## **Deceptive Patterns and FAST** Framework for Accessible Specifications of Technologies

Todd Libby - 19 January, 2023



## Todd Libby

- Senior Accessibility Engineer
- W3C Invited Expert
- Accessibility Advocate
- Phoenix, Arizona
- 42 years experience
- 24 years professionally

Todd Libby - 19 January, 2023







### #CodeMash2023 #DeveloperCommunity #Accessibility

Todd Libby - 19 January, 2023



# Thank You! Or CodeMash

Todd Libby - 19 January, 2023 CodeMash 2023





Todd Libby - 19 January, 2023



### What is FAST?

Todd Libby - 19 January, 2023



The Framework for Accessible Specification of Technologies (FAST) advises creators of technical specifications how to ensure their technology meets the needs of people with disabilities.

Todd Libby - 19 January, 2023





### Goals of FAST

Todd Libby - 19 January, 2023



# FAST was originally designed for internal accessibility spec review at the W3C.

Todd Libby - 19 January, 2023



### WCAG WAI-ARIA ATAG (Authoring Tool Accessibility Guidelines) UAAG (User Agent Accessibility Guidelines) ACCG (Accessibility for Children Community Group)

Todd Libby - 19 January, 2023





### **User & Functional Needs**

Todd Libby - 19 January, 2023



User need: A high-level accessibility characteristic of content and/or a user interface that is necessary for users to complete an objective.

Todd Libby - 19 January, 2023



Functional need: A statement that describes a specific gap in one's ability, or a specific mismatch between ability and the designed environment or context.

Todd Libby - 19 January, 2023



### 3 Stages of FAST

Todd Libby - 19 January, 2023



## FAST Approach Three stages

- needs;

Todd Libby - 19 January, 2023

Inventory functional and user

 Identify ways to meet needs; Develop technology guidelines.





## FAST Approach **Stage One**

Todd Libby - 19 January, 2023

• Many user needs are well-known; • Documented in multiple places; Collected and related to each other; Arrive at a single set of user needs.



### FAST Approach Stage Two

- Technology features;
- Author implementation;
- User agent support.

Todd Libby - 19 January, 2023





### FAST Approach **Stage Three**

- If the author must implement something...
- If the user need is met by design... • If the user need is met by user agents...

Todd Libby - 19 January, 2023





### "Dark" Patterns

Todd Libby - 19 January, 2023



Todd Libby - 19 January, 2023

## )ark"







### **Connotation and Inclusion**

Todd Libby - 19 January, 2023





## Black/Dark - Evil, disgrace, vile, immoral White/Light - Purity, good, innocence, cleanliness

Todd Libby - 19 January, 2023



### **Deceptive Patterns or Anti-patterns**

Todd Libby - 19 January, 2023







"A deceptive pattern is a deliberate anti-pattern designed to confuse or deceive a user. There is a difference between poor design and unintentional blockers for users."

**Functional Needs Subgroup** 

Todd Libby - 19 January, 2023





"A deceptive pattern is where there is a deliberate attempt to aim or force a user down a particular path or to trap attention in a way that redirects or focuses on a goal, that the user either doesn't want or need or maybe harmful to them."

**Functional Needs Subgroup** 

Todd Libby - 19 January, 2023



## Deceptive Pattern: Deliberate. With intent Anti-pattern: No intent but harmful/bad UX

Todd Libby - 19 January, 2023



## Solving User Needs

Todd Libby - 19 January, 2023



Makes Web pages more accessible and usable, less harmful to people with disabilities and neurodivergent users, and creates friendlier and safer user experiences for everyone.

Todd Libby - 19 January, 2023



### **Barriers & Categories**

Todd Libby - 19 January, 2023



### **Deceptive Patterns Categories of barriers**

- Annoying / Unwanted (Unexpected)
- Not using affordances  $\bullet$
- Vestibular  $\bullet$
- Not activated / Not controlled by user
- Indicators  $\bullet$
- Unwanted content / advertising / without user knowledge •

Todd Libby - 19 January, 2023



### **Deceptive Patterns** Categories of barriers

- Wording
- Consistency (Affordances)
- Adjustability / flow blockers
- (Time) Pressure
- Invasive

Todd Libby - 19 January, 2023



### **Deceptive Patterns Examples of patterns/anti-patterns**

- Trick questions;
- Infinite scroll;  $\bullet$
- Copy and paste is disabled; •
- Timers;  $\bullet$
- Asking the user to enable features (microphone, camera, etc.).

Todd Libby - 19 January, 2023



## Unsubscribing Anti-pattern

- Confusion?
- Intent / No Intent?
- Deceitful?
- Accessibility?

Not now

622 neighbours

### Allow Nextdoor to mail letters on your behalf



Allow Nextdoor to periodically print and <u>mail</u> <u>invitation letters</u> on your behalf to help grow your neighbourhood. Invitations include:

- · Your name
- · Your street name
- $\cdot$  Helpful information about Nextdoor

Opt out anytime in privacy settings

Confirm

### **Preferences** Deceptive Pattern

- Confusion?
- Intent / No Intent?
- Deceitful?

I would like to receive relevant information from this company



I would like to receive additional information too

🔿 Yes ( No

Contact Preferences

Would you like to receive information from

about upcoming events,

exhibitions and news?







### Preferences Anti-pattern

- Confusion?
- Intent / No Intent? ullet
- Deceitful?
- Accessibility?

### Handle

(Your unique personal identifier. You currently can't change it, so pick a good one. example: noam)



Handle must be between 6 and 15 characters in length and can only contain letters, numbers, and underscores.

### O jina



### Preferences Anti-pattern

- Confusion? ightarrow
- Intent / No Intent? ullet
- Deceitful? 0
- Accessibility?

| If this | i |
|---------|---|
| associ  | a |
|         |   |

is not your email address, please ignore this page since the email ted with this page was most likely forwarded to you.

No more calls, no more texts - we're breaking up.







Grover shows a picture of who the fuck asked

# Any current gap in the WCAG guidelines we want to address through FAST and Deceptive Patterns.

Todd Libby - 19 January, 2023



# The most important part about bringing Deceptive Patterns to WAI / WCAG 3 is to reduce harm to those who are affected.

Todd Libby - 19 January, 2023



# People can use without physical harm or risk (to self or others within a physical environment).

Todd Libby - 19 January, 2023



## Ways to Meet User Needs

Todd Libby - 19 January, 2023



## How to meet user needs:

- Author design & technical implementation
- User agent accessibility support of standard & authorimplemented features
- Assistive technology support (including accessibility API mediation)

Todd Libby - 19 January, 2023



# User needs need to be analyzed for how they can be met.

Todd Libby - 19 January, 2023











# What about large companies like Meta, Twitter, Google, etc.? How will you get them to change?

Todd Libby - 19 January, 2023



## Ethical Web Principles

Todd Libby - 19 January, 2023



## • W3C TAG Ethical Web Principles

- The web should be a platform that helps people and provides a positive social benefit
- Ethical Principles for Web Machine Learning
  - related use cases

Todd Libby - 19 January, 2023

 This document discusses ethical issues associates with using Machine Learning and outlines considerations for web technologies that enable



Acknowledgments



- Jake Abma (Invited Expert)
- Joshue O Connor (Invited Expert)
- Michael Cooper (W3C/MIT)
- Charles Hall (Invited Expert)



# https://toddl.dev/slides

https://raw.githack.com/w3c/fast/restructurefunctional-and-user-needs/index.html

https://www.w3.org/TR/ethical-web-principles/

Todd Libby - 19 January, 2023

# https://www.w3.org/TR/webmachinelearning-ethics/



## Twitter: @toddlibby Mastodon: <u>a11y.info/@todd</u> LinkedIn: <u>linkedin.com/in/todd-libby</u> Website: <u>https://toddl.dev</u>

Todd Libby - 19 January, 2023





