

ACCESSIBILITY WITHOUT THE API

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PREVIOUS CLIENTS



WHAT GOT ME STARTED ON ACCESSIBILITY

ACCESSIBILITY FOR EVERYONE

LAURA KALBAG



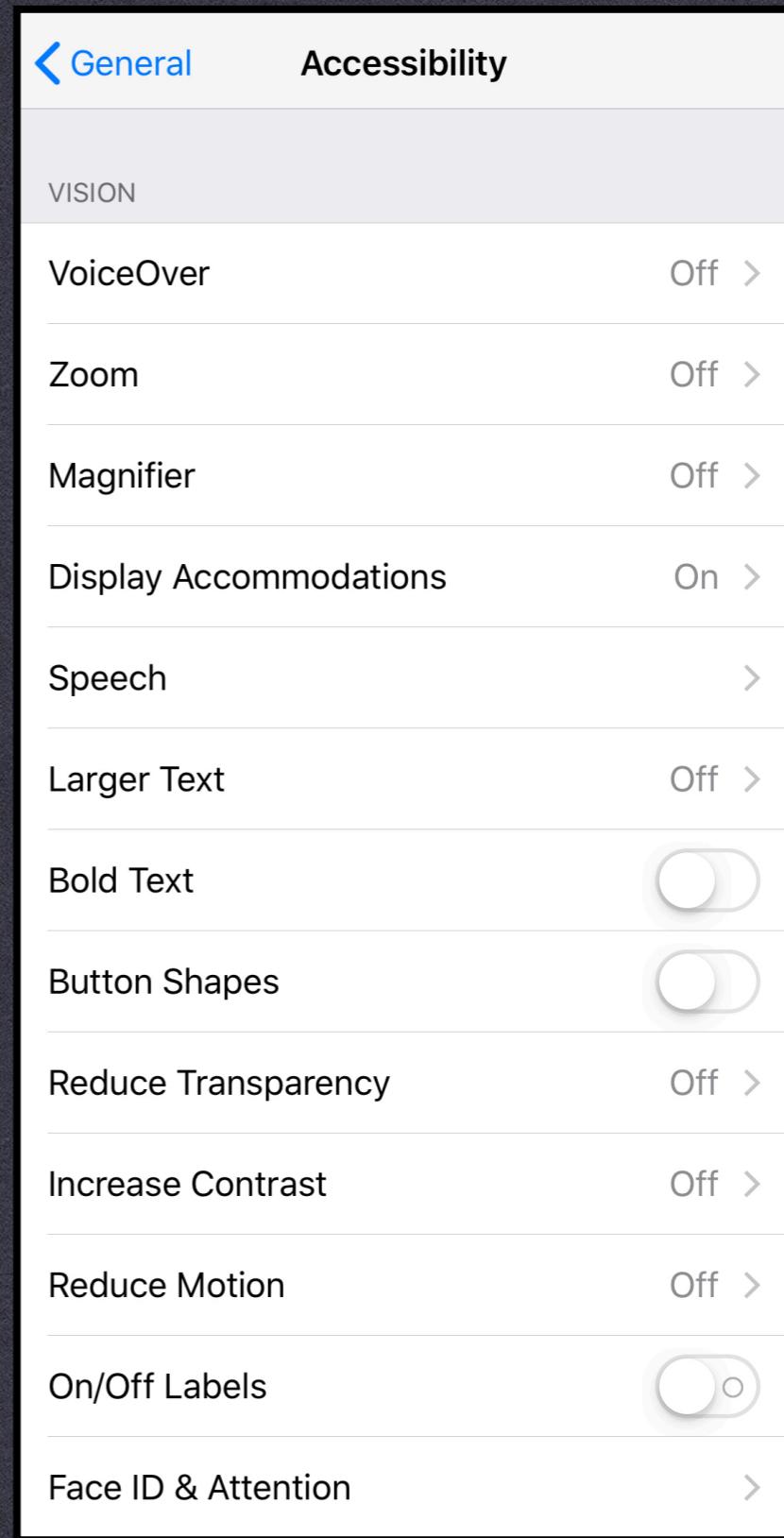
GLOBAL ACCESSIBILITY AWARENESS DAY

THURSDAY, MAY 16 2019

<https://globalaccessibilityawarenessday.org/>

ACCESSIBILITY

IOS 12.1.2



CASE STUDY

NIAMH, 13 YEARS OLD

IRLEN SYNDROME

<https://irlen.com/what-is-irlen-syndrome/>

**“WORDS JUST JUMP AROUND
AROUND THE SCREEN”**

NIAMH, 13 YEARS OLD

CASE STUDY #1

APPS USED

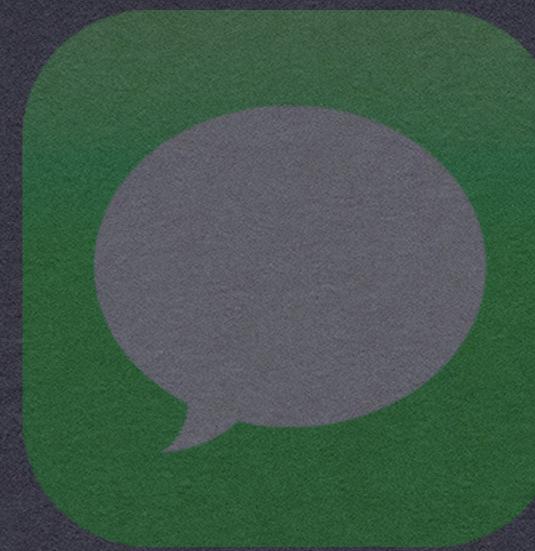
FAVOURITE APPS

INSTAGRAM
SNAPCHAT
IMESSAGE
GMAIL



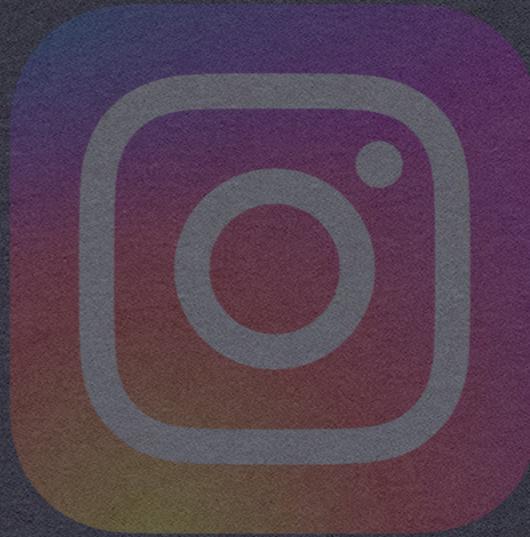
FAVOURITE APPS

INSTAGRAM



FAVOURITE APPS

SNAPCHAT



FAVOURITE APPS

iMESSAGE



FAVOURITE APPS

GMAIL



CASE STUDY #2

SHOPPING APP

SEARCH FOR A PRODUCT SIMPLY BE

← NEW IN 

1,224 Items Sort Refine



£25.00  Sequin Lips Embellished T Shirt



£39.00  Joe Browns Longline Blouse



£29.00  Black Plunge Midi



£40.00  Pink Oversized Denim Jacket

 HOME  SHOP  BAG (3)  SAVED  ACCOUNT

UNDERSTANDING A COLOUR PREFERENCE

HOW DO WE SOLVE THIS?

**WILL THIS SOLVE IT FOR
EVERYONE?**

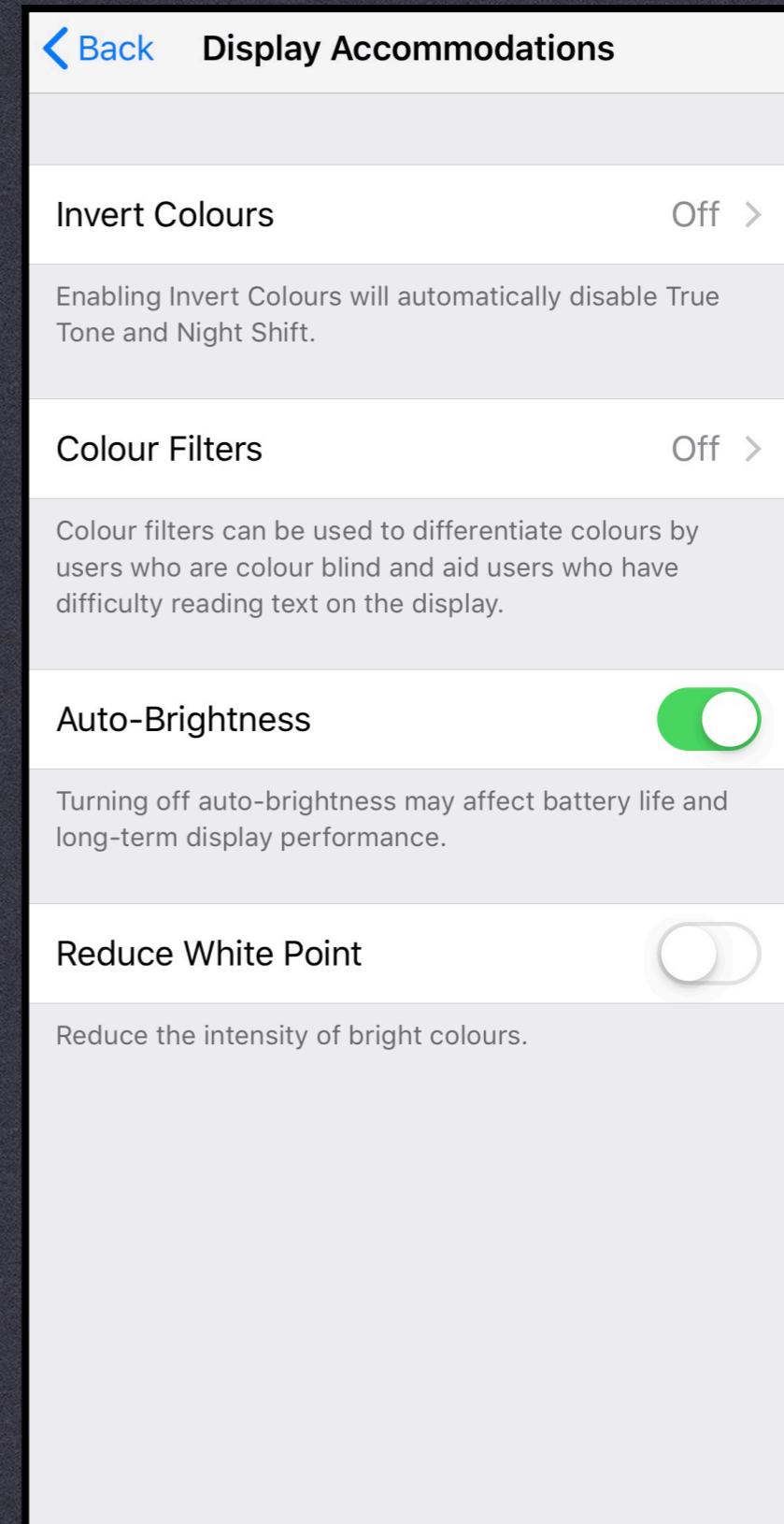
“YOU DON’T JUST GET PRESCRIBED A COLOUR”

CASE STUDY #3

AVAILABLE OPTIONS AS A USER

DISPLAY ACCOMMODATIONS

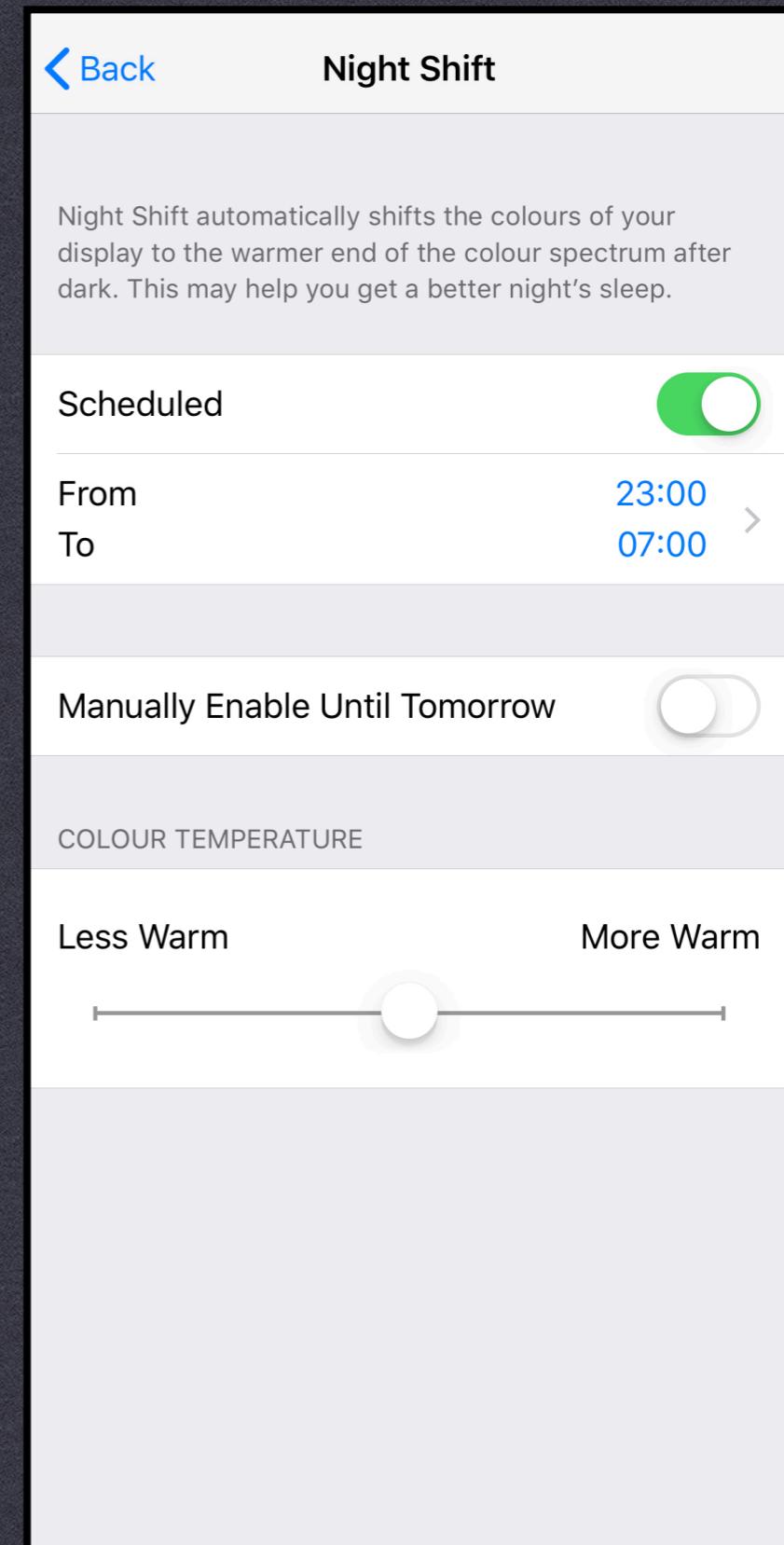
NIGHT SHIFT
INCREASED CONTRAST
SMART INVERT
CLASSIC INVERT
REDUCE WHITE POINT



NIGHT SHIFT

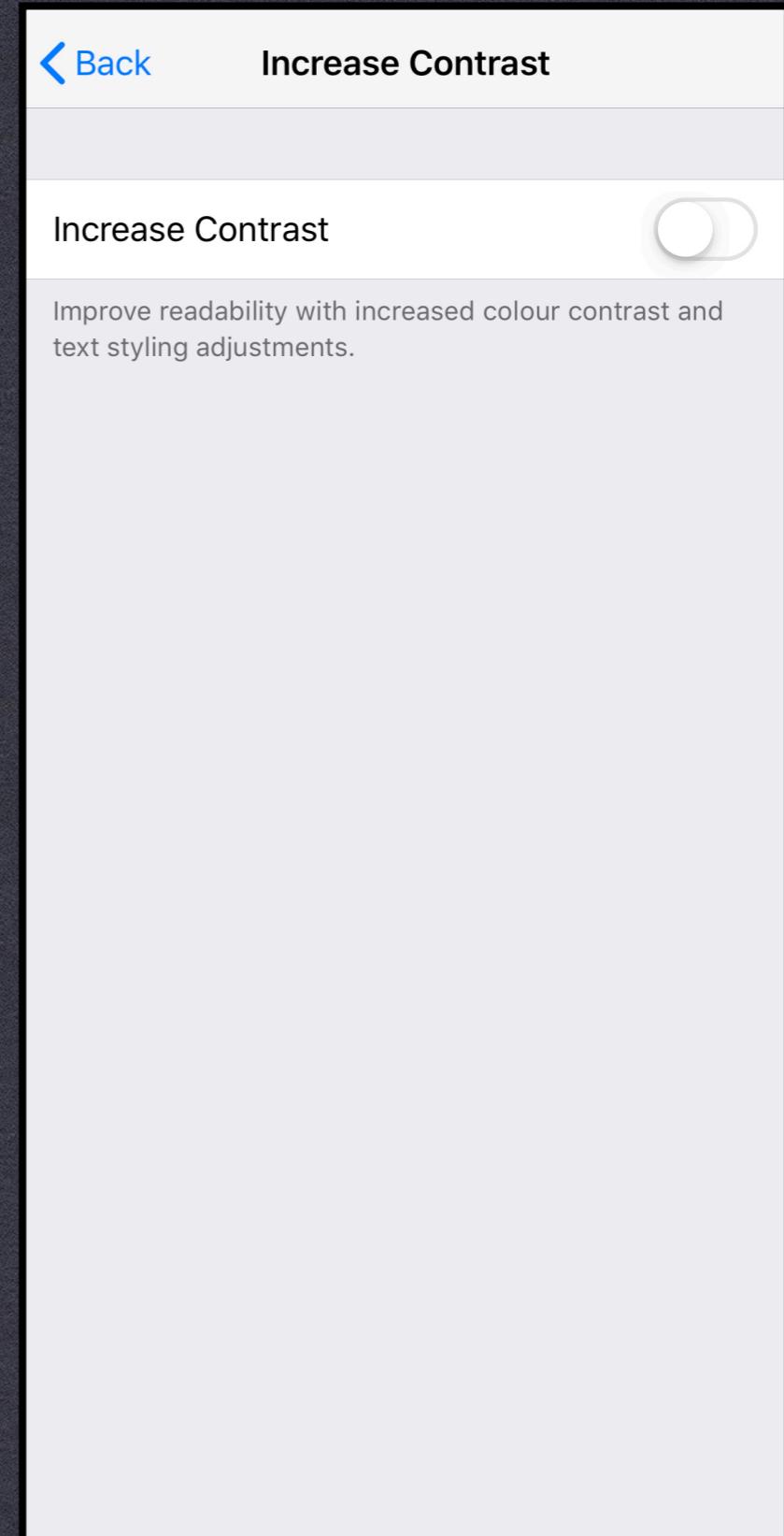
FIRST INTRODUCED

IOS 9.3



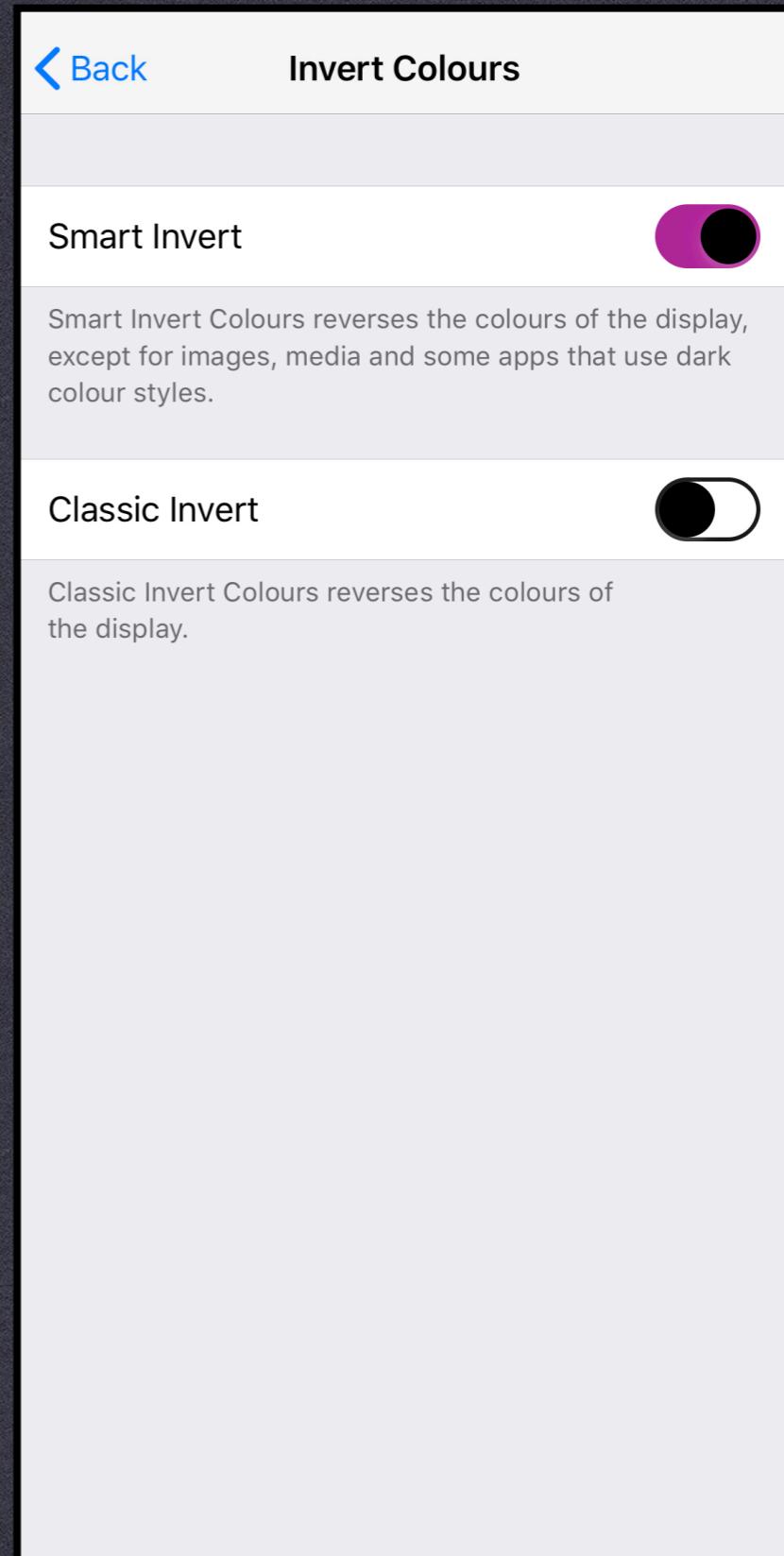
INCREASED CONTRAST

IMPROVE READABILITY



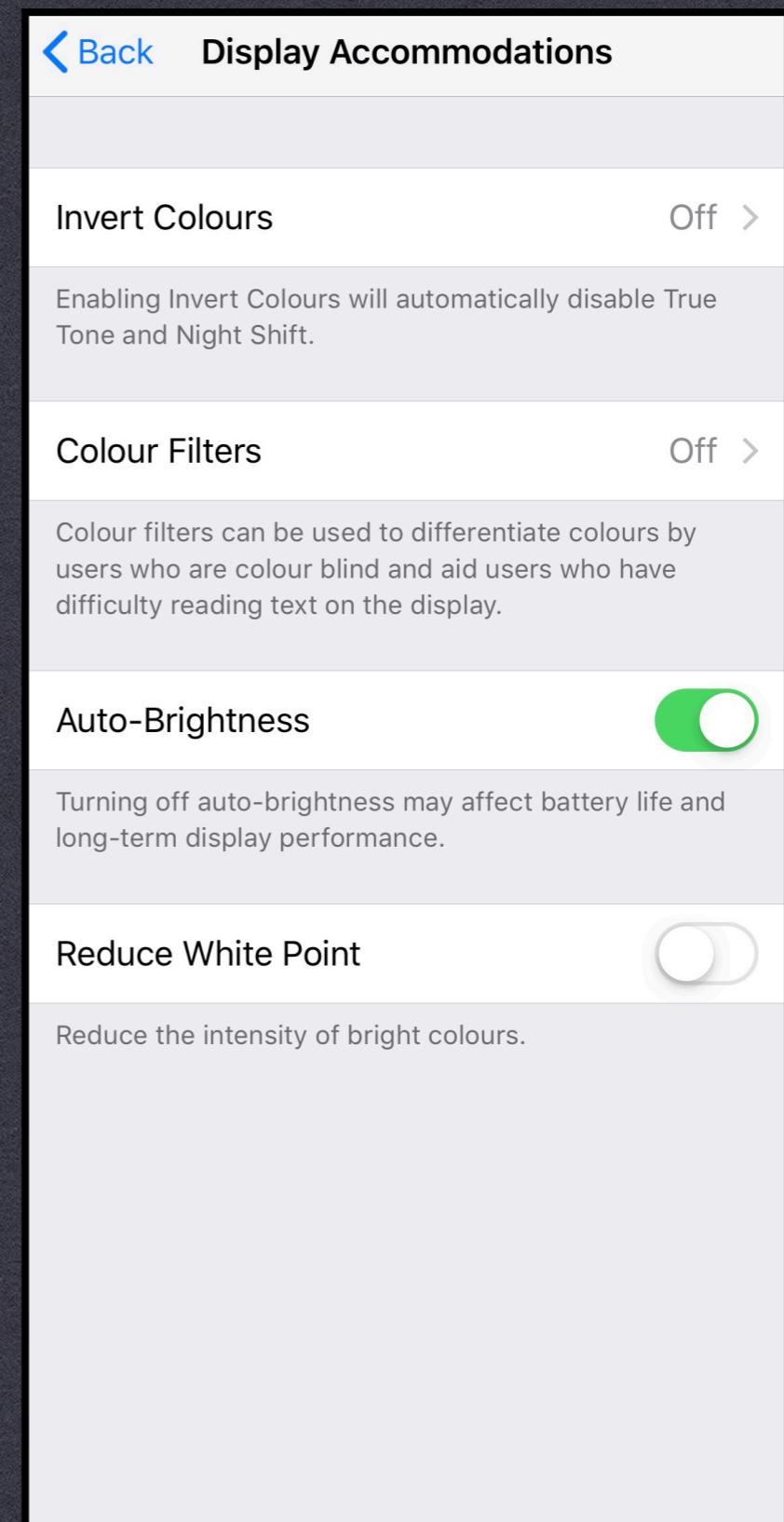
SMART INVERT & CLASSIC INVERT

“THE ORIGINAL”
IOS “DARK MODE” - 😜



**REDUCE WHITE
POINT**

**REDUCE THE INTENSITY OF
BRIGHT COLOURS**



DO ACCESSIBILITY
GUIDELINES HELP
FOR DEVELOPERS?

YES THEY DO...

Requesting Permission
Test your app with accessibility features. In addition to text and motion changes, accessibility options can change contrast, invert colors, reduce transparency, and more.

[Overview](#) [Resources](#) [Videos](#) [What's New](#)

Human Interface Guidelines

- › User Interaction
- › System Capabilities
- › Visual Design
- › Icons and Images
- › Bars
- › Views
- › Controls
- › Extensions

macOS

tvOS

watchOS

- › Technologies

Enable these settings and observe how your app will look and behave for people who enable these features.

Include closed captions and audio descriptions. Closed captions allow the deaf and hard-of-hearing to perceive spoken dialogue and other audible content in videos. Audio descriptions provide spoken narration of important video content for the visually impaired.

Use sufficient color contrast ratios. Insufficient contrast in your app makes content hard to read for everyone. Icons and text might blend with the background, for example. An online color contrast calculator can help you accurately analyze the color contrast in your app, to ensure that it meets optimal standards. Strive for a minimum contrast ratio of 4.5:1, although 7:1 is preferred because it meets more stringent accessibility standards. For additional design guidance, see [Color](#).

For more information, see [iOS Accessibility](#) and [UIKit Accessibility](#).

<https://developer.apple.com/design/human-interface-guidelines/ios/app-architecture/accessibility/>

WHAT DO OTHER APPS DO?

#DARKMODE (PRE IOS 13)

OTHER APPS

INSTAGRAM

WHATSAPP

FACEBOOK

ASOS

BOOHOO

TWITTER



#FFFFFF

WHITE, BLANCO, BLANC, WEIß

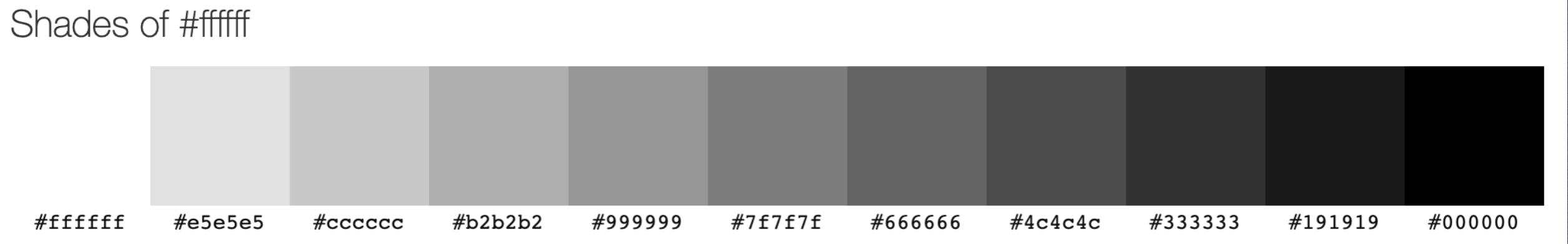
**WHITER THAN
WHITE
LIKE, REALLY WHITE....**



CASE STUDY #4

THE LITTLE THINGS

MOVING UP THE VARIOUS SHADES OF #FFFFFF



MOVING UP THE MONOCHROMATIC SCALE OF #FFFFFF



<https://developer.apple.com/design/human-interface-guidelines/ios/app-architecture/accessibility/>

#F2F2F2
SLIGHTLY BETTER

← NEW IN 

1,202 Items Sort Refine



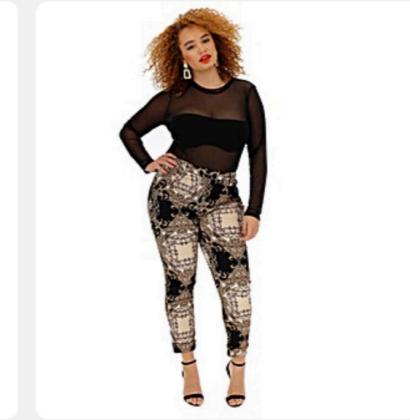
£20.00  Sequin Lips Embellished T Shirt



£29.00  Black Plunge Midi



£40.00  Pink Oversized Denim Jacket



£20.00  Scarf Print Crepe Tapered Leg Ankle

 HOME  SHOP  BAG  SAVED  ACCOUNT

#E5E5E5
SAME AS #F2F2F2

← NEW IN 

1,202 Items Sort Refine



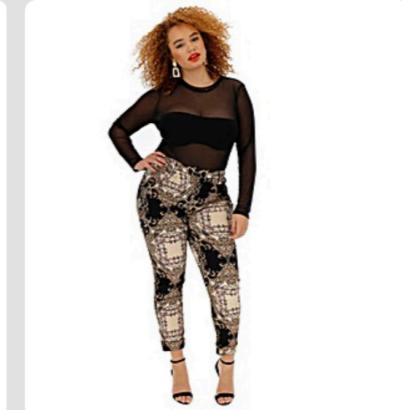
£20.00  Sequin Lips Embellished T Shirt



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£20.00  Scarf Print Crepe Tapered Leg Ankle

 HOME  SHOP  BAG  SAVED  ACCOUNT

#D8D8D8
MUCH BETTER,
6/10

← NEW IN 

1,202 Items Sort Refine



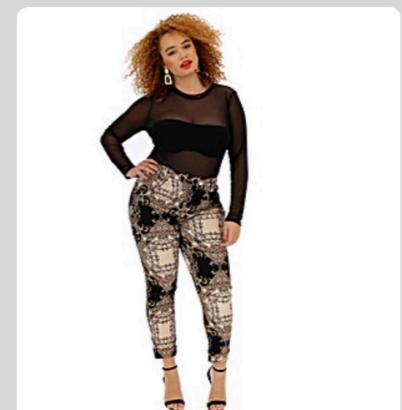
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£20.00  Scarf Print Crepe Tapered Leg Ankle

 HOME  SHOP  BAG  SAVED  ACCOUNT

#F8FD89
IMPROVEMENT ON #D8D8D8
3/10

← NEW IN 

1,202 Items Sort Refine



£20.00  Sequin Lips Embellished T Shirt



£29.00  Black Plunge Midi



£40.00  Pink Oversized Denim .jacket



£20.00  Scarf Print Crepe Tapered Leg Ankle

 HOME  SHOP  BAG  SAVED  ACCOUNT

CONCLUSION

I'VE NOT COME HERE TO SHARE A SOLUTION

ACCESSIBILITY @ WWDC 19



DARK MODE @ WWDC 19



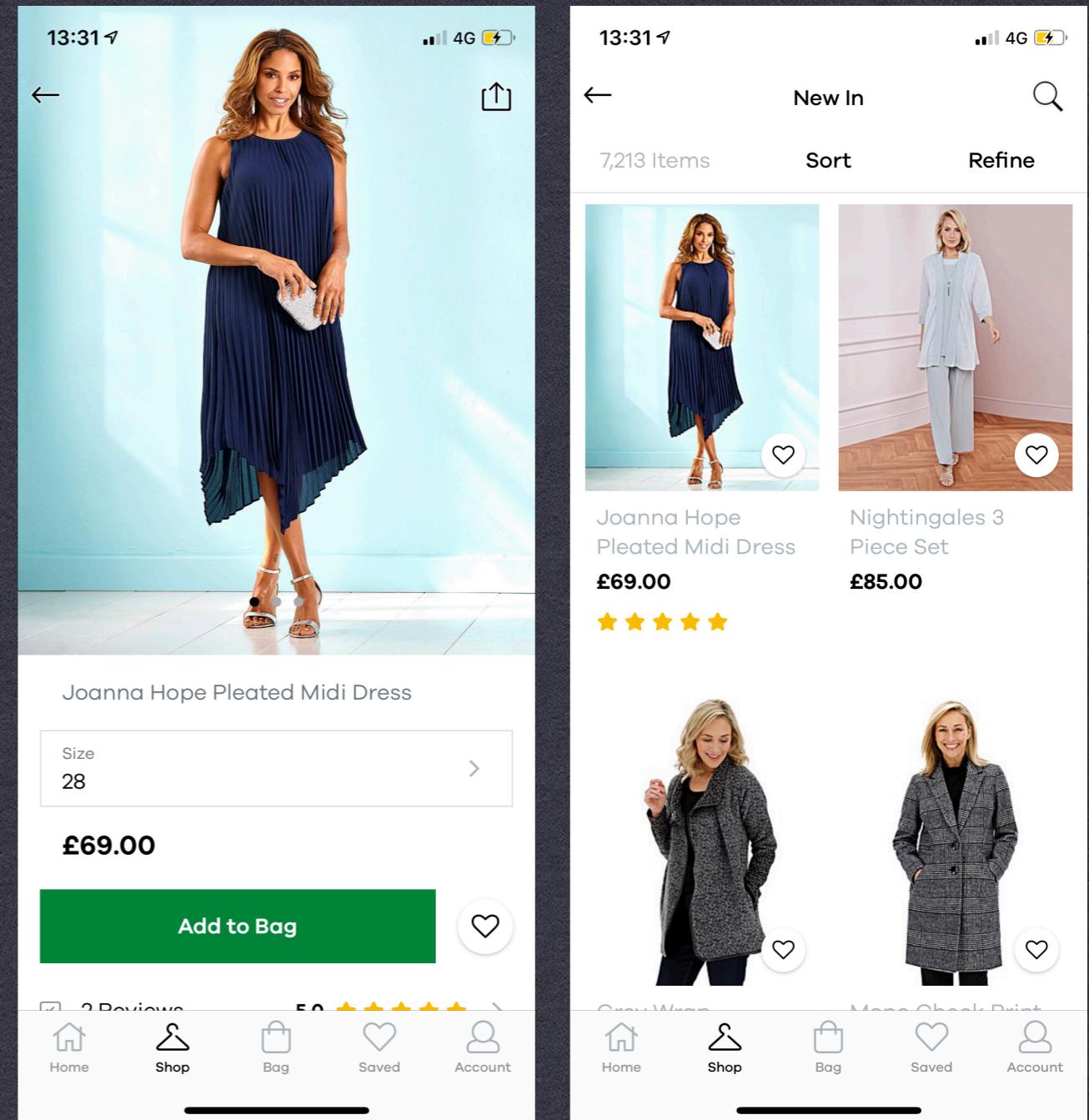
FEEDBACK

DON'T OVER COMPLICATE VOICE
OVER

USE CONTAINERS

DON'T INVERSE COLOURS

DYNAMIC TEXT



THANK YOU & QUESTIONS

PLEASE GO EASY ON ME,
IT'S ONLY MY "SEVENTH" EVER TALK



REFERENCES

APPLE HUMAN INTERFACE GUIDELINES

<https://developer.apple.com/design/human-interface-guidelines/ios/app-architecture/accessibility/>

<https://developer.apple.com/design/human-interface-guidelines/ios/visual-design/color/>

STUDY OF PEOPLE WITH AND WITHOUT DYSLEXIA

<https://www.cs.cmu.edu/~jbigham/pubs/pdfs/2017/colors.pdf>

WHAT IS IRLEN SYNDROME

<https://irlen.com/what-is-irlen-syndrome/>

GLOBAL ACCESSIBILITY AWARENESS DAY

<https://irlen.com/what-is-irlen-syndrome/>