

A close-up, shallow depth-of-field photograph of a person's hands. The person is holding a black smartphone in their right hand, looking at the screen. Their left hand is resting on a tablet device that is lying flat on their lap. The person is wearing a dark blue jacket over a red and white plaid shirt. The background is blurred, showing what appears to be an outdoor setting with wooden benches.

Dos and don'ts when building an accessible app

Amir Ansari and Kira Eviston



Who are we?



Amir Ansari

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Head of User Experience

21 years' experience in the field of design, both as a Practitioner and Manager.



Kira Eviston

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Senior User Experience Consultant

12 years' in the design industry and eight of those years as a marketing professional.



creating digital experiences that
transform and inspire

The reality when building accessible apps

Dos and Don'ts

Resources

The reality

Scope



Time



Budget



Accessibility



Scope



Time

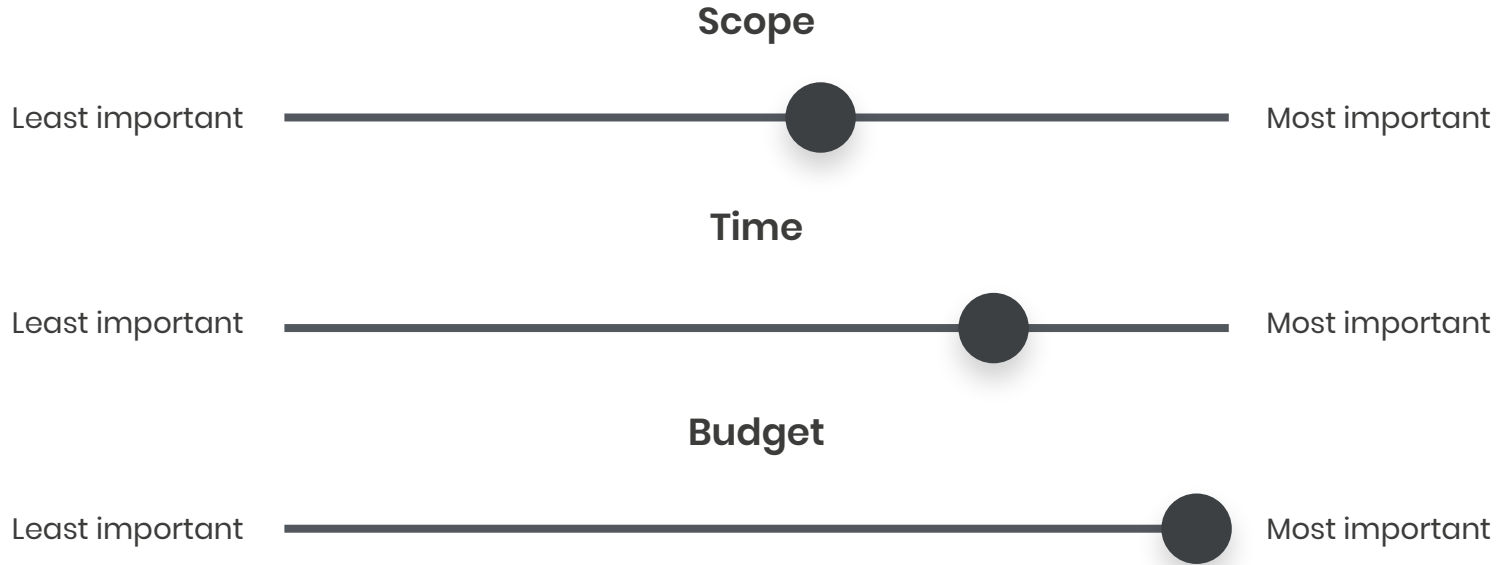


Budget



Accessibility





Accessibility is no longer a line item

The Dos and Don'ts

DO

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**Create your minimum
accessible level**

Baseline accessibility acceptance criteria

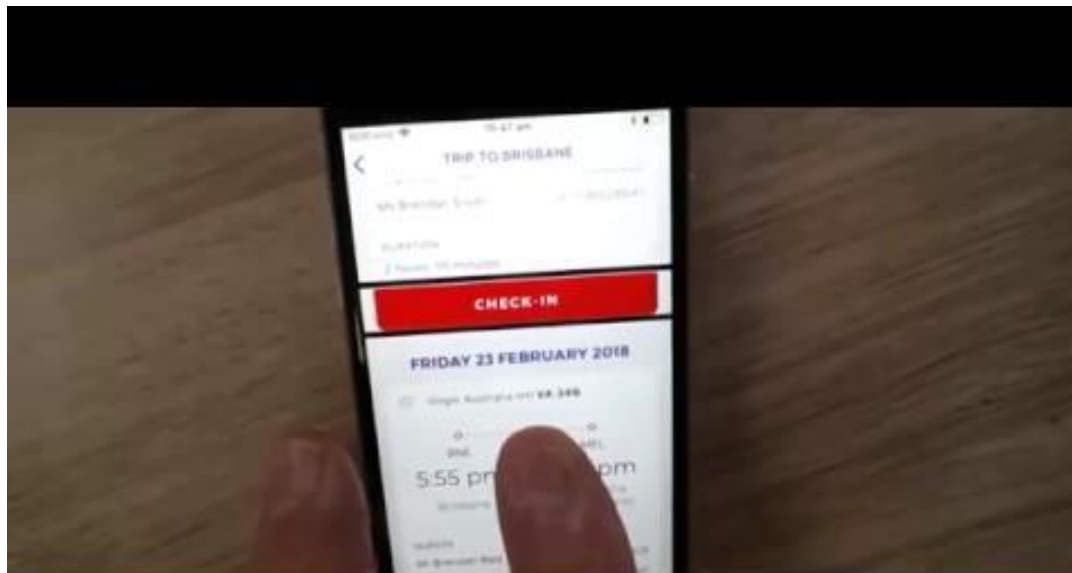
- **No autoplay** /continuous (flashing speed slow)
- **Touch target** - Android: 48x48 dp iOS: 44x44 pt
 - Sit 8dp away from another touch state
 - Labelled to allow for screen readers and assistive technology on all read parts of the interface.
- **Dynamic fonts** / adjusting containers
- Complimentary text and images **groupings**
- Image **alt text**
- **Colour contrast**
 - Small text: at least 4.5:1 against its background
 - Large text (at 14 pt bold/18 pt regular and up): at least 3:1
 - Icons: at least 4.5:1 contrast
- Screens have been uploaded and checked via Chrome extension: [Funkify](#)

DON'T

.....

**Assume baseline acceptance
criteria will be used**

DON'T: Assume baseline acceptance criteria will be used



Participant: It doesn't say what time the check in is there

DON'T: Assume baseline acceptance criteria will be used

Create issue

Import issues

Configure fields ▾

As a <user role>, I want to <do something> So that <reason you want to do something>

Background

Acceptance Criteria

- **Touch targets:** Android: 48x48 dp | iOS: 44x44 pt | 8dp away from other touch states
- **Colour contrast:** 4.5:1 minimum
- **VoiceOver to announce:** "Check-in" - Button

Single line statements describing - Validation Rules (Front end and/or Backend), Fields, Buttons, Success and Error scenarios, Data integrity considerations, analytics tags

Single line statements describing - Validation Rules (Front end and/or Backend), Fields, Buttons, Success and Error scenarios, Data integrity considerations, analytics tags

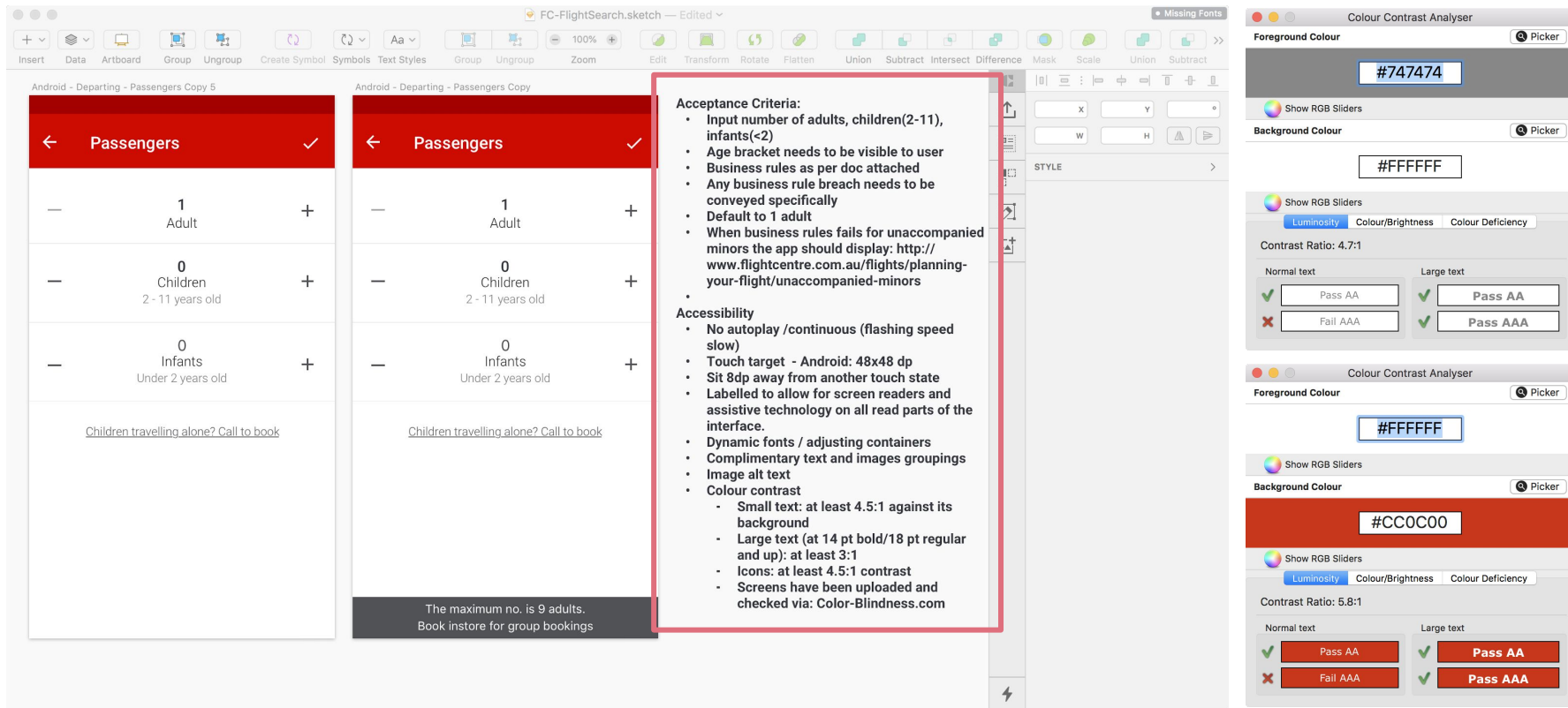
Technical Information

☐ Create another

Create

Cancel

DON'T: Assume baseline acceptance criteria will be used



Acceptance Criteria:

- Input number of adults, children(2-11), infants(<2)
- Age bracket needs to be visible to user
- Business rules as per doc attached
- Any business rule breach needs to be conveyed specifically
- Default to 1 adult
- When business rules fails for unaccompanied minors the app should display: <http://www.flightcentre.com.au/flights/planning-your-flight/unaccompanied-minors>

Accessibility

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 - Screens have been uploaded and checked via: Color-Blindness.com

Colour Contrast Analyser

Foreground Colour: #747474
Background Colour: #FFFFFF
Contrast Ratio: 4.7:1
Normal text: Pass AA
Large text: Pass AA

Foreground Colour: #FFFFFF
Background Colour: #CC0C00
Contrast Ratio: 5.8:1
Normal text: Pass AA
Large text: Pass AA

DO

.....

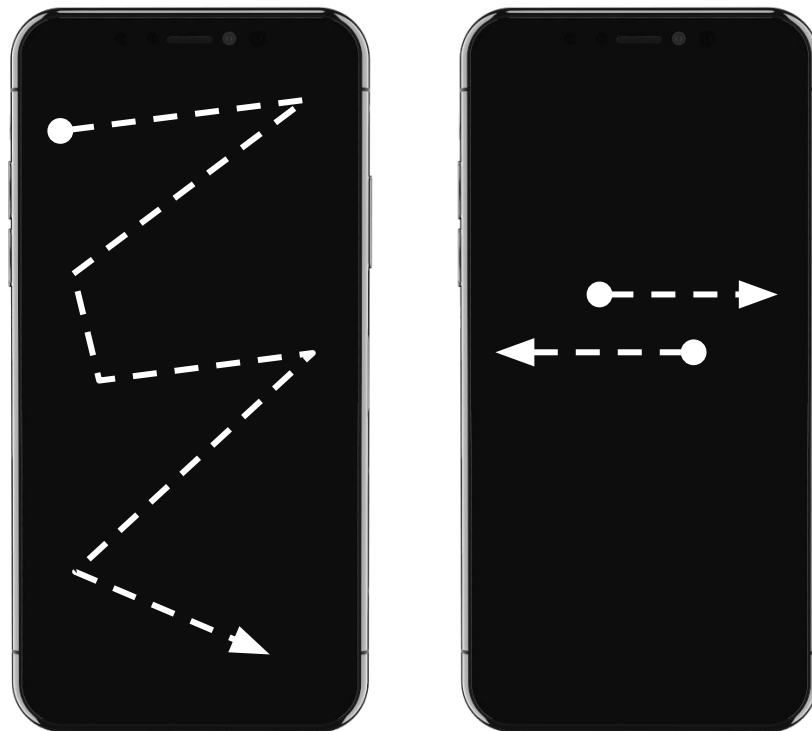
**Test with a wide range of
user types**

The
find
par

The logo for 'intopia' features the word in a lowercase, rounded sans-serif font. The 'o' is replaced by a stylized circular icon composed of three interlocking, curved segments in pink, yellow, and orange.

ssion:
t short or long
e's
(Voice Over) or
r/hand
rkinson's.

An aha moment



DON'T

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**Shy away from challenging
brand guidelines**

Airline



Before

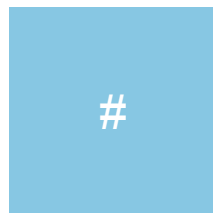
3.3:1



After

5.4:1

Bank



Before

1.9:1



After

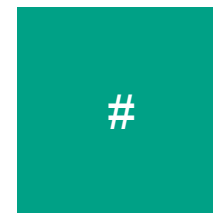
5.1:1

Not-for-profit



Before

1.9:1



After

3.7:1

Custom font

Custom font

Why use system fonts:

- Readability
- Optimised for smaller screens
- Trusted and tried rendering weights
- Dynamic text size support

DO

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**Think of accessibility at a
screen level**



MEL SYD 4:00 PM, 5:25 PM, 5:00 PM, 6:25 PM.

TRIP TO SYDNEY

THURSDAY, OCTOBER 4, 2018

 Virgin Australia VA 859 **DELETED**

MEL BNE

4:00 PM 5:25 PM

5:00 PM 6:25 PM

Melbourne (Tullamarine) Sydney

GUESTS


Mr Michelle Jones 1027002532



estimated arrival will be at 6:25 PM.

TRIP TO SYDNEY

THURSDAY, OCTOBER 4, 2018

 Virgin Australia VA 859 **DELAYED**

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4:00 PM 5:25 PM

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Melbourne (Tullamarine) Sydney

GUESTS

Ms Michelle Jones 1027002532

DON'T

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**Let accessibility training slip
with your team**

Training hubs

- Apple WWDC recordings and Tech Talks
<https://www.apple.com/au/accessibility/>
- Android Guidelines:
<https://support.google.com/accessibility/android/>
- Web Content Accessibility Guidelines (WCAG) 2.1
<https://www.w3.org/TR/WCAG21/>
- Apps for All
<https://www.appsforall.com.au/>

Gestures are everything

- Without shortcuts, you're in trouble!
- Phone form factor changes accessibility gestures (e.g. iPhone's removal of physical home button)
- Users use diverse gestures to suit their needs (e.g. two finger scrub, rotor, curtains)

DO

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Discuss and disagree

To announce or not to
announce...
That is the question!

DreamLab



You're supporting  Project Genetic Profile



Charge your device to power
DreamLab



Resources

Resources



[Appsforall.com.au](https://www.appsforall.com.au)

Tips for all members of a product team on what their responsibility is.



Colour Contrast Tools for designers

[Colour Contrast Analyzer](#)

[Funkify Chrome extension](#)



Platform Guidelines

[Google Material Guidelines](#)

[Apple Human Centred Guidelines](#)



[Accessibility scanner app](#)

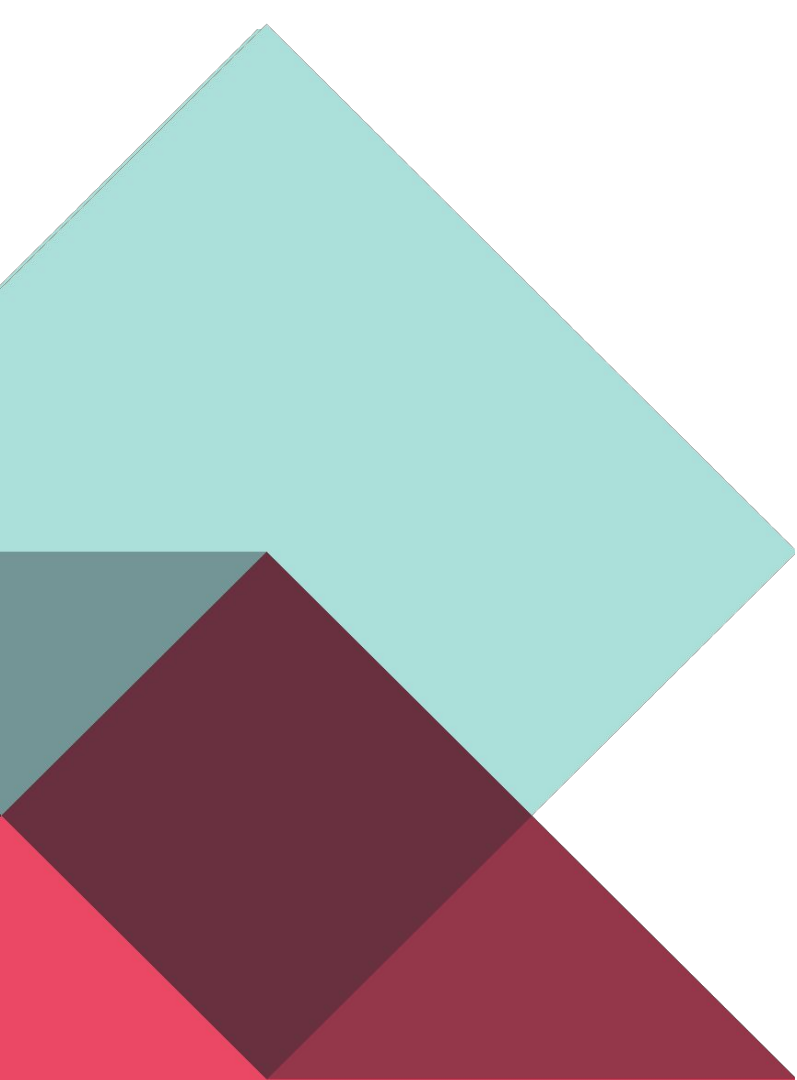
For Android, scans your app and tells you all the accessibility issues.

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Final Takeaways

Final takeaways

- Start somewhere – building an accessible app is an evolution.
- It's OK to get it wrong. Good, better, best.
- Showcase the impact being accessible has.
- Don't underestimate the benefits of grouping and going the extra mile.
- Keep up the conversation.



*Do the best you can until
you know better. Then
when you know better, do
better.*

Maya Angelou

Thank you

 amir_ansari

 kira_eviston

 transpire