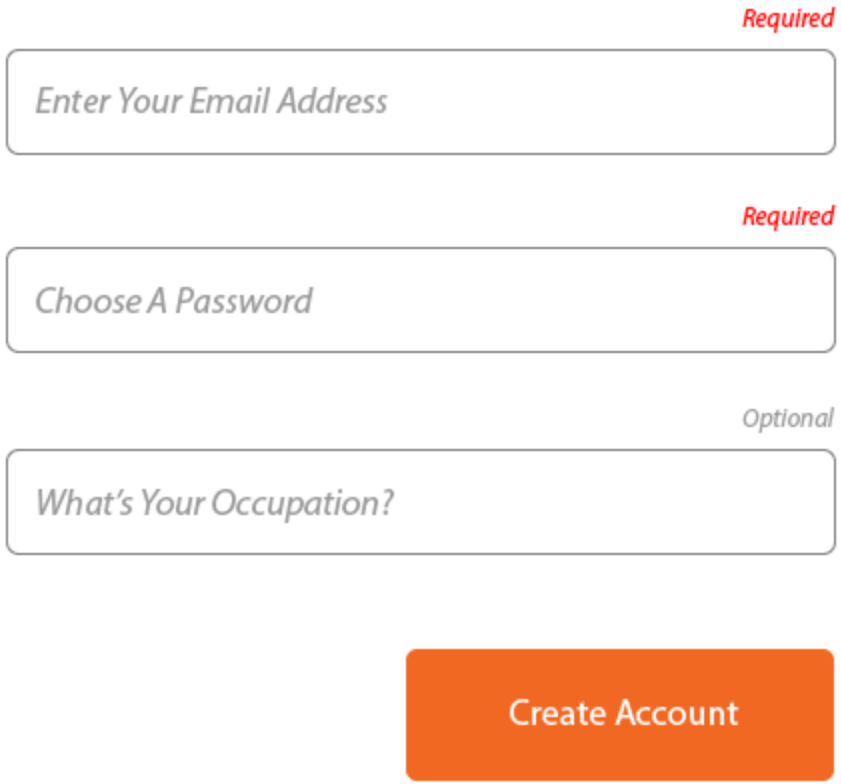
Oh Yeah, That's Right, My Email



pluralsight

Provide Clear Feedback for Errors and Warnings

pluralsight

Enter Your Email Address *Required*

JohnSmith@gmail.com

Choose A Password

Must be at least 8 characters *Required*

●●●●●

Whats Your Occupation? *Optional*

Web Developer

Create Account

pluralsight

Again, Don’t Rely Solely on Color

pluralsight

Enter Your Email Address *Required*

JohnSmith@gmail.com

Choose A Password

Must be at least 8 characters *Required*

●●●●●

Whats Your Occupation? *Optional*

Web Developer

Create Account

pluralsight

Enter Your Email Address *Required*

JohnSmith@gmail.com

OK

Choose A Password

Must be at least 8 characters *Required*

●●●●●

Not Long Enough

Whats Your Occupation? *Optional*

Web Developer

OK

Create Account

pluralsight

Enter Your Email Address *Required*

JohnSmith@gmail.com

OK

Choose A Password

Must be at least 8 characters *Required*

●●●●●

Not Long Enough

Whats Your Occupation? *Optional*

Web Developer

OK

Create Account

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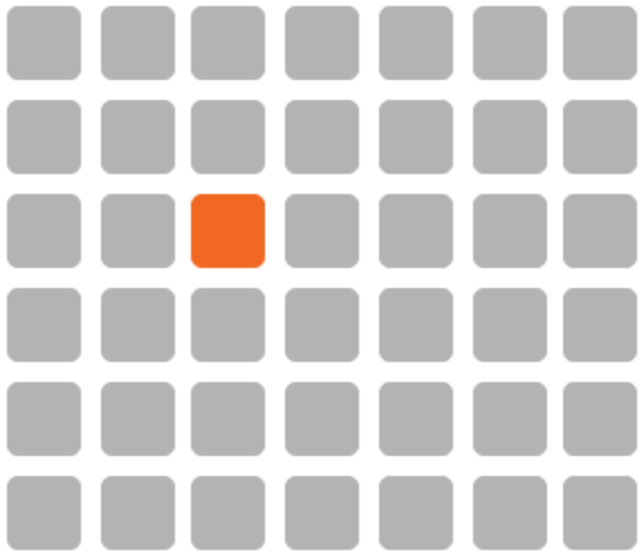
Touch Targets

pluralsight

pluralsight

Difficult to Touch



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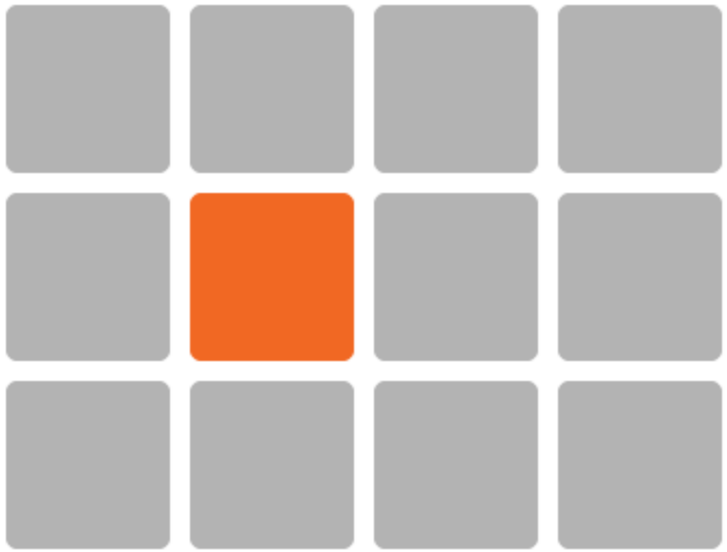
Much Easier to Touch



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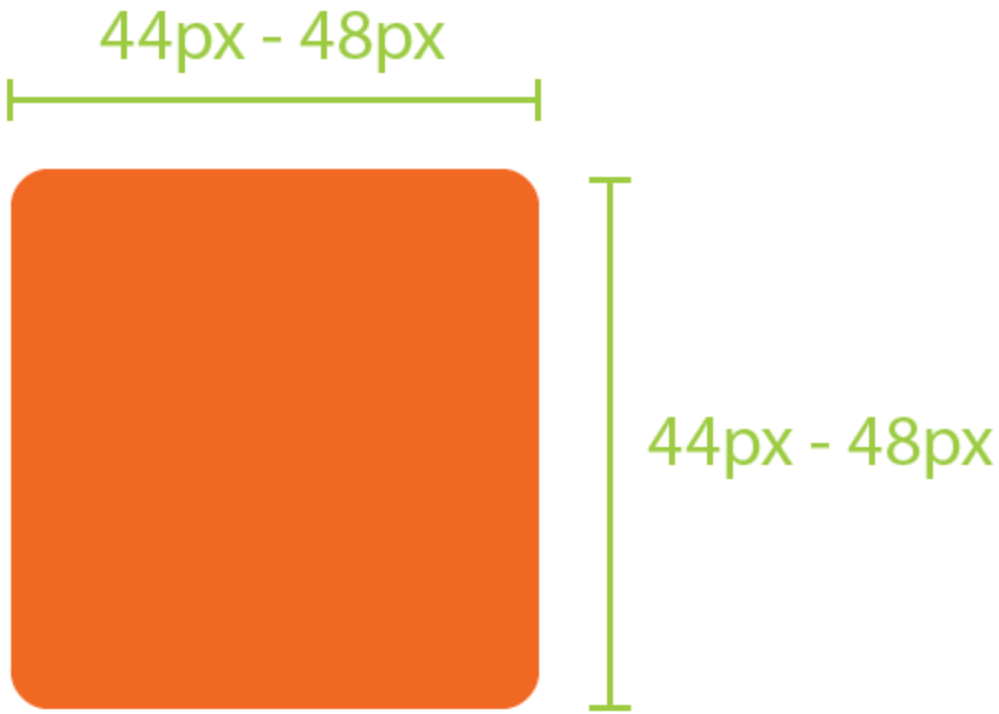

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The Bigger The Better

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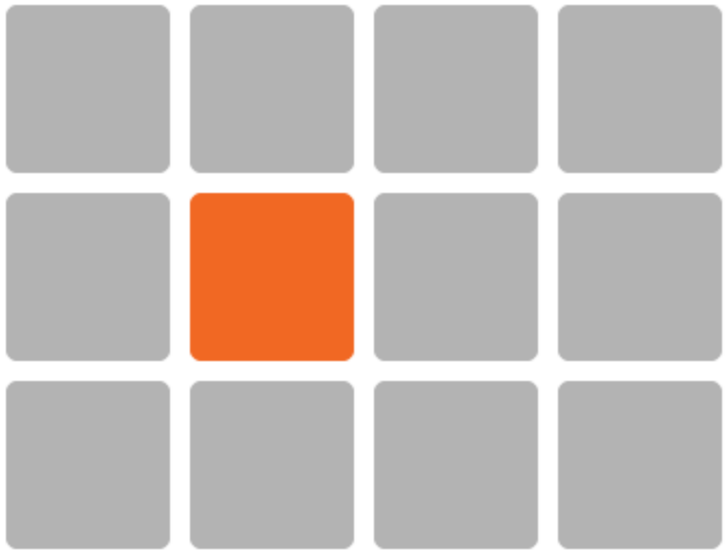
Easy to Make Mistakes



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Easy to Touch Hard to Make Mistakes

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User Errors Decrease

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As Touch Targets Increase

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Focus & Active Indicators

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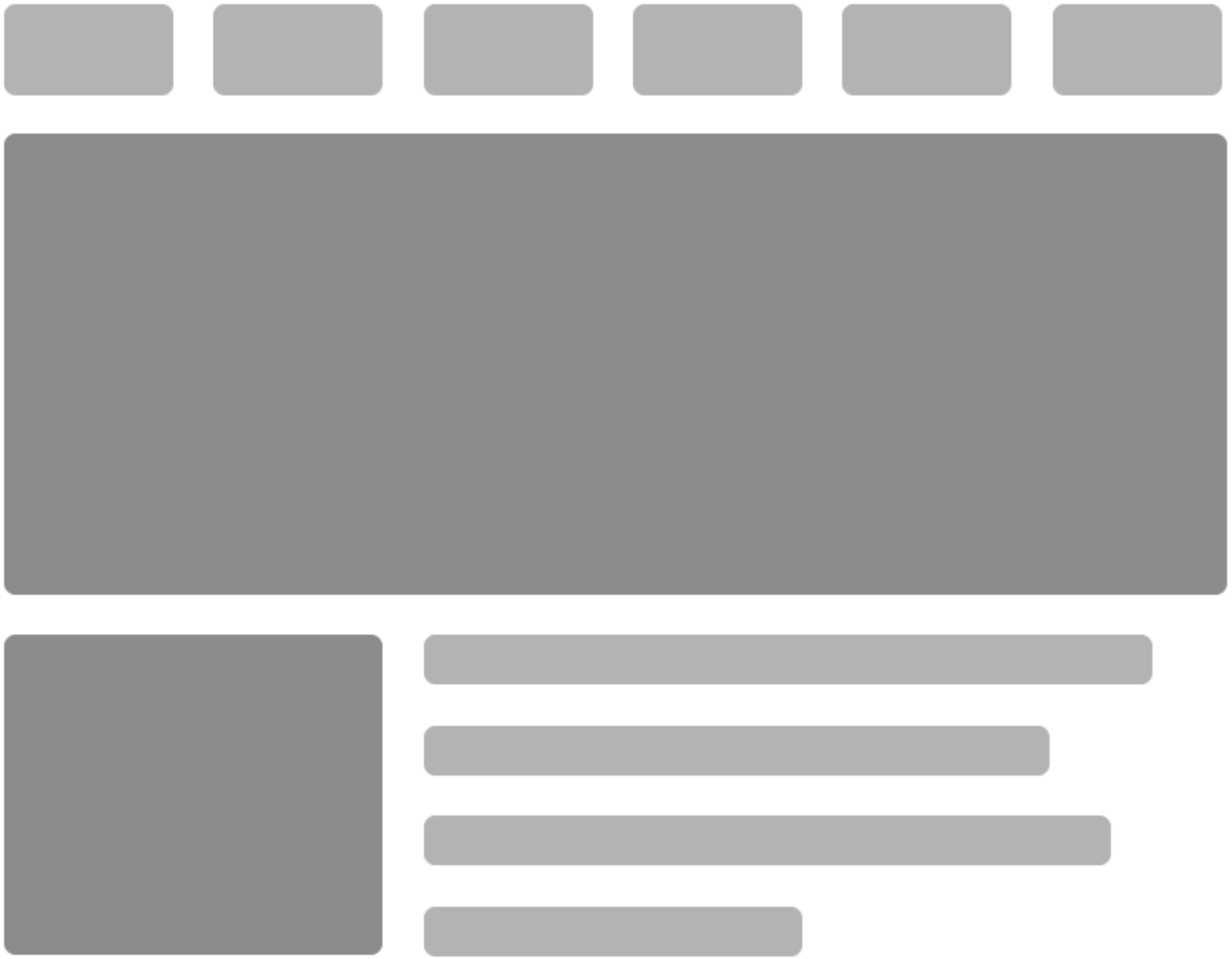

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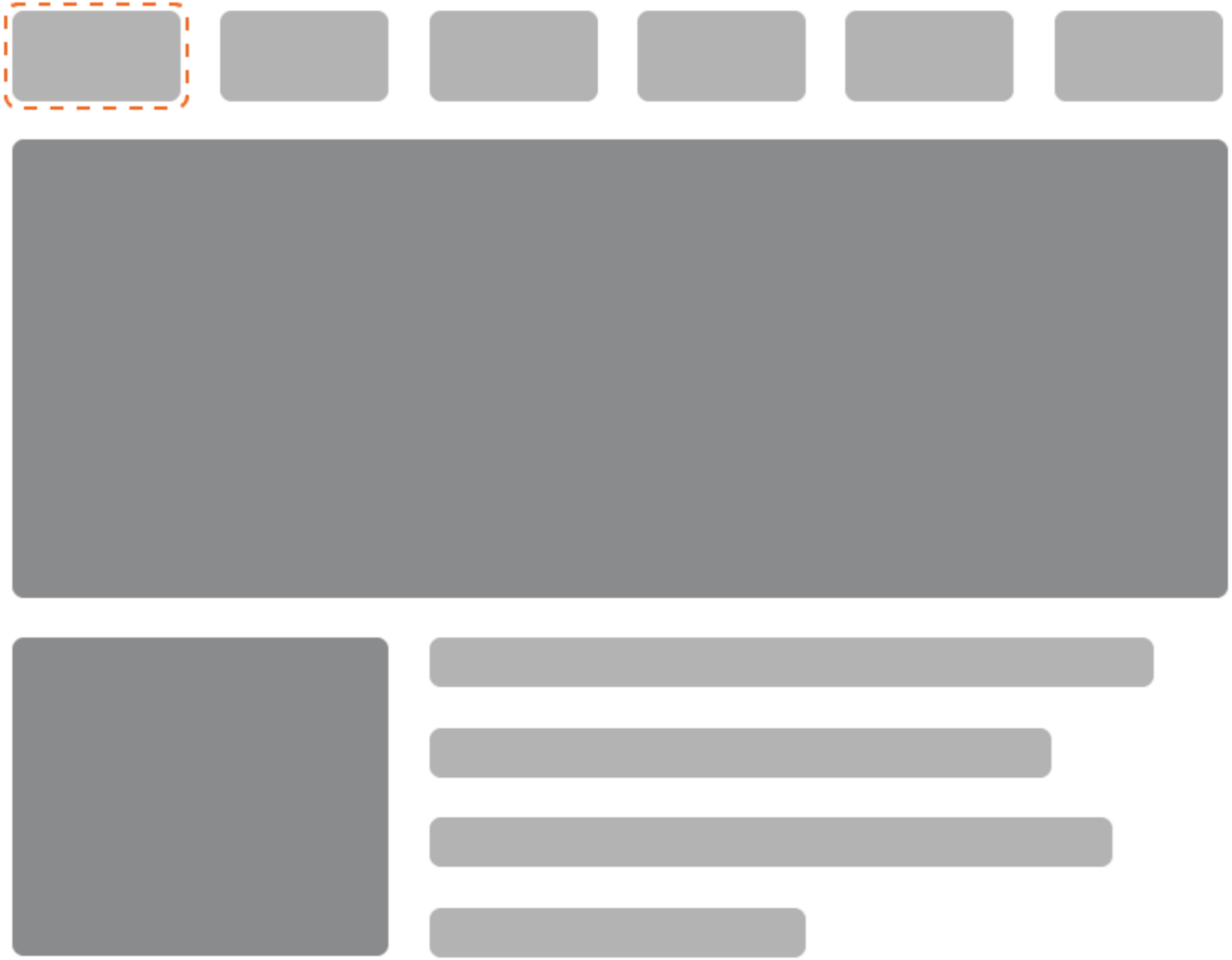
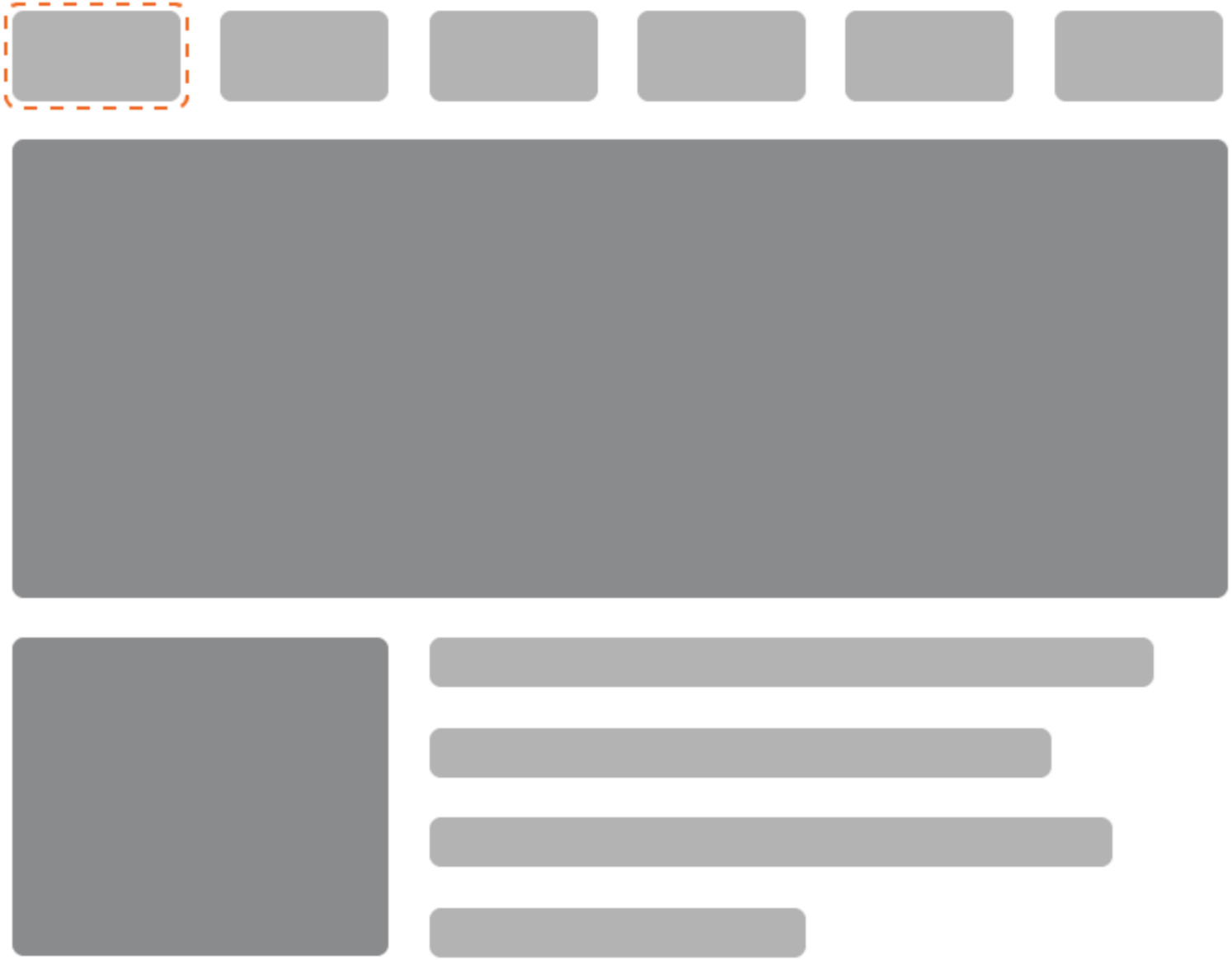

Tab



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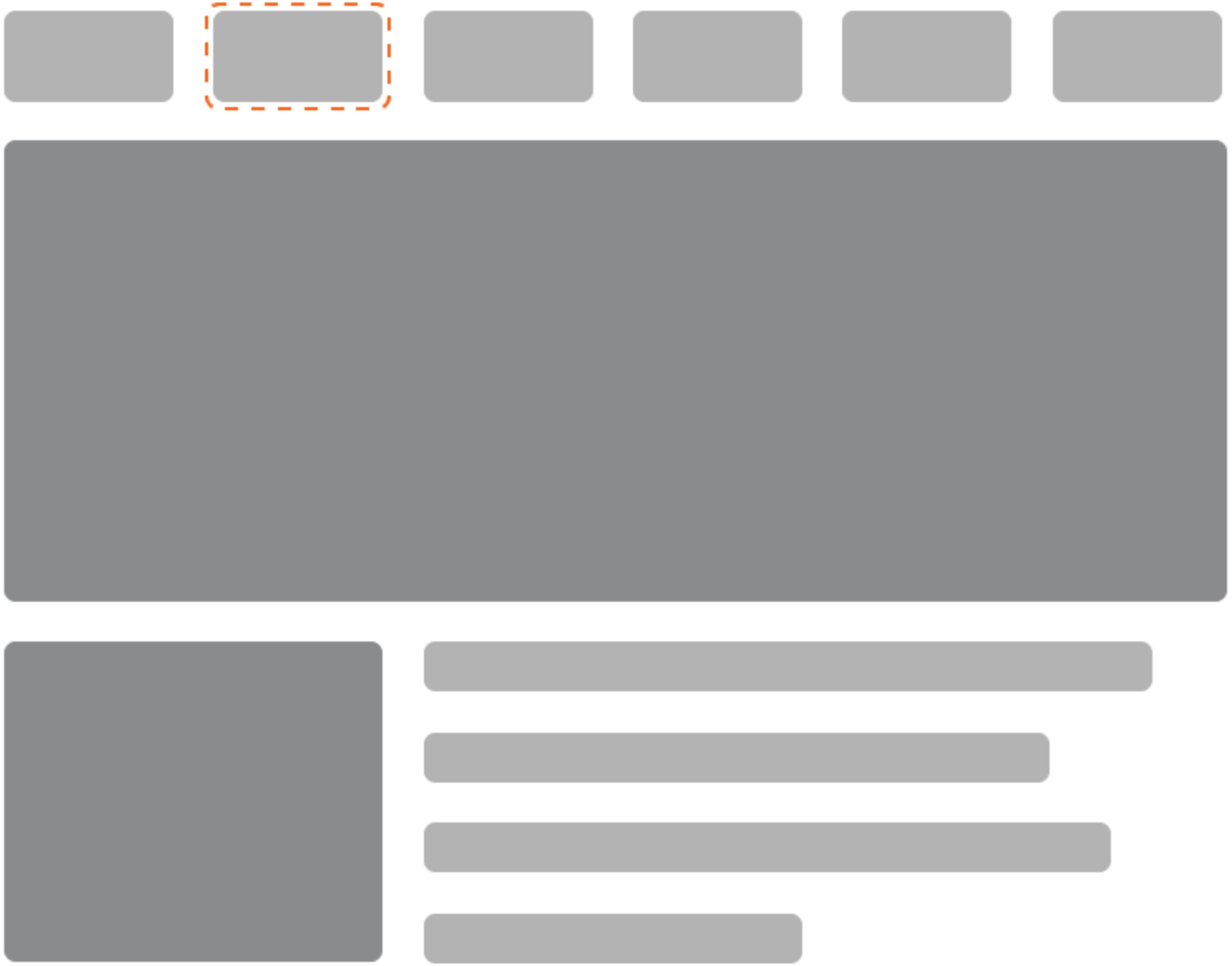
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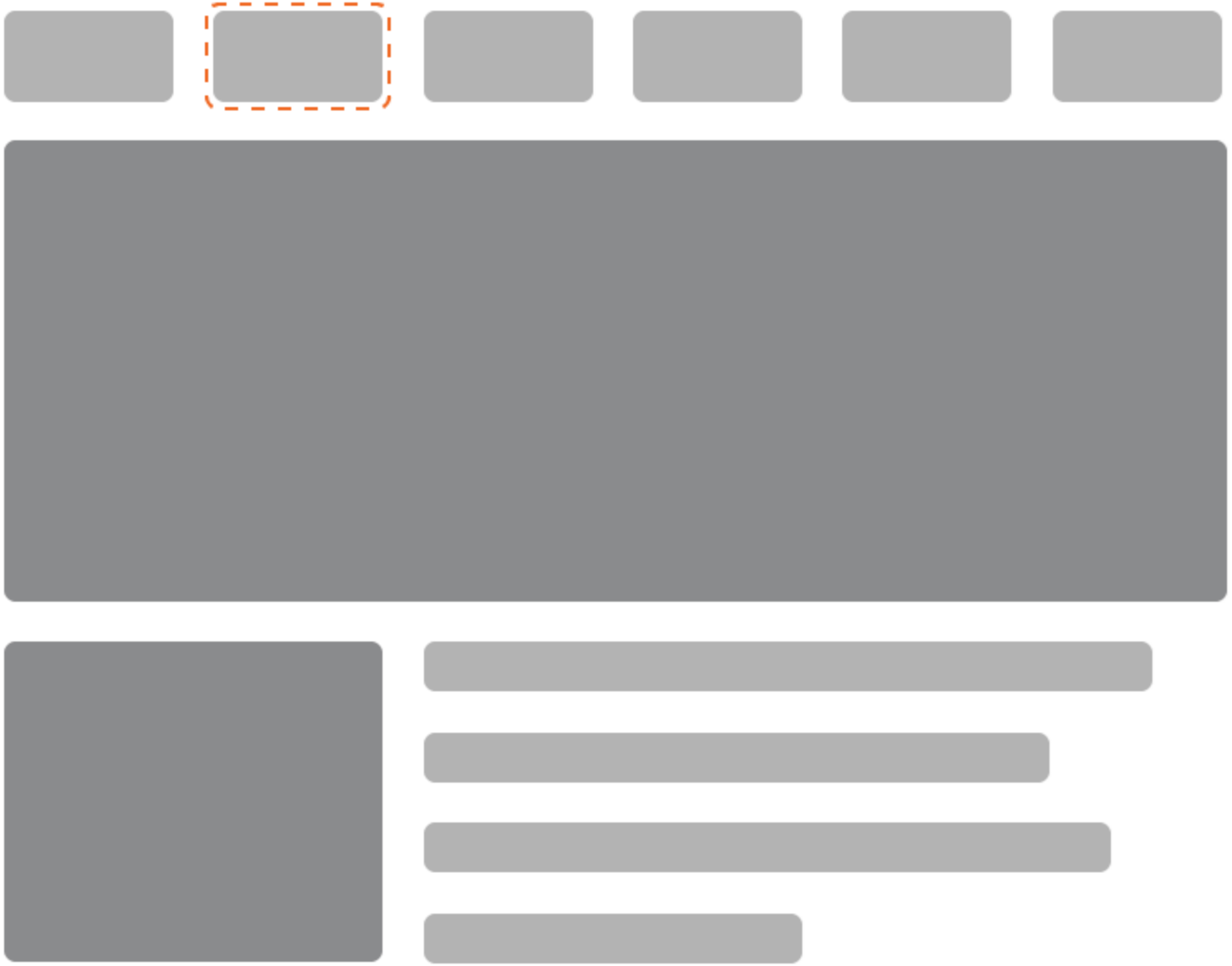

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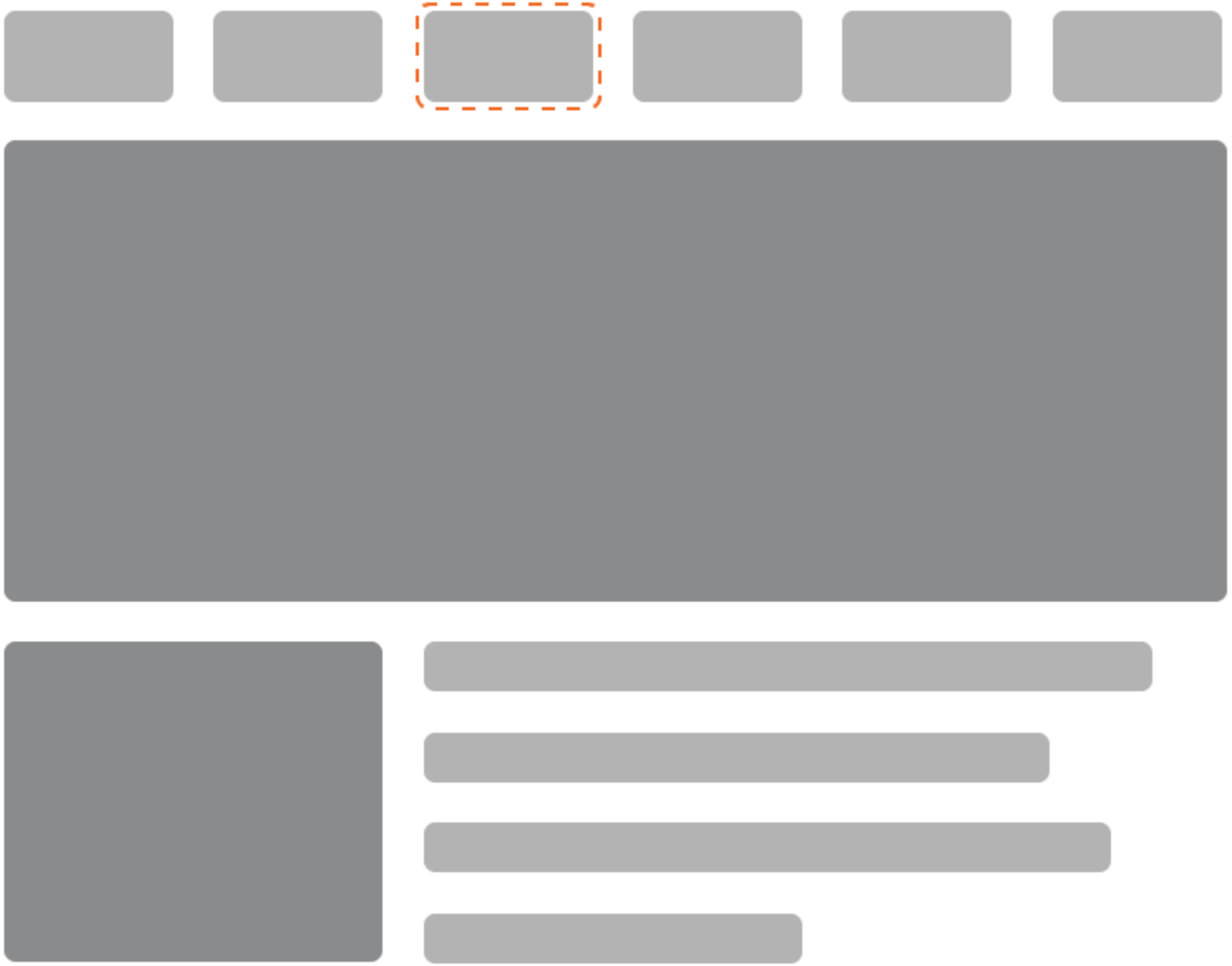
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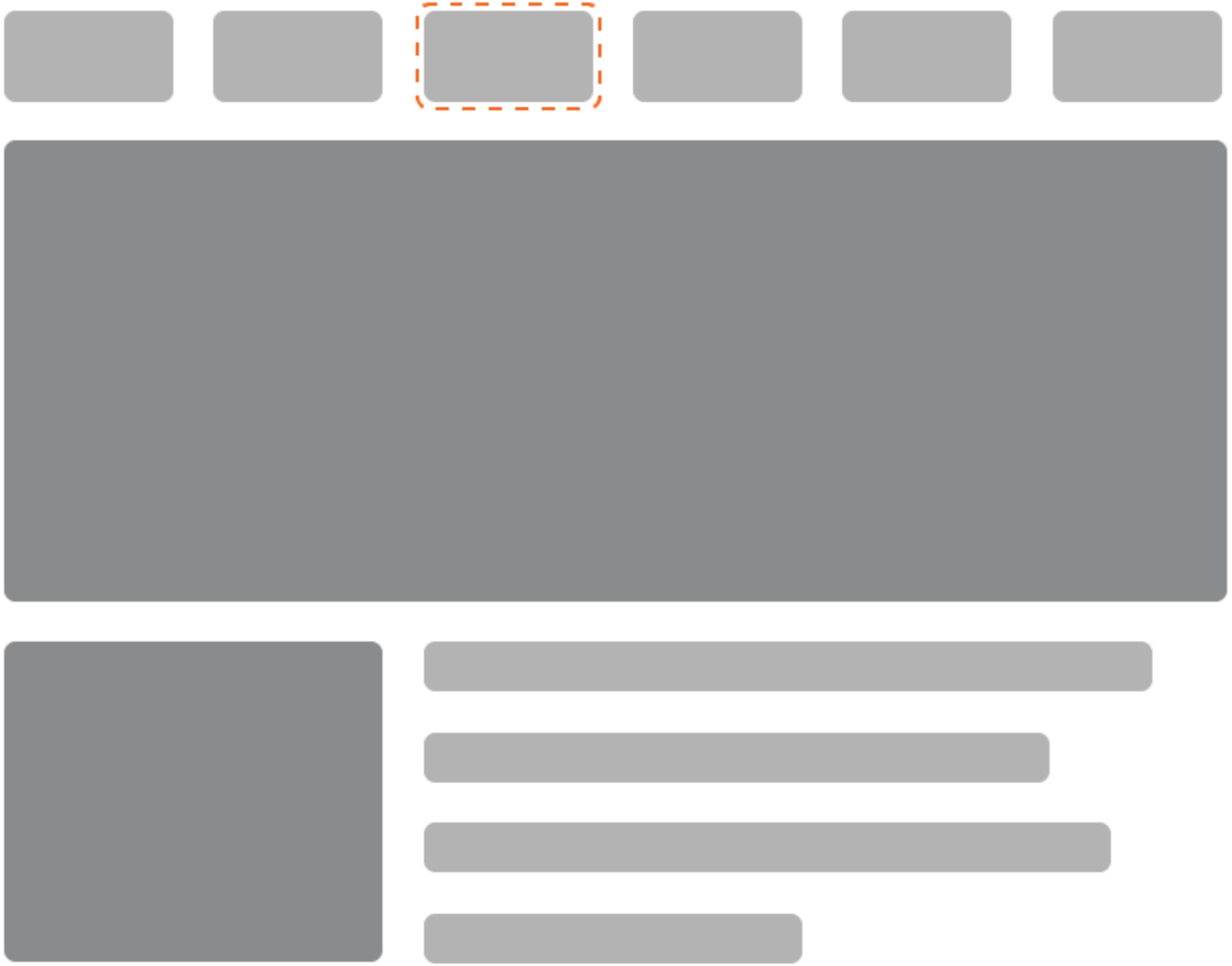

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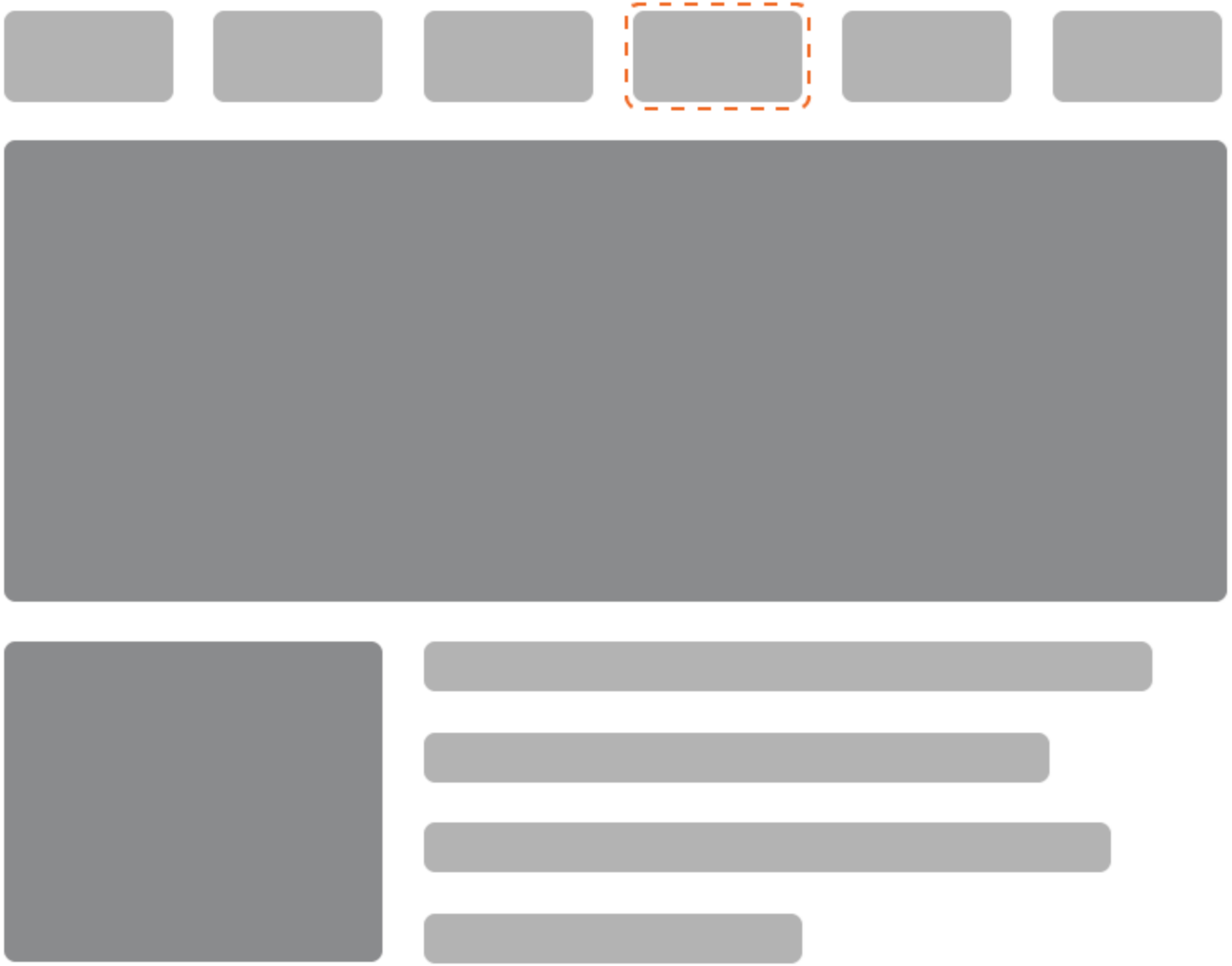
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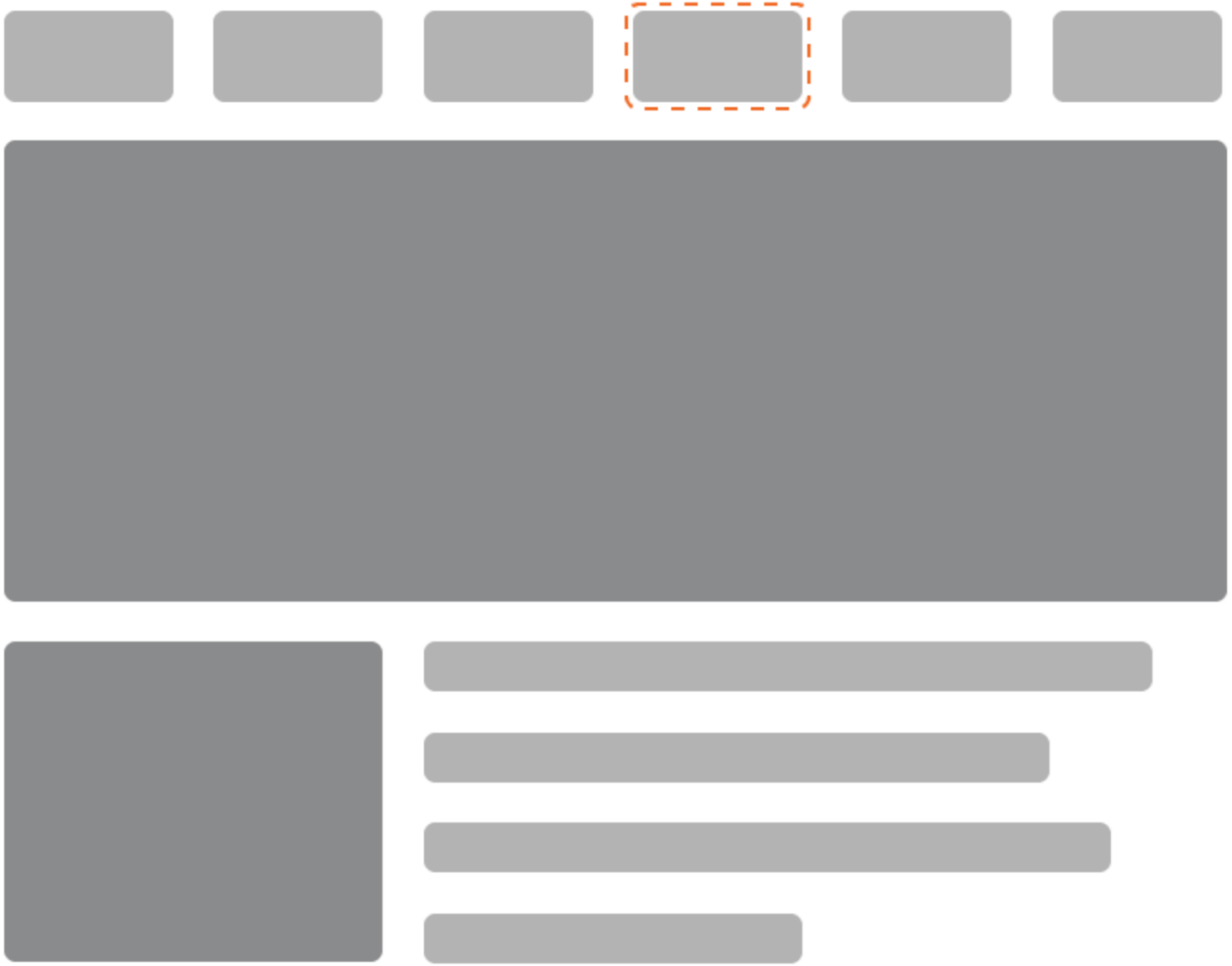
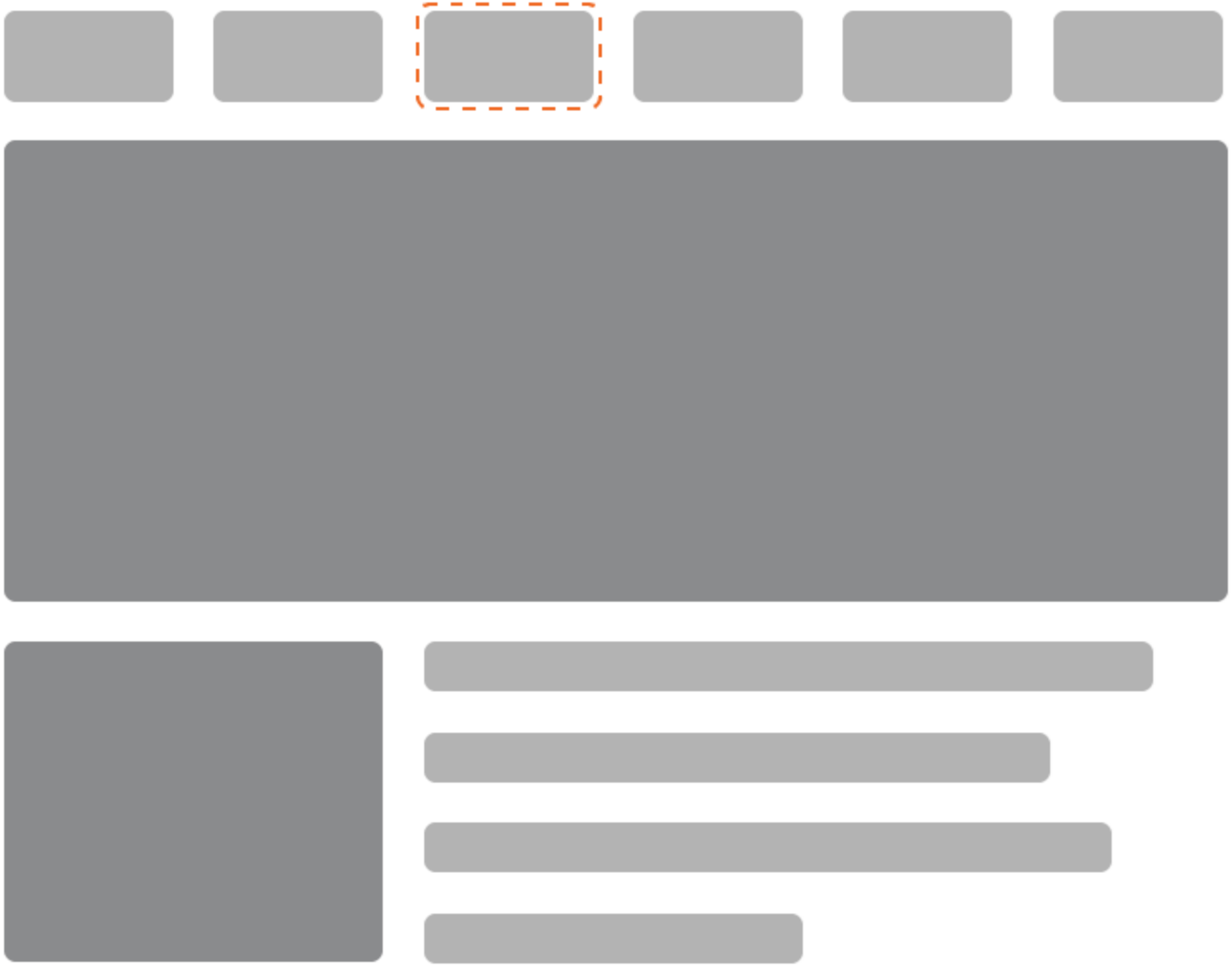
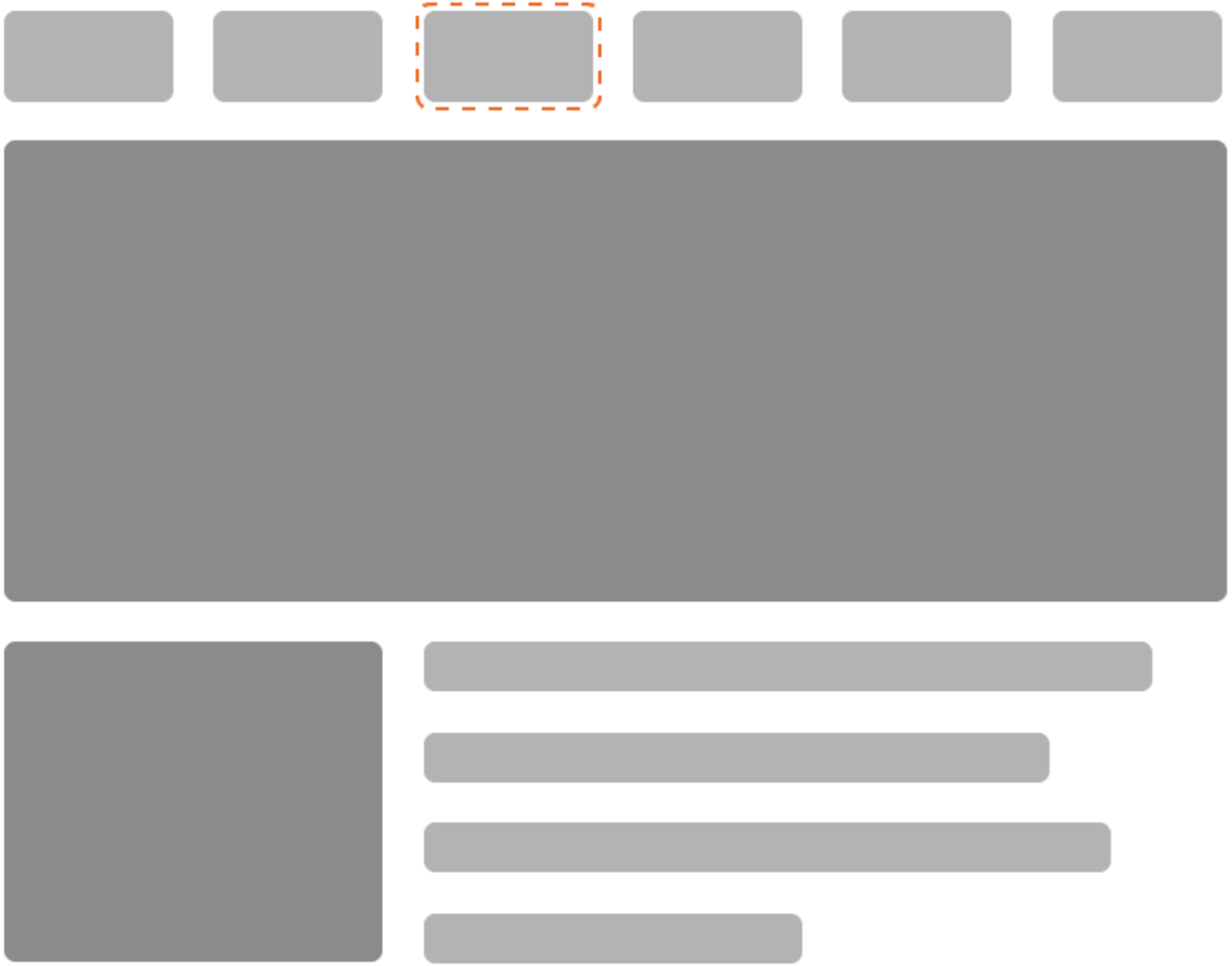


pluralsight


Shift
Tab



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Focus/Active Indicators

- Need to exist
- Need to be unobstructed
- Need contrast
- Do not remove with CSS or JavaScript
- Don’t rely solely on color

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Motion & Vestibular Disorders

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pluralsight

Headaches
Stomach Aches
Other Issues
pluralsight

40%
Of Those
Over Age
40

Related to Motion

- Transforms
- Animation
- Parallax

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New Territory

pluralsight

Keep It Simple

pluralsight

Allow Users to Disable Animations

pluralsight

Designing for Crisis

pluralsight

Eric Meyer

One heck of a cool dude

Influential part of the Web since early 90's

Written a million books

Presented at a million conferences

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The Ideal User

pluralsight

Calm

pluralsight

Cool

pluralsight

Collected

pluralsight

Design For Crisis Driven Personas

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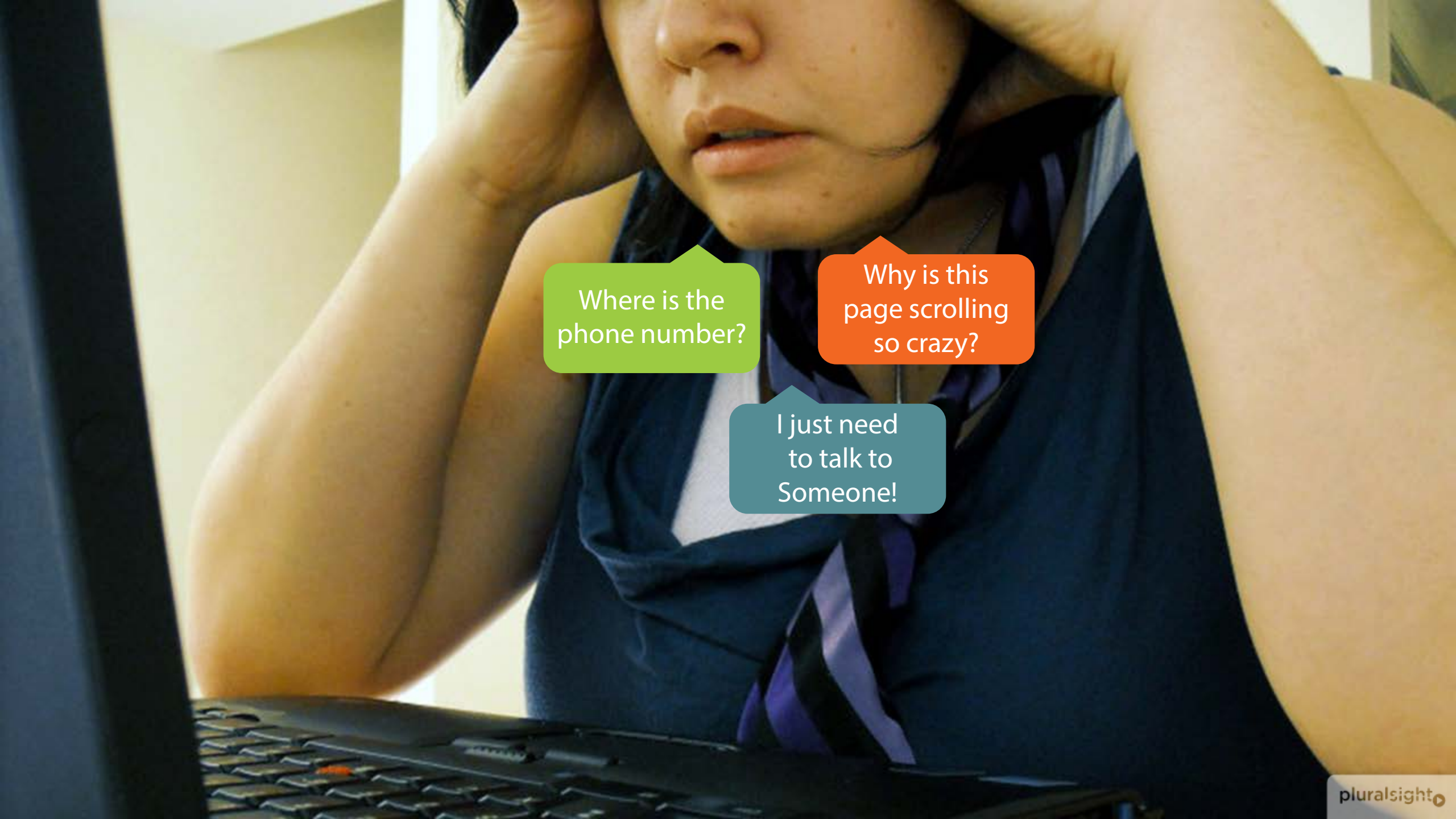
Where is the phone number?
Why is this page scrolling so crazy?
I just need to talk to Someone!

Create a Diverse Set of Personas

pluralsight

Provide Information for Different Failure Cases

pluralsight

Summary

Accessibility concerns more than code

Responsive design is a must

Choose colors carefully

Handle typography with care

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Summary

Forms should be clear, organized, & easy

Touch targets should be easy to touch

Keep it simple when using motion

Design for those in crisis

pluralsight