ARIA-AT Output of users' situations of struggle and desired outcomes workshop

1. About this document

1.1 Recap of the process so far

This document summarises the output of conversations on April 17, 24 and May 8. It is a work in progress. Feel free to comment and or feed back.

Methodology

We're identifying specific situations of struggles that our potential users experience, and the outcomes they're hoping to achieve.

This will help us design a quicker, easier way for them to go from these situations of struggle to their desired outcomes.

Thinking through this lens helps us focus on the real life situations and problems that potential users have, rather than feature ideas.

This in turn gives us a way to come up with ideas and a rational way to evaluate them.

Here's more detail about the method we're using and where it comes from.

1.2 Where we are in this process

1. **Use cases for web developers**
   We're in broad agreement on these.

2. **Use cases for screen reader developers**
   We're still in the process of defining these. I've used my imagination to weave what we talked about into 3 draft use cases. The situations I'm describing might be off, and I'm sure they can be improved. I'd love your input.

3. **Use cases for ARIA-AT contributors**
   To be reviewed

2. Key users and actors for the tool we will be designing and developing

2.1 Primary audiences

- People **developing websites**
- People **developing assistive technology**
- People **contributing testing instructions** and expected outcomes
- People **performing tests** and contributing test results
- People **reviewing test data** and maintaining the project

2.2 Other key audiences

- Browser developers
- Accessibility subject matter experts / consultants
- Educators / Teachers
- People learning accessibility
- People who could participate in testing or collating test results
- Users of assistive technology
- People who will do administrative, setup or development work on the project
- Accessibility auditing tool developers
- People who might file issues, or disagree with results
- People who might contribute infrastructure code
- People who might contribute test cases (eg if we need something not already covered by the ARIA Authoring Practices examples)
- People who might want to request extra test coverage

Note: We are not planning to support importing test data they've found elsewhere.

3. Our audiences' pre existing situations of struggle and desired outcomes

3.1. Situations of struggles and desired outcomes of people developing websites

3.1.1 Situation of struggle 1

Situation of struggle

I'm developing a piece of user interface. I'm not sure how to make it accessible. It's not clear to me which ARIA roles and attributes are well supported across different browsers and screen readers.

Outcomes they're hoping for

- Make a user interface that will work for as many people as possible
  - Know how to work around support gaps
- Be done with this user story as quickly as possible
- If someone reports a user experience issue, know whether the problem is with our code or due to poor browser/AT support
- Feel more and more competent (rather than discouraged)

3.1.2 Situation of struggle 2

Situation of struggle

The code I've written isn't producing the results that I expected. Am I doing something wrong? Is there a bug in my codebase? Is it an issue with the browser or screen reader? Or maybe there's nothing wrong – I'm just confused because I don't know how this screen reader is expected to behave.

Outcomes they're hoping for

- Know whether these is a problem – or whether what they're hearing is how the screen reader is supposed to behave
- Know whether the problem is with their code, or due to poor ARIA support by the browser/screen reader
- Be done with this user story as quickly as possible
- Make a user interface that will work for as many people as possible
  - Know how to work around support gaps
- Feel more and more competent (rather than discouraged)

3.2. Situations of struggles and desired outcomes of **people who develop assistive technologies**

3.2.1 Situation of struggle 1

Situation of struggle

– *Draft* – I want the screen reader I'm working on to support a specific ARIA attribute. But there's a lack of clarity about what supporting this attribute means. I don't know how it should translate in terms of user experience, in different situations. The ARIA specifications offer a few examples, but I need to define rules that cover many more cases. And different people have different opinions about what's best for users and what they're expecting. I need concrete definition of a successful implementation.

Outcomes they're hoping for

TBC

3.2.2 Situation of struggle 2

Situation of struggle

– *Draft* – Customers are reporting issues with our screen reader, when using a well-known website. It's hard to know what the issue is, and whether it's something we should worry about. It's quite likely that the website's developers have used some ARIA attribute the wrong way. There's also debate about how that ARIA attribute should be used, and conveyed to users. So it's hard to know what we should do. There's no simple answer.

Outcomes they're hoping for

TBC

3.2.3 Situation of struggle 3

Situation of struggle

– *Draft* – Me and my team are working to improve a screen reader's support for ARIA. I need to know where we need to improve in priority. But I don't have a clear view of exactly where our current implementation is incomplete, broken, or fails to meet our users' expectations.

Outcomes they're hoping for

TBC

3.2.4 Situation of struggle 4

<u>Situation of struggle</u>

– Draft – I'm concerned that the screen reader I'm working on is not going to evaluated in the right way, and that results made public might not be fair. I don't know/believe that the tests are based on a correct understanding of how my screen reader is expected to work.

<u>Outcomes they're hoping for</u>

- TBC

3.3. Situations of struggles and desired outcomes of **people who might contribute testing instructions**

3.3.1 Situation of struggle 1

Situation of struggle

I **want to help make the web accessible**. It's not as accessible as I think it should be. I want screen readers to offer good support for ARIA and a good user experience. I want to **feel like I'm doing something useful**.

Outcomes they're hoping for

- Feel useful. Feel happier myself
- Feel that things are the way they should be (social justice)

3.3.2 Situation of struggle 2

Situation of struggle

I am **responsible for a screen reader**. **I care for its reputation**. I want to make sure that it's **being tested and evaluated in the right way** – following the right instructions and with correct expectations.

Outcomes they're hoping for

- The screen reader I work on as a good reputation, and doesn't get unfair criticism
- I feel that I'm doing good, useful work

3.3.3 Situation of struggle 3

Situation of struggle

I am **frustrated with my screen reader**. I want it to have a **better support for ARIA. I want a better user experience**.

Outcomes they're hoping for

- I can get things done quicker and easier, with more autonomy
- A more pleasant experience online

3.4. Situations of struggles and desired outcomes of **people who might contribute by performing tests**

3.4.1 Situation of struggle 1

Situation of struggle

I want to learn more about how screen readers support and render some ARIA attributes, so that I can make websites accessible (or help others do so). But **testing and collating test results in my own separate space feels futile.** There's just too much for me to test on my own. And I want to help move things forward.

Outcomes they're hoping for

- Feel more competent and confident in my knowledge of accessibility and ATs
- Developing accessible websites (or helping others do so) feels easier. I can do it with ease

3.4.2 Situation of struggle 2

Situation of struggle

I think that I have **found an ARIA-related bug** (or incorrect implementation). But **I'm not sure that I'm interpreting things right**. So **I'd like confirmation** about whether this is a bug or not, and how the screen reader is actually expected to behave. If I can't make sense of this I'd feel discouraged.

Outcomes they're hoping for

- Feel more competent and confident in my knowledge of accessibility and ATs
- Developing accessible websites (or helping others do so) feels easier. I can do it with ease

3.4.3 Situation of struggle 3

Situation of struggle

I think that I have **found is an ARIA-related bug** (or incorrect implementation). I hear about so many bugs, **it's hard to keep track of them**. So I want **everyone to be aware of this issue**, so that we can **get it fixed**. I want to feel that **we're making progress**, otherwise I'd feel discouraged.

Outcomes they're hoping for

- I feel I've helped enrich the life of others, and feel happier myself
- Feeling that things are the way they should be (social justice)

- Developing accessible websites (or helping others do so) feels easier. I can do it with ease

3.5. Situations of struggles and desired outcomes of **administrating, maintaining and leading the ARIA-AT project**

3.4.1 Situation of struggle 1

Situation of struggle

– DRAFT– Most web pages don't use ARIA well. ARIA is hard for web developers to know what ARIA attributes are well supported for different browser and screen readers. Testing ARIA implementations is difficult because it's hard for web developers and testers to know what screen reader output they should expect.

Outcomes they're hoping for

- *– DRAFT– It's quick and easy for web developers to know what ARIA attributes are well supported across different browsers and screen readers, and which ones aren't.*
- *Screen reader users get a better, more reliable screen reader experience when using the web*

3.4.2 Situation of struggle 2

Situation of struggle

DRAFT - Screen readers' support for ARIA is incomplete and inconsistent. We can't specify how a screen reader should implement ARIA.

Outcomes they're hoping for

- *– DRAFT– Screen reader developers have a clear, convenient view of which ARIA attributes are well supported or not by their screen reader*
- *Screen reader users get a better, more reliable screen reader experience when using the web*

3.4.3 Situation of struggle 3

Situation of struggle

– DRAFT– I'm working on the ARIA-AT project and I'm hoping it'll be a success. I'm concerned that screen reader developers might not agree with the test results that the project publishes -- because we might not be able to get enough time with them to define test assertions together. I'm concerned that the project might lose credibility

and momentum if there are disagreements about the expected outputs of different screen readers, and what counts as 'supports', 'doesn't support' or 'incorrect support'.

Outcomes they're hoping for

- Disagreements regarding test results and what screen reader outputs constitute 'support' for ARIA attributes are resolved efficiently, and without damaging momentum for the project.
- *Screen reader users get a better, more reliable screen reader experience when using the web*