

# VARIABLE FONTS

*and the future of web design.*



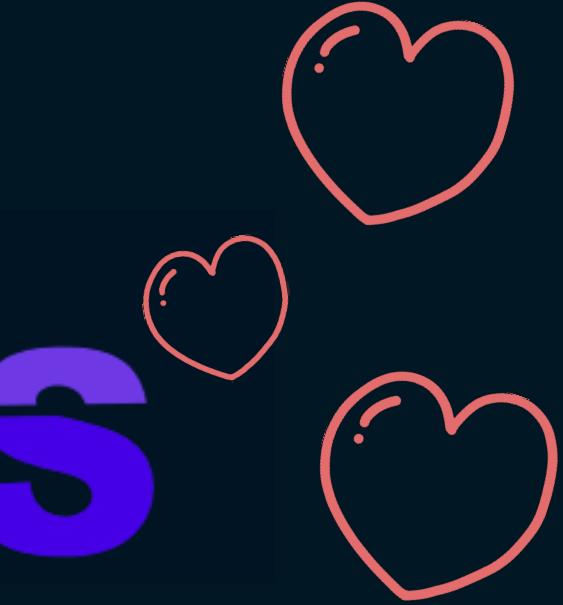
PRESENTED BY

Mandy Michael



# VARIABLE FONTS

*and the future of web design.*



PRESENTED BY

Mandy Michael





I am a **Developer** *that loves to Design.*





**But I** *love* **experimenting with CSS**



GRASS

►RETRO

S

MAGIC

SLIDE

COOL

FOLDED

Relay

WINNER

BAUHAUS



SWIMMING



Suscipit velit commodi  
Lorem ipsum dolor sit amet, consectetur  
adipiscing elit. Impedit nemo id dolorem  
quaerat placeat deflectus explicabo similique  
consectetur vero illum sequi enim, beatae?  
Quas excepturi dolor eum illo velit, deserunt!

*Find the  
light*

# Variable fonts



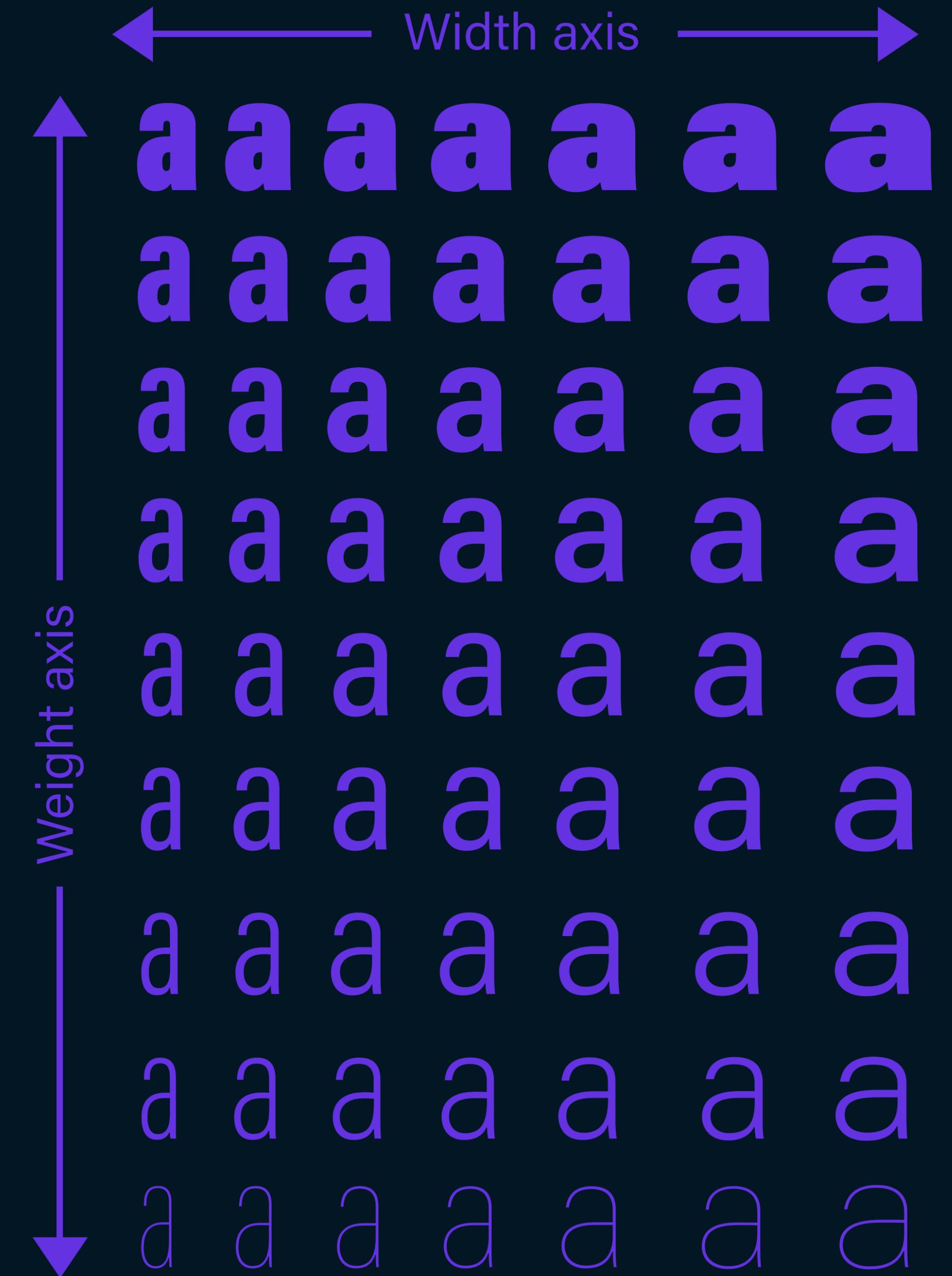
@mandy\_kerr



**Weight Axis**



a



**one font that acts like multiple**



**one font that acts like multiple**

900	234kb
810	234kb*
700	235kb
600	233kb
500	234kb*
400	230kb
360	234kb*
200	222kb

---

**1856kb**

**one font that acts like multiple**

900	234kb
810	234kb*
700	235kb
600	233kb
500	234kb*
400	230kb
360	234kb*
200	222kb
	<hr/>
	<b>924kb</b>



**Variable fonts can improve  
actual and perceived  
*performance.***



```
font-family: "Source Sans Variable", Variable Fallback, Arial, sans-serif;
```



# Layout shifting caused by mis-matched fallback and custom font.



The fox jumped over the lazy dog, the scoundrel.

**Consectetur** adipisci elit, sed do eiusmod tempor  
incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud  
exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure  
dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.  
Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit  
anim id est laborum.

The fox jumped over the lazy dog, the scoundrel.

*meowni.ca/font-style-matcher*



**Attempts to match the fonts as closely as possible.**



@mandy\_kerr

The *implementation* of  
variable fonts in CSS is  
very similar to what we do  
right now.

```
@font-face {  
    font-family: "Source Sans Variable";  
    src: url("source-sans-variable.woff") format("woff-variations");  
    font-weight: 200 700;  
}
```

```
@font-face {  
    font-family: "Source Sans Variable";  
    src: url("source-sans-variable.woff") format("woff-variations");  
    font-weight: 200 700;  
}
```



**The available *range* — you cannot access  
any values outside of this range.**

```
h1 {  
  font-family: "Source Sans Variable";  
  font-weight: 658;  
}
```

```
h1 {  
  font-family: "My Variable Font";  
  font-variation-settings: 'wght' 375, 'INLI' 88;  
}
```

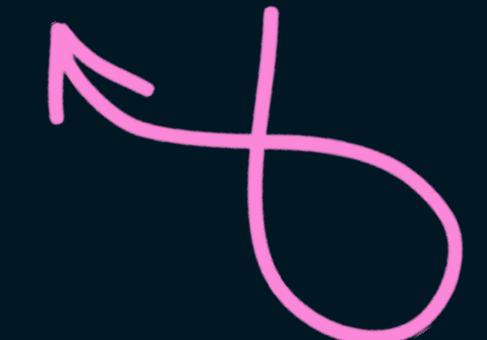
A named axis  
for font weight



A custom axis  
called *inline*

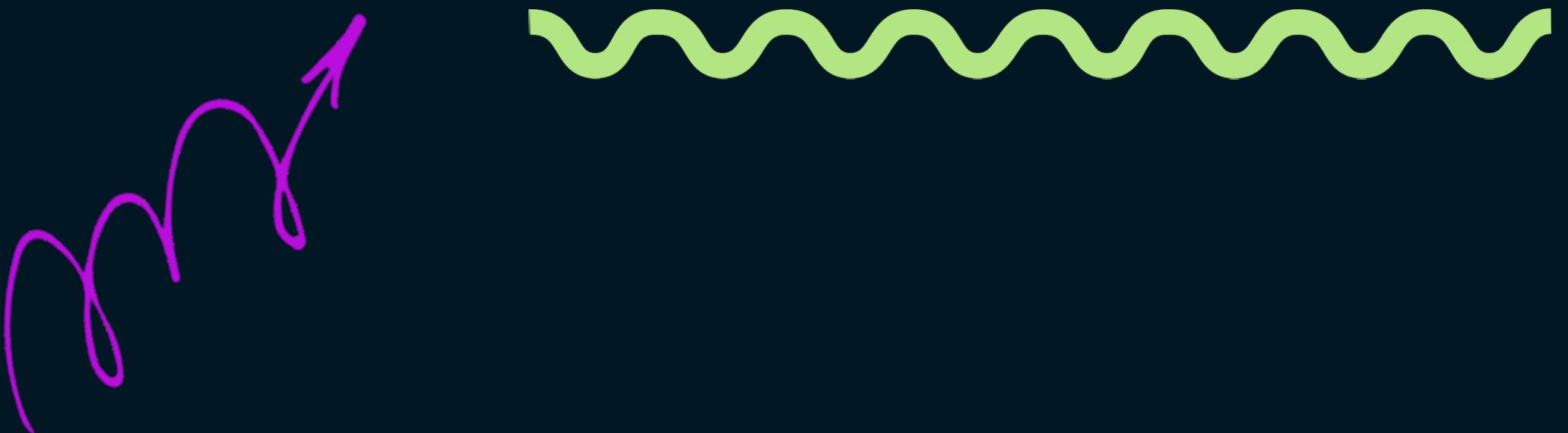
```
h1 {  
  font-family: "Source Sans", sans-serif;  
  font-weight: 700;  
}  
  
@supports (font-variation-settings: normal) {  
  h1 {  
    font-family: "Decovar";  
    font-variation-settings: "INLI" 88;  
  }  
}
```

**When we are not limited by  
technical considerations,  
creativity can determine  
our *choices*.**



GRASS

**Because variable fonts can have an  
interpolated range of values, we can  
create *fluid variations*.**



```
h1 {  
  font-family: "Decovar";  
  font-variation-settings:  
    "INLI" 1000, "SWRM" 0;  
}
```

GRASS

```
h1 {  
  font-family: "Decovar";  
  font-variation-settings:  
    "INLI" 0, "SWRM" 1000;  
}
```

GRASS

```
h1 {  
  font-family: "Decovar";  
  font-variation-settings: "INLI" 0, "SWRM" 1000;  
}
```

```
@keyframes grow {  
  0% {  
    font-variation-settings: "INLI" 1000, "SWRM" 1000;  
  }  
  
  50% {  
    font-variation-settings: "INLI" 1000, "SWRM" 0;  
  }  
}
```



```
h1 {  
    font-family: "Decovar";  
    font-variation-settings: "INLI" 0, "SWRM" 1000;  
    animation: grow 4s linear infinite;  
}  
  
@keyframes grow {  
    0% {  
        font-variation-settings: "INLI" 1000, "SWRM" 1000;  
    }  
  
    50% {  
        font-variation-settings: "INLI" 1000, "SWRM" 0;  
    }  
}
```



GRASS



**Font: Duos Writer by Underware**

# variablefonts

INPEXIT

WIND

**Font: Wind VF by Hansje van Halem**

**Font: Zycon by David Berlow**

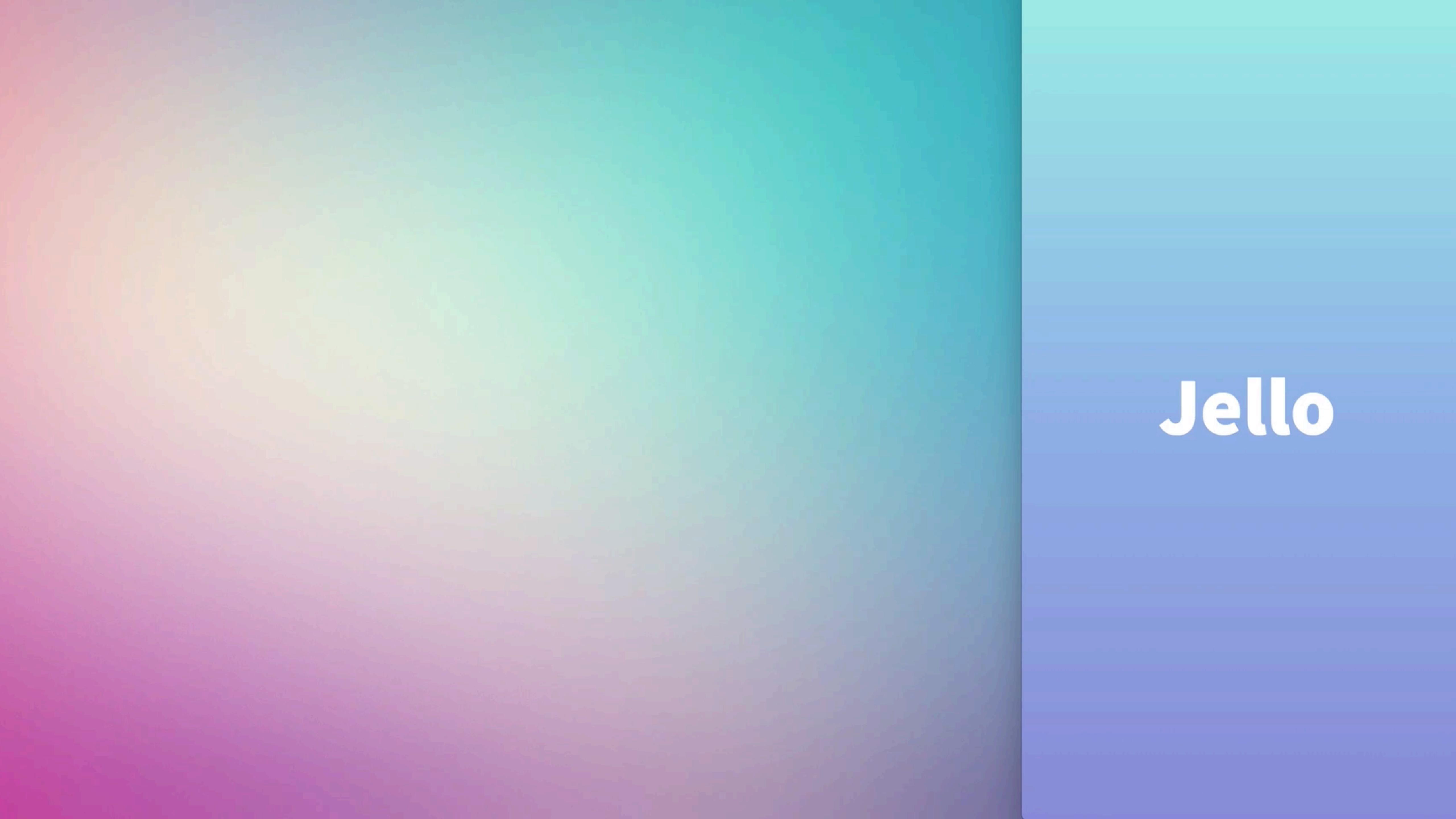
Font: Decovar by David Berlow



chee

**Variable fonts allow web typography  
to adapt to screens, environments  
and our devices or technologies.**



The background of the image is a soft-focus photograph of a jello mold. The mold is filled with a translucent, light-colored gelatinous substance and contains visible pieces of fruit, likely strawberries and kiwi, giving it a vibrant, multi-colored appearance.

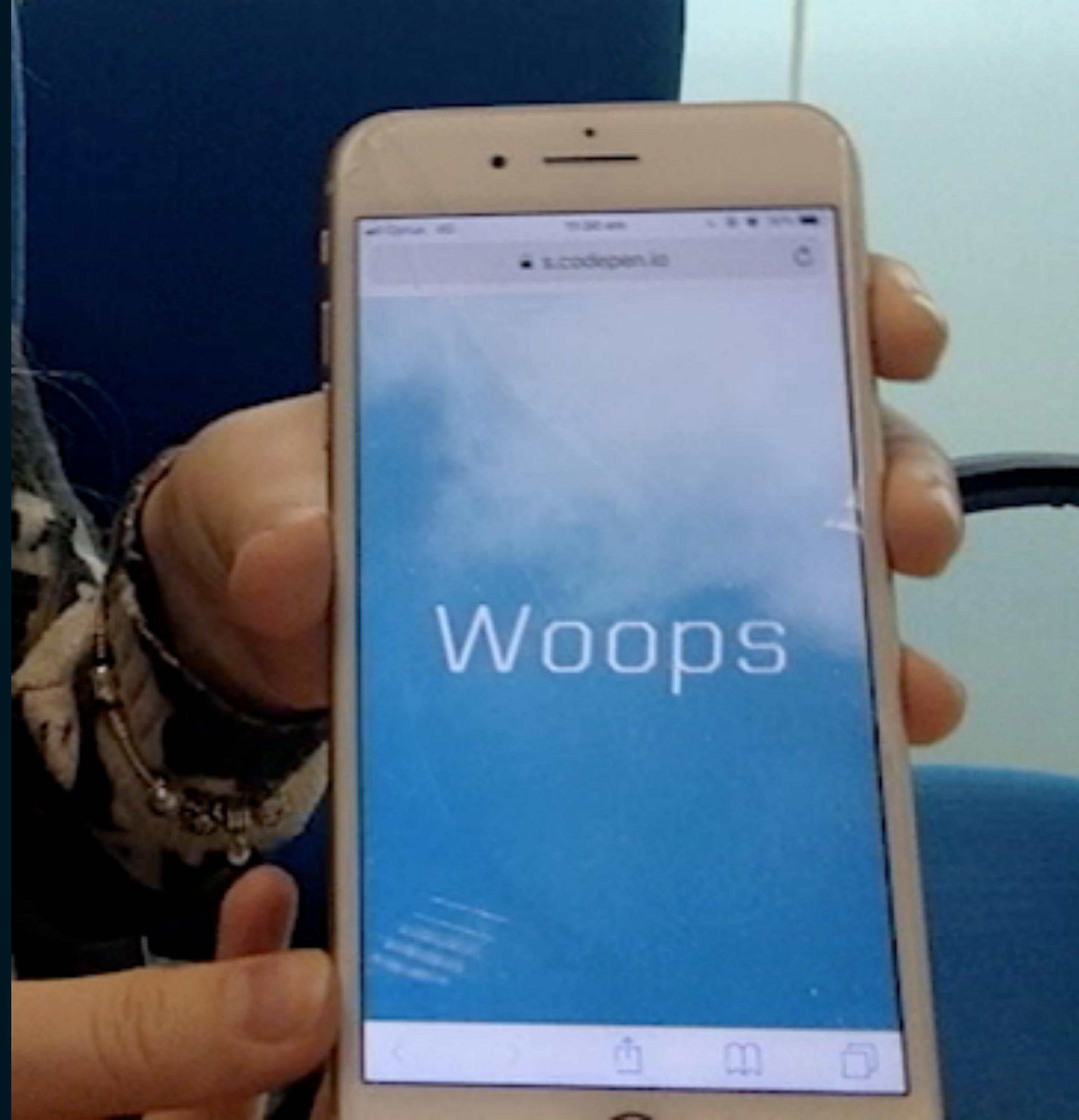
Jello



squeeeze

scroll







by Andrew Johnson and Erik van Blokland

<https://medium.com/@aetherpoint/reading-distance-and-variable-fonts-1f6e1ffd1879>

 @mandy\_kerr

[Home](#)[Moments](#)[Notifi](#)

Isabel Lea  
@isabellea95

[studioatypical.com](#)

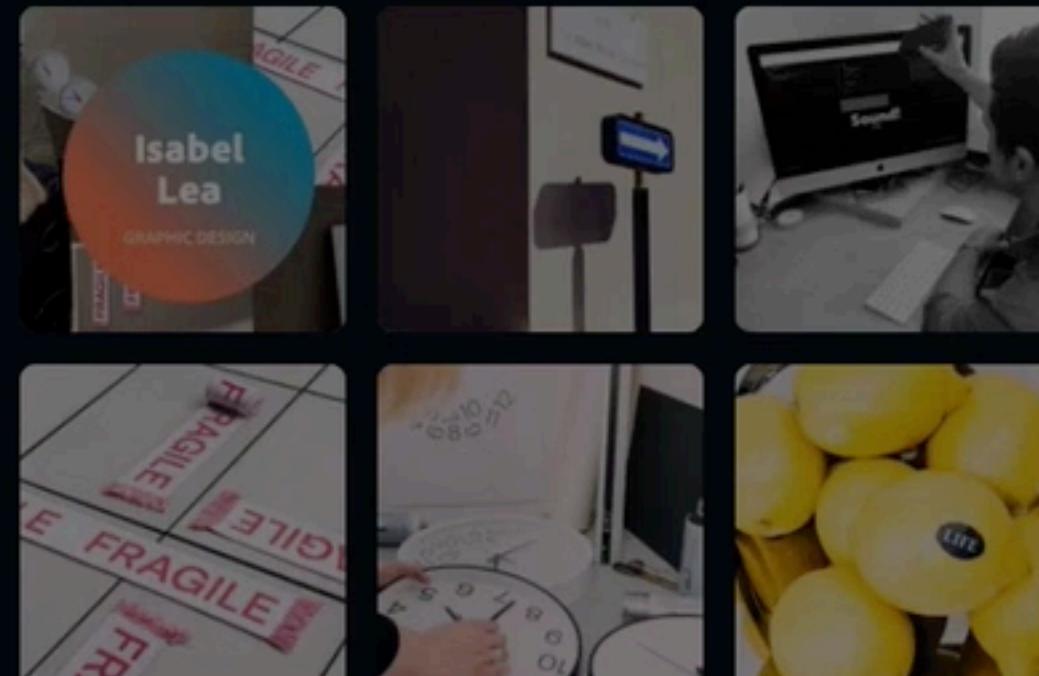
Joined October 2014

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Isabel Lea  
@isabellea95

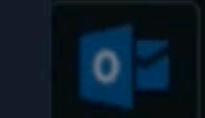
Following

Our #variablefont experiment loves a round of applause



Aaron Bernstein @Hungr...

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Import your contacts from Outlook

Connect other address books

Trends for you · Change

#NBL19

#9TheBlock

1,034 Tweets

#PineGap

Jimin

2.59M Tweets

Alexa

35.6K Tweets

#TheProjectTV

#alltogethernowau

#ShakespeareSunday

1,868 Tweets

#SundayMotivation

21.6K Tweets

David Davis



## Tom Lokhorst

@tomlokhorst

Functional Programming enthusiast.  
Software Writer at [@Q42](#).

⌚ The Netherlands

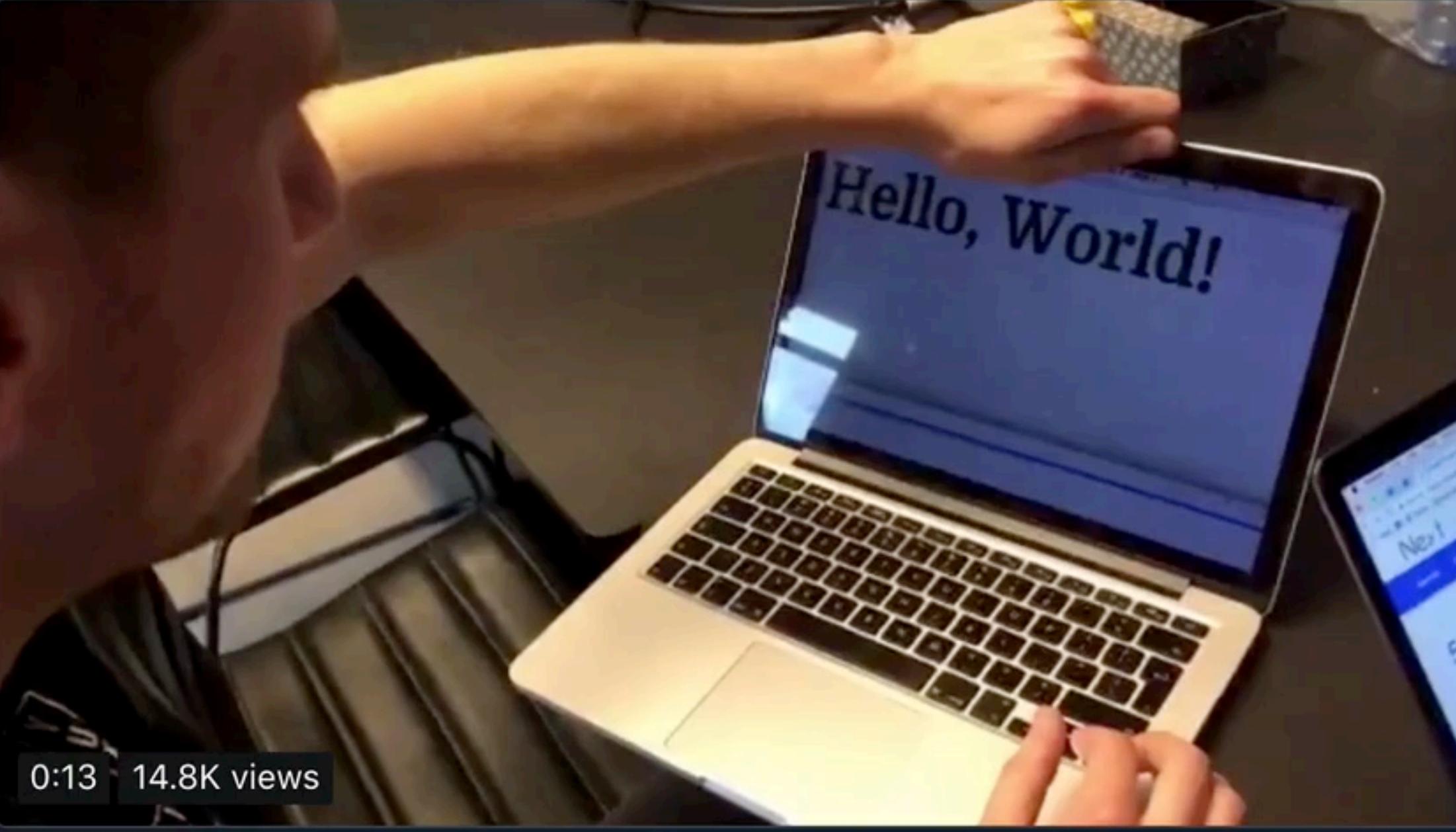
🔗 [tom.lokhorst.eu](http://tom.lokhorst.eu)

📅 Joined May 2008

 **Tom Lokhorst**  
@tomlokhorst

**Following**

Changing font grade (weight irrespective of width) based on ambient light. “Heavy” font in low-light. **#typography** [@q42](#)



0:13 14.8K views

4:31 AM - 2 Mar 2017

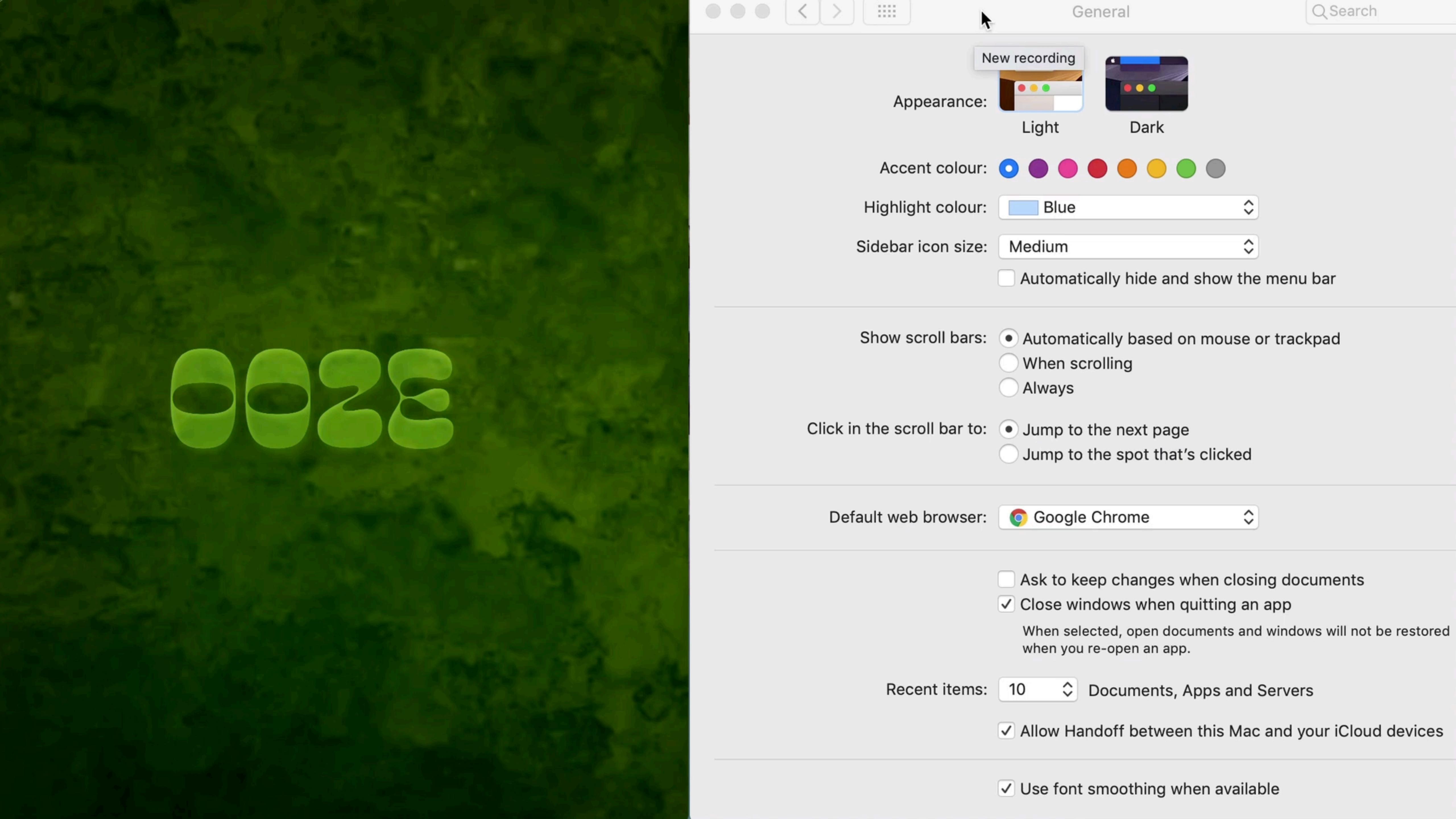
227 Retweets 431 Likes

13 227 431

*CSS Media Queries, Level 5 will give us more control over things like environment, light, contrast and colour scheme directly in our CSS.*



```
h1 {  
  font-variation-settings: "TEMP" 0;  
  transition: all 4s linear;  
}  
  
@media (prefers-color-scheme: dark) {  
  h1 {  
    font-variation-settings: "TEMP" 1000;  
  }  
}
```

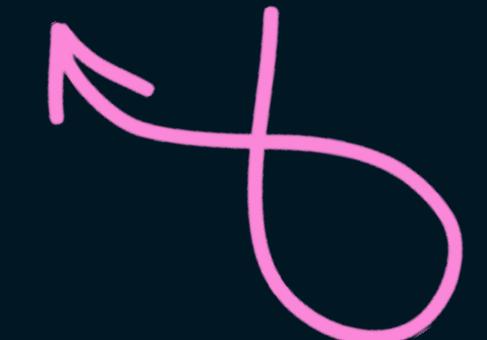




**We can improve the readability and accessibility of our content. This is a level of control that is *unprecedented*.**



**When we are not limited by  
technical considerations,  
creativity can determine  
our *choices*.**



# Still I Rise

Maya Angelou

YOU  
MAY

s h o o t m e

with your words,

YOU  
MAY

c u t m e

with your eyes,

YOU  
MAY

k i l l m e

with your hatefulness,

But still, like, air

# STILL RISE.

100  
200  
240  
320  
400  
500  
560  
640  
720  
800  
900

1 x serif font  
1 x sans serif  
11 x weights  
226kb

**HE**

# TELLS *her*

BY WENDY COPE

**HE** tells *her* that the earth  
is FLAT

In  
altercations  
fierce and  
L O N G

But **HE** has  
learned to  
argue well.

And often asks *her* not to  
yell.

**HE** knows the facts, and  
**that is that.**

She tries *her* best to  
prove him wrong.

**HE** calls her arguments  
unsound

She cannot win. **HE**  
stands his ground.

The planet goes on being **round**.

200  
300  
500  
600  
850  
900

1 x serif font  
1 x sans serif  
6 x weights

# & qit Bibendum

ETIAM

Vestibulum id ligula porta felis  
euismod semper?



Donec ullamcorper nulla non  
metus auctor fringilla.  
Praesent commodo cursus  
magna, vel scelerisque nisl  
consectetur et.

Praesent commodo  
cursus magna, vel  
scelerisque nisl  
consectetur et.  
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.

Aenean lacinia bibendum nulla sed consectetur. Cras  
mattis consectetur purus sit amet fermentum.  
Vivamus sagittis lacus vel augue laoreet rutrum  
faucibus dolor auctor.

“*Fusce dapibus, tellus ac cursus  
commodo, tortor mauris  
condimentum nibh, ut fermentum  
massa justo sit amet risus.*

Nullam quis risus eget urna mollis ornare vel eu leo.  
Praesent commodo cursus magna, vel scelerisque nisl  
consectetur et.

Praesent commodo cursus magna, vel scelerisque nisl  
consectetur et. Vivamus sagittis lacus vel augue  
laoreet rutrum faucibus dolor auctor. Donec id elit non  
mi porta gravida at eget metus.

Morbi leo risus, porta ac consectetur ac, vestibulum at  
eros. Sed posuere consectetur est at lobortis.

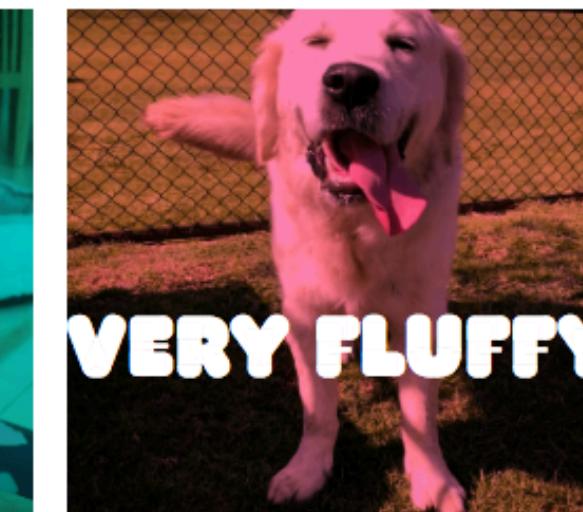
**Curabitur blandit tempus porttitor.** Curabitur blandit  
tempus porttitor. Sed posuere consectetur est at  
lobortis. Integer posuere erat a ante venenatis dapibus  
posuere velit aliquet.

**Cras mattis consectetur purus sit  
amet fermentum.**

Nulla vitae elit libero, a pharetra augue. Aenean eu leo  
quam. Pellentesque ornare sem lacinia quam venenatis  
vestibulum. Maecenas sed diam eget risus varius blandit sit  
amet non magna. Cum sociis natoque penatibus et magnis dis  
parturient montes, nascetur ridiculus mus. Etiam porta sem  
malesuada magna mollis euismod. Cum sociis natoque penatibus et

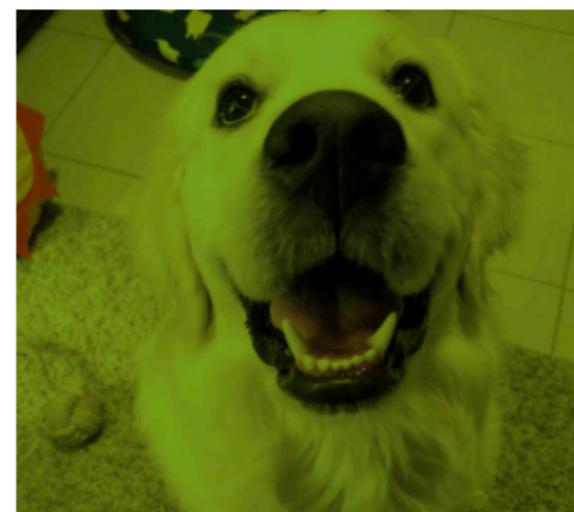


Jello, you  
little fluffy  
fellow.

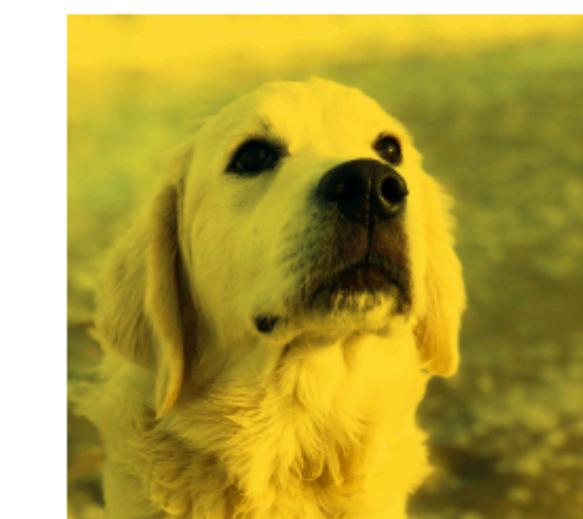


# JELLO

The **fluffiest** doggy in  
all the land



Nothing  
compares to  
**JELLO.**



**GOO  
DEST**



@mandy\_kerr

**CLIP-PATH** CSS GRID FLEXBOX  
FILTER MASK **MIX-BLEND-MODE**  
BACKGROUND-CLIP PERSPECTIVE  
TRANSFORM **TEXT-SHADOW**  
TEXT-DECORATION TRANSITION  
**BOX-SHADOW** BORDER-RADIUS  
GRADIENT ::FIRST-LETTER  
DISPLAY OPACITY ANIMATION

Jello.

A little fluffy dog.

Hello squishy  
jello you little  
fluffy fellow.

Bouncy yellow Jello.

A very mellow fellow.

**EATING MY MARSHMALLOW.**

**There has never been a  
better time to *create* for  
the web.**



**Thank you.**



@mandy\_kerr



@mandymichael

**This presentation was proudly brought to you by**  
**Arial Black and *Times New Roman.***

