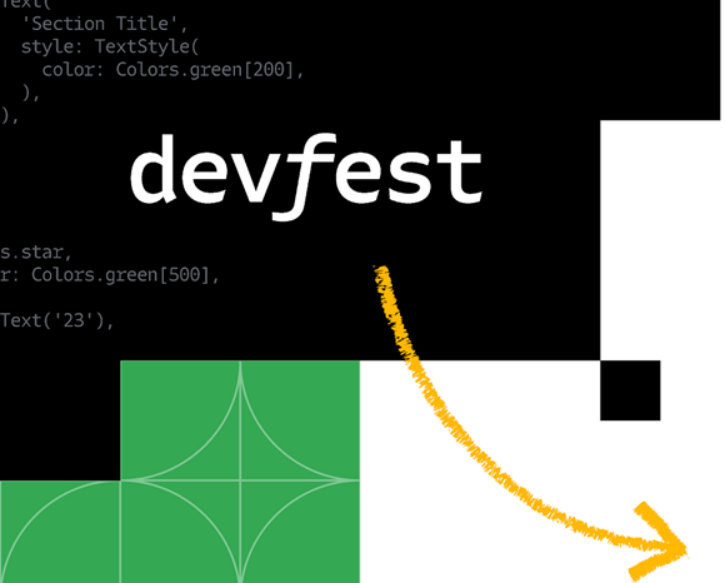
devfest

Designing for Neurodiversity, Empathy, Human Centric Design and Inclusion in Software Applications

Google Developer Groups

Vancouver

Glossophobia



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Agenda

What is Neurodiversity?

Accessibility vs ND

Guidelines for Design

Concluding Remarks

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Text(
  'Section Title',
  style: TextStyle(
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  ),
),
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devfest

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s.star,
r: Colors.green[500],

Text('23'),
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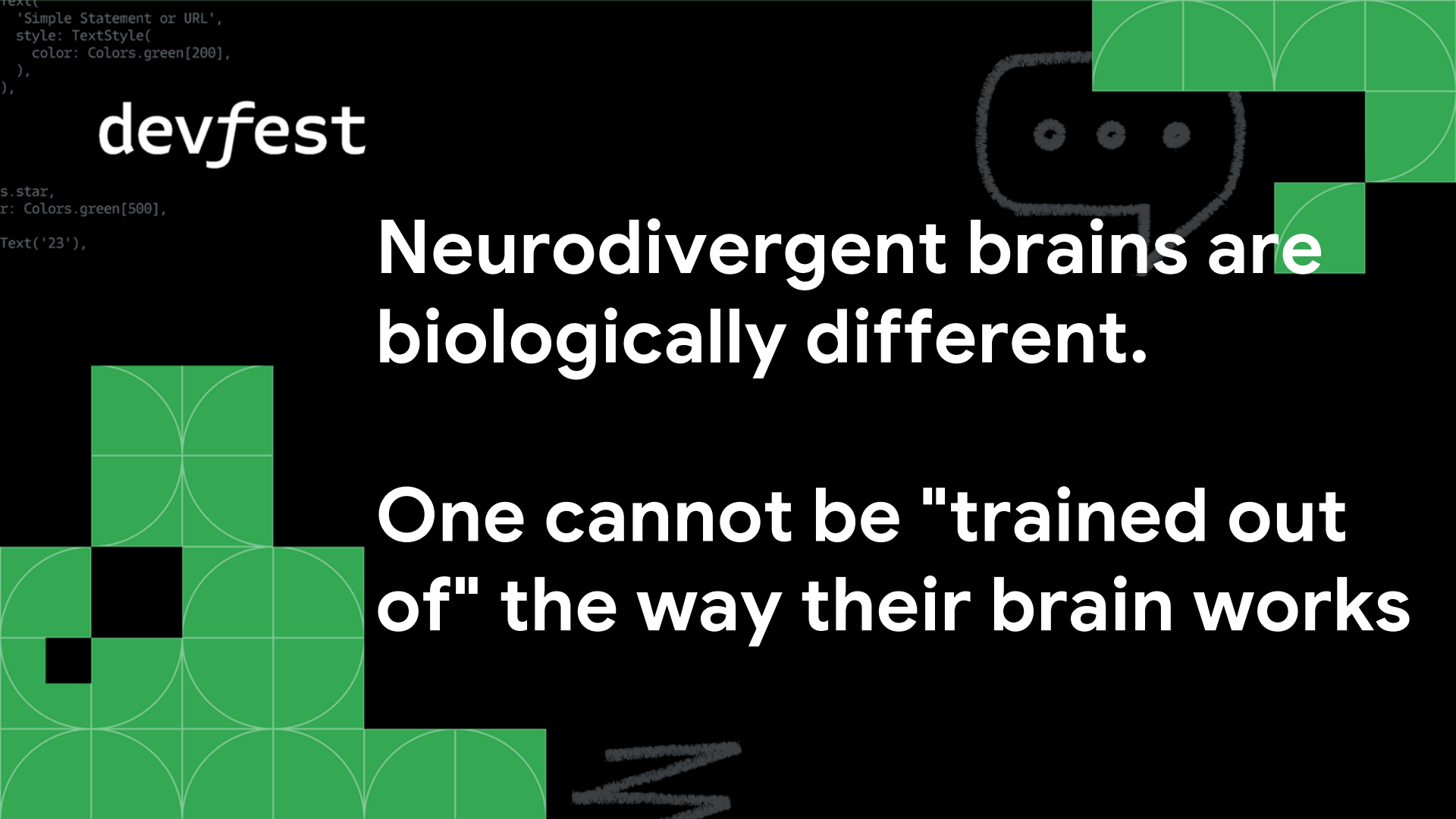
'Simple Statement or URL',
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devfest
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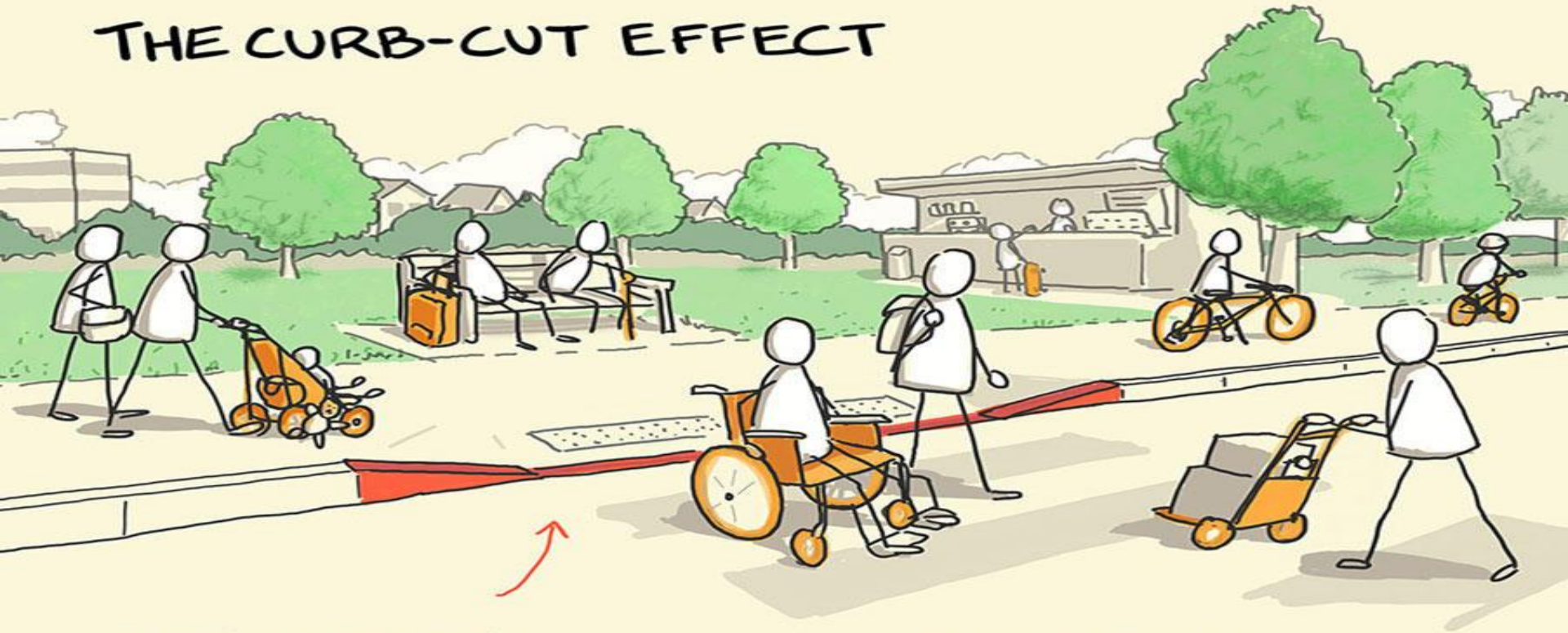
r: Colors.green[500],
Text('23'),
Neurodivergent brains are biologically different.
One cannot be "trained out of" the way their brain works

THE CURB-CUT EFFECT



WHEN WE DESIGN
FOR DISABILITIES

... WE MAKE THINGS
BETTER FOR EVERYONE

sketchplanations

'Simple Statement or URL',
style: TextStyle(
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s.star,
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Not legally required until 1990 with the signing of Americans with Disabilities Act

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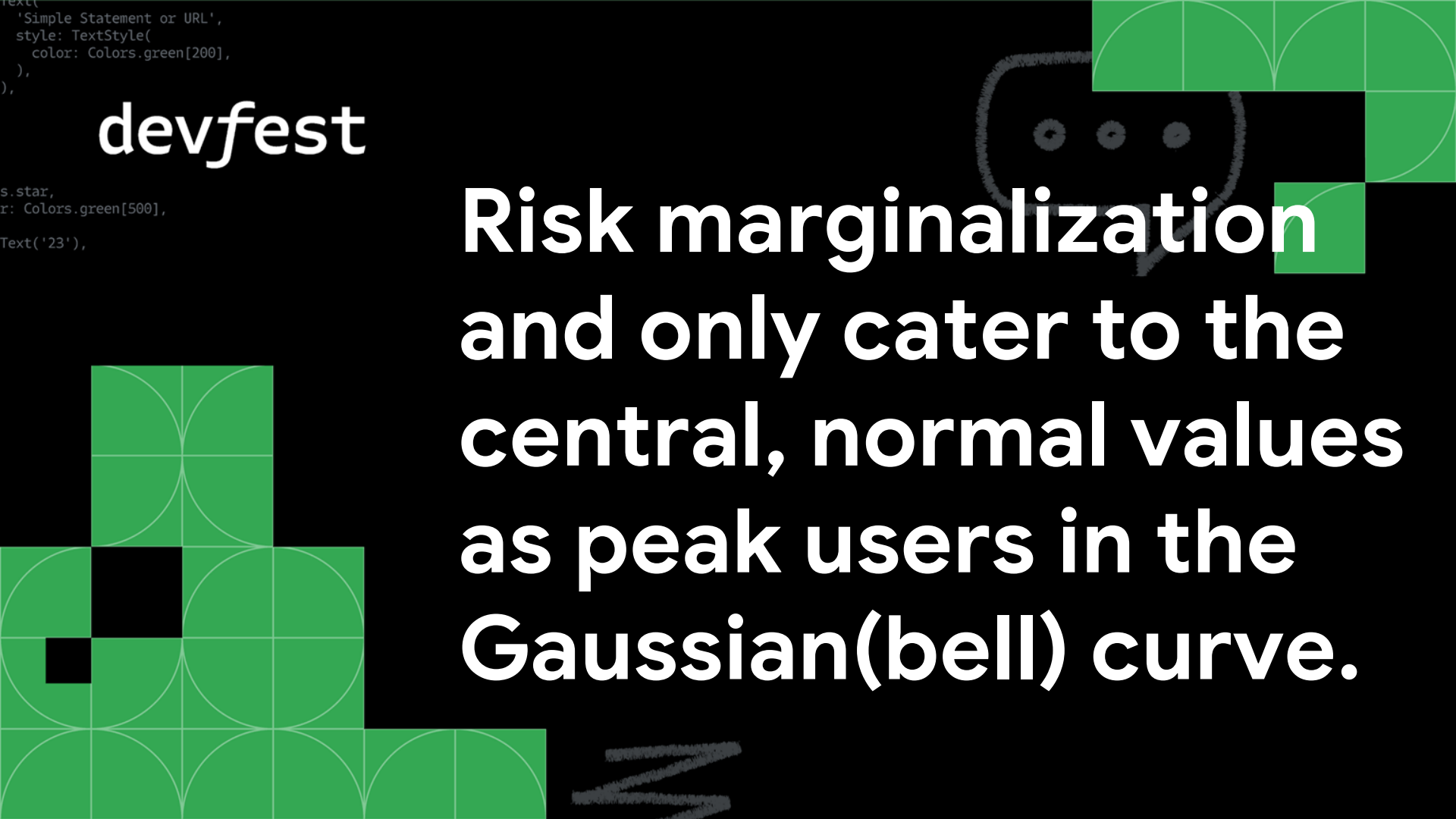
Solve for one, extend to many

"NOTHING ABOUT US WITHOUT US"

IDA
International
Disability Alliance

#IDPD21


'Simple Statement or URL',
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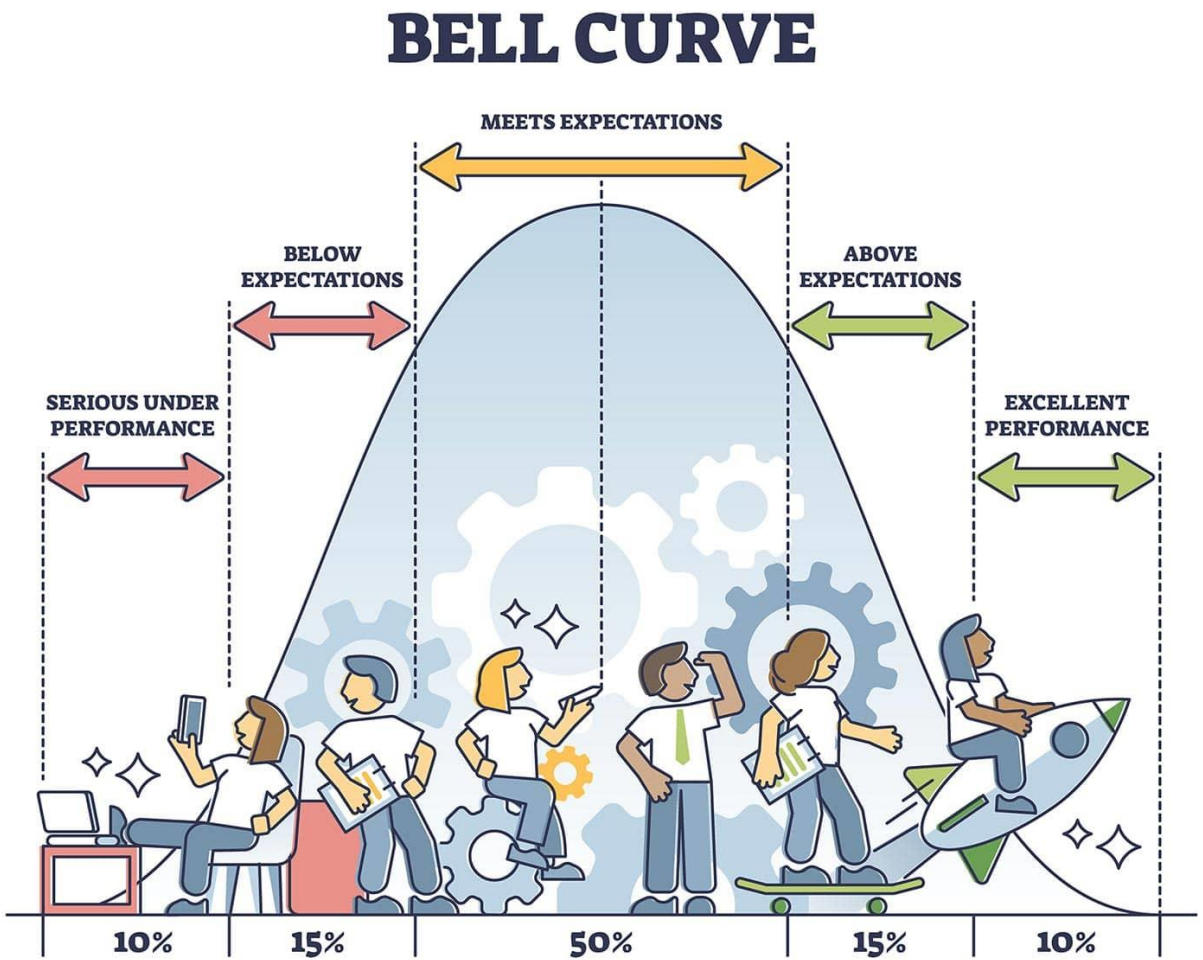
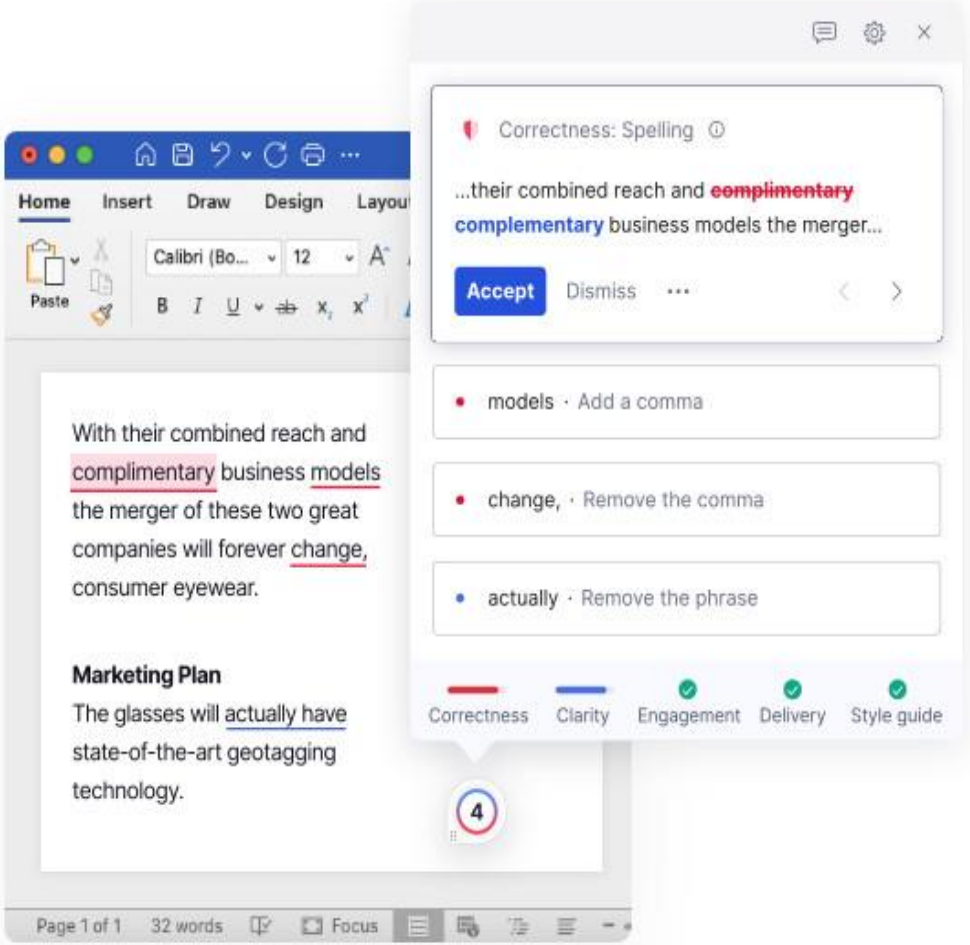
Text('23'),
Risk marginalization and only cater to the central, normal values as peak users in the Gaussian(bell) curve.



Source : https://www.simplypsychology.org/normal-distribution.html

Be Kind and Forgiving

Grammarly - Disneyland of Spelling



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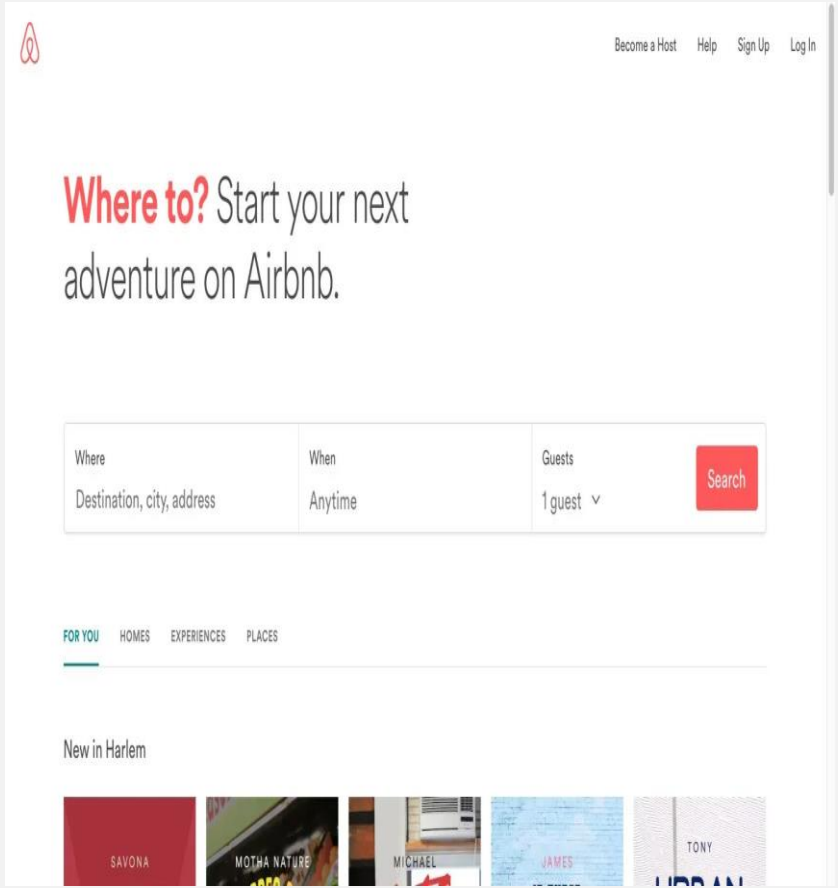
Implement a Forgiving Format to Accommodate Users' Mistakes

"We don't make mistakes, just happy little accidents."
—Bob Ross, American painter, painting instructor, and TV show host



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Forgot attachment?

Attachments first, message second, subject third, and recipients last. This is my way.

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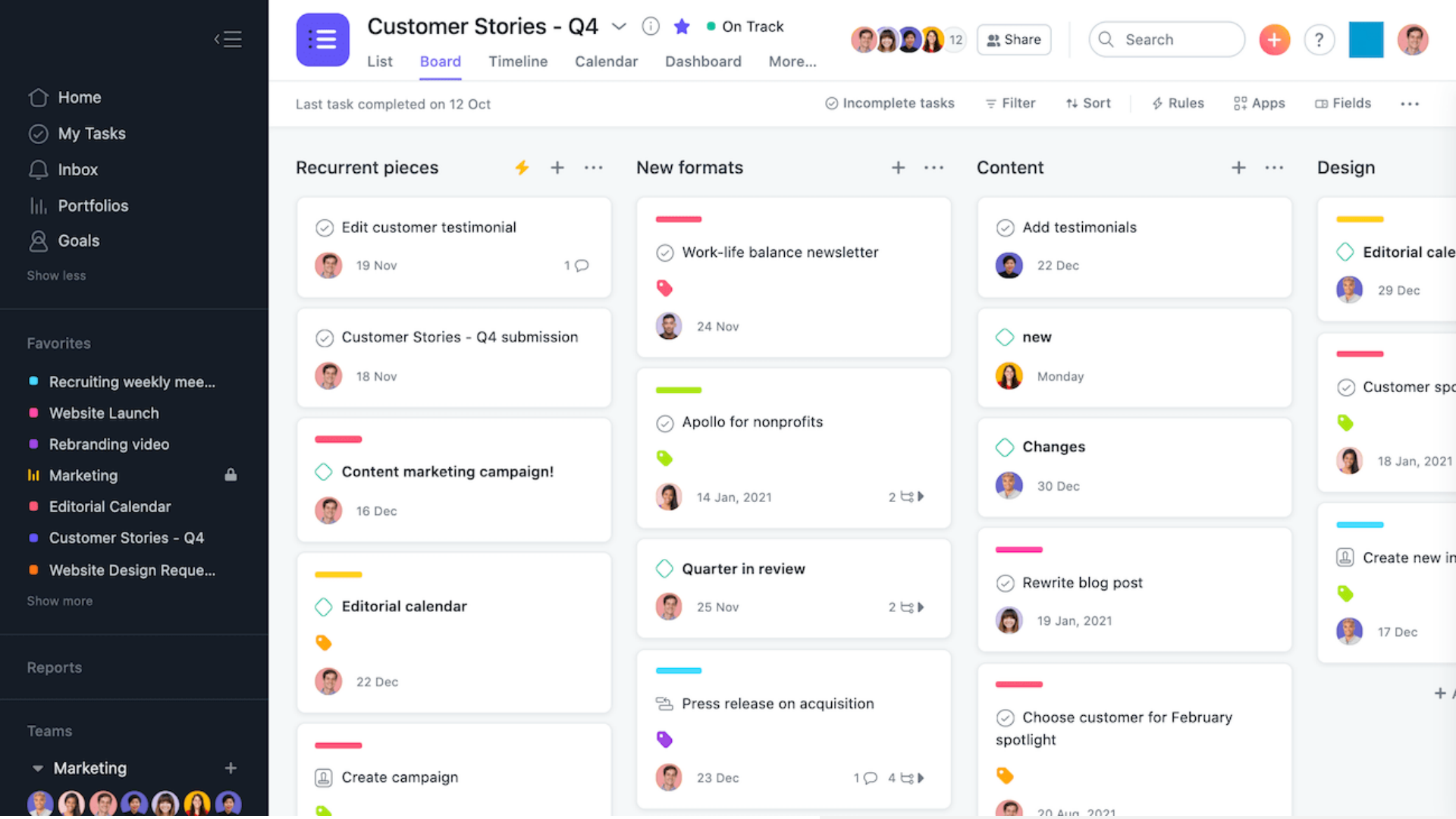
Editable Location

Abundance and not redundance


Customer Stories - Q4
On Track
List
Board
Timeline
Calendar
Dashboard
More...
12
Share
Search
Last task completed on 12 Oct
Incomplete tasks
Filter
Sort
Rules
Apps
Fields
Home
My Tasks
Inbox
Portfolios
Goals
Show less
Favorites
Recruiting weekly mee...
Website Launch
Rebranding video
Marketing
Editorial Calendar
Customer Stories - Q4
Website Design Reque...
Show more
Reports
Teams
Marketing
Recurrent pieces
Edit customer testimonial
19 Nov
1
Customer Stories - Q4 submission
18 Nov
Content marketing campaign!
16 Dec
Editorial calendar
22 Dec
Create campaign
New formats
Work-life balance newsletter
24 Nov
Apollo for nonprofits
14 Jan, 2021
2
Quarter in review
25 Nov
2
Press release on acquisition
23 Dec
1
4
Content
Add testimonials
22 Dec
new
Monday
Changes
30 Dec
Rewrite blog post
19 Jan, 2021
Choose customer for February spotlight
Design
Editorial cale
29 Dec
Customer spo
18 Jan, 2021
Create new in
17 Dec

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Canary in the coalmine

Often the first to sense danger akin to canaries in the coal mine
Preventing miscommunication and not overwhelming the users

Guidelines

- **Interpretable messages**

  Avoid use of characters that look alike

  E.g. 1ll, B8, QO0CD, and try to break up long strings in phone numbers e.g. (000) 000–0000

- **Stick to active voice**: Passive voice sentences are longer and harder to comprehend. Users with ADHD will get bored, dyslexics will have even more trouble reading, and so will readers on the spectrum.
- **Avoid metaphors**: Trouble understanding metaphors, such as idioms and other abstract figures of speech.

  E.g. Instead of calling it a day, it's more inclusive to say that something is done.

Guidelines

Format your writing : Divide large chunks of text into smaller paragraphs.
It is challenging for people struggling with limited attention spans.

Use descriptive buttons : No vague microcopy, such as *Click here*.

Describe the purpose of the button.
Example: *Upload images, Register, Download the e-book*.
This simple change makes navigation smoother and reduces anxiety.

Be careful with animations : Too much stimulation can induce anxiety in people on the autism spectrum, which may even lead to physical pain, withdrawal, or meltdown.

Use of animated elements : should be limited to instances when it serves a purpose.
Also remember not to make them too invasive.

Avoid autoplay

Unexpected movement is surprising and scary, not to mention the sound!

Add subtitles and captions

Bring in the perspective of ND users

Perform user testing and focus groups with them.

Takeaways

Aim to visually please, rather than disturb.

Abstain from auto play and music that suddenly appears out of nowhere.

Skip highly vibrant colors.

Designing for users on the autistic spectrum

Do…	Don't…
use simple colours	use bright contrasting colours
write in plain English	use figures of speech and idioms
use simple sentences and bullets	create a wall of text
make buttons descriptive	make buttons vague and unpredictable
build simple and consistent layouts	build complex and cluttered layouts

Do this.

Attach files

Click here!

Home Office Home Office Digital

For more information, contact:
access@digital.homeoffice.gov.uk

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Designing for users with dyslexia

Do…	Don't…
use images and diagrams to support text	use large blocks of heavy text
align text to the left and keep a consistent layout	underline words, use italics or write in capitals
consider producing materials in other formats (for example, audio or video)	force users to remember things from previous pages - give reminders and prompts
keep content short, clear and simple	rely on accurate spelling - use autocorrect or provide suggestions
let users change the contrast between background and text	put too much information in one place

DON'T DO THIS

dyslexia ✖

dsyle

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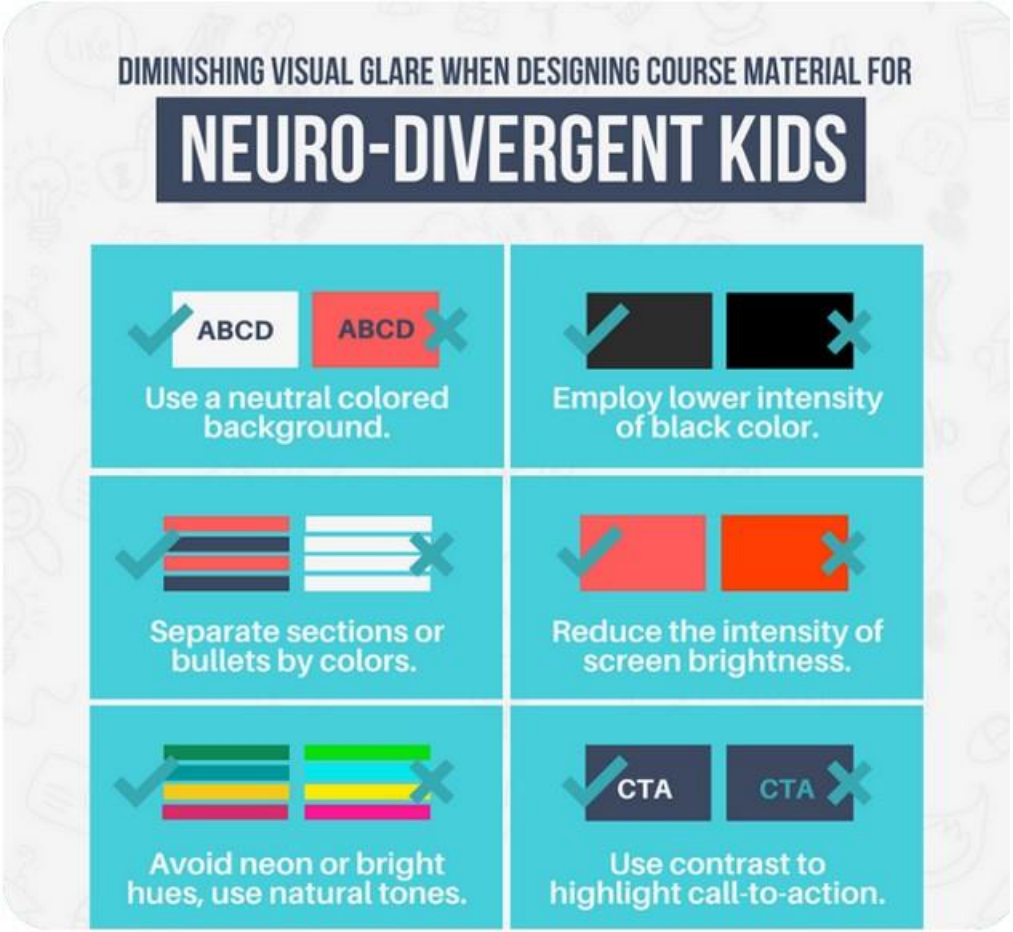

Credit : DesignMantic

Great Minds Think Unalike And Learn Differently

Representation Matters!

A design with inclusivity and neurodiversity in mind is not just ‘nice to have’ – it’s imperative

THANK YOU FOR WATCHING OUR PRESENTATION
makeameme.org