Building Apps for Accessibility and Inclusive Design

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What is the goal of this presentation?

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Agenda

- What is Accessibility and Inclusive Design?
- Why do they matter?
- What are compliance regulations?
- How do they apply to what I’m building?
- How can I build apps for Accessibility and Inclusive Design?

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What is accessibility?

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Definition Accessibility

The practice of making your products and services usable by as many people as possible.

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Disability

Personal Health Condition

Disability

Mismatched Human Interactions

Focusing on

People with disabilities (age-related as well)

- Visually impaired
  (Color) blindness
- Hearing impairment
  (Partially) deaf
- Mobility impairment
  Paralyzed, RSI, Wheelchair
- Cognitive impairment
  Seizures / Learning

People facing situational barriers

- Multitasking
- Cultural / social differences
- Language differences

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The Problem with ”Good Design”

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What is Inclusive Design?

Involves designing products and services to be usable by everyone to the greatest extent possible, without the need for adaptation

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How are they related?

Why does it matter?

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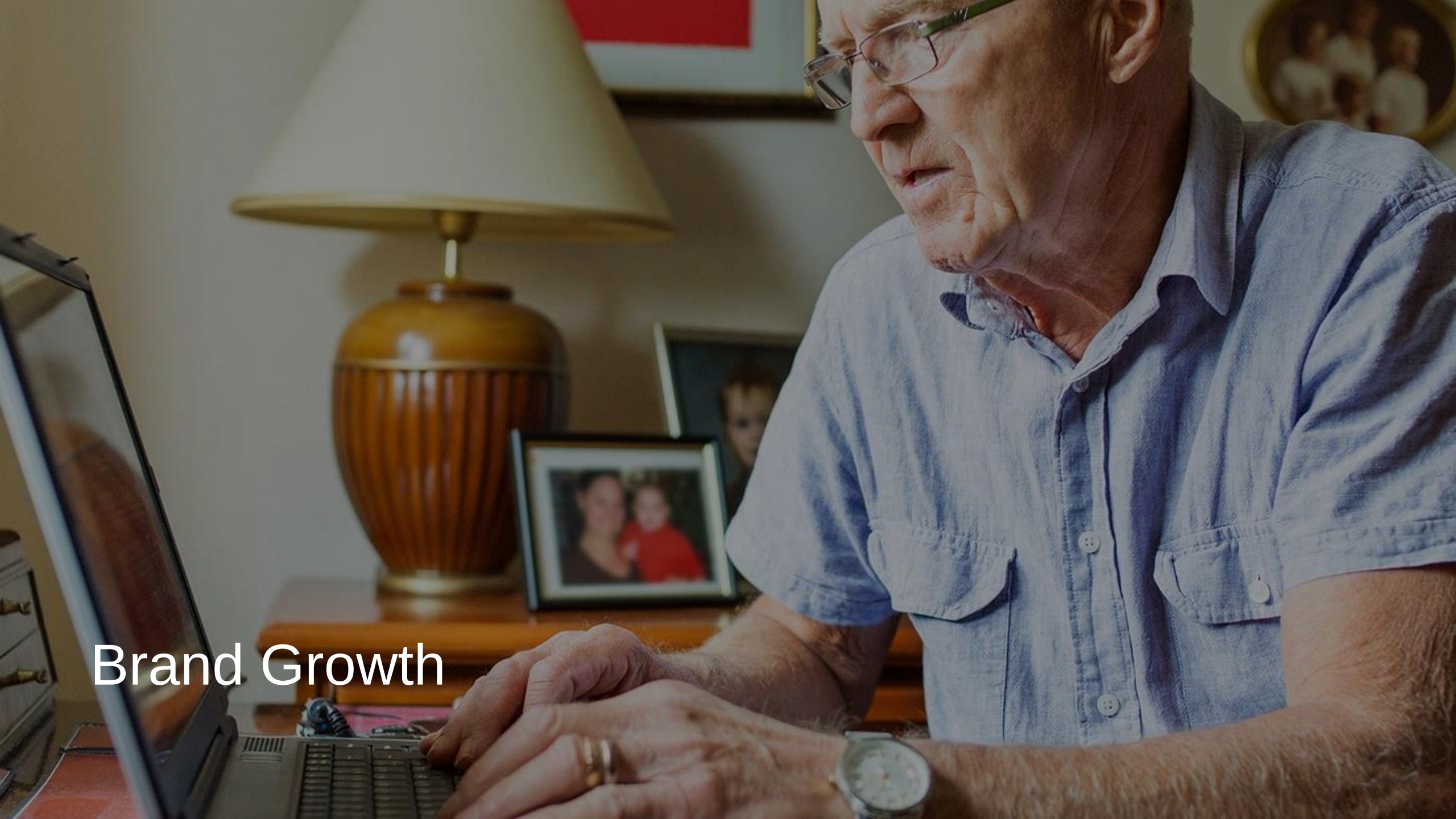
Digital Innovation


Brand Growth

Increased Market Reach

Minimize Legal Risk

Everyone of us is only temporary fully enabled…

WCAG, ATAG, 508, ADA, EN 301 549

What do they all mean?

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What are compliance regulations?

All these standards have the same goal:

To make your products and services usable by as many people as possible.

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What is WCAG?

WCAG 2.0 is the technical standard featuring 12 guidelines under four principles:

Image Source: Mightybytes

What is WCAG?

Level A

We **must** satisfy these requirements, otherwise it will be impossible for one or more groups to access the web content

Level AA

We **should** satisfy these requirements, otherwise some groups will find it difficult to access the web content

Level AAA

We **may** satisfy these requirements, in order to make it easier for some groups to access the web content

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How does it apply to what I’m building?

Image Source: Mightybytes

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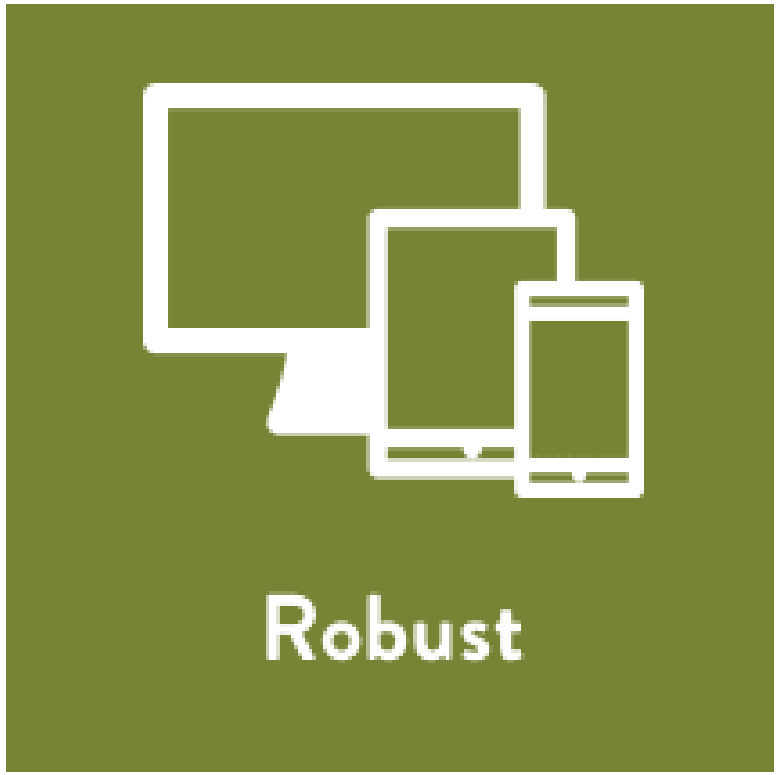

Image Source: Mightybytes

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Applying it in your app

Examples and Best Practices

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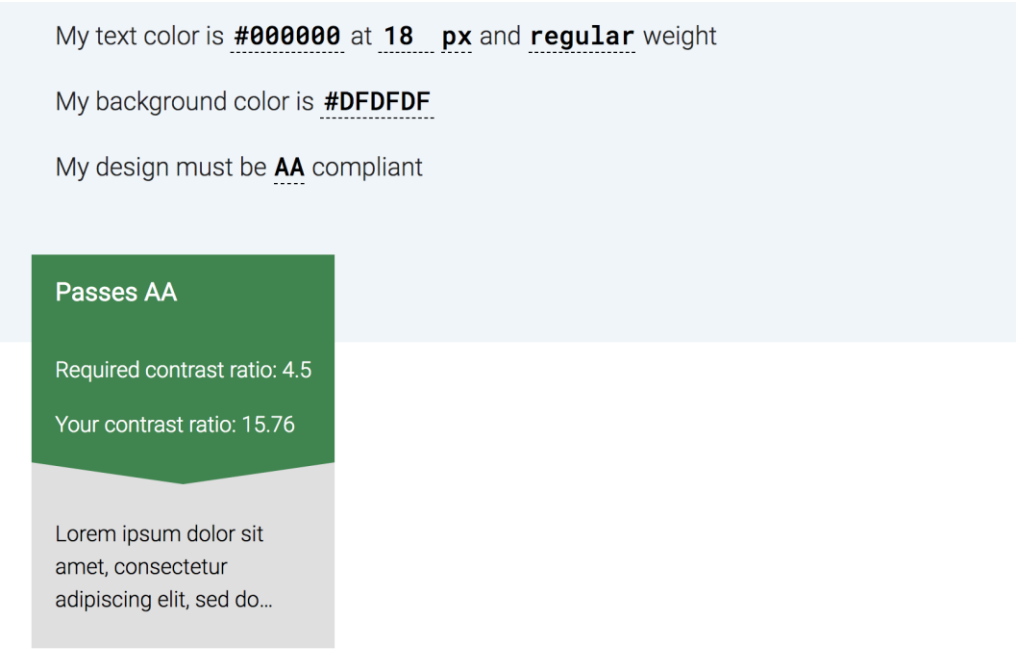
Adhering to color contrast ratios



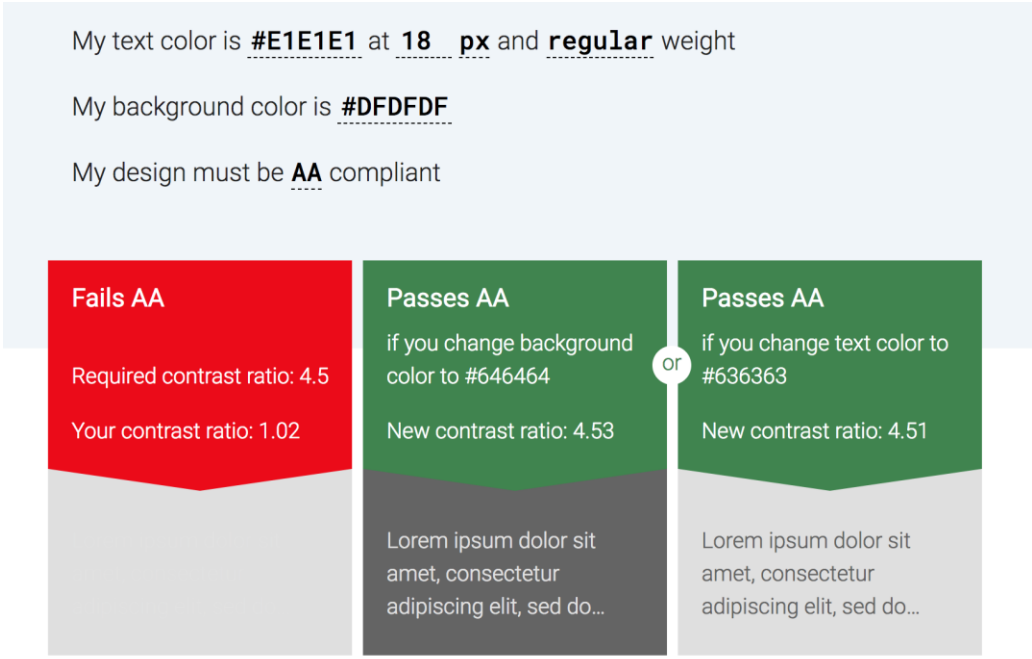


Image Source: http://accessible-colors.com/

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Not relying on color alone for critical information

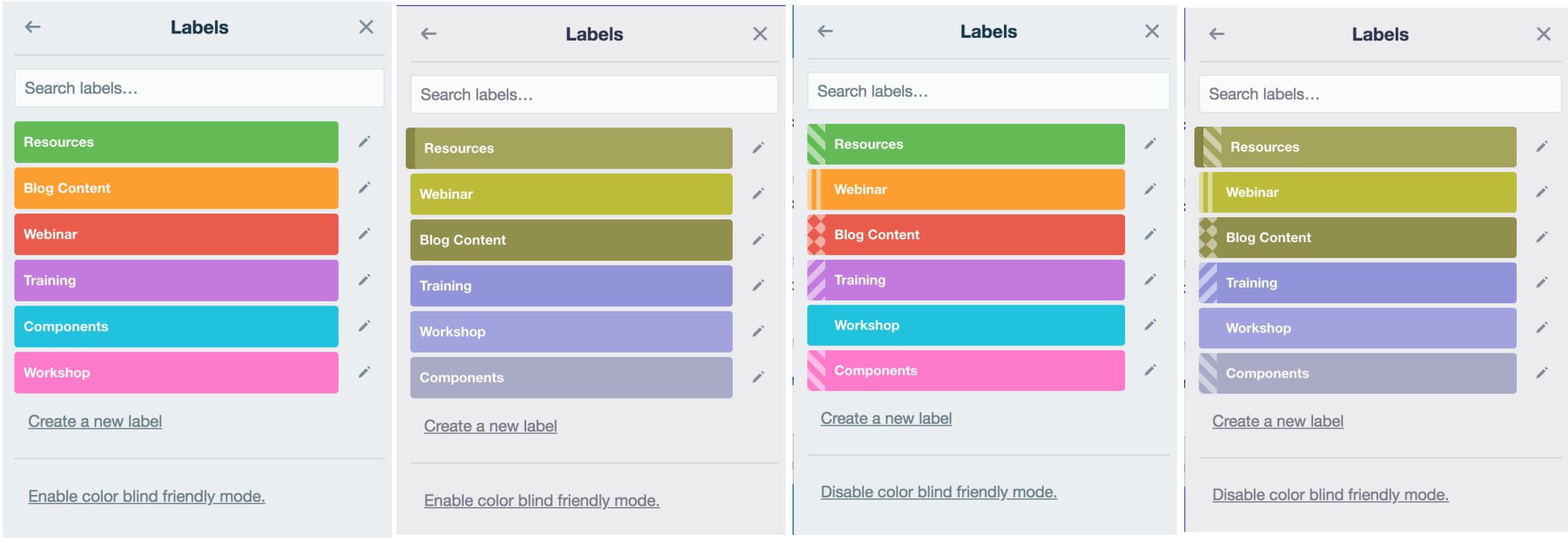

Image Source: Trello

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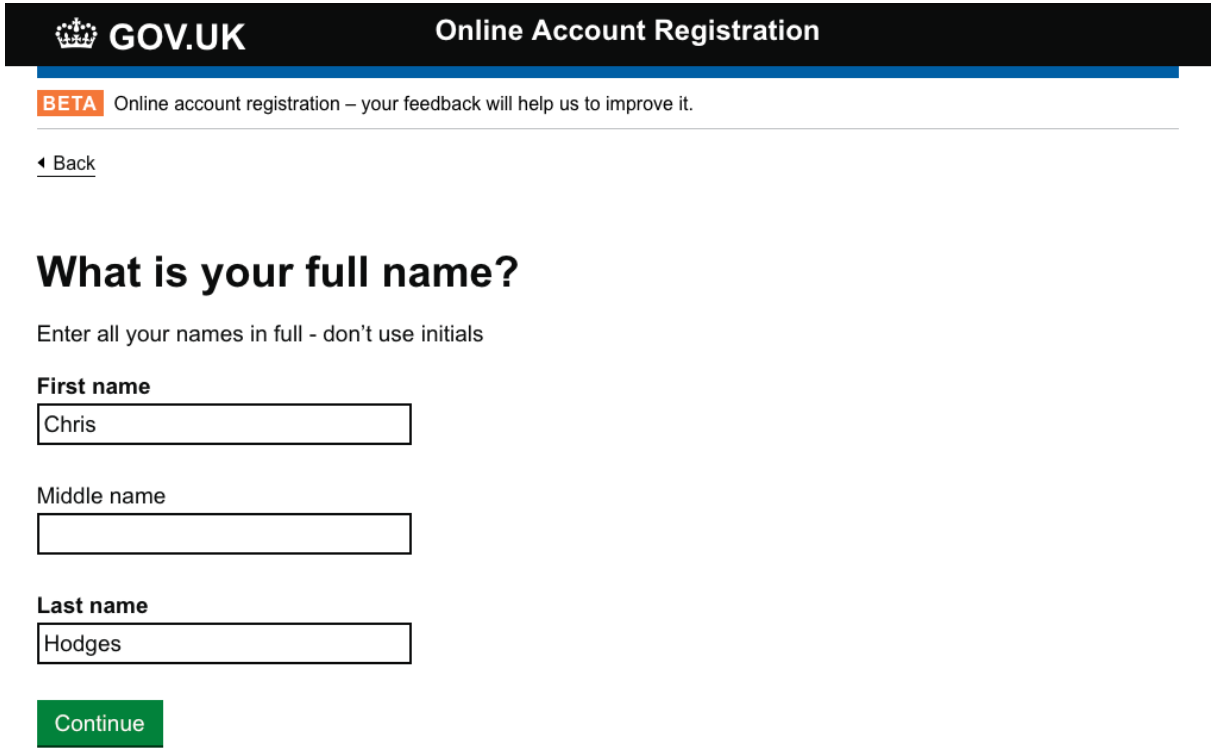
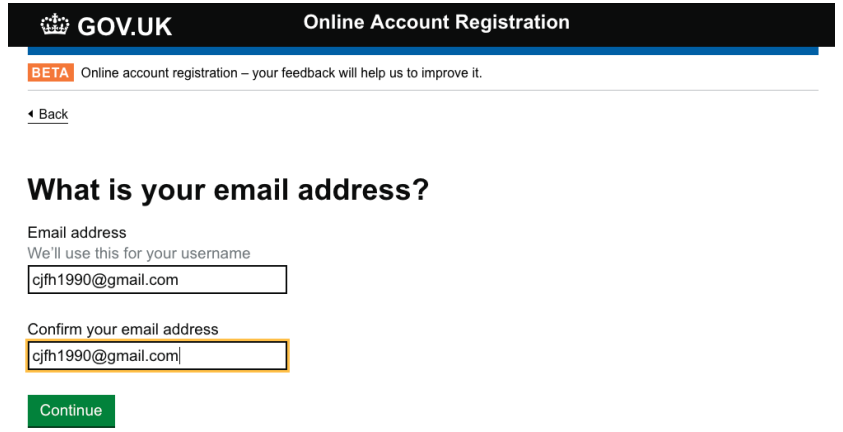
Clear & Consistent Layouts





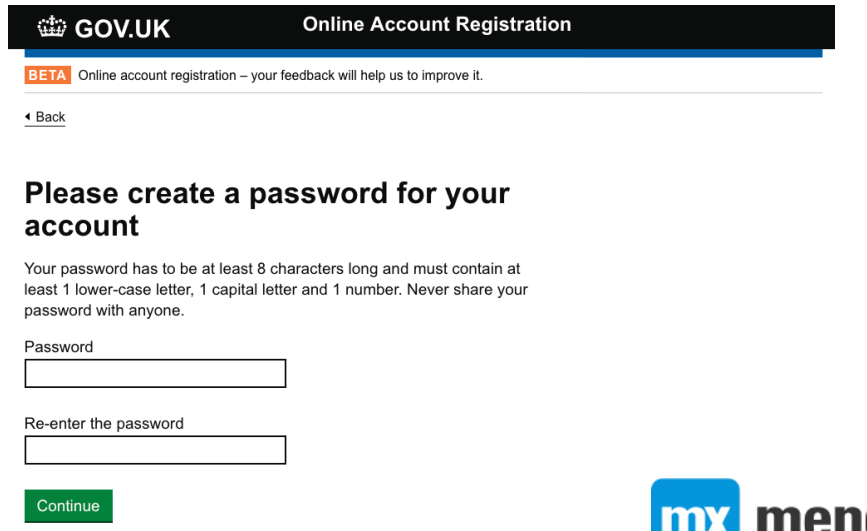


Image Source: Gov.uk

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Consistent Navigation

Simple services

Use the GOV.UK standard header if your service is just a few pages long:

EXAMPLE

Header with service name

Add the standard header with service title if your service is more than 5 pages long - this can help users understand where they are:

EXAMPLE

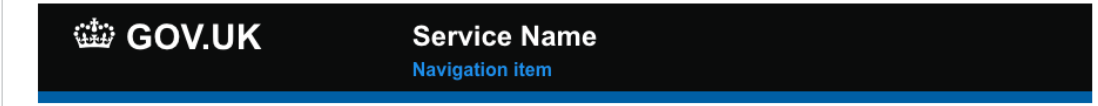
Header with navigation

Use the standard header with propositional navigation if you need to include basic navigation, contact or account management links:

EXAMPLE

Use the standard header with a propositional link if you only need to add one link:

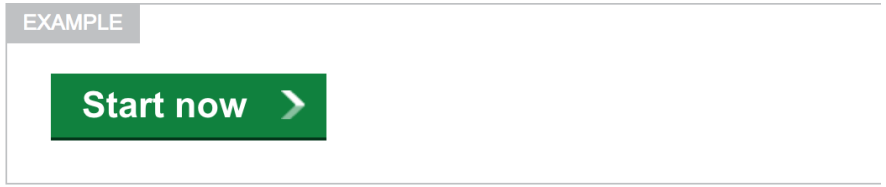
EXAMPLE



Consistent use of icons & imagery

Start now button

Launch your service with a Start now button.



Button alignment

Align the primary action button to the left edge of your form, in the user's line of sight.

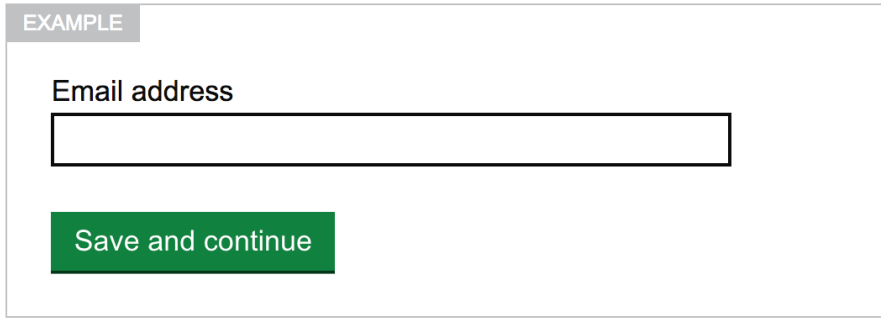


Image Source: MacOS

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Create a typography hierarchy

Heading 1

This is an intro paragraph at 24px. Maecenas faucibus mollis interdum. Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor. Integer posuere erat a ante venenatis dapibus posuere velit aliquet. Curabitur blandit tempus porttitor. Vestibulum id ligula porta felis euismod semper.

Heading 2

This is a body copy paragraph at 19px. Donec id elit non mi porta gravida at eget metus. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Donec sed odio dui. Aenean lacinia bibendum nulla sed consectetur. Aenean lacinia bibendum nulla sed consectetur. Sed posuere consectetur est at lobortis.

Heading 3

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Heading 3

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Labels, captions, & transcriptions

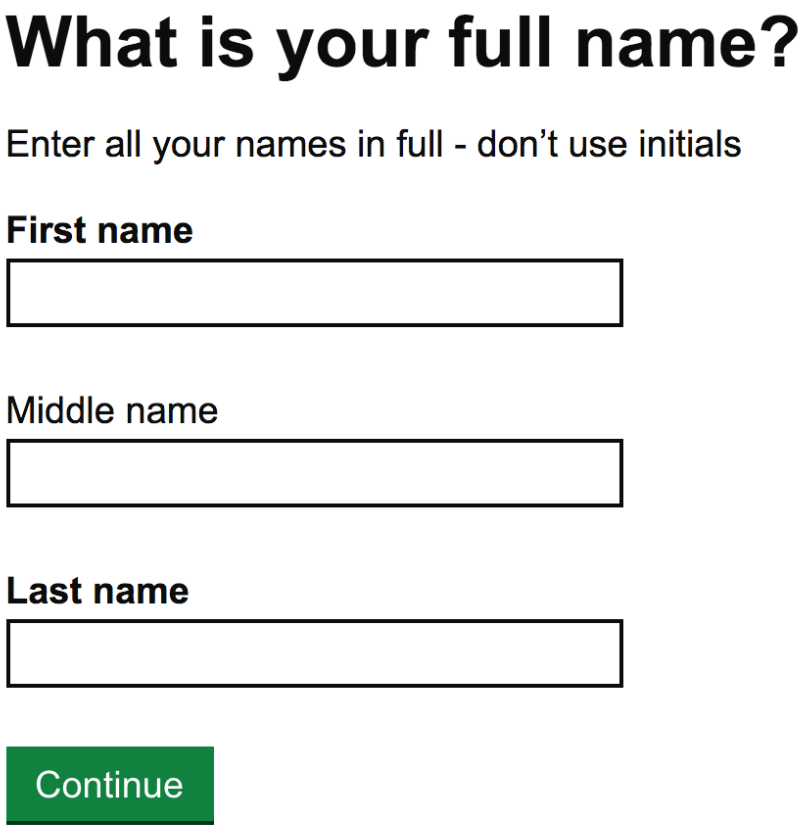

Image Source: Invision

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Designing usable focus states

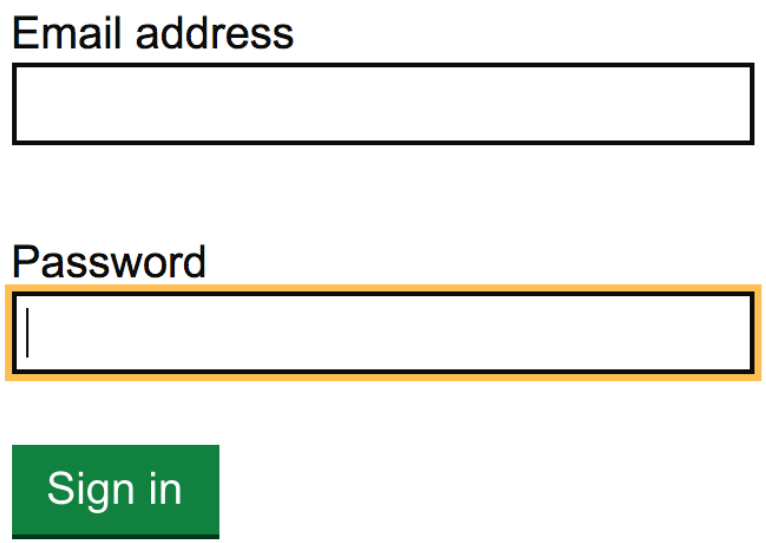

Image Source: Gov.uk

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Helping users recover from errors

There are errors on the page.

Enter your first name
Enter your last name

What is your full name?

Enter all your names in full - don't use initials

First name
Enter you first name

Middle name

Last name
Enter you last name

Continue

Image Source: Gov.uk

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Present content in a meaningful order

EXAMPLE

1

Register to the Online portal

2

Use this service to apply to register or to:

- update your name, address or other details on the council register
- sign up to receive bills electronically
- view account payments

You may need the following, if you have them:

- your Council Tax Account number
- your National Insurance number

You need to be registered to pay your bills online.

3

Start now

4

Before you start

You can also register by post
You can't register to online payments if you are in rented accommondation

I already have an account - back to sign in

Image Source: Gov.uk

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Avoid high rates of blinking/flashing

Set Attribute Widget

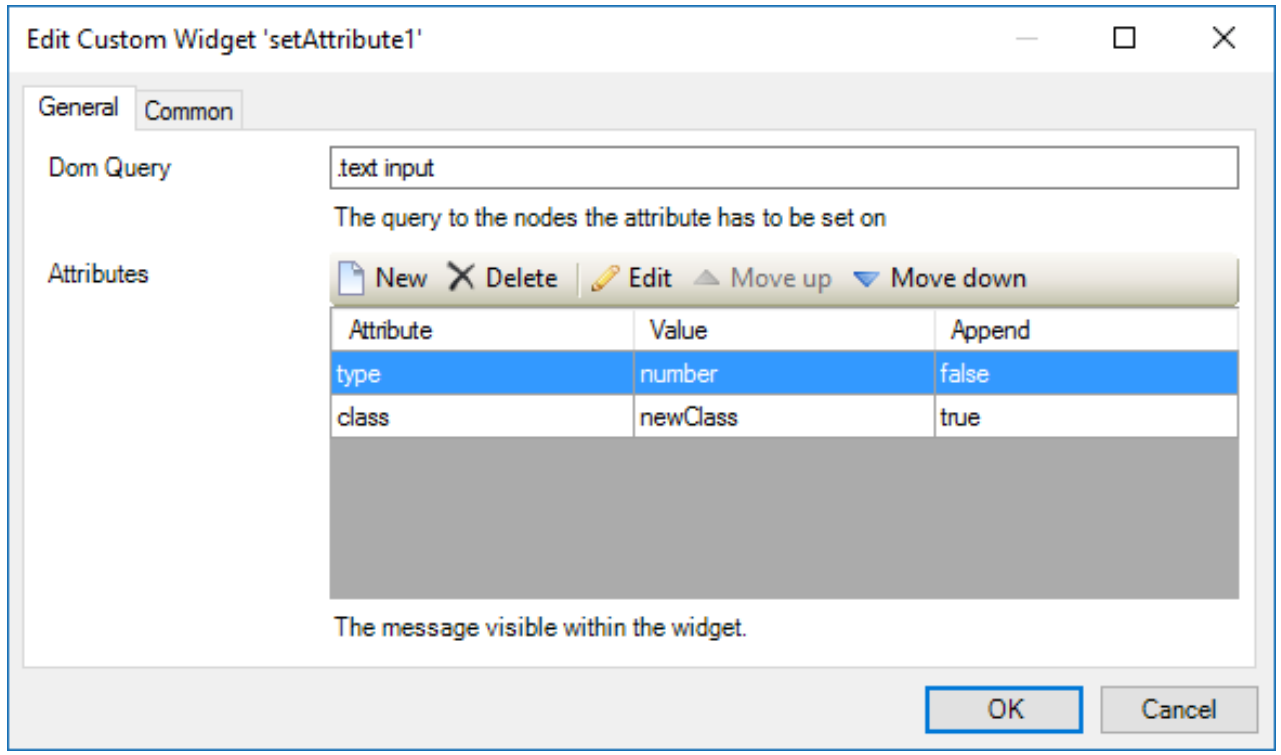

Image Source: https://github.com/cdcharlebois/SetAttribute

Thank you

Any questions?