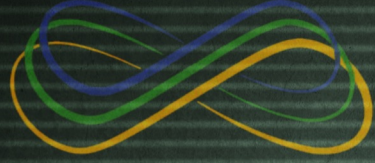


The logo graphic consists of three overlapping, flowing lines in purple, green, and yellow, forming a shape reminiscent of a stylized infinity symbol or a continuous loop.

Zebra  
**DevCon 2023**  
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DevCon 2023



# 60 Years of the GUI

**James Morley Smith**

Senior Director of User Experience, Research & Human Factors

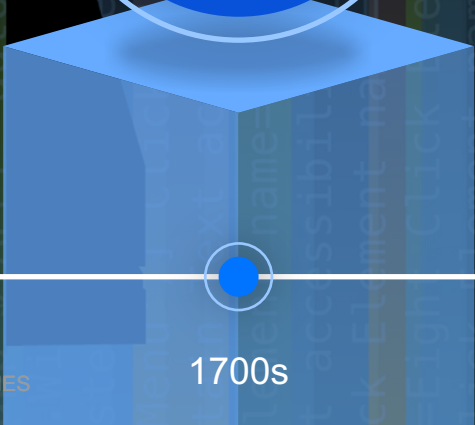




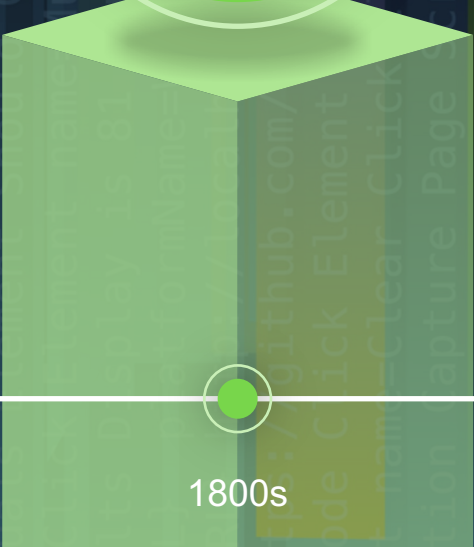
```
#####  
##### DATE:          SEPTEMBER 2023          #####  
##### LOCATION:     MADRID, SPAIN             #####  
##### PRESENTER:    JAMES MORLEY-SMITH        #####  
#####
```

```
> HELLO DEVCON █
```

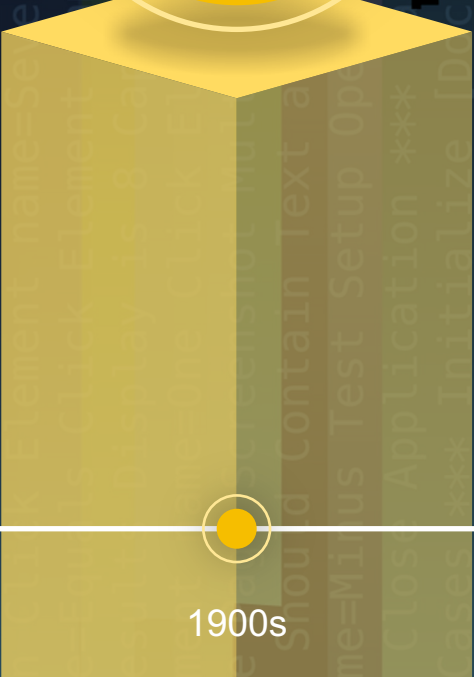




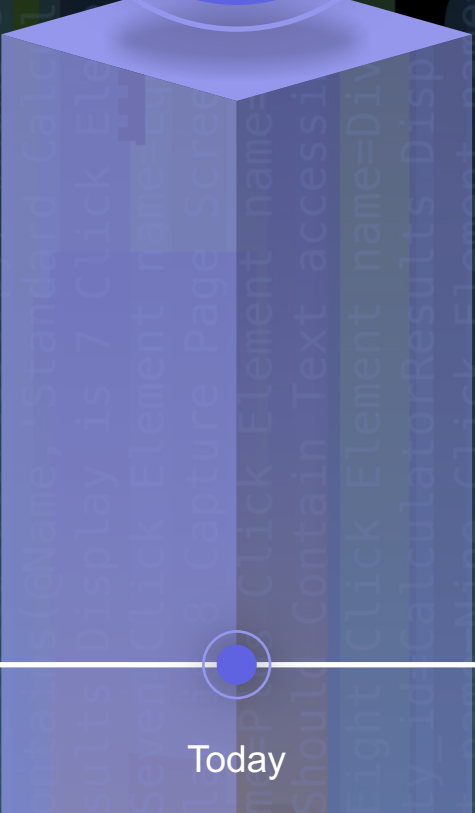
1700s



1800s



1900s



Today





1963





1963

1968



1. Mouse Input
2. Text Editing & Word Processing
3. Hypertext
4. Video Conferencing
5. Copy & Paste
6. Graphics
7. Online real-time collaboration ■





1963



1968



1963

1968

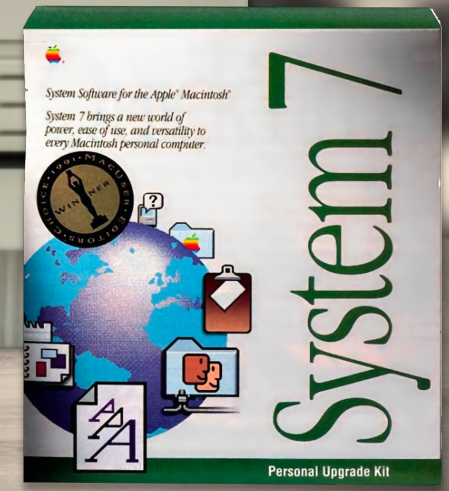
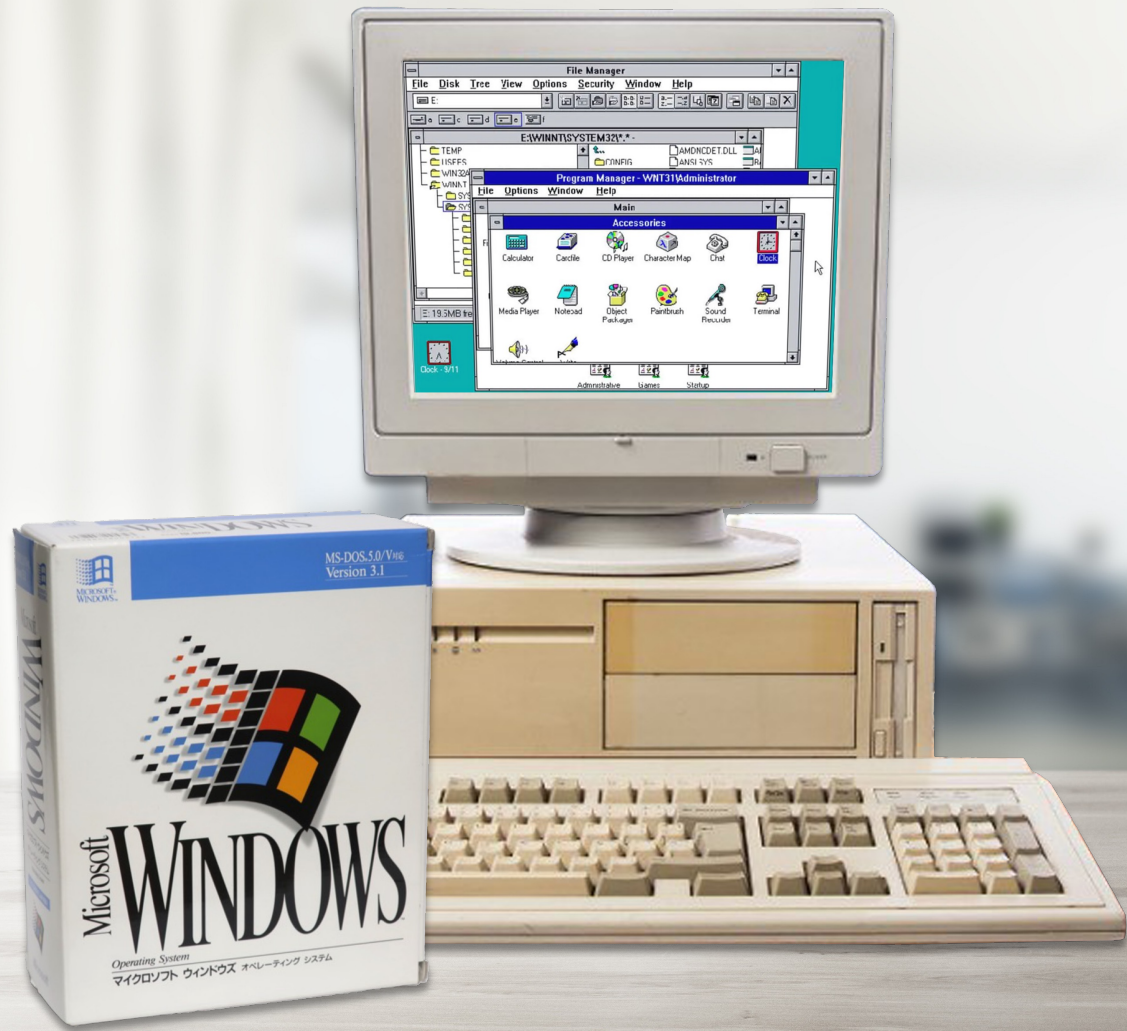
1970s

1983

1984

1985

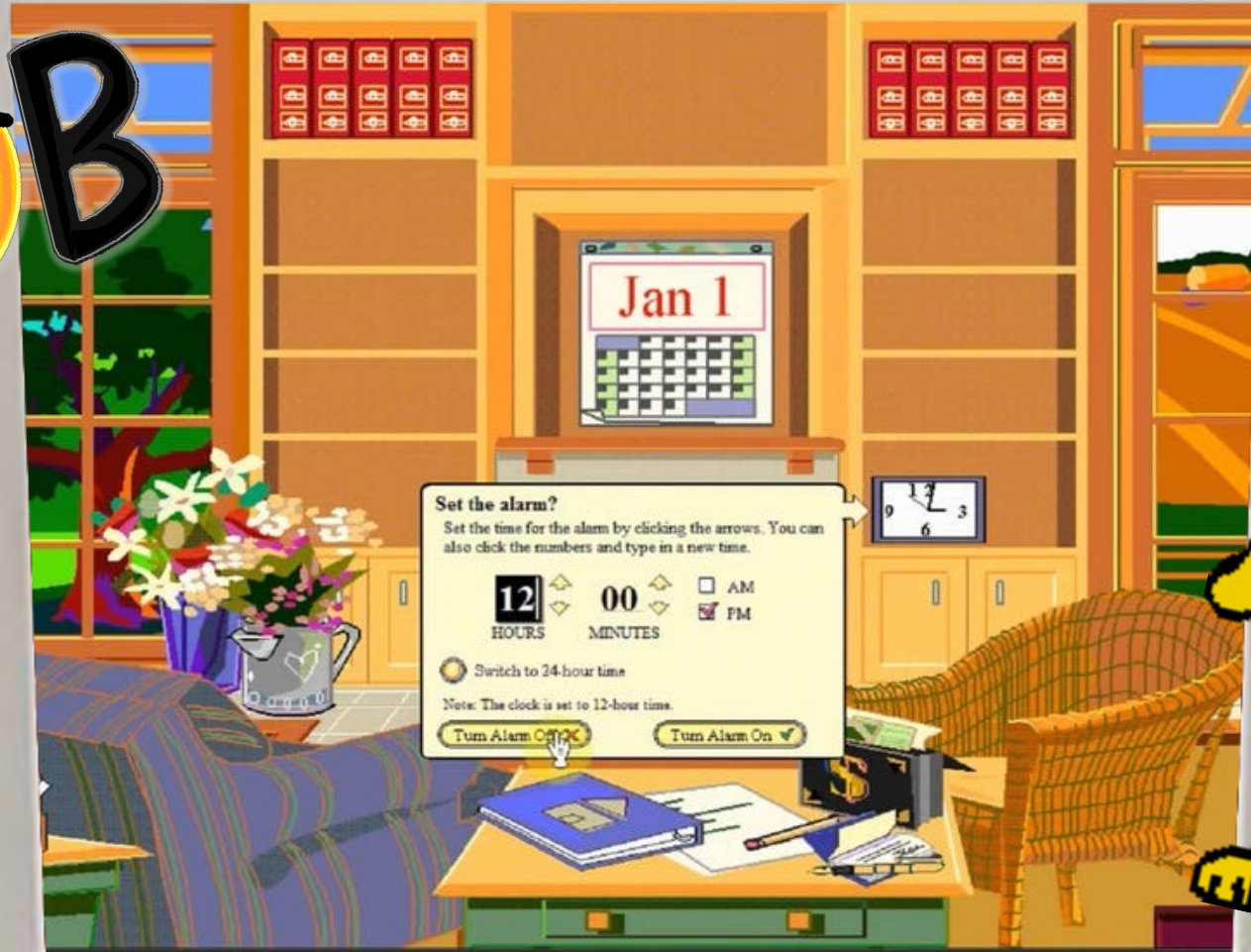












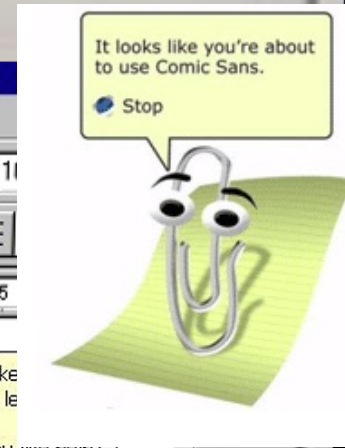
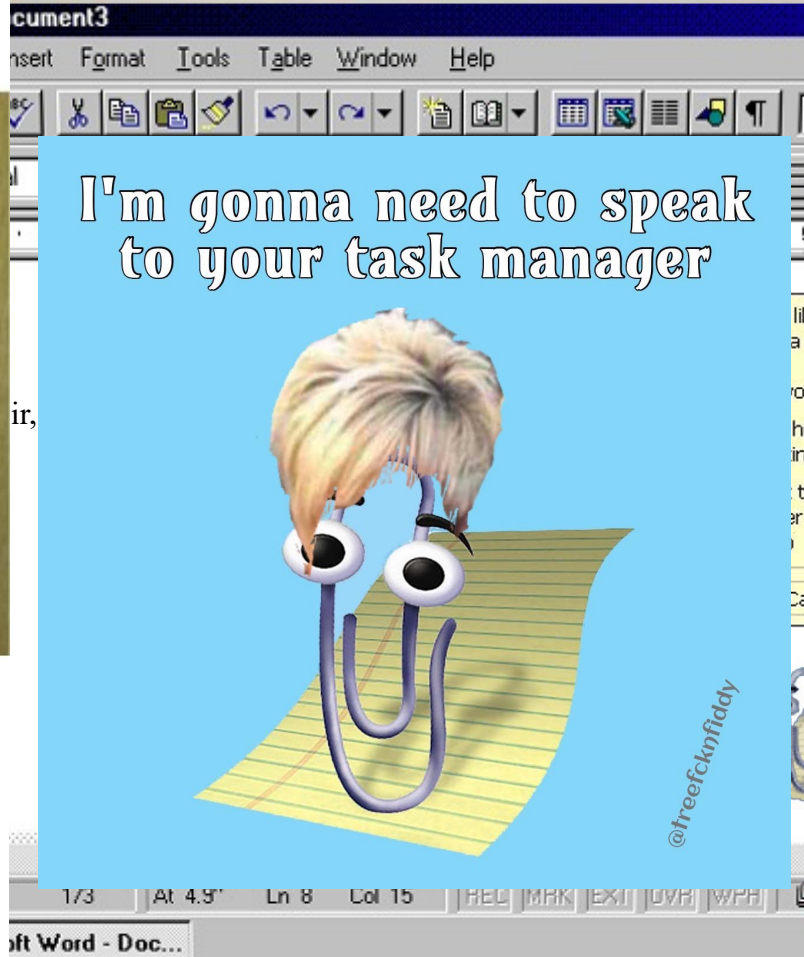




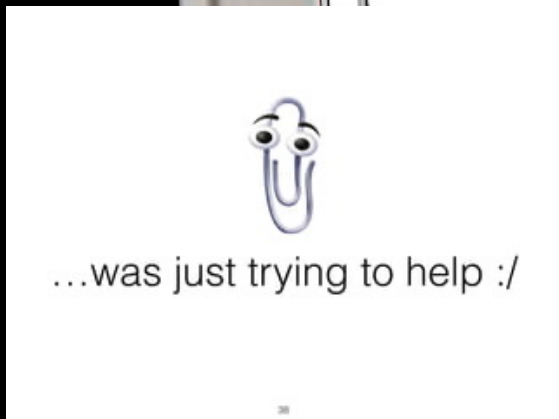




He used to help write resumes...  
Now he holds toilet paper.



Sometimes when I don't know what to do I'll get this out  
my pocket & pretend it knows the answer.



# Google!

BETA

Search the web using Google

Google Search

I'm feeling lucky

[More Google!](#)

Copyright ©1999 Google Inc.



# Google!

B E T A

Search the web using Google

Google Search

I'm feeling lucky

[More Google!](#)

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Average household internet access sin 10 results

Google Search

I'm Feeling Lucky

Google results 1-10 of about 23,000

Search took 0.07 seconds.

### Broadband Adoption in the United States:

...In the year 2000, only 4% of U.S. **households** had broadband internet access.  
Risen to 73% in 2019... *[Source: Pew Research Center]*

### Global Internet Speeds:

...In In 2000, the average global internet speed was around 512 Kbps  
As of 2021, the global average internet speed had risen to ~24.83 Mbps...  
*[Source: Speedtest Global Ind]*

### Mobile Internet Use:

...In 2000, mobile phone ownership was widespread, but internet access on  
mobile devices was limited.  
By 2021, there were over 5.3 billion unique mobile internet users worldwide...  
*[Source: Statista]*

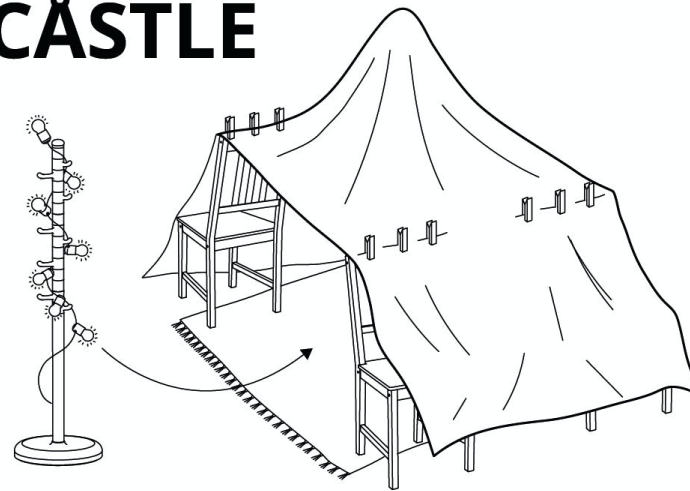
### Internet Usage and Streaming:


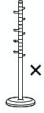


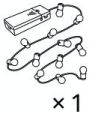
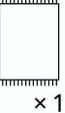

In 2000, the concept of streaming video was in its infancy.  
As of 2021, streaming video accounted for over 80% of global internet traffic...  
*[Source: Sandvine]*





# CÅSTLE



STEFAN	KROKIG	NATTJASMIN	BLÖTSNÖ	TAULOV	VALBJÖRG
 × 4	 × 1	 × 2  × 16	 × 1	 × 1	 × 3

Make sure that the structure is safe. Do not leave children unattended.  
The suggested examples are not official IKEA user guides for IKEA products.  
If you didn't find products mentioned in the instruction, use similar ones.



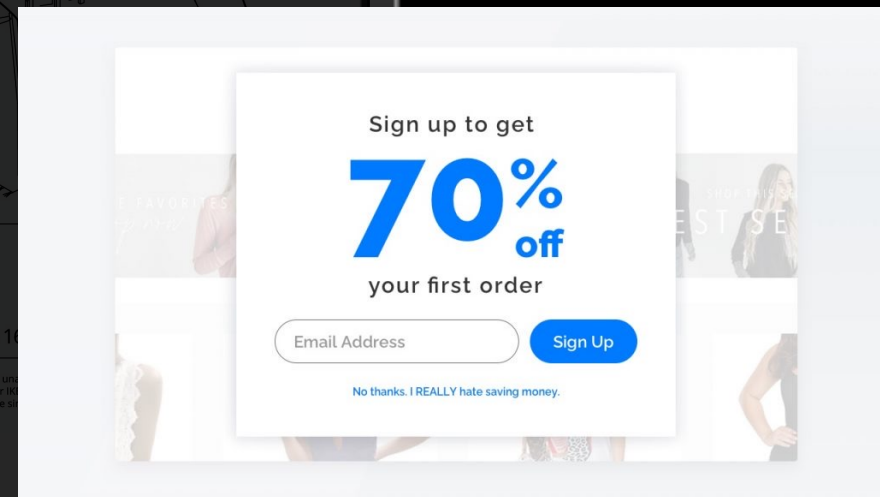
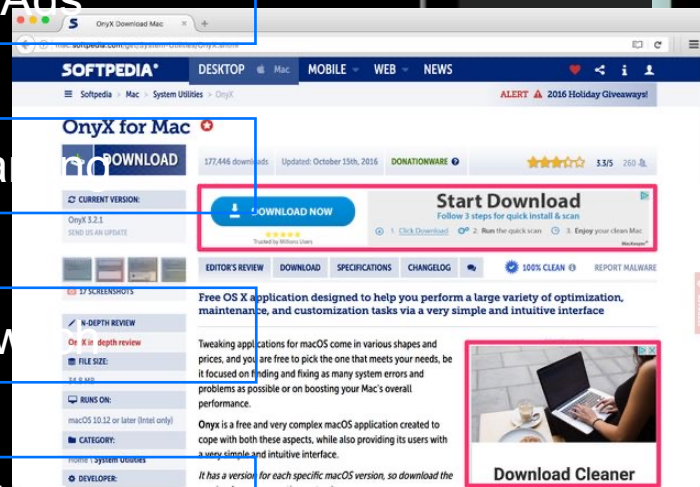
Dark UX

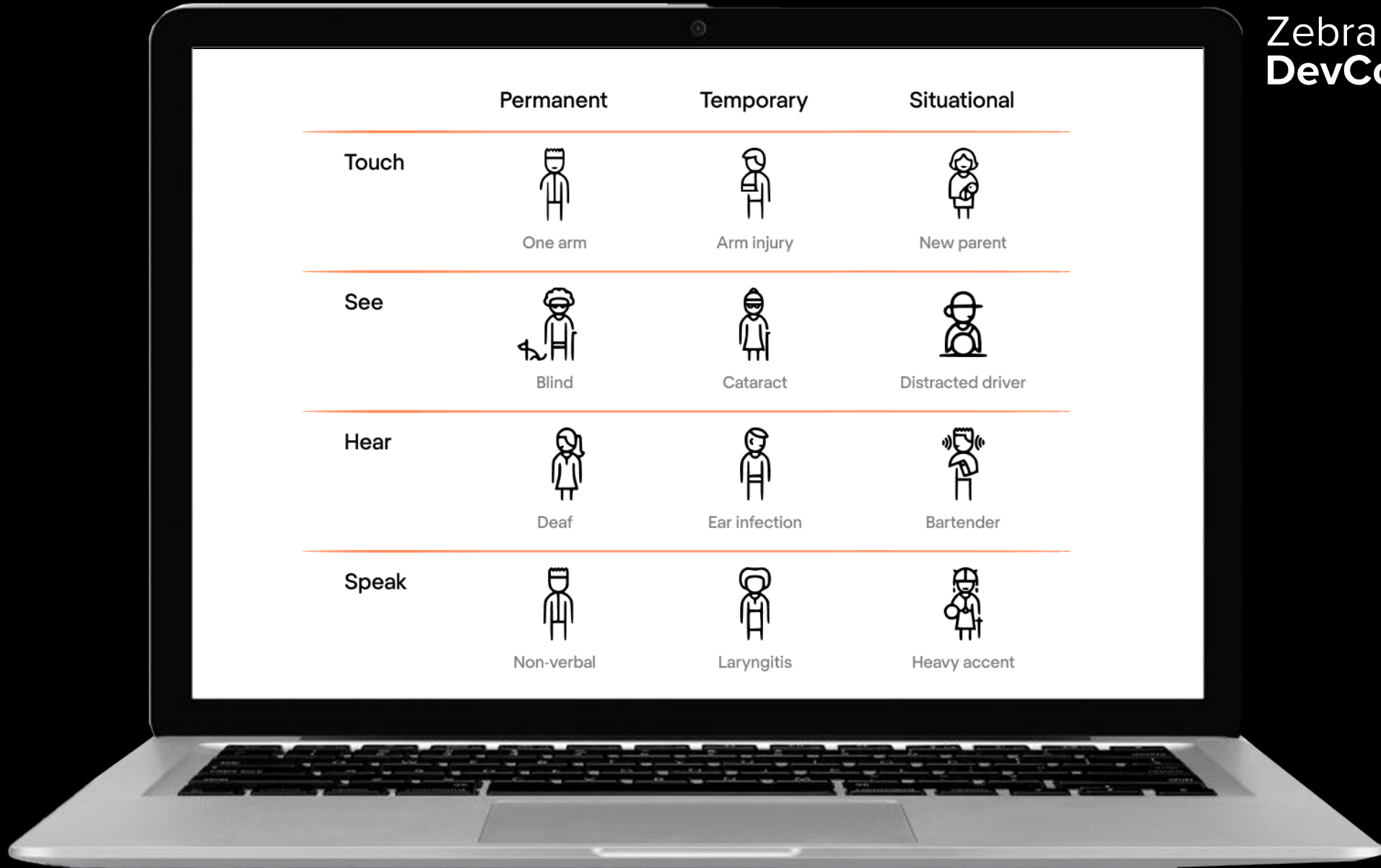
Disguised Ads

Confirm sharing

Bait and Switch

Forced Continuity







1960s



1960s



## Tabulating Systems



## Programmable Systems



## Cognitive Systems



1900s

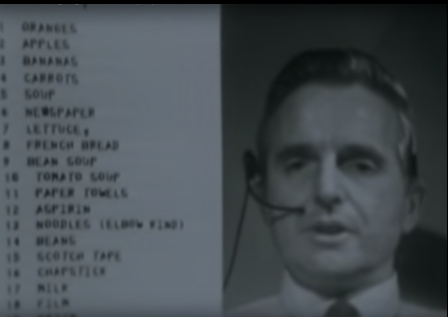
1960s

1960s

1980s

2000s

2020s



### Programmable Systems



### Cognitive Systems



1960s

1980s

2000s

2020s

+ New Chat



Today

What's Next for GUI's?

Default (GPT-3.5)



Within the context of cognitive computing, what will future interfaces look like?



1. Conversational & Voice Interfaces
2. Multi-Modal Interfaces
3. Contextual Awareness
4. Improved Accessibility
5. Reduced Learning Curve
6. Ethical, Privacy and Security Challenges
7. Industry-Specific Applications

**Make up a story**

about Sharky, a tooth-brushing shark superhero

**Design a database schema**

for an online merch store

**Come up with concepts**

for a retro-style arcade game

**Help me pick**

a gift for my dad who loves fishing







**EVERYTHING  
CONNECTED**



**EVERYONE  
CONNECTED**



**DIGITAL  
INTELLIGENCE**



**TRANSFORMED  
EXPERIENCES**

Up until now, we have primarily initiated the interaction with technology...

The next frontier is a world in which technology predominantly initiates the interaction with us...

Let's build that future together!

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