Good Intentions, Real Barriers: Investigating Accessibility in XR Workflows





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Executive Summary

This project, conducted in collaboration with XR Access and the Metaverse Standards Forum (MSF), investigates why accessibility in eXtended Reality (XR) often breaks down between intention and execution—and what tools or systems could help bridge that gap. As XR technologies evolve, ensuring accessibility requires not just awareness, but practical, embedded support that fits real-world workflows.

Interviews with XR creators and accessibility specialists revealed several core challenges: accessibility is often introduced too late in the process due to deadline pressure or lack of ownership, while existing standards like WCAG are viewed as too complex or web-centric for immersive environments. Teams also lack integrated tools for testing and interpreting accessibility. There is limited shared language or structure for communicating accessibility needs across disciplines.

In response, I designed a guideline interface prototype (Figure 1) that makes guidelines easier to understand, filter, and apply. The interface allows users to explore categorized guidance based on user ability, platform, or team role, and presents success criteria, practical examples, and implementation tips in a clear, accessible layout. It aims to shift accessibility from a static checklist to an active, usable reference for inclusive XR design.



Figure 1: Guidelines Interface Prototype

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Goal

To explore how accessibility is currently approached in XR design and development, identify the barriers teams face in applying guidelines, and propose a solution that makes those guidelines easier to find, interpret, and implement in practice.

Research

I conducted 19 semi-structured interviews with a total of 21 participants:

- **10 XR creators (X1 X10)** including designers, developers, creative technologists, and product managers working in spatial computing, XR platforms, and immersive content.
- 11 accessibility specialists (A1 A11) including consultants, researchers, advocates, and testers with deep experience in disability access, inclusive design, and policy.

Interviews lasted 45-60 minutes and focused on:

- How accessibility currently fits into XR workflows (if at all)
- How teams interpret and apply accessibility guidance
- What tools, processes, or roles support (or hinder) inclusive outcomes
- Where responsibility and decision-making around accessibility actually sits

The goal was not just to collect pain points, but to understand the **underlying systems** and **team dynamics** shaping accessibility efforts in XR. The interview script can be found in <u>Appendix A</u>.

Analysis

I used a structured way using a thematic matrix to present insights from stakeholder interviews (see Figure 2). By grouping similar responses, it highlights recurring themes across participants and brings attention to key challenges and opportunities in XR accessibility. This approach also allows for a clear comparison between the perspectives of XR creators and accessibility specialists. The sticky notes are color-coded to reflect the tone of participant quotes—red for negative, green for positive, and yellow for neutral or factual statements. This visual system helps quickly identify emotional cues and patterns across themes.



Figure 2: Thematic matrix mapping participant quotes by stakeholder group and theme. Full text of sticky notes is available in <u>Appendix B</u>.

Key themes that emerged from this analysis include:

• **Approaches to Accessibility** – Differences in when and how accessibility is integrated into XR development.



- **Challenges Faced** Technical, organizational, and knowledge barriers limiting accessibility implementation.
- **Existing Guidelines** The role of current accessibility standards, their limitations, and their applicability to XR.
- **Perceived Need for XR Accessibility Guidelines** The demand for structured resources, toolkits, and platform-level solutions.

High v/s Low Priority Approaches to Accessibility

Participants showed a clear divide in when accessibility is prioritized. Some teams incorporate it early in the design process, treating it as foundational.

"You really want to think about accessibility before you start design because accessibility is pretty much impossible to retrofit." – X9

"I think accessibility is not something that you can incorporate towards the end. It's something you start working with from the very beginning." – X3

Others, however, approach accessibility reactively—only addressing it post-launch due to client demands, limited resources, or lack of awareness.

"A lot of that type of stuff gets deprioritized because, you know, we can barely make the thing as is, let alone add the accessibility, hitting the deadline." – X7

XR creators in particular admitted to deprioritizing accessibility under deadline pressure or due to insufficient knowledge, while accessibility specialists expressed frustration with this approach.

"It's not that they're not doing it because they don't like disabled people. It's that they just didn't think about it." – X9

Only a few participants reported consistently integrating accessibility from the beginning.

"Someone should be [responsible for accessibility]." – X7

Insight: Many teams treat accessibility as an afterthought due to deadlines, resource constraints, or lack of awareness.



Systematic Lack of Technical and Organizational Support

Teams face both technical and organizational barriers when trying to implement accessibility. Many lack dedicated accessibility roles, making ownership unclear.

"The roles and responsibilities are not clarified when it comes to accessibility between, like, all the different roles." – A2

"We don't necessarily have a dedicated accessibility engineer... we mix it into the normal engineering process." – X6

Tools and engines often don't support accessible design out of the box, and crossplatform conflicts further complicate implementation. Some features were added by accident rather than intention, pointing to a lack of systematic processes. Testing with users is limited for most participants, and criteria for cognitive accessibility remain especially unclear, as noted by multiple accessibility specialists.

> Insight: Lack of ownership and tooling leads to fragmented and inconsistent accessibility efforts.

Need for Clear and Practical XR Guidelines

Participants widely agreed that existing guidelines like WCAG (Web Content Accessibility Guidelines) are too complex and web-centric to apply cleanly to XR.

"WCAG is just so obtuse to try to read, you have to really understand accessibility to even interpret it." – A7

While some teams attempt to use WCAG, many prefer internal, informal standards based on WCAG but are easier to act on. There's a general understanding that guidelines are necessary, but their current form is often overwhelming or impractical.

"We'll probably need something like how WCAG works for traditional websites." – X2



"Unreal and Unity have accessibility guidelines... but nothing that pulls everything together." – A1

Several noted that requirements often overlap or feel ambiguous in XR contexts. Testing was emphasized even when formal standards weren't followed closely.

"There needs to be testing. There's no substitute." – X7

Insight: Teams need simpler, XR-specific guidelines that are actionable and not web-centric.

Appetite for Built-in Testing and System-Level Tools

There is strong demand for XR-specific accessibility resources that are easier to use, more visual, and context-aware. Participants requested interactive guides, code examples, and toolkits tailored to their development environments.

"Having a more standardized way of labeling things for non-developers would be really helpful." – A4

Some suggested TLDRs or cheat sheets to lower the barrier to understanding. Several emphasized that guidelines should be built into platforms and tools, not left as external references.

"I think putting more focus on platform-level or native-level accessibility is needed" – X6

A universal, agreed-upon standard was seen as ideal but difficult to achieve. Many participants emphasized that accessibility challenges go beyond just tools and standards—it's a multifaceted issue with no final fix.

"Accessibility will never be a 'solved problem'." – A9

Insight: There's strong demand for native, easy-to-use accessibility tools within XR platforms.



Analysis Summary

Tensions between XR creators and accessibility specialists often stemmed from differing expectations—creators favored built-in tools and ready-made solutions that could help them solve accessibility challenges swiftly, whereas accessibility specialists wanted clear, testable criteria that could make it easier to evaluate and audit XR experiences.

Both groups agreed that current tools are lacking, guidelines are insufficient, and that testing with real users is essential. There was a shared recognition that accessibility needs to be better communicated and embedded across workflows. Business priorities and tight timelines frequently push accessibility to the background. Overall, participants supported having clearer responsibilities, more intuitive resources, and built-in infrastructure support.

Guidelines Interface Prototype

Purpose & Context

The guidelines prototype was designed to help designers, developers, and testers explore XR accessibility guidelines more easily. It addresses key challenges surfaced in stakeholder interviews, including the lack of a central resource, confusion around responsibilities, and the complexity of existing standards like WCAG.

Design References & Benchmarks

As part of the early research and benchmarking process, I looked closely at existing accessibility resources to understand how guidance is currently structured and delivered. The Web Content Accessibility Guidelines (WCAG) offered a comprehensive but often overwhelming model. Its sidebar-based structure (Figure 3) was helpful for organizing large volumes of information, but its technical depth and web-specific framing made it difficult to translate into XR contexts.



Figure 3: Screenshot of the W3C's <u>Web Content Accessibility Guidelines 2.2</u>. Guidelines are split into individual testable accessibility criteria.



The Game Accessibility Guidelines (GAG), in contrast, adopt a more approachable tone, presenting recommendations as clear, actionable statements (Figure 4). While GAG loosely categorizes guidelines by ability (e.g., visual, motor, cognitive), it lacks a structured way to search or filter through them, which limits discoverability when applied in practical contexts. This lack of navigability echoed feedback from participants, several of whom described the current state of accessibility guidance as "scattered" or "hard to interpret in context."

actions that can be carried out while paused, or a skip mechanism Allow play in both landscape and portrait	Complex adaptations, usually only used when aiming for specific niche audiences. Considerations that are only applicable to certain game mechanics, require more budget, specialist knowledge / advice to implement, or don't benefit as wide a range of people. However they have incredibly high value for the people who do benefit from them. Motor (Control / mobility) Provide very simple control schemes that are compatible with assistive technology devices, such as switch or eye tracking Include a cool-down period (post acceptance delay) of 0.5 seconds between inputs Do not make precise timing essential to gameplay – offer alternatives,	All guidelines Basic Intermediate Advanced Full list Excel checklist download Help & advice Mow to work with these guidelines
	actions that can be carried out while paused, or a skip mechanism	
Cognifive	Cognitive	
	Provide an option to turn off / hide all non interactive elements	
Provide an option to turn off / hide all non interactive elements	Allow all narrative and instructions to be replayed	
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Figure 4: Screenshot of the <u>Game Accessibility Guidelines</u>, showing sample accessibility solutions that could potentially support gamers with different disabilities.

References to resources for existing platforms like <u>Unity's accessibility package</u> and <u>Meta's accessibility principles</u> were also reviewed, but fragmented structures and lack of detailed resources in those sources validated the need for something more cohesive and informative.



Interface prototype

To address the gaps surfaced through interviews and benchmarking, I designed a guidelines interface prototype that reframes guidelines in a more structured, approachable, and role-aware format. The goal was to make accessibility guidance easier to find, understand, and apply within real XR development workflows.

Structure & Categorization

The interface offers two primary ways of navigating guidelines:

- **By Principle** Grouped according to stages or functions within an XR experience (e.g., Setup, Understand, Navigate).
- **By Ability** Grouped by disability categories such as Vision, Hearing, Motor, Cognitive, and Cross-modal.

Guidelines were intentionally allowed to appear in multiple groups to support flexible discovery. Additional filters include **Role** (e.g., designer, developer, tester) and **Platform**, acknowledging gaps in responsibility awareness and platformspecific implementation issues raised during interviews.

Navigation & Interaction

Users can toggle between Ability and Principle tabs, which restructure the list of guidelines accordingly. They can also use the **universal search bar** to find guidelines by keyword. Filters are positioned above the content area, making them contextually visible and directly connected to the guideline list. Clicking a guideline opens a detailed view, with title, description, success criteria, accessibility relevance, and examples.

A future-facing feature includes a **chat-based AI assistant**, envisioned to help users ask questions and interpret guidelines more easily—especially when unsure how to apply them.

Design Iteration

The initial layout followed a three-panel grid with filters on the left, a list of guidelines in the center, and detailed content on the right (see Figure 5). However, during informal reviews and walkthroughs, it became clear that the placement of filters in a side panel made it less obvious that they were directly connected to the



list of guidelines. Users didn't intuitively associate the filters with the content they were viewing, which affected usability and discoverability.



Figure 5: Initial prototype with a 3-column structure

To address this, the layout was restructured with filters positioned above the guideline list, making their function more contextually visible and clearly tied to the content. Tabs were also introduced to switch between categorization types (by Ability and by Principle), keeping the interaction simple and reducing visual clutter.

The final prototype (Figure 6) presents a cleaner, wiki-style interface that enables XR creators to browse, filter, and understand accessibility guidelines more effectively. A dedicated section "How it helps different disabilities" was included to help creators understand the impact of each guideline, encouraging more empathetic and informed decision-making.





Figure 6: Annotated prototype highlighting core features of the interface.

Known Limitations

- Some users may want to select **multiple abilities**, which points to Ability potentially being better as a filter than a categorization.
- **Edge case handling** (e.g., filtering out a currently visible guideline) needs further definition.
- The prototype has **not been user tested**, and feedback from actual users is essential before making decisions about implementation.

Next Steps

This research uncovered clear gaps in how accessibility guidelines are understood, accessed, and implemented in XR workflows. The guidelines interface prototype is a foundational step toward creating a more usable, structured, and role-aware guideline system — but additional layers of exploration are needed.

Moving forward, we could:

- Validate the IA and prototype through user testing with XR creators and accessibility specialists to ensure real-world relevance.
- Explore development of a shared checklist or reporting tool, enabling teams to track, assign, and document accessibility considerations collaboratively.
- **Refine how guidelines are presented**, potentially shifting from static content to more interactive formats (e.g., customizable views, decision trees, Al-supported interpretation).
- **Build a platform-level strategy** for how guidelines, infrastructure, and tooling can be better aligned moving from reactive documentation to embedded support.
- Have a dedicated examples section to help creators find specific examples of what has been done before and how they can approach a particular accessibility issue.
- **Continue shaping a unified, XR-specific standard**, informed by lived practitioner experiences, that balances technical depth with practical usability.



This work opens a pathway not just for organizing accessibility guidelines more effectively, but for helping teams interpret and apply them with greater clarity and confidence. As the MSF continues its work on developing standardized accessibility guidelines for XR, this research offers valuable insight into how different stakeholder groups navigate, understand, and act on accessibility guidance. The prototype provides a foundation for structuring and presenting guidelines in ways that are actionable across roles.

Conclusion

This research highlights the real-world gap between the intent to build accessible XR experiences and the barriers that make it difficult in practice. While many XR creators value inclusion, challenges like unclear guidelines, time constraints, and limited collaboration with accessibility experts often get in the way.

The prototype developed as part of this work offers a starting point to address some of these gaps. By organizing existing guidelines in a clearer, more navigable format and explicitly highlighting the roles and responsibilities, it supports creators in making accessibility decisions earlier and more confidently in their workflows. While still exploratory, it lays the groundwork for future iterations and conversations, acting as both a baseline and a provocation for rethinking how accessibility guidance is delivered and used in XR. There's still much to be done but building shared understanding and tools like these can help push the industry toward more inclusive and sustainable design practices.



Appendix A: Interview Script

Interview Script: Understanding the current state of accessibility in XR

Stakeholders: XR Creators & A11y testers

Greetings and introduction

Hi <Participant name>, How are you doing today?

Thank you for taking the time to talk to us today!

My name is Mrunmai and I'm a UX researcher at XR Access. My team is working with the Accessibility Working Group of the Metaverse Standards Forum on a project to improve accessibility in XR (virtual and augmented reality) and would love to learn about the challenges you face when creating or testing XR experiences or otherwise evaluating for accessibility. Your insights will help make XR more inclusive for all users.

Please share your honest thoughts as we go along. Do remember, there are no right or wrong answers!

Do you have any questions for me before we get started?

Before we begin, could I just confirm that you're still okay with this session being

recorded? [Wait for reply]

Awesome! I will start the recording now.

Thank you!

Questions

XR Creators

- 1) Can you tell me a little about your background and experience in XR?
- 2) What are the types of XR applications you have worked on? (e.g., VR, AR, MR, gaming, training, simulations)
- 3) What software or tools do you use to design or develop XR experiences?



- 4) When designing XR experiences, what are the key factors you prioritize?
- 5) At what stage in the development process do you consider accessibility?a) [For Sr Devs] Has that changed over time?
- 6) When designing/developing XR experiences, have you ever needed to consider accessibility? Was there any incident which prompted that?
 - a) Which disabilities have you considered in your designs?
 - b) How do you ensure users of different abilities can interact with your applications?
- 7) Who in your organization is responsible for accessibility? OR Who determines the priority of accessibility-related tasks, and who is responsible for approving accessibility changes?
- 8) Do you have any internal accessibility guidelines or best practices specific to XR?
- 9) Are there any people with visible disabilities on your team/in your organization? OR Have you ever worked with users with disabilities when designing an XR experience? What was that process like?
- 10)Have you ever had to adapt an existing XR experience to make it more accessible? If so, how did you approach it?
- 11)Can you share a time when making an XR experience accessible was challenging? OR Are there specific technical or design limitations that make accessibility harder to implement in XR?
- 12)Are there accessibility requirements from clients, stakeholders, or regulations that you have to meet?
- 13) Are there any accessibility-related design patterns or frameworks you follow?
- 14)Have you used any existing accessibility guidelines when designing XR experiences? How helpful or challenging was it?
 - a) Have you found these guidelines helpful, or do they present any challenges in practical implementation?
- 15) What would make accessibility easier to integrate into your workflow?
- 16) How do you typically learn about new best practices or industry standards in XR development?
- 17)Is accessibility also a part of your QA tests?

Accessibility Testers

1) Can you tell me about your experience with accessibility testing?



- 2) Have you tested XR applications for accessibility? If yes, which types? *(e.g., VR, AR, MR)*
 - a) What software and hardware do you use for accessibility testing in XR?
 - b) Can you describe a recent experience testing an XR product?
 - i) How did you determine if it is accessible?
 - c. Do you follow any specific accessibility testing guidelines for XR? If yes, which ones?
 - d. What are some of the most common accessibility issues you've identified in XR applications?
 - e. Have you come across any accessibility features in XR that were wellexecuted?
 - f. How do you typically document or report accessibility issues in XR?
 - g. Are there any specific disabilities that XR applications often fail to accommodate?
- 3) What guidelines do you apply regarding accessibility besides WCAG?
 - a) What would make your job as an accessibility tester easier when evaluating interfaces and experiences beyond WCAG?
- 4) Do you use any specific checklist tools for different interfaces (eg: web, mobile, XR, etc)?
 - a) Are there any features you really like about those tools?
 - b. Is there any tool/feature that you find difficult to use?
- 5) What do you do when existing accessibility guidelines don't directly apply to the application you're testing?
- 6) Is accessibility also a part of your QA tests?
- 7) If you could change one thing about the way accessibility is handled today, what would it be?

Closing/Thank you

These are all my questions for today!

Thank you so much for participating in this screening session. Your opinions and suggestions are important and will help us improve the accessibility in XR interfaces.

Ask if they want to join mailing list:



https://docs.google.com/forms/d/e/1FAlpQLSdZxYGXzfZumj_1xRu0J1V7gG3PLmCDj 2GC8pB8SMAQB9rDRA/viewform

Is there anything else you'd like to add or any questions you have for us at this point?

Awesome! Thank you again for your participation and sharing your opinions. Have a great day!

Appendix B: Full Quotes and Insights

Stakeholders	Approach to accessibility	Challenges faced	Guidelines and standards	Perceived need for XR specific a11y guidelines
XR Creators				
Legend Positive Neutral Negative				

Figure B1: Thematic matrix mapping participant quotes by stakeholder group and theme. The sticky notes are color-coded to reflect the tone of participant quotes—**red** indicates negative sentiments or challenges, **green** highlights positive experiences or opinions, and **yellow** represents neutral or factual statements.

Approach to Accessibility

Participant	Sentiment	Insight
X2	Negative	Commercial projects: 'I think it really kicks in in the
		later stages.'
X2	Positive	Research projects have more liberty and feasibility
		to accommodate accessibility in XR
X5	Neutral	Highly dependent on client requirement - does not
		proactively implement any accessibility features or
		follow any guidelines
X9	Neutral	As a consultant, clients are not super receptive of
		the feedback on accessibility and look for quick fixes
		and improvements
X4	Negative	Know your audience and cater the solution
		accordingly: User Centric but not accessibility
		oriented



X8	Negative	Focus more on MVP then iterate to make it more
X8	Negative	"I think Industry projects are not always making the
70	Negative	decision to spend time and money for accessibility '
X3	Positive	The definition of accessibility changes when in
//3	1 OSICIVE	context of XR
X8	Neutral	Created user persona after alpha launch and
	i vederai	incorporated accessibility according to the persona
χ9	Positive	'You really want to think about accessibility before
,(5		you start design because accessibility is pretty much
		impossible to retrofit'
X10	Positive	'I think that accessibility is for everyone'
X10 X4	Negative	'I'm more focused on being a developer than a
		designer. So that wasn't my first go to thing always'
X5	Negative	'I am a tech person. A healthcare person is required
,		when designing in the healthcare domain'
X6	Positive	Don't have a dedicated accessibility engineer but
		included accessibility at all steps
X6	Positive	In a11v first orgs: Accessibility is considered pretty
		early in the process - embedded in the design phase
X8	Negative	'But if we don't have these kinds of needs, our user
	0	feedback is not asking for any of those features. We
		might not do that.'
X5	Negative	Despite the client being into healthcare, nobody
		worked on the accessibility aspect
X3, X7	Positive	'I think accessibility is not something that you can
		incorporate towards the end. It's something you
		start working with from the very beginning.
Х9	Negative	'It's not that they're not doing it because they don't
		like disabled people, right? It's that they just didn't
		think about it.'
A1	Positive	Considering multiple disabilities and having
		alternative controls
A1	Positive	If a studio has a dedicated accessibility team/
		people are passionate => good accessibility features
A9	Positive	Accessibility guidelines are more about player
		experience and their comfort and usability
A6	Negative	'A lot of the time something's accessible but still
		might not be usable'



A1	Positive	Other considerations include environmental factors like movement of text, acceleration of objects/environment
A2	Positive	The approach was more 'how do we do this' than 'we don't want to do this'
A1	Positive	'I think there's a misconception out there that VR just is completely unusable if you can't see, and it's not necessarily the case.'
A4	Positive	Information architecture played a major role in revamping the website's design to make it more accessible
A9	Positive	'If it's not accessible, it's a bug'
A4	Positive	Focuses more on shapes and symbols over color to convey certain things like avoiding red for negative and green for positive

Challenges Faced

Participant	Sentiment	Insight
X8	Negative	Current prototyping tools for XR lack customization
		wrt accessibility
X1	Negative	Technical difficulties like file size for audio support
X7	Positive	Accessibility issues sometimes get addressed
		unknowingly
X4	Neutral	Consider UX but don't consider accessibility explicitly
X1	Negative	Less interest from XR Dev teams worked with or a
		dedicated team
X4	Neutral	Haven't had anyone in the org responsible for a11y -
		worked with clients and their requirements
X4, X5	Neutral	Made a few features/changes to make the
		experience accessible unintentionally
X1	Negative	Lack of information/data about users - difficult to
		focus on any disability
X8	Neutral	Conflicting guidelines like Meta and Apple can be
		difficult to resolve for cross-platform compatible
		experiences
X6	Neutral	Adding an accessibility feature in a more user-
		intuitive way



Х7	Positive	Important to know how to have conversations about
		accessibility features and requirements
X1, X3	Negative	Difficult to pitch accessibility features/changes in
		commercial applications
A9	Negative	There are some current solutions that aren't
		necessarily the definitive solutions
A2	Neutral	'The roles and responsibilities are not clarified when
		it comes to accessibilities between, like, all the
		different roles'
A8	Negative	A lot of conversations and back and forth with
		design and dev teams to fix issues based on the
		testing performed
A3	Negative	Determining success criteria for cognitive disabilities
		is challenging
A5	Negative	'I really don't know who to communicate with on it
		(accessibility issues)'
A4	Neutral	Difficult to accommodate a large number of
		different stakeholders with different requirements
A8	Negative	'How the webpage is going to look for people that
		use enlarged texts - often overlooked'
A9	Negative	Hand tracking enables natural interaction without
		having to hold a controller, but comes with
		requirements for e.g. gestures
A9	Positive	Game will ship one way or the other - want to get as
		much into it to let people play as possible

Guidelines and Standards

Participant	Sentiment	Insight
X1	Neutral	Did have a few considerations while designing for
		certain disabilities - But not aware of accessibility
		compliance and existing guidelines
X2	Neutral	Existing standards & guidelines: Focused on
		traditional interfaces and don't really apply to XR
X1, X3	Negative	Did not use any specific guidelines - Brainstormed
		potential issues with the team
X6	Neutral	Don't have any specific internal guidelines - making
		things accessible and intuitive testing within the
		team



X6	Positive	'It's usually a lot of internal and play testing that
		really kind of shape what that is but at least currently
		we don't necessarily have like a specific set of
		standards for everything we do'
X7	Neutral	Also used video game accessibility guidelines - don't
		feel as official
X4	Negative	Have referred to Oculus guidelines - but after
		completion of the development
Х9	Neutral	Did not really refer to any other guidelines and
		referred to the internal doc created since it felt
		sufficient
Х7	Positive	'There needs to be testing. There's no substitute.'
X8	Negative	Have referred to Meta's XR Design guidelines as well
		as Apple's guidelines
Х9	Neutral	Used spreadsheets to document issues and prioritize
		into buckets
Х9	Positive	Own set of guidelines - XR interaction style guide that
		includes general best practices
X2	Positive	Tried to reference WCAG to meet minimum font
		sizing requirements
X7	Positive	Have tried skimming through other guidelines like
		WCAG but they seem more web-oriented and don't
		always apply to XR
X6	Positive	Refer to WCAG when looking for more "fleshed out"
		guidelines
A1	Positive	Multiple formats of reporting including full reports,
		slide decks or conversational walkthrough
A2, A8	Positive	Use project management tool to log accessibility
		issues
A5	Positive	Document feedback in the form of
		notes/observations
A2, A5, A7	Positive	Have internal set of guidelines
A1, A3	Positive	Also use client internal guidelines if any for
		evaluating accessibility
A9	Positive	Have internal guide documented using multiple
		resources like GAG, W3C, APX, etc
A1	Neutral	'No amount of evaluation will ever replace testing
		with players with disabilities'



A1	Positive	Have internal guidelines/ design patterns called APX - work in conjunction with guidelines
A6	Positive	Internal rating system (Google Accessibility Rating)
A9	Positive	Use vision simulation tools and also test for spoken
		audio and auditory processing issues
A1, A9	Positive	Things fall under multiple guidelines and design
		patterns often overlap
A3	Negative	Referring to WCAG or other guidelines could be
		difficult for beginners/layman to understand
A9	Positive	'I like the idea of WCAG guidelines categories over
		GAG'
A9	Neutral	Not a lot of standards about VR-specific accessibility
		right now
A7	Negative	WCAG is very complex
A8	Negative	Sometimes it is difficult to understand the WCAG
		success criterion and difficult to meet it because of
		user system settings that might lead to the website
		or app failing WCAG compliance
A5	Positive	Have noticed a high-level similarity between
		guidelines for web/mobile and XR interfaces

Perceived Need for XR-specific Accessibility Guidelines

Participant	Sentiment	Insight
Х3	Neutral	Toolkit - something like a plugin that can help
		implement/take care of a11y
Х3	Positive	A well documented resource on non-2D platform -
		An interactive VR based approach to understand and
		test the guidelines
X7	Positive	Need for real guidelines that would be simple to
		interpret and use
X1	Positive	Would be helpful but also could change with context
Х3	Neutral	Design system - Pick assets on the go, catering to the
		XR a11y
X8	Positive	Customizable XR interaction toolkit
X2	Positive	Helpful to have standardized tools/packages
		according to guidelines
X2	Positive	Would love to have a11y plugins



X2	Positive	Easier to make the code more accessible using Al tools
X2	Positive	Examples of a11y issues in code for XR experiences and how to fix - like WCAG
X6	Positive	Focus more on platform level or native accessibility that applications could more rely on
X9	Positive	Accessibility should be built into the toolkit/infrastructure
X2	Negative	Customization leads to ambiguity in terms of putting everything in the same basket
A9	Positive	Hitting the minimum level of requirements/standardization/measurements would be useful
A3	Positive	'I definitely think it would be easier, you know, if there was just kind of one universal set of criteria that everyone was in agreement on'
A7	Positive	Use own code examples in internal guidelines for better understanding of guidelines
A1	Neutral	'Unreal and Unity have accessibility guidelines and templates and so on and so forth that you can kind of read through, but nothing that pulls everything together'
A1	Neutral	Having a holistic set of guidelines could help understanding the problem
A9	Positive	Having a cheat sheet / more approachable would be beneficial
A3	Negative	Having good examples in documentation is really important
A9	Positive	'There should be a TLDR'
A5	Positive	Interactive tutorials/guide including a11y features for users to understand and adapt
A4	Positive	'Having a more standardized way of labeling things for non developers would be really helpful'
A4	Positive	Helpful to include an alt text in the metadata of images and videos - will make it easier for developers and designers