



# Accessibility Apple Tools

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# Muhammad Ali

1942-2016



*"I have wrestled  
with the alligator,  
tussled with the  
whale."*

1 You think Ali means when he says "the alligator" and "the whale"?

Approximately one in  
seven people have a  
**disability** that affects the  
way they interact with the  
world and their devices.

*World Health Organization*

About **24% of the population**, almost **46 million brazilians**, declared having **some degree of difficulty** in at least one of the skills investigated (seeing, hearing, walking or climbing steps), or having a mental/intellectual disability.



# Types of Disabilities



## Situational

Based on a specific set  
of **circumstances**.



## Temporary

Affects you for a **short**  
**period** of time.



## Permanent

Refers to conditions  
that may **permanently**  
impair normal activities.

	Permanent	Temporary	Situational		Permanent	Temporary	Situational	
Touch				Hear				
See				Speak				
One arm	Arm injury	New parent	Blind	Cataract	Distracted driver	Non-verbal	Laryngitis	Heavy accent

"Some people need  
accessibility at all times and  
all people need  
accessibility at some point."

*Tim Berners Lee*  
World Wide Web Director

# ACCESSIBILITY **WCAG**

<https://www.w3.org/TR/WCAG22/#abstract>

<https://guia-wcag.com/>



# WCAG

WEB CONTENT ACCESSIBILITY GUIDELINES

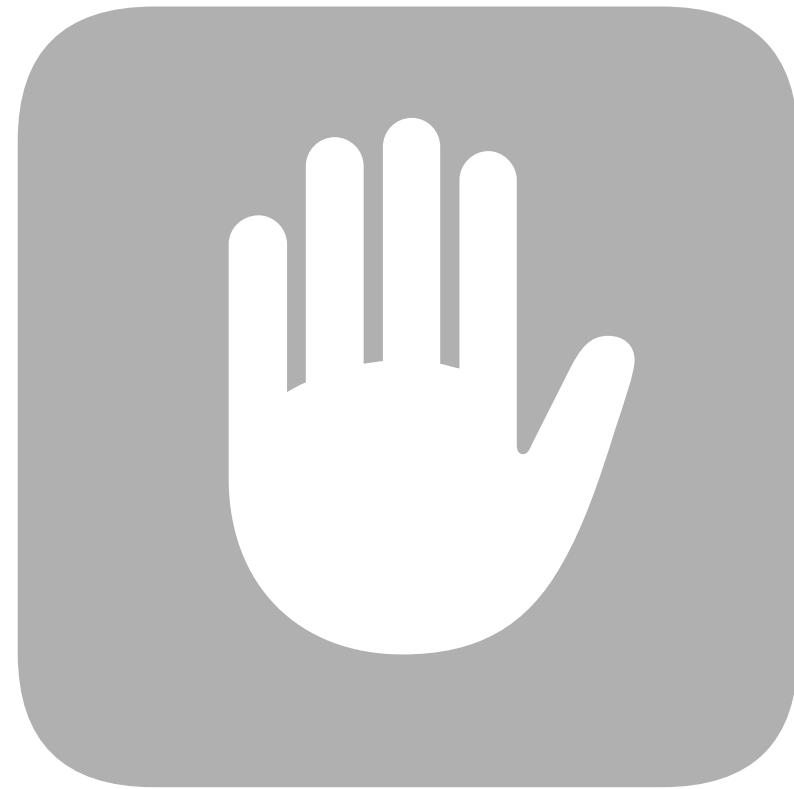
The documents explain how to make web content **more accessible to people with disabilities**. Web “content” refers to the information in a web page or web application, including: natural information such as text, images, and sounds code or markup that defines structure, presentation, etc.

# WCAG PRINCIPLES



## Perceivable

Easy to use



## Operable

Simple to use



## Understandable

Clear to understand



## Robust

Strong

# WCAG

## CONFORMANCE LEVELS

**A**

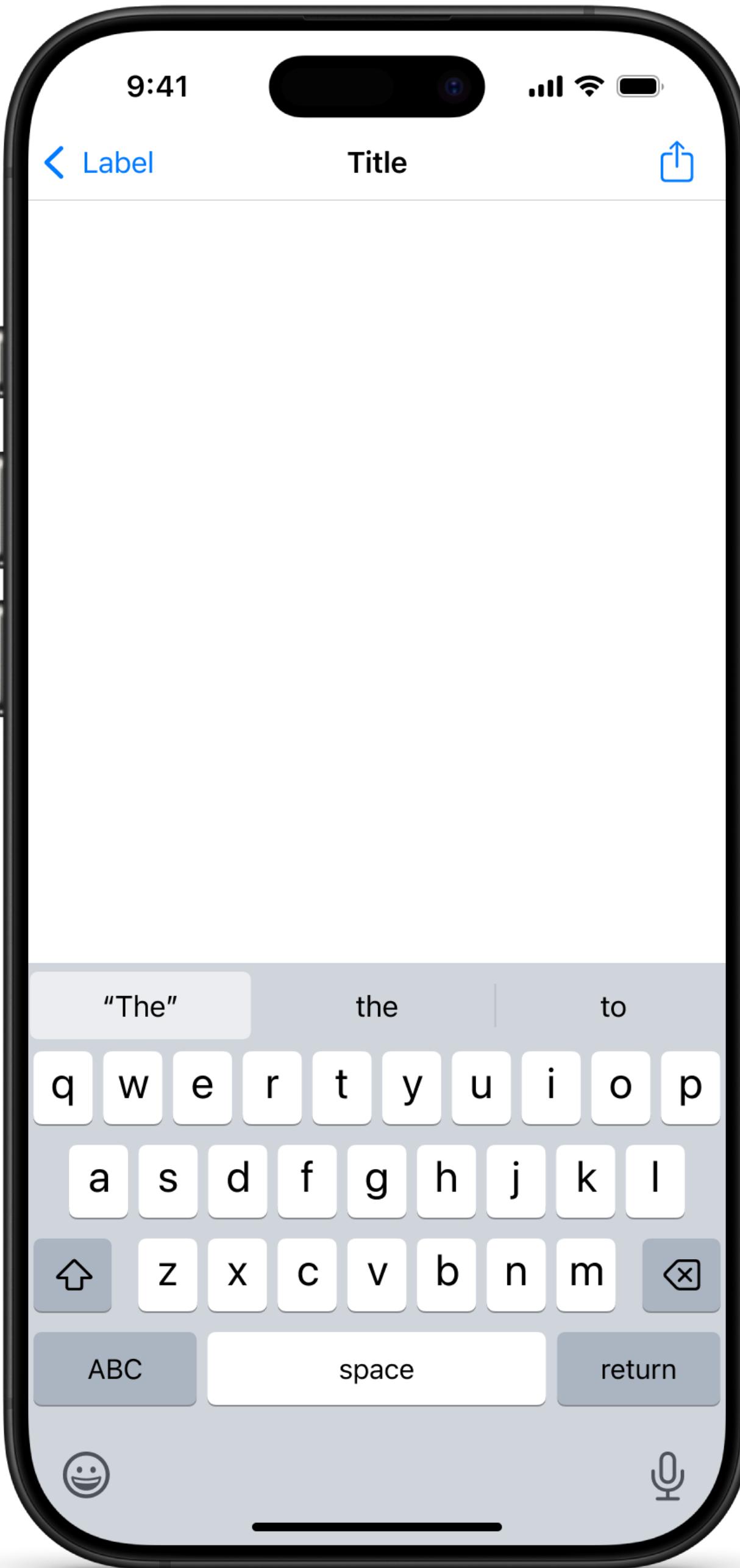
Basic accessibility

**AA**

Strong accessibility

**AAA**

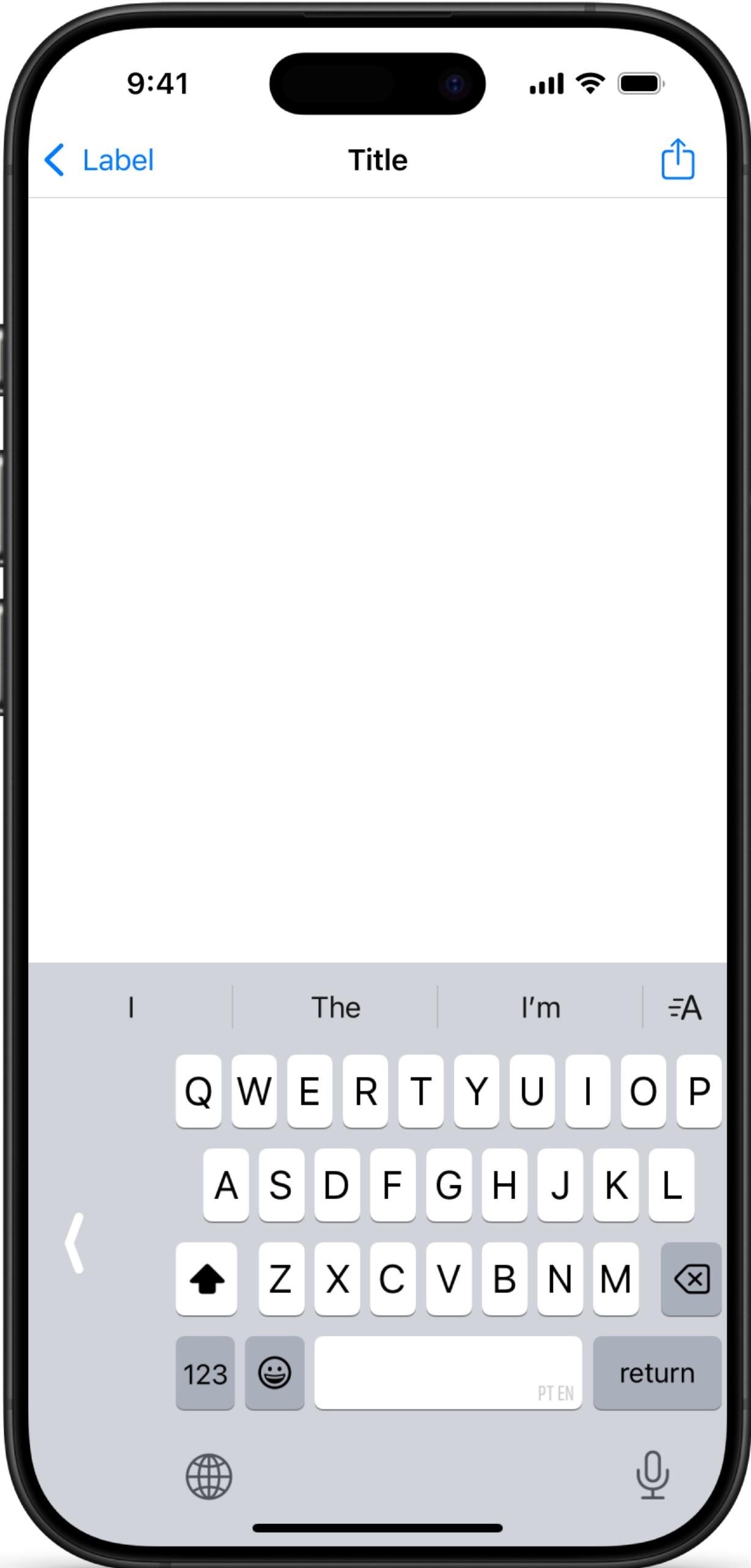
Excellent accessibility



CONCEPT

# Universal Design

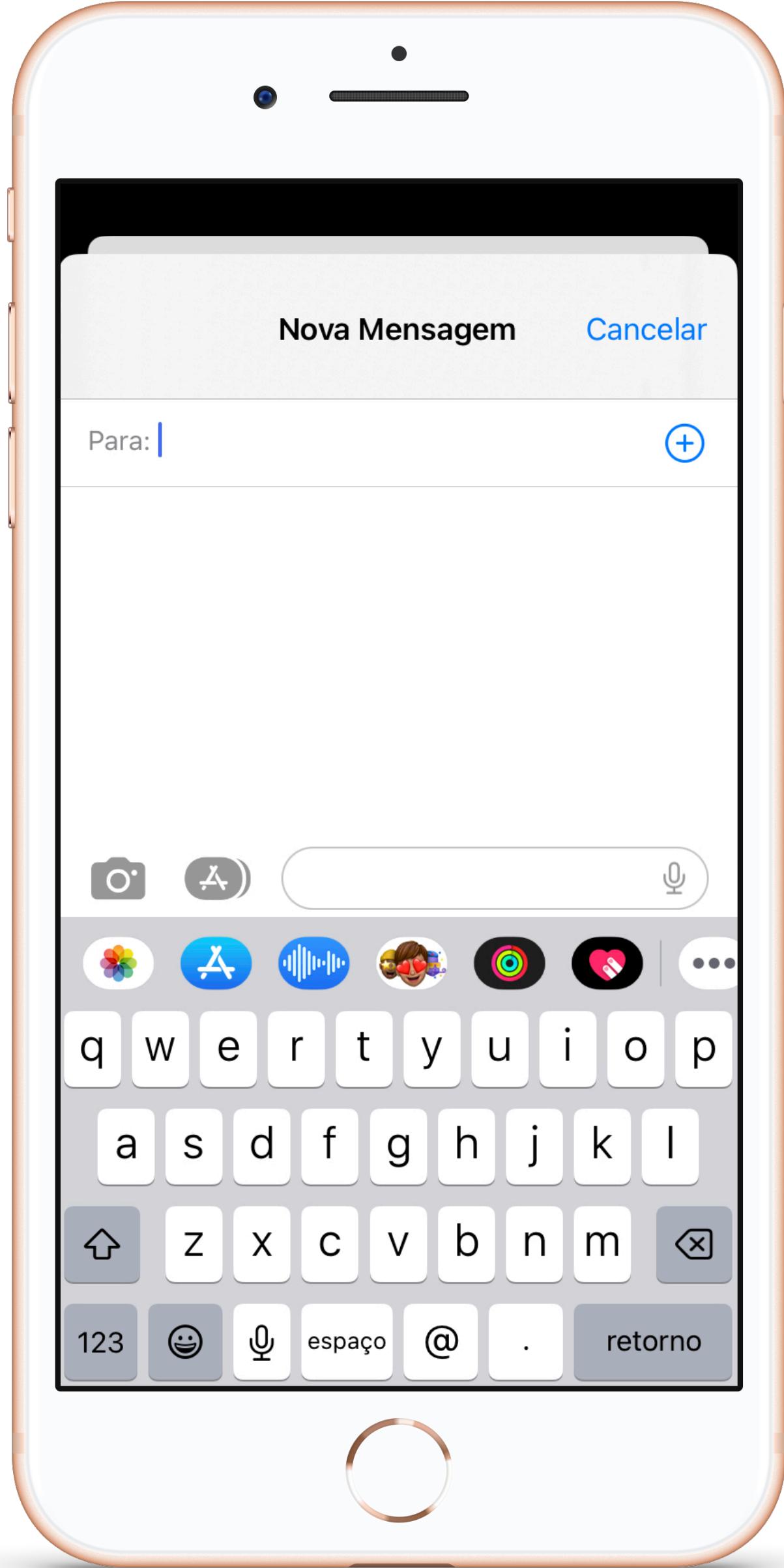
Designers propose a solution  
for everyone. Think of it as a  
**one-size-fits-all** approach.



CONCEPT

# Inclusive Design

Focuses on finding solutions that meet diverse needs. Can be described as a solution **for one that extends to many**.



CONCEPT

# Equity-Focused Design

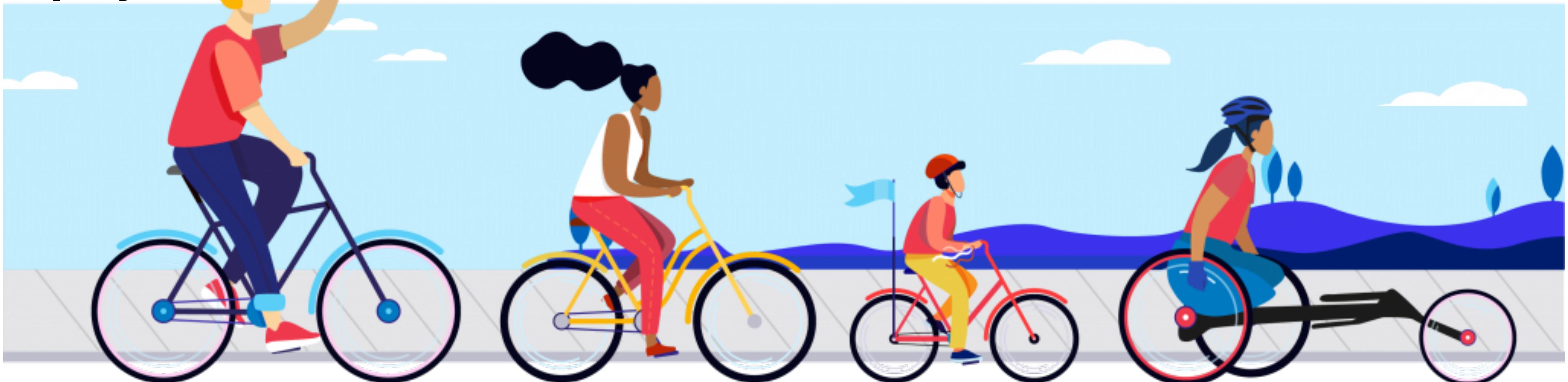
Design products that meet the need  
of specific people in groups that have  
been excluded in the past.

# Equality

#Foundations



# Equity



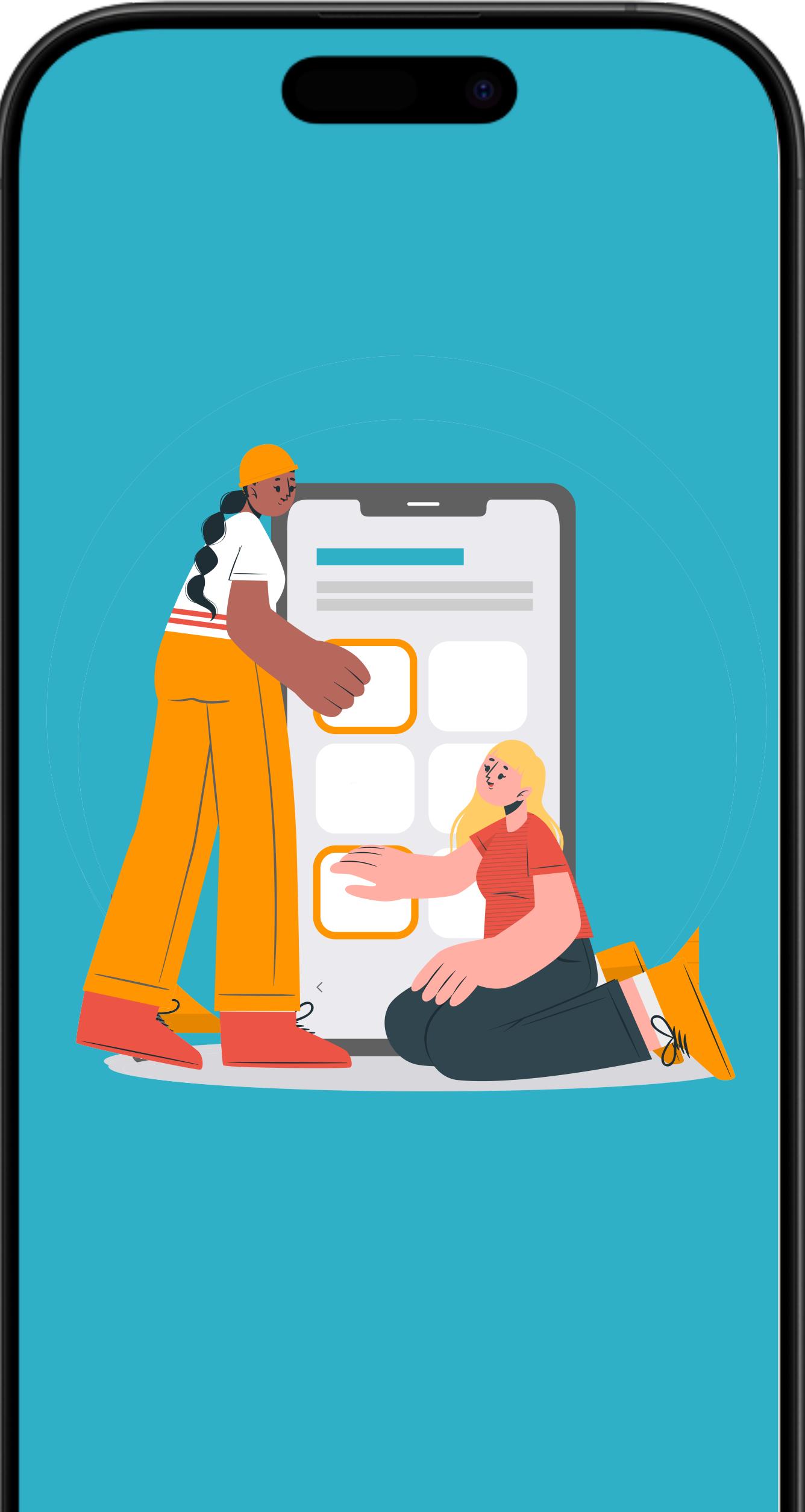
#Foundations

# Best Practices

DESIGN FOR ALL

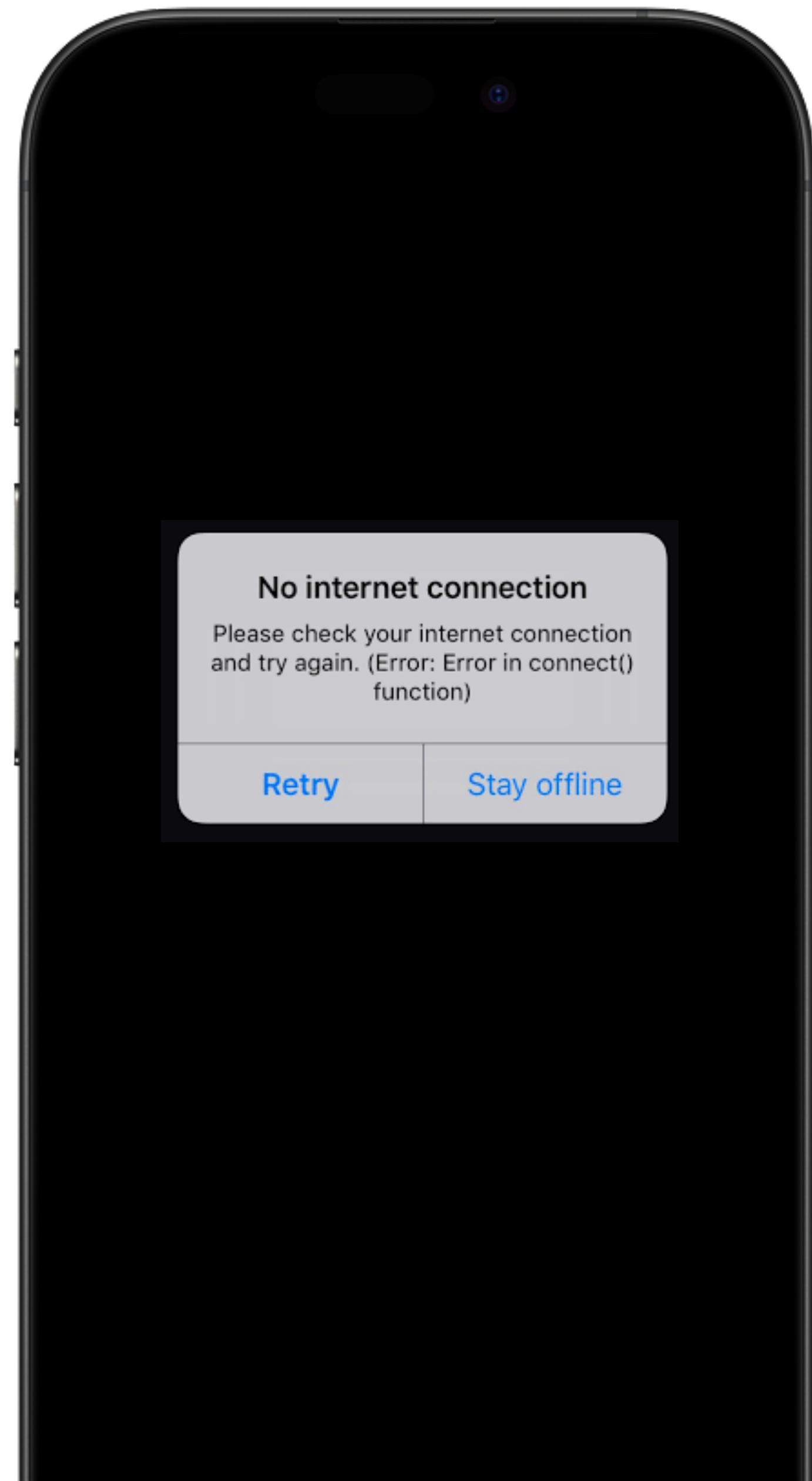
## BEST PRACTICES

**Use different images  
and illustrations of  
different cultures**



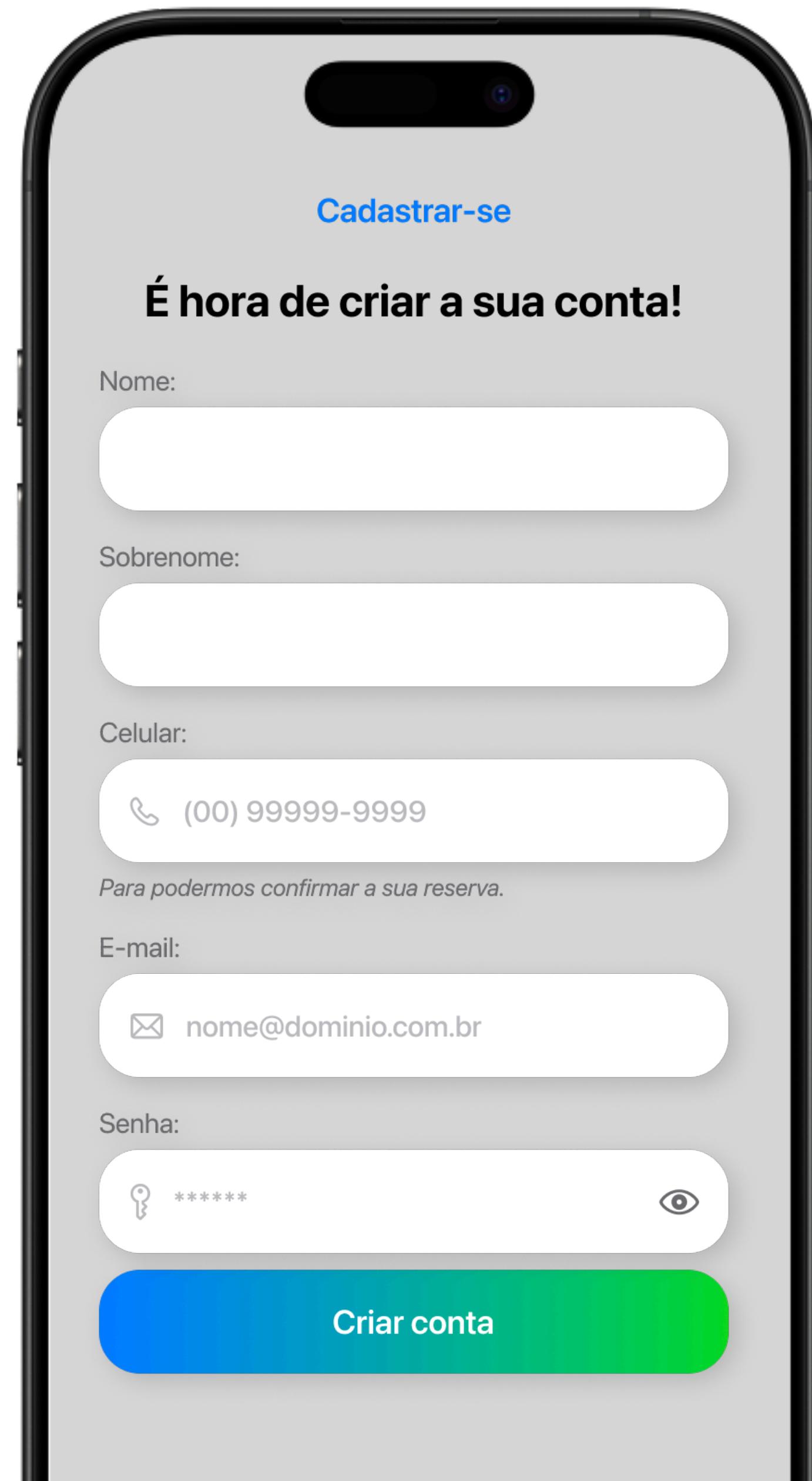
## BEST PRACTICES

**Think a better  
offline experience**



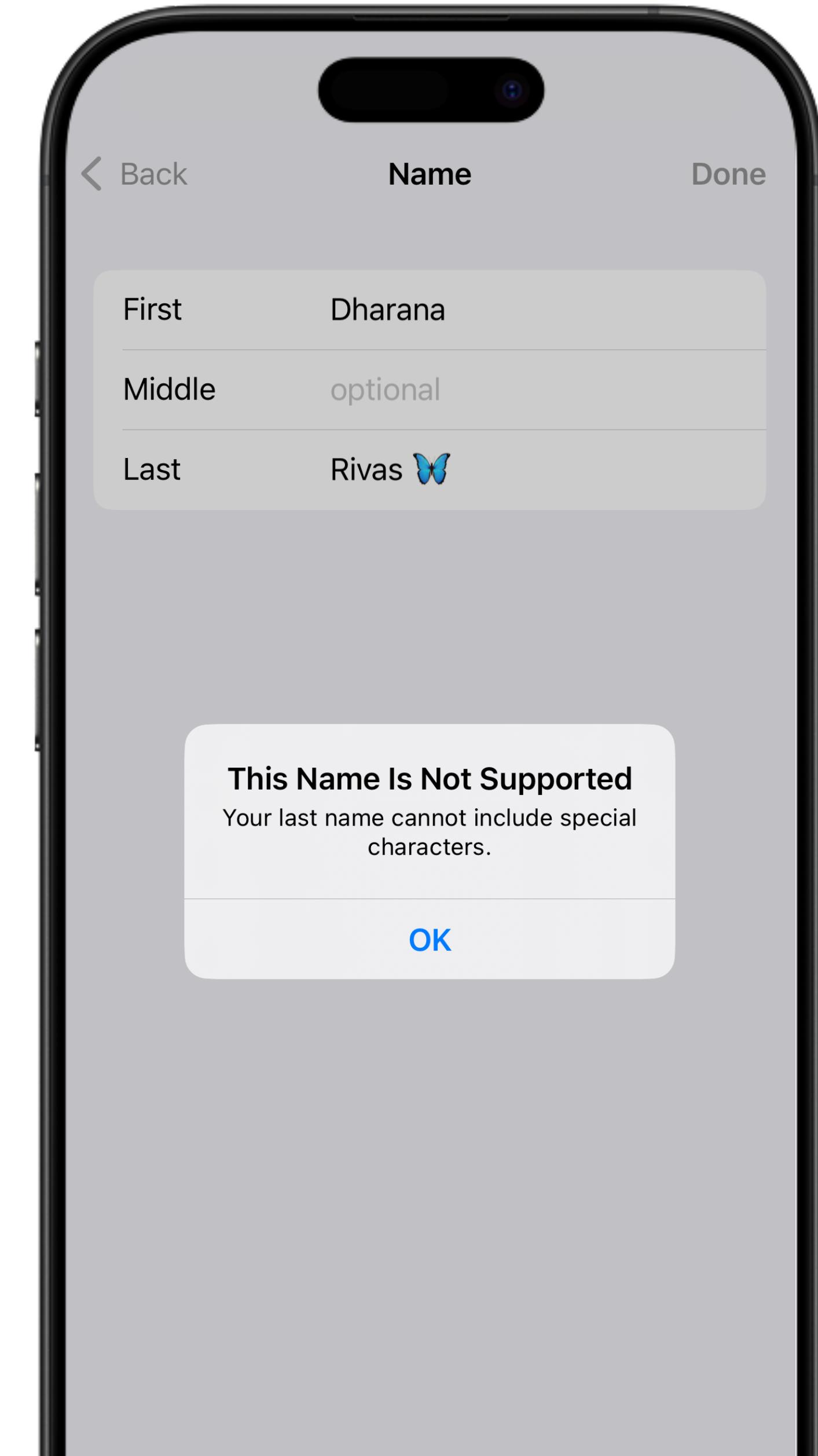
BEST PRACTICES

# Be careful with forms



## BEST PRACTICES

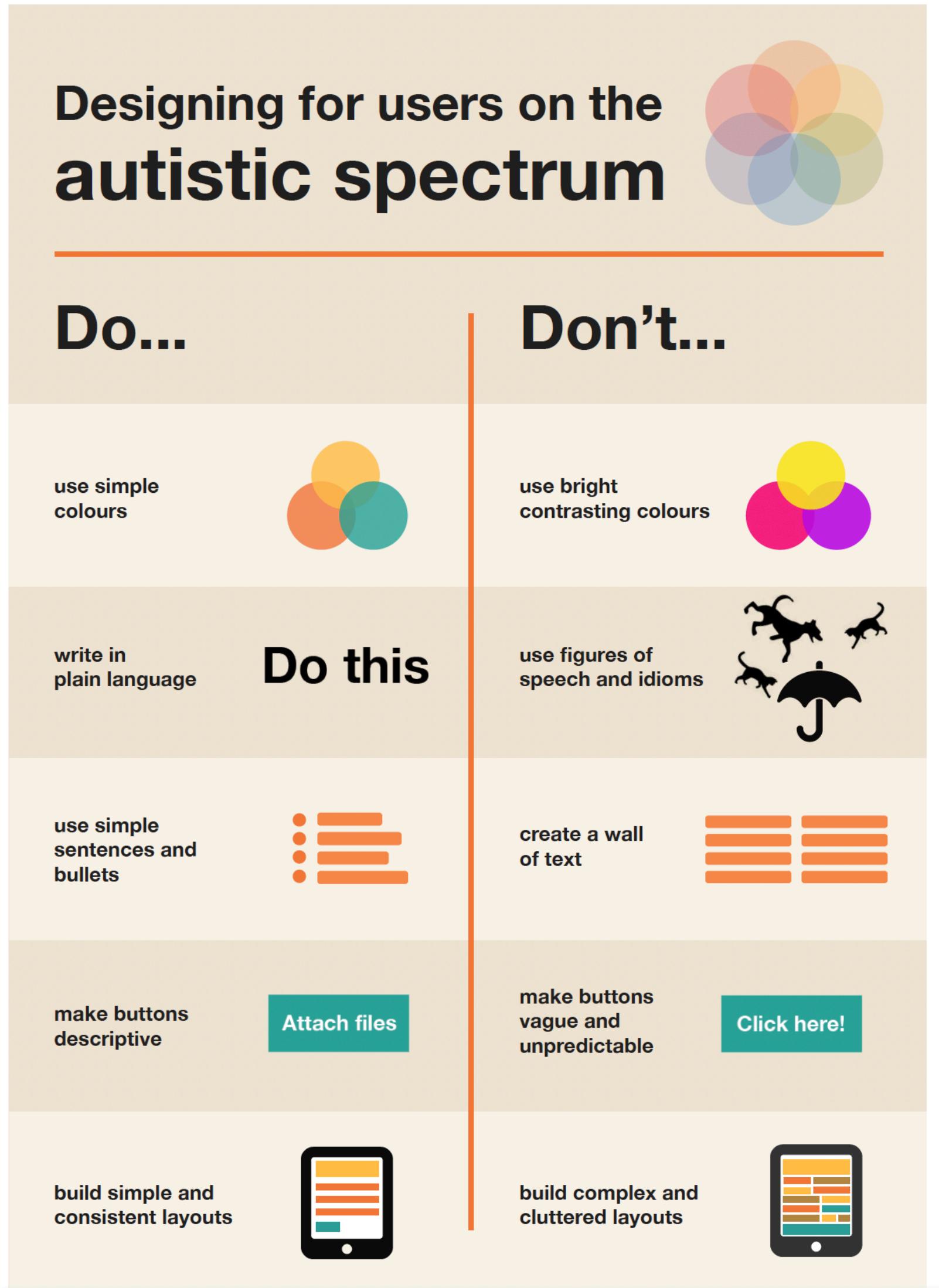
**Always  
remember the  
edge cases**



# BEST PRACTICES

# Design for different users

<https://www.gov.uk/help/accessibility-statement>



PIXAR

#Foundations



**Technology is most powerful  
when it empowers everyone.**

*Apple*

# Design Tools

ACCESSIBILITY

## DESIGN TOOLS



**Who  
Can Use**



**Stark  
Pluggin**



**Sim  
Daltonism**



**VoiceOver  
Designer**

#Foundations

# ios RESOURCES

<https://developer.apple.com/accessibility/>



# Speech

MORE WAYS TO  
COMMUNICATE.





**Live  
Speech**



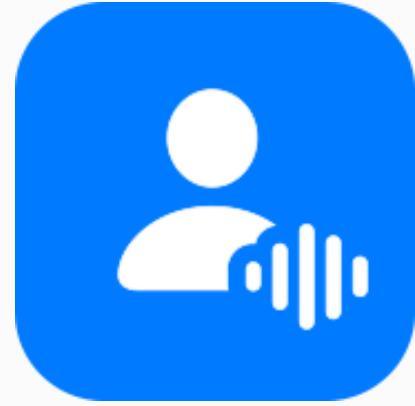
**Personal  
Voice**



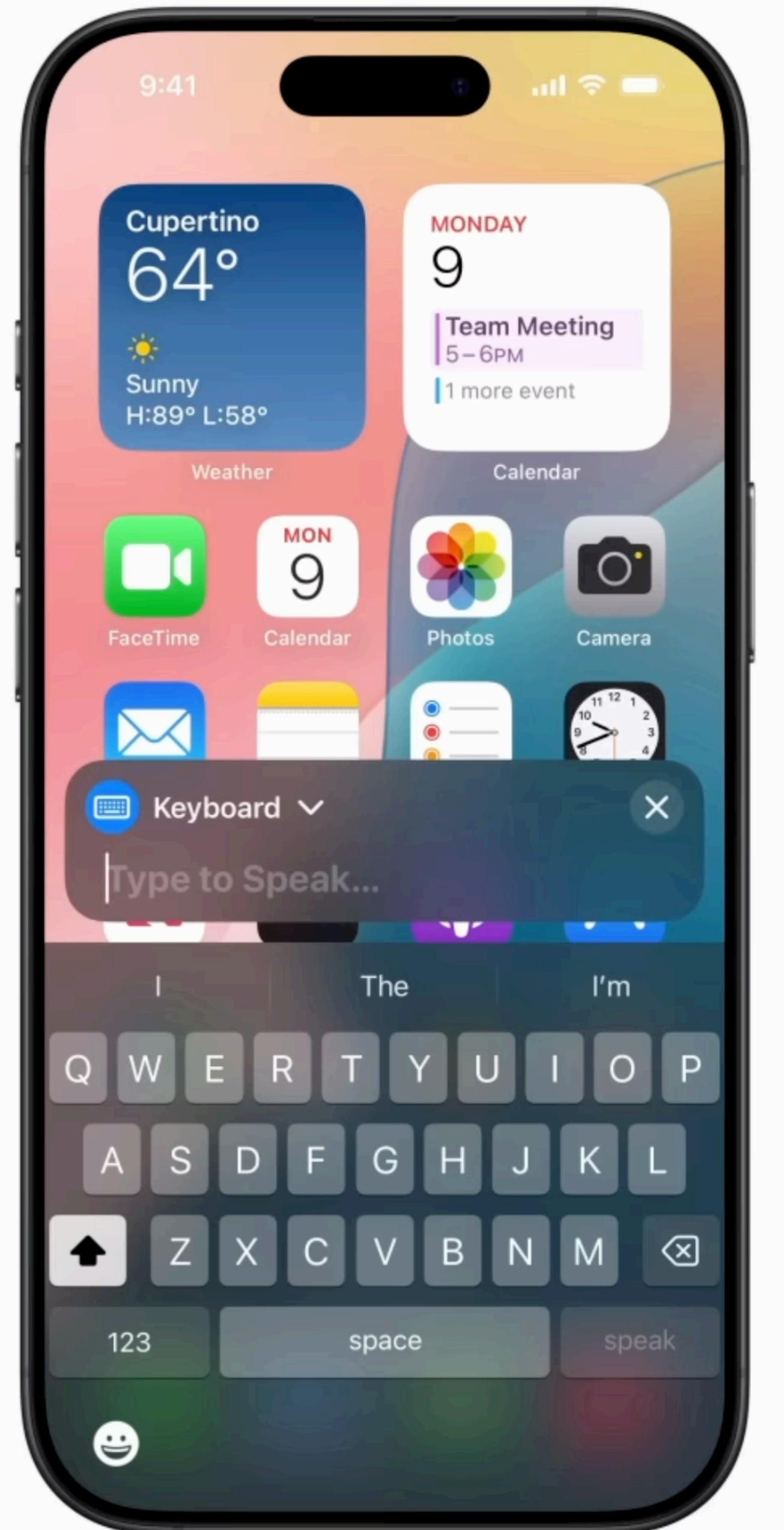
**Vocal  
Shortcuts**



**Spoken  
Content**



## Personal Voice



#Foundations

# vision

FOR ALL POINTS  
OF VIEW.





**VoiceOver**



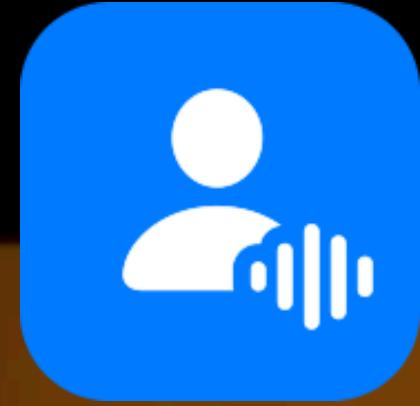
**Motion  
Settings**



**Magnifier**



**Text Size**



#Foundations

Magnifier

A blurred photograph of a person with dark hair, wearing a dark shirt, sitting at a desk and looking down at a laptop screen. The background is a colorful, out-of-focus scene.

# Hearing

CATCH EVERY WORD,  
SIGN, OR SIGNAL.





**Live  
Captions**



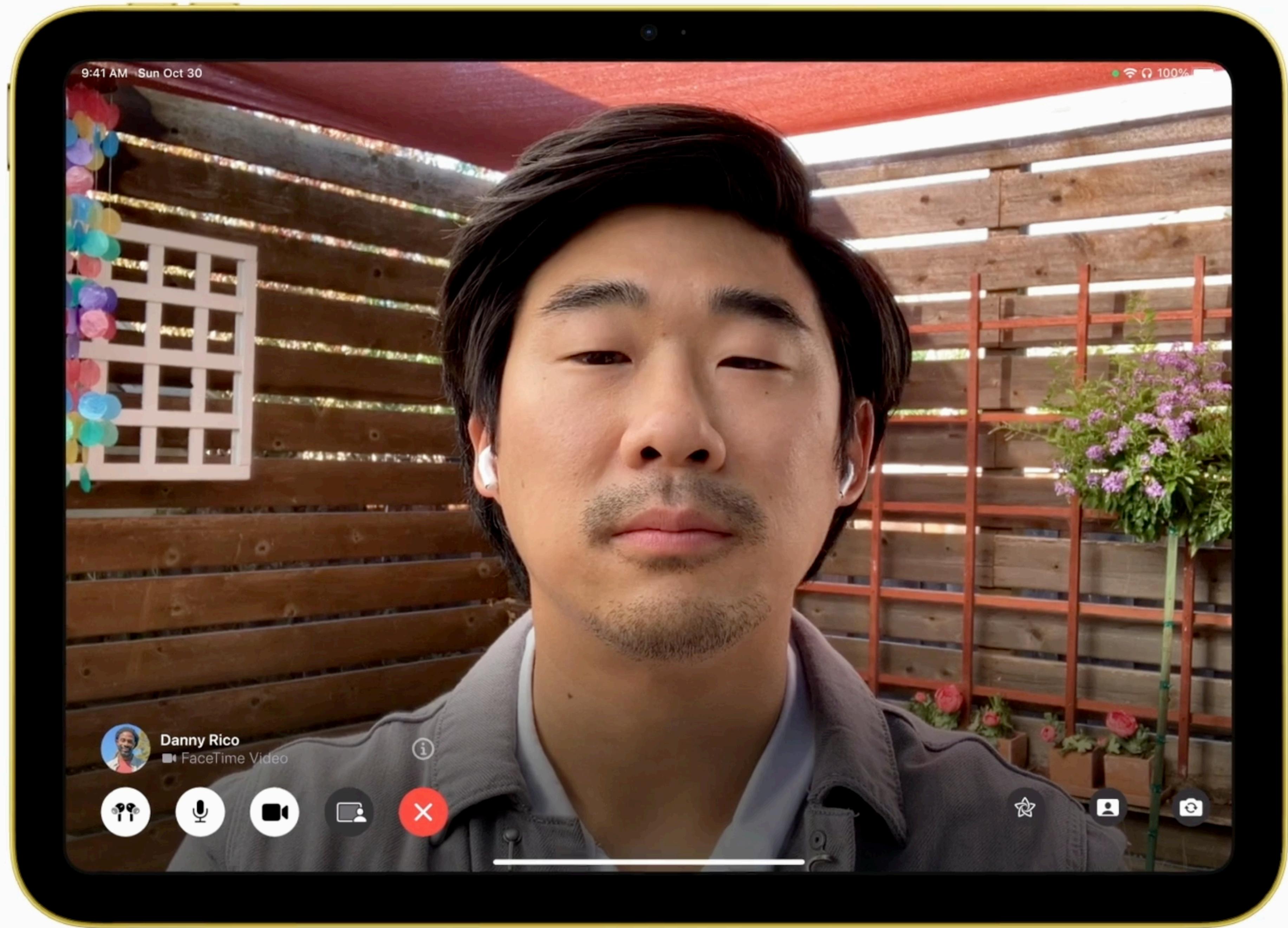
**Sensory  
Alerts**



**FaceTime**



**Sound  
Recognition**



**Live  
Captions**

# Mobility

A TAP. A TOUCH.  
A TON OF POSSIBILITIES.





**Voice  
Control**



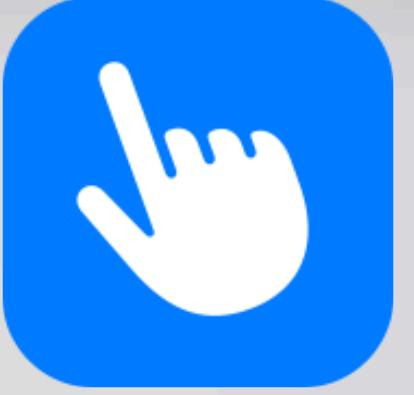
**Eye  
Tracking**



**Assistive  
Touch**



**Alternative  
Input**



**Assistive  
Touch**





# Eye Tracking



# Cognitive

GO THROUGH YOUR DAY IN  
A MORE FOCUSED WAY.





**Safari  
Reader**



**Assistive  
Access**



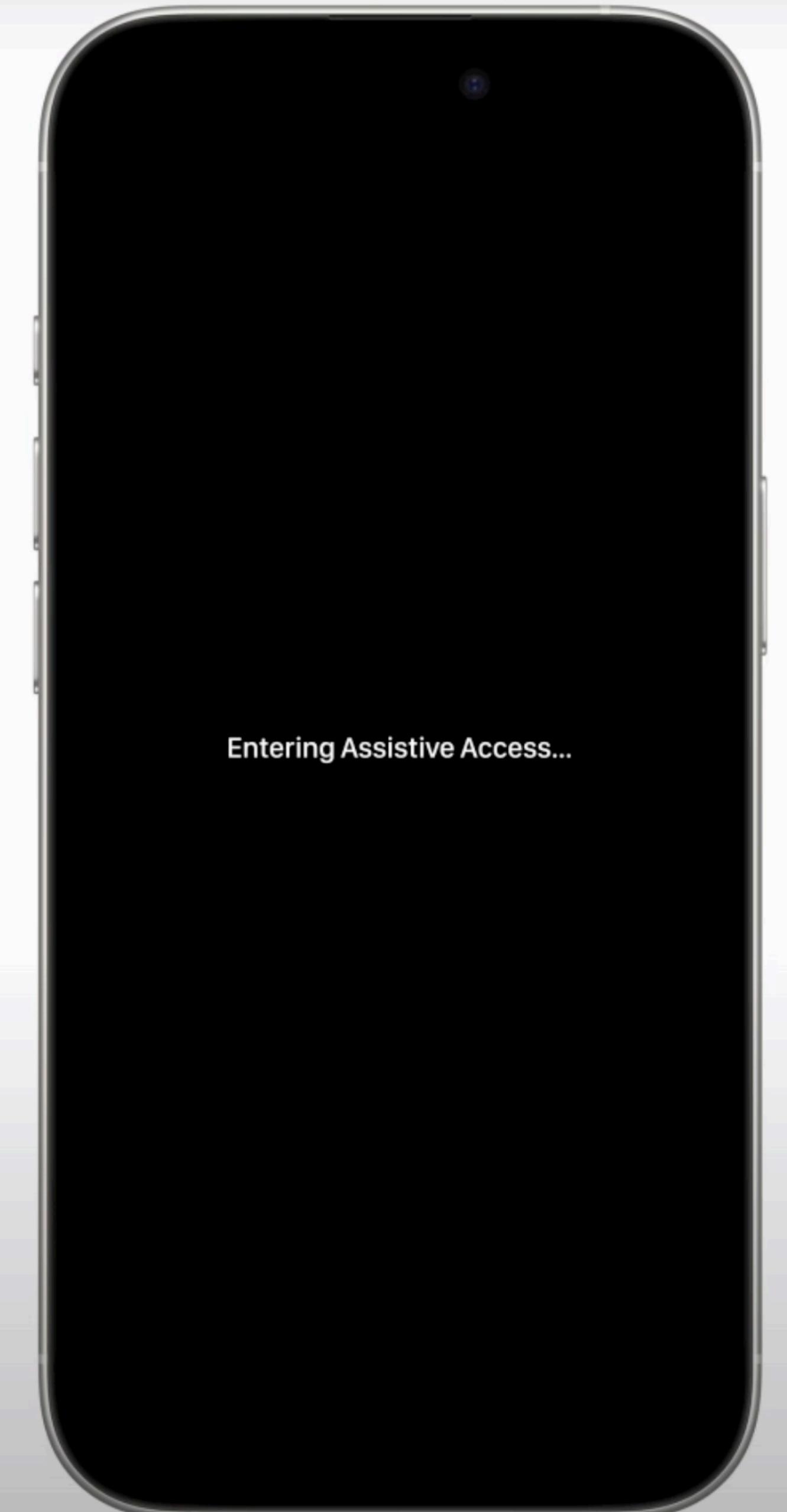
**Guided  
Access**



**Background  
Sounds**



## Assistive Access



#Foundations



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