Designing for accessibility on smart glasses

A checklist from three on-device builds

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1. Research first.

Talk to people with lived experience before writing code. Talk to the organizations that already serve them. Synthesize what they ask for. Don't anticipate it for them.

2. Severity without color.

Monochrome HUDs are common on AR glasses, and color-blind users exist on every device. Encode severity through shape, weight, italic, brightness, position, and flash timing instead.

3. Glance-distance recognition.

Users should not read the HUD. They should recognize it in under a second.

4. Photosensitivity matters.

Stay under 3 Hz on any flashing element, per WCAG 2.3.1. JustListen's halo breathes at 1.2 Hz.

5. Privacy by default.

Audio stays on the device. No telemetry. No cloud transcripts. No analytics that touch user content.

6. Dual-audience screens when the situation requires.

The Samira phone tabletop bisects the screen between survivor and case worker, rotated 180 degrees, so each person reads upright from their side.

7. Discreet warning systems.

A trigger banner in the worker's HUD is not the same as a flashing alert on the phone the survivor can see. Discretion is a design value, not a nicety.

8. Confidence states made visible.

Speech recognizers fail in known ways. Italic plus lower brightness on low-confidence words tells the user what they can rely on.

9. Trauma-informed inputs.

Voice-activated panic-clear. No persistence without explicit opt-in. Don't keep what the user didn't ask you to keep.

10. Cultural sensitivity.

Cultural-cue notes go to the helper, not the helped. They support the worker's interpretation. They're not for the survivor to read about themselves.

11. Literacy is a real constraint.

Don't assume text literacy in the survivor language, or in any language. Icon plus voice plus glanceable shape carries the meaning when text can't.

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