



# Accessibility for Copywriters – Irish Computer Society

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# Welcome!

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- The session is being recorded.
  - Live captions during the training
  - Please use the Q&A panel to ask questions
  - We will pause for questions throughout
  - We will be doing a couple of small practice tasks
  - Slides and a recording will be made available via email in the coming days
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## About AbilityNet





# Outline

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## What we will cover!

- WCAG 2.1 AA for copywriters and content editors
- Good practices
- Tools and techniques
- Taking it forward

Or



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“What I wish I had known about  
accessibility when I was a  
content editor.”



## Who is your user?

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- User personas
- Stereotypes of disability
- Range of impairments, multiple impairments
- SWIM – designing for “Someone Who Isn’t Me”



## WCAG 2.1

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- Web Content Accessibility Guidelines 2.1 Level AA
- Pass/fail success criteria
- Some legal status eg Public Sector Bodies Accessibility Regulations
- Cognitive impairments less well covered
- 4 principles: Perceivable, Operable, Understandable and Robust = POUR

<https://www.w3.org/TR/WCAG21/>

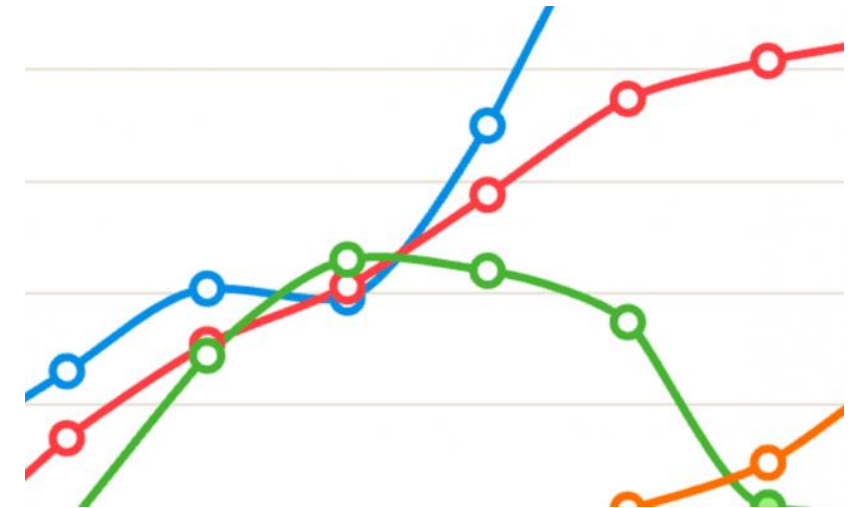


# Perceivable

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Users must still be able to perceive your content if they have a sensory impairment.

- Visual content: images, graphs, videos
- Use of colour
- Audio content: audio files, video.
- Can be read by assistive technology





# Images and alt text

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What does this image **do**?

What is it **for**?

- Informative?
- Decorative?
- Functional?



Code looks like: ``

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# Informative





WIKIPEDIA  
The Free Encyclopedia

[Main page](#)  
[Contents](#)  
[Current events](#)  
[Random article](#)

Article [Talk](#)

[Read](#) [Edit](#) [View history](#)

Not logged in

## British Shorthair

From Wikipedia, the free encyclopedia

The **British Shorthair** is the pedigreed version of the traditional British domestic [cat](#), with a distinctively stocky body, dense coat, and broad face. The most familiar color variant is the "British Blue," a solid grey-blue coat, orange eyes, and a medium-sized tail. The breed has also been developed in a wide range of other colours and patterns, including tabby and colorpoint.

A close-up photograph of a British Blue Shorthair cat. The cat has a dense, grey-blue coat, a round face, and striking orange eyes. It is looking directly at the camera with a calm expression.

## Decorative

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### CATSNAAX

Your cat will love this vitamin-rich blend of succulent meat and delicious jelly. Vets have given our formula the thumbs up for lively, happy cats with great coats.

Ingredients: Beef concentrate, cereals, mechanically recovered meat, gelatine, niacin, thiamine, yeast extract.



# Functional

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- Decision tree for alt text:  
[https://www.w3.org/WAI/tutorials/  
images/decision-tree/](https://www.w3.org/WAI/tutorials/images/decision-tree/)
- Be concise!

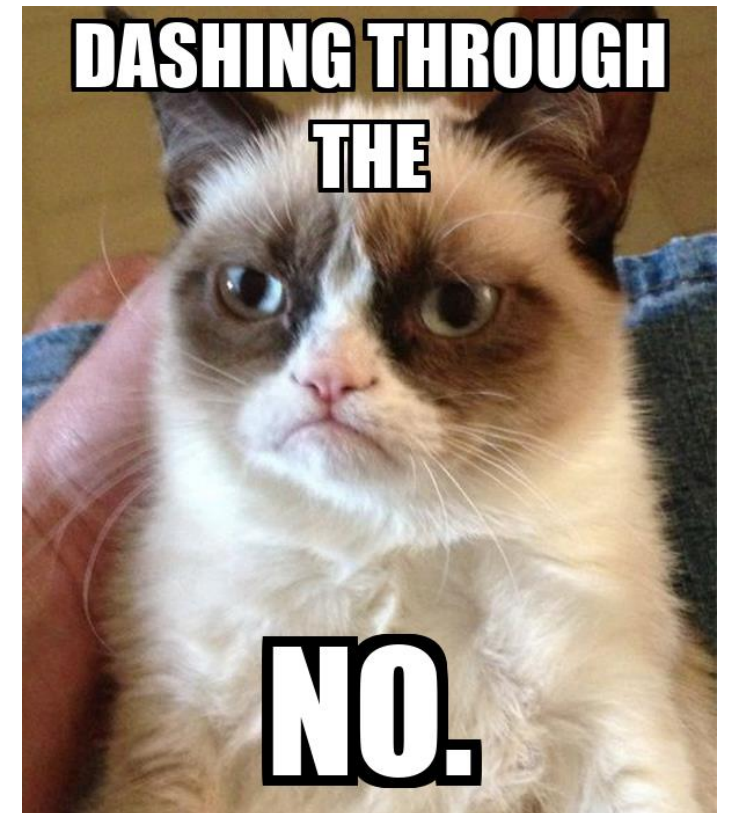


## Images of text

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- Can't be read by screen reader
- Users who have text settings specified will not be able to use these



# Graphs and charts

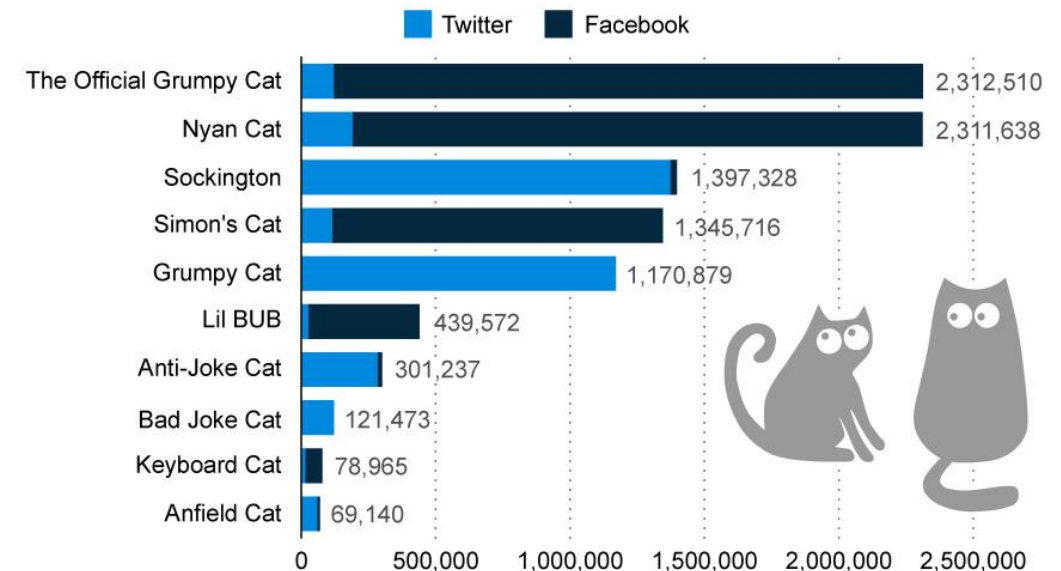
- The same information must be conveyed in text.
- Alt text is for short snippets of information.
- Eg provide a full explanation of the data adjacent to the image and tell people about it in the alt text.

<img alt="graph of most popular internet cats – description below" src=catgraph.jpg>

“The chart shows that the Internet’s most popular cat is Grumpy Cat, who has 260k followers on Twitter and 260 million on Facebook...”

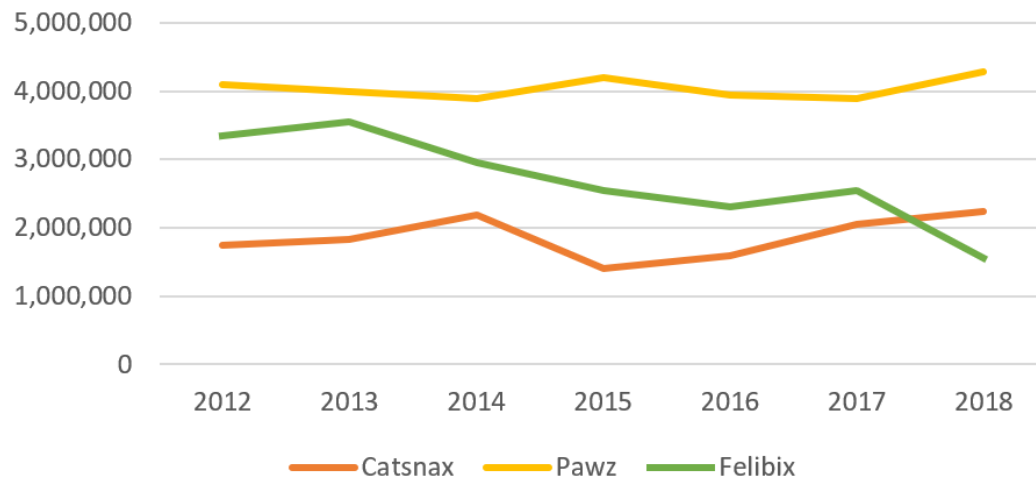
## The Internet's Most Popular Cats

Followers / fans of selected cat accounts on Twitter and Facebook (as of November 11, 2013)

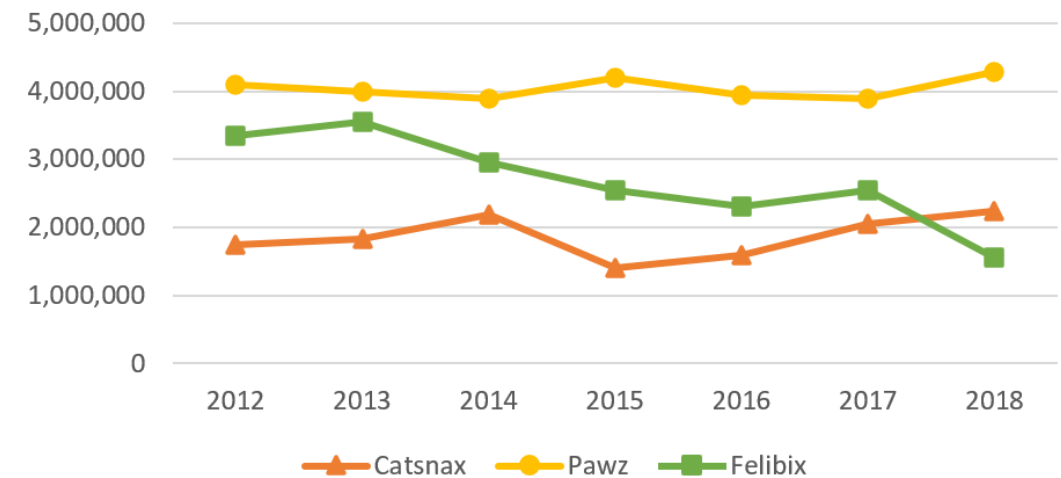


## Use of colour: graphs and charts

Cat food sales by year



Cat food sales by year







# Colour Contrast

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- Colour blindness affects around 4.5% of the population
- Contrast of general text needs to be 4.5:1, large text or graphical elements 3:1.
- Test with ANDI or Deque's [Colour Contrast Analyzer](#)

A rectangular box with a solid red background. Centered within the box is the text "Poor contrast inhibits comprehension" in a green, sans-serif font. The text is large and bold, but the green color is not highly contrasting against the red background, illustrating the concept of poor contrast.

Poor contrast  
inhibits  
comprehension





## Audio & video (prerecorded)

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Provide **equivalent information** for people who cannot perceive the audio or video:

- **Captions** and **audio descriptions** for video with sound
- **Transcripts** for audio-only content
- **Transcripts** or **Audio Description** for video only



# Audio & video (prerecorded)

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- **Captions** should cover all essential audio: dialogue, music, sound effects, audio cues.
- **Transcripts** should indicate who is speaking and (if relevant) how, describe important background sounds and visual events.



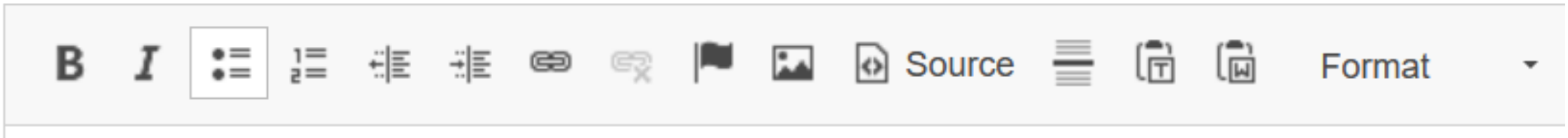
# Headings and structure

- Visual structure of the page must be perceivable to those who can't see it
- Screen reader users may navigate by headings
- Headings must be descriptive
- Heading structure must be logical
- Ideally organise content into sections with headings



# Text styling

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- Don't use heading styles just for emphasis
- Don't use styled text to indicate a heading
- If writing a list use list markup
- Don't use tables for layout, only for data



# Sensory Characteristics

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Avoid instructions that rely solely on sensory information since users may not be able to perceive or understand these. Some examples are **shape**, **size**, **colour**, **location** and **sound**.





# Task!

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What would be good alt text for this image?

## Adopt Harvey and May

Harvey and May are brother and sister and need to find a home together. They are one year old and used to going outside. They have been well looked after but their owner has had to go into long term care. Harvey is a very friendly lap cat but May is a bit more nervous and spends a lot of time outdoors.





## Perceivable – WCAG reference

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- 1.1.1: Non-text content [A]
  - 1.2.1: Audio-only and video-only (Prerecorded) [A]
  - 1.2.2: Captions (Prerecorded) [A]
  - 1.2.3: Audio Description or Media Alternative [A]
  - 1.2.4: Captions (Live) [AA]
  - 1.2.5: Audio Description [AA]
  - 1.3.1 Information and Relationships [A]
  - 1.3.3: Sensory Characteristics [A]
  - 1.4.1: Use of Color [A]
  - 1.4.3: Contrast (Minimum) [AA]
  - 1.4.5: Images of Text [AA]
-



## Perceivable – some AAA criteria

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- 1.2.6: Sign Language [AAA]
- 1.2.7: Audio Description (Extended) [AAA]
- 1.2.8: Full Text Alternative [AAA]
- 1.2.9: Live Audio-only [AAA]
- 1.4.7: Low or No Background Audio [AAA]



A person in a dark blue suit and white shirt is holding a rectangular, cream-colored sign with both hands. The sign has the word "QUESTIONS?" written on it in a bold, dark blue, sans-serif font.

**QUESTIONS?**



# Operable

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Users must be able to use your web product regardless of disability.

- Do they know where they are?
  - Can they find what they are looking for?
  - Are you making them ill?!
-

## Page title

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- Web pages must have titles that are **unique** and **describe their topic or purpose**.
- Tell the user where they are and what they will find here.
- Best practice is to frontload the title – unique/most important information first.



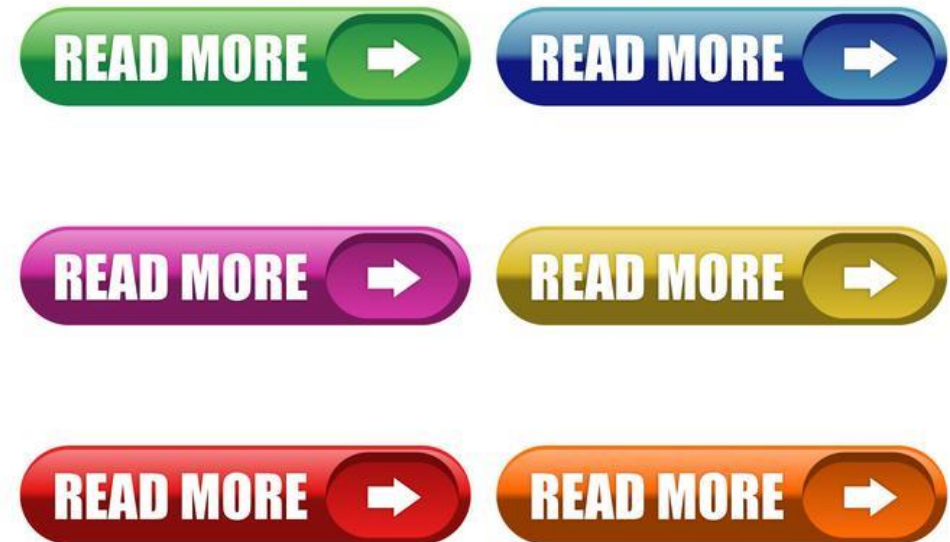


## Links

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Screen reader users may navigate by links, or look for a link of interest.

**Don't do this**



# Links

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It should be possible to determine the purpose of a link by the link text alone.

Where is the user going if they click this?

- Use unique link text
- Ideally links should make sense out of context.

**Do this**



## Moving/flashing content

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- Epilepsy – flashing more than 3 times per second
- Vestibular disorder/migraine – the user must be able to pause moving content





# Task!

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You are linking to this page. How would you write the link text? What might affect this?

<https://www.rspca.org.uk/adviceandwelfare/pets/cats/behaviour/understanding>



## Operable - WCAG reference

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2.2.2: Pause, Stop, Hide [A]

2.3.1: Three Flashes or Below Threshold [A]

2.4.2: Page Titled [A]

2.4.4: Link Purpose (In Context) [A]

2.4.6: Headings and Labels [AA]

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## Operable – some AAA criteria

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2.4.10: Section Headings (AAA)

2.4.9: Link Purpose (Link Only) (AAA)

A person in a dark blue suit and white shirt is holding a rectangular, cream-colored sign with both hands. The sign has the word "QUESTIONS?" written on it in a bold, dark blue, sans-serif font.

**QUESTIONS?**



# Understandable

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Users must be able to understand your product and its content.

- How to fill in forms
  - What errors have been made and how to correct them
  - Language
  - Reading level (AAA)
-



# Instructions

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## Where?

Microcopy for form fields

## What?

Labels are clear, brief and meaningful

The expected format is given (eg date format)

Any specific rules for input (eg no spaces in a phone number)

### What's your date of birth?

If you're applying for someone else enter their date of birth.

For example, 23 11 1979

Day	Month	Year
<input type="text"/>	<input type="text"/>	<input type="text"/>

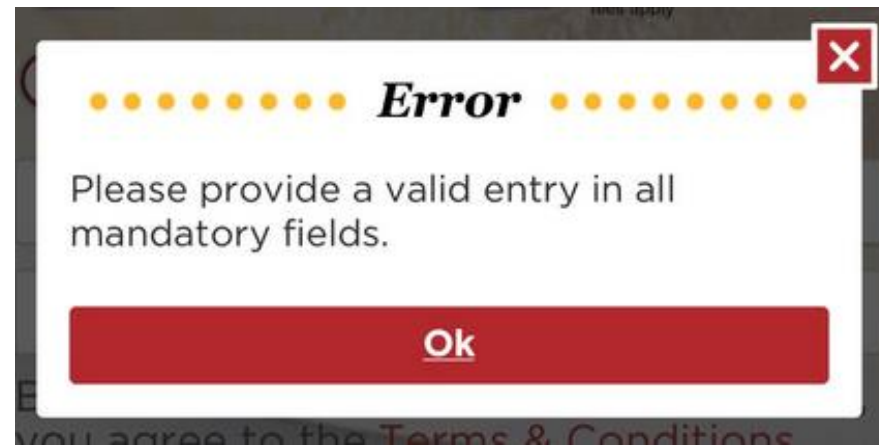
Read about [how we use personal information](#).

Continue

# Errors

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- Error must be described in text, not just indicated by eg colour
- The field in error must be identified
- The nature of the error must be clearly communicated





## Language of page

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### 3.1.1

The default human language of each Web page can be programmatically determined. (Level A)

```
<!DOCTYPE html>  
<html lang="en" event  
▶ <head> ... </head>
```

```
<!DOCTYPE html>  
<html lang="ga" event  
▶ <head> ... </head>
```



## Language of parts

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If quoting from other languages, the language should be specified: “fr”

<div lang=“fr”>

Non! Rien de rien

Non! Je ne regrette rien

Ni le bien qu'on m'a fait

Ni le mal tout ça m'est bien égal!

</div>

French	English
Non, Je Ne Regrette Rien	No, I regret nothing
Non, rien de rien	No, absolutely nothing
Non, je ne regrette rien	No, I regret nothing
Ni le bien qu'on m'a fait	Not the good that has been given
Ni le mal, tout ça m'est bien égal	Not the bad, it's all the same to me



# Language of parts

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Exceptions:

- Appropriated words: “croissant”
- Technical terms: “homo sapiens”
- Proper names: “Angela Merkel”





# Reading Level (AAA)

Aim for a reading age of '**lower secondary education**' where possible to make content accessible to a wider audience: 11 – 13 year olds (Year 7 – 9 in England, 8<sup>th</sup> Grade US)

## Flesch Reading Ease/Flesch-Kincaid Grade Level

- MSWord [Readability Statistics](#)
- [Hemingway Editor](#)
- [WebFX Readable](#)
- Eg Yoast (WordPress add-on)

The image shows two side-by-side screenshots of readability analysis tools. The left screenshot is a Microsoft Word 'Readability Statistics' dialog box. It displays counts for Words (847), Characters (3,595), Paragraphs (34), and Sentences (59). Under 'Averages', it shows Sentences per Paragraph (1.7), Words per Sentence (14.3), and Characters per Word (4.0). Under 'Readability', it shows Flesch Reading Ease (82.6), Flesch-Kincaid Grade Level (4.7), and Passive Sentences (1.6%). The right screenshot is the Hemingway Editor interface. It shows a sample text with various readability issues highlighted in colored boxes: blue for adverbs, green for passive voice, purple for complex phrases, and yellow for hard-to-read sentences. The editor indicates a 'Grade 4' readability level and a word count of 847.



# Readability

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- Use simpler words with fewer syllables
- Short sentences
- Use images to support text
- Be direct and use active voice
- Avoid jargon and abstract ideas, define terminology and explain concepts
- Easy Read for documents: designed for people with learning difficulties: [GDS guide](#) to Easy Read.

# Readability

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“Writing is 1% inspiration  
and 99% elimination”

Louise Brooks





# Formatting

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Use considerate styling when creating copy to maximise legibility:

- Use clear sans-serif font
- Avoid fully justified text
- Use bold text rather than italics or underline
- Avoid ALLCAPS
- Font size 16 px or equivalent recommended

The field of learning disabilities, like education in the main, is undergoing calls for reform and restructuring, an upheaval brought on in great part by the forces of opposing paradigms - reductionism and constructivism. In reexamining our past, we must begin to address the failures of traditional deficit models and their abysmally low "cure" rate. Several new theories have arisen that challenge traditional practices in both general and special education classrooms.

Particularly influential has been the work of Howard Gardner, whose theory of multiple intelligences calls for a restructuring of our schools to accommodate modes of learning and inquiry with something other than deficit approaches. At last some current research in the field of learning disabilities has begun to focus on creativity and nontraditional strengths and talents that have not been well understood or highly valued by the schools.



# Task!

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Try the page text in Hemingway: <http://www.hemingwayapp.com/>

## **British Shorthair**

The British Shorthair is the pedigreed version of the traditional British domestic cat, with a distinctively stocky body, dense coat, and broad face. The most familiar colour variant is the "British Blue," a solid grey-blue coat, orange eyes, and a medium-sized tail. The breed has also been developed in a wide range of other colours and patterns, including tabby and colourpoint.

Distinctive features:

- Stocky body
- Dense coat
- Broad face

# Understandable – WCAG reference



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3.1.2: Language of Parts [AA]

3.3.1: Error Identification [A]

3.3.2: Labels or Instructions [A]

3.3.3: Error Suggestion [AA]

3.3.4: Error Prevention (Legal, Financial, Data) [AA]

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## Understandable – AAA criteria

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3.1.3: Unusual Words [AAA]

3.1.4: Abbreviations [AAA]

3.1.5: Reading Level [AAA]

3.1.6: Pronunciation [AAA]

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A person in a dark blue suit and white shirt is holding a rectangular, cream-colored sign with both hands. The sign has the word "QUESTIONS?" written on it in a bold, dark blue, sans-serif font.

**QUESTIONS?**





# Robust?

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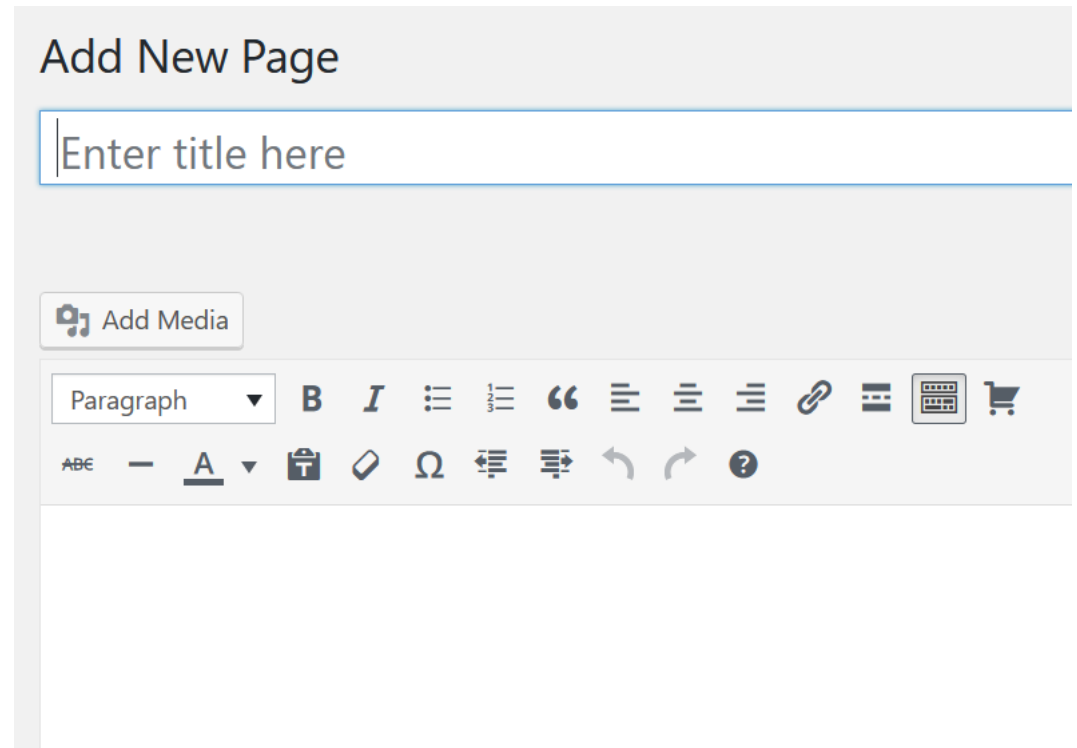
- [4.1.1 Parsing](#)
- If using code, make sure it's correct!



## Your CMS

What can your CMS do? Can you implement the above?

- Setting the alt attribute on images, **including being able to mark them as decorative.**
- Specifying the language of text, **such as lang="fr" for a snippet of text in French.**

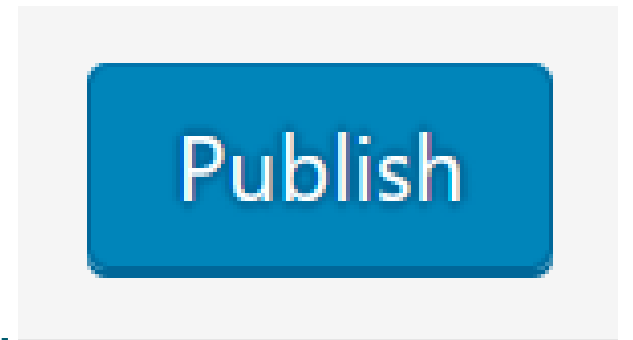




## Before you hit submit, check...

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- Images, including graphics, have alt text
- Videos have captions
- Page has unique, informative title
- Headings are correctly marked up, descriptive and used appropriately
- Text formatting is used correctly
- Link text is informative
- Language is straightforward and concise





## How to test

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- ANDI: “bookmarklet” for any browser:  
<https://www.ssa.gov/accessibility/andi/help/install.html>
- Lists images, links, structure, colour contrast issues.

# When to think about accessibility

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- Writing new content
- Updating content - is old content broken?
- Adding images, multimedia, widgets
- User research and testing
- Project planning - new websites, new components
- Regular testing
- Style and brand guidelines
- Training and induction!

# Accessibility Feedback

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Users must be able to **inform you about accessibility issues.**

You cannot assume that a style guide will act as a silver bullet.

Any content needs an owner that can **receive and triage feedback.**





## Useful Resources

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- W3C Writing for Web Accessibility – <https://www.w3.org/WAI/tips/writing/>
- Inclusive Communication – <https://www.gov.uk/government/publications/inclusive-communication>
- GDS Style Guide - <https://www.gov.uk/guidance/style-guide/a-to-z-of-gov-uk-style>
- Mailchimp Style Guide - <https://styleguide.mailchimp.com/writing-for-accessibility/>
- UCL Creating Accessible Content - [UCL Creating Accessible Content](#)
- Stroke Association – [Accessible Information Guidelines](#)
- British Dyslexia Association – [Dyslexia Friendly Style Guide](#)



## Useful Resources

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- ANDI - <https://www.ssa.gov/accessibility/andi/help/install.html>
- NVDA Screen Reader – <https://www.nvaccess.org/>
- Colour Contrast Analyser - <https://github.com/ThePacielloGroup/CCAe/>
- Web Developer Extension - <https://chrispederick.com/work/web-developer/>
- Accessibility bookmarklets - <https://accessibility-bookmarklets.org/>
- Paul J Adam bookmarklets - <http://pauljadam.com/bookmarklets/>
- Hemingway App - <http://www.hemingwayapp.com/>





## Useful Resources

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- DWP: [Formal Easy Read guidelines](#)
- BBC subtitling guidelines <https://www.bbc.co.uk/academy-guides/how-do-i-create-subtitles>
- Self Defined – [A dictionary of inclusive definitions](#)
- [Easy Read for people with learning difficulties \(pdf\)](#)
- Making Content Usable for People with Cognitive and Learning Disabilities: <https://www.w3.org/TR/coga-usable/>



# Questions?

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