

# *Responsive & Accessible Future*

## *Accessibility & Multi-Screen Design*

# *Responsive Web Design*

## *CSS Grids*

*Some great examples:*

- Elliot Jay Stocks
- Web Design Experiments by Jen Simmons
- Jazz Poster | Jen Simmons
- Demo | Jen Simmons Labs
- Header, as many as will fit, footer
- Header, as many as will fit, some tall, footer

# Great Support for Grid

## CSS Grid Layout (level 1)

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors. Includes support for all `grid-\*` properties and the `fr` unit.

IE	Edge	Firefox	Chrome	Safari	iOS Safari	Opera Mini	Chrome for Android	Android Browser	Samsung Internet
9	80	74	80	12.1	13.2			4.4	9.2
10	81	75	81	13	13.3			4.4.4	10.1
11	83	76	83	13.1	13.4	all	81	81	11.1
		77	84	TP					

✓ ✗ Partial Support Prefixed

Global: 93.99% + 1.54% = 95.53%

Data from caniuse.com | Embed from caniuse.bitsofco.de

3 June 2020

Grid “fallbacks” and overrides *by Rachel Andrew*

@supports *Feature Queries*

# *Grids allow for...*

- reliable *2-dimensional* layouts.
- mixing fixed-width elements with flexible ones (fr unit).
- *redefining layout from the container* – a more straight forward responsive workflow.
- *layering items* on the grid.

## *Subgrids are not well supported*

### CSS Subgrid

Feature of the CSS Grid Layout Module Level 2 that allows a grid-item with its own grid to align in one or both dimensions with its parent grid.

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9	80	74	80	12.1	13.2			4.4	9.2
10	81	75	81	13	13.3			4.4.4	10.1
11	83	76	83	13.1	13.4	all	81	81	11.1
		77	84	TP					

✓ ✗ Partial Support

Global: 3.34% + 0% = 3.34%



# **How Subgrids Work by Rachel Andrew**

# ***Progressive Web Apps***

## ***(PWA)***

- Loads over HTTPS
- Use Service Workers to provide a offline access
- Prompt users to add to home screen
- Have mobile friendly layout
- Uses progressive enhancement
- Optimizes assets

# *Service Worker*

*Basically a small proxy that handles URL requests and can act on them, for example serve a fallback page and caching assets.*

*Accessibility*

## *The Accessible Smart Home*

- Amazon Echo
- Google Home
- HomePod
- Nest Thermostats
- ...



# *Smart Home Accessibility*

- Voice Input
- Non-Voice Input
- Accessible configuration

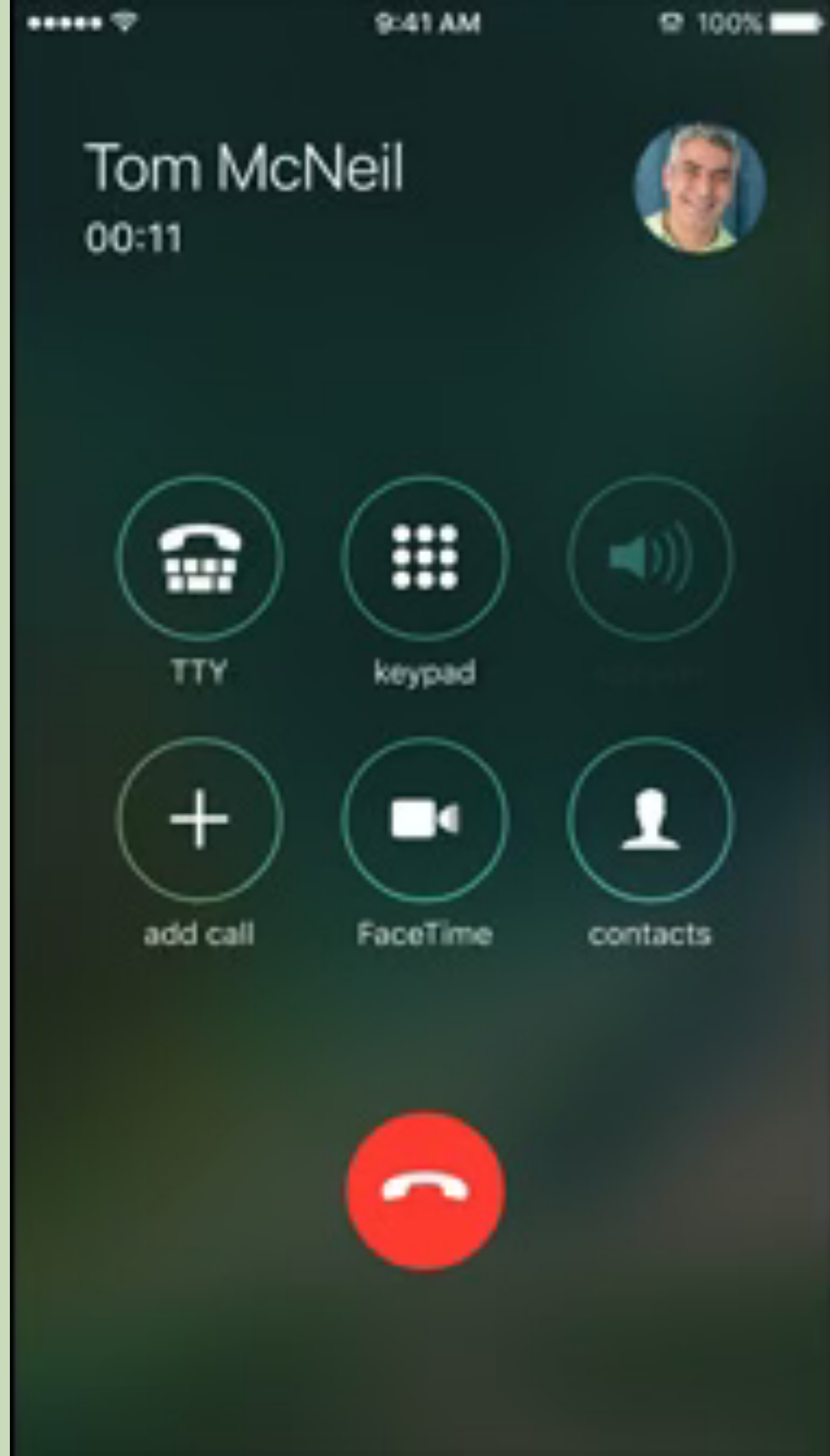




# *Video Calls*

*Face Time, Google Duo, Skype,  
Zoom...*





*Software TTY*

*Teletypewriter*

# ***Augmented Reality***

***Color detection, shapes/faces detection***





A Peek Inside the Niantic Real World Platform – Niantic

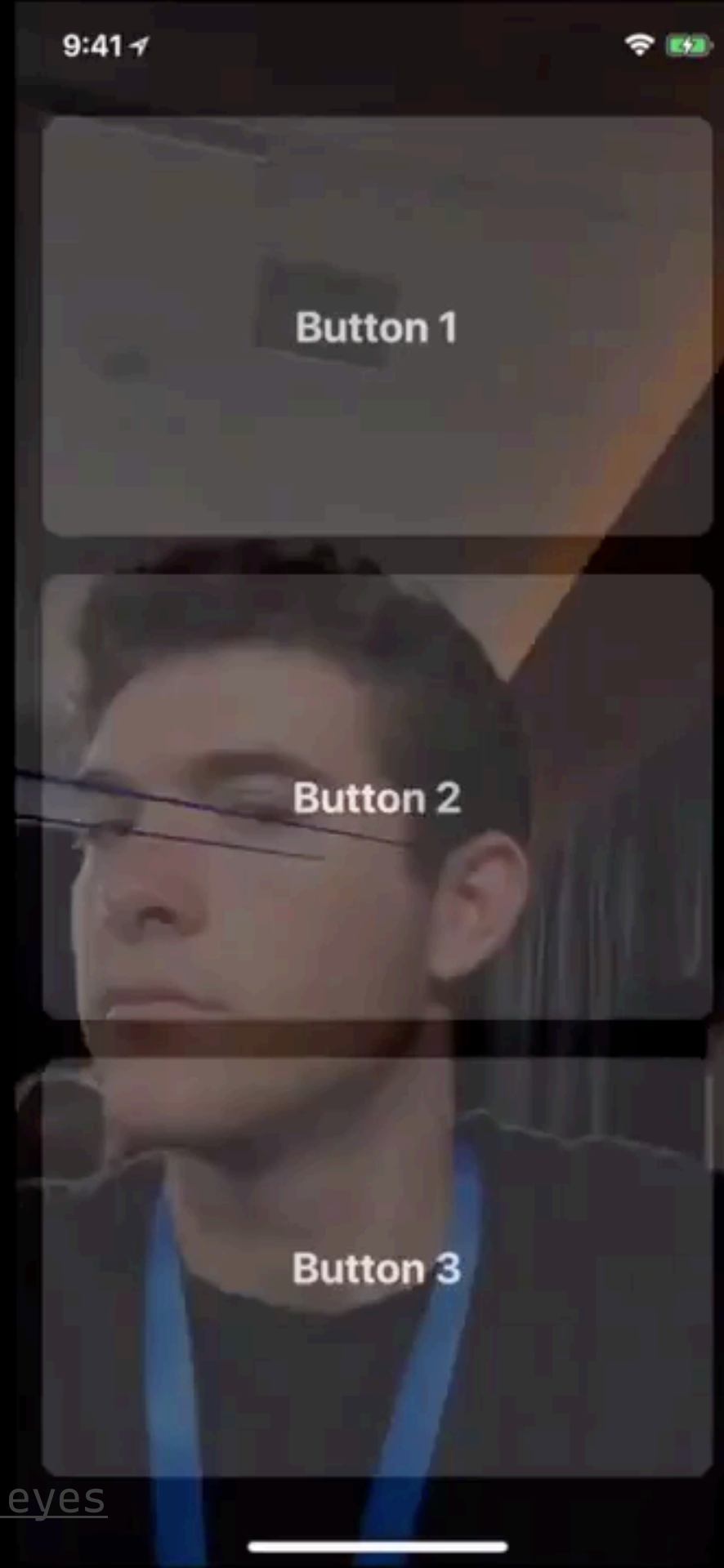




*Source: @tomemrich*



*Source: @CastIrony*



Matt Moss: Control your iPhone with your eyes



***Wearables***

***Watches, Glasses***

# *Apple Watch: Visual*

- VoiceOver
- Zoom
- Font Adjustment
- Grayscale
- Extra Large Watch Face



# *Apple Watch: Hearing*

- Taptic Feedback
- Scribble
- Mono Audio

***Apple Watch: Physical/Motor***



# ***Social Media Accessibility***

# *Captions*

*On* YouTube, Facebook



# ***Automatic Captions***

***On YouTube, usually insufficient, but a good start***

# *Alternative Text*

*On* Twitter

# *Automatic alternative Text*

*On* Facebook

