Agile ORLANDO
JULY 24-28 2023
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#AGILE2023
Sukriti Chadha
Agile Accessibility

Agile Alliance
PRESSENTS

Agile ORLANDO
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2023
Agenda

- Digital Accessibility Basics
- Why Accessibility
- Examples
- Agile Product Lifecycle
- Beyond Compliance Example
- Q&A

Speaker: Sukriti Chadha

https://www.linkedin.com/in/sukriti-chadha/
Digital Accessibility Basics
What is a disability?
What is Accessibility?  
What is Inclusion?
A 60-foot long ramp that looks like a maze and visually takes up the entire front of the house, with unnecessary turns leading up from a street to the door of a house.
A ramp leading from street level to the door of a house, with side rails and one turn
Why Accessibility?
People in the world live with some form of disability including
26% of US adults live with a disability
Distribution of functional disability types in the US: 13.7% mobility, 10.8% cognition, 6.8% independent living, 5.9% hearing, 4.6% vision and 3.7% self-care
97%

Of the world’s top 1M websites fail even the most basic accessibility checks
Legal and Compliance Landscape
Regulatory Frameworks

1. ADA
2. WCAG (A, AA, AAA)
3. Section 508
4. CVAA
5. EU Web Accessibility Directive
6. European Accessibility Act
7. Accessible Canada Act

Between 2019 and 2022, 12% increase in lawsuits
“The U.S. Department of Labor’s Office of Disability Employment Policy categorizes persons with disabilities as the third-largest market segment in the U.S., after Hispanics and African-Americans. The discretionary income for working-age persons with disabilities is $21 billion—greater than that of the African-American and Hispanic segments combined”

- 2018 Accenture Report
Challenges
Prioritization

Impact = (People reached X Impact on each person) - (People excluded X Impact on each person)

CS and other tech programs don’t teach a11y

Know-how

Measuring impact
Different/overlapping user needs
Design-only focus
Tech outpacing guidelines
Mobile Specific Challenges
By 2025, 72% of all internet users will solely use smartphones to access the web

Predicted by World Advertising Research Center
- Limited documentation and guidelines
  - Last mobile WCAG guidelines published in 2015
- Fragmentation
  - Types of device (watches, tablets, operating systems)
  - Sizes
- Supporting different orientations
- Release cycles and long-tail adoption
- Consideration for multiple sensors and output devices
Practical Examples
#thisisthebestproductever
#ThisIsTheBestProductEver
A side-by-side comparison of a Spotify playlist page with the shuffle setting turned off and on respectively. The shuffle button turns green with a dot on the bottom when on.
Private Writing Retreat - Burlington, VT

Sponsored by Vermont Writers’ Group

Overview


Ut at ultrices velit eu pretium bibendum maecenas ultricies. Fermentum eu, scelerisque sed eu sagittis. Non mattis sed nunc quis cum ultrices mauris. Sit nisl luctus justo eu urna etiam

Dates

9/1/21-9/30/21

Application Deadline

8/15/21

Spots Available

20
Mobile app screen with images of furniture, with sale items and departments as subcategories
Two mobile app screens. One on the left with large text size, where images don’t scale with the text, causes elements to overlap, making it unreadable. One on the right, where the rest of the content scales with enlarged text.
List of financial stocks where a positive movement is shown by a green background and negative movement by a red background.
Two mobile screens with video: one with small, and one with enlarged captions
Side-by-side comparison of 2 payment screens. On the left, is a screenshot of a credit card payment screen where the hint “cardholder name” disappears upon focus. On the right, is a screenshot of a credit card payment screen with the hint “cardholder name” visible as the user types.
We’d love to hear from you!

How was your recent writing retreat experience?

Tell us your thoughts!

Submit

OR

Call now  Chat now  Email us

Screenshot of a feedback screen with options to call, chat or email
Embedding Accessibility in the Agile Product Lifecycle
Why working on just design is ineffective

The agile product development lifecycle with

1. Planning
2. Design
3. Development
4. Testing
5. Deployment
6. Review
Who is responsible?
Who is accountable?
Planning

When writing user stories, consider different user needs and make sure everyone can complete the core action. Prioritize user flows and measuring engagement.

Design

Primarily visual elements should have labels, mocks consider different states such as text sizes, contrasts, error states and focus order.

Development

Including provisions for alt text, captions, and the needs defined in the previous two cases. Write test cases where possible.

Testing

Cover as many cases as possible with automated testing, and ensure manual testing for higher-level checks that automated testing can’t cover.

Deployment

Reporting and assigning failed tests to respective teams. Failing builds for tests deemed to cover key user flows.

Review

Conducting user studies with people with lived experience, and having ways to to collect feedback, and a process to triage and assign fixes to responsible teams.
Manual and Automated Testing
Assistive technology examples

- **Auditory**
  a. Hearing aids

- **Visual**
  a. Voice assistants
  b. Screen readers

- **Motor**
  a. Single-switch access
  b. Eye-tracking
  c. Voice recognition

- **Mobility**
  a. Wheelchairs
  b. Scooters
  c. Walkers

- **Cognition**
  a. Memory Aids
  b. Speech Recognition
Learning from contextual or temporary disability

**Mobility**
- Holding a baby, driving, cooking

**Cognitive**
- Stress, lack of sleep

**Hearing**
- Noisy streets, home

**Visual**
- Glare, dark rooms

**Speech**
- In a meeting, different language
Web Tool for Automated Testing: Example

Example of Lighthouse on a website, and the resulting report.
Mobile Automated Testing Tools Examples

iOS Accessibility Inspector (XCode)

Android Accessibility Scanner
Formalizing A11Y
- Employee Onboarding
- Centralized Accessibility Team
- Clear rubric to prioritize and triage issues
- Part of hiring, promotions and employee evaluations
Real-world example
Beyond Compliance
- Full screen chart
- Personalization
- Focus order of the buttons
- Points of interest
- Haptic feedback
Expanded Overview in Book

https://www.amazon.com/Beyond-Accessibility-Compliance-Generation-Inclusive/dp/1484279476
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