

ACCESS AI

SMART GLASSES PROOF OF CONCEPT

AI Vision Beyond the Smartphone

Project Overview

Access AI is an accessibility-focused mobile application being developed to help blind and low-vision users understand and interact with the world around them through modern multimodal artificial intelligence. The next stage of the project is a hands-free smart-glasses prototype that combines a first-person camera, microphones, speakers, a smartphone, and conversational AI.

Why This Project Exists

Access AI is being built by Anthony Pope, an independent solo developer who is visually impaired and is creating the product from lived experience. Anthony attended the Governor Morehead School for the Blind in Raleigh, North Carolina, and has longstanding connections with blind and visually impaired people across different age groups. The goal is not merely to demonstrate AI technology, but to test whether it can become a practical, affordable, everyday accessibility tool.

Mission: Give a blind or low-vision user fast, natural access to useful visual information without requiring them to repeatedly hold, aim, and operate a smartphone.

Prototype Hardware Request

We are seeking one developer/evaluation smart-glasses unit, a temporary loaner, developer sponsorship, or equivalent hardware assistance. The ideal device exposes camera, microphone, speaker and control functions through an official SDK so Access AI can be tested without modifying or circumventing consumer hardware.

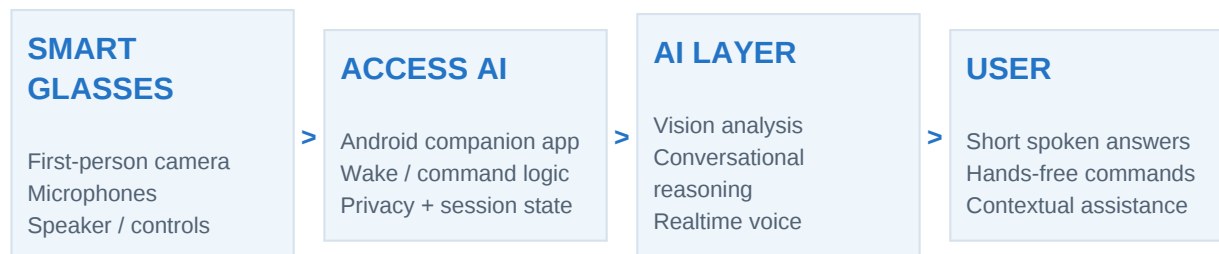
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THE PROOF OF CONCEPT

A simple wearable interface with the intelligence running where it makes the most sense.

Proposed Architecture



Core Test Scenarios

Read	Read signs, menus, labels, packaging and printed documents aloud.
Identify	Answer questions such as “What am I holding?” or “What is in front of me?”
Find	Search successive first-person frames for a requested object and provide simple directional feedback.
Describe	Give concise descriptions of rooms, scenes, people’s visible clothing, and relevant surroundings.
Hands-free interaction	Use a short wake phrase or button and continue the conversation through the glasses.
Context	Maintain short-term visual and conversational context so users do not have to repeat every instruction.

Example Command Structure

“Access, what’s in front of me?”	“Access, read this.”	“Access, find the Coke Zero.”
“Access, describe the room.”	“Access, what am I holding?”	“Access, start visual mode.”

Design Principle: Useful AI Without Waste

The prototype will be designed to avoid continuously sending unnecessary camera frames to cloud AI. Normal mode can remain idle until requested; reading mode can send one high-quality frame; find and visual modes can temporarily sample successive frames; and local phone-side logic can suppress duplicate or unchanged scenes. This approach targets lower latency, better battery life, improved privacy, and sustainable per-user operating costs.

DEVELOPER PARTNERSHIP REQUEST

A focused evaluation with practical accessibility feedback.

What We Are Asking For

- One compatible smart-glasses developer/evaluation unit, loaner, or hardware sponsorship.
- Access to the manufacturer's supported SDK, developer documentation, and appropriate developer channels.
- Permission to identify the hardware as part of an independent Access AI proof-of-concept demonstration.
- Optional technical guidance if an integration issue exposes a hardware- or SDK-specific limitation.

What We Can Provide

- Real-world testing from a visually impaired developer using the system personally.
- Structured feedback on camera, audio, controls, latency, battery behavior, accessibility and developer experience.
- Documented prototype use cases and appropriate demonstration footage/screenshots as development progresses.
- Feedback from additional blind or low-vision testers when the prototype is stable and appropriate for broader testing.
- A practical accessibility case study showing how the hardware performs as an interface for multimodal AI.

Initial Evaluation Milestones

1	CONNECT	Pair glasses with Access AI and validate camera, microphone, speaker and control access.
2	SEE + SPEAK	Capture a first-person image, analyze it with AI, and return a concise spoken answer.
3	COMMANDS	Implement reading, identification, scene description and object-finding commands.
4	FIELD TEST	Use the prototype in normal daily environments and document reliability, latency and usability.
5	OPTIMIZE	Measure AI usage, battery impact and cost; reduce unnecessary requests and improve response speed.

Why Developer-Friendly Smart Glasses Matter

The proof of concept is intentionally hardware-agnostic, but official camera and audio APIs are critical. For example, Mentra's current Bluetooth SDK supports direct mobile-app connections and exposes camera, audio, streaming and hardware events on compatible glasses. Mentra Live is also described by the manufacturer as having a camera, speakers, three microphones and an open SDK. These are the kinds of capabilities Access AI needs for a seamless prototype.

Access AI is seeking a hardware partner willing to help test a simple idea:

Can modern smart glasses and multimodal AI give blind and low-vision users a more natural, affordable and immediately available way to access visual information?

Anthony Pope - Founder / Developer, Access AI

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Technical basis reviewed August 2026. Mentra Bluetooth SDK documentation describes Android/iOS/React Native support and camera/audio/stream controls; Mentra Live product documentation lists camera, speakers and three microphones.