DEMO DAY BRIEFING · EVEN REALITIES HACKATHON

ByYourSide

A quiet companion for people living with memory loss — family manage care in Telegram, the person sees gentle prompts on Even Realities G2 glasses.

Item	Detail
Live app	byside.here
Telegram bot	@bysappbot · t.me/bysappbot
Hardware	Even Realities G2 glasses, optional R1 ring
AI layer	Cocoon (TON confidential compute), server-side adapter
Status	Working prototype; live connections listed honestly in Section 07

SECTION 01

The problem

Over 55 million people worldwide live with dementia. In the early and middle stages, most still live at home and want to stay independent. What erodes that independence is rarely one big event — it is a hundred small gaps across the day: a missed pill, a forgotten allergy, an appointment that slips, a name that won't come.

Families try to fill those gaps with phone calls, sticky notes and alarms. Phones demand attention and unlocking; notes stay where they were left; alarms say that something is due but not what or why. Care partners carry the load, and they rarely know whether anything actually happened.

Design question

How do we put the right reminder in front of someone, at the right moment, without taking over their view of the world or asking them to learn a new device?

SECTION 02

The solution

ByYourSide splits care into the two roles that already exist in a family:

Role	Where they work	What they do
Family / care partner	Telegram, @bysappbot	Add reminders and familiar people in plain sentences. Get notified when something is confirmed — or when it isn't.
Your Loved One	Even Realities G2 glasses	See one short, warm prompt in the corner of their vision. Tap the temple or the R1 ring to confirm.

Nobody installs anything new to manage care: Telegram is already on the family's phones. The person wearing the glasses learns one gesture — tap — and everything else is optional.

Principles behind the experience

— **Peripheral, not central.** Prompts sit small and off-centre inside the lens so the wearer still sees the room, the road, the person in front of them.

— **One thing at a time.** A single reminder fills the display; no menus, no app name, no clutter.

— **Warm language.** "Good morning. Take the blue pill from the table." — not "TASK DUE 08:00".

— **Family stays in the loop.** Confirmations and missed reminders flow back to Telegram automatically.

— **Honest about limits.** Not a medical device; every simulated feature is labelled as such.

SECTION 03

How it works, end to end

1. Family adds care information

In Telegram, a relative writes a natural message or command, for example **/remind 08:00 Take the blue pill from the table** or **/person Anna — your daughter, lives in New York**. The bot stores it in a private care circle.

2. Glasses are paired once

The family sends **/pair** and receives a six-digit code valid for 15 minutes. It is entered once in the ByYourSide glasses app. The code is single-use and is exchanged for a per-device token; no passwords live on the glasses.

3. The reminder appears

While the glasses app is open, it syncs every minute. At the due time the prompt appears in the lens with the clock in the upper-left of the left lens and the action hint (“tap = done”) at the bottom of the right lens. Reminders are also saved on the phone so they keep working offline.

4. Confirm with a tap

A single tap on the G2 temple or R1 ring marks it done. The family receives “✓ done” in Telegram. Swipes move between today’s reminders; a long press opens voice.

5. Safety net

— At due time the bot can also message the loved one’s own phone directly.

— If a reminder is not confirmed within **15 minutes**, the family is alerted once (e.g. “Blue pill not confirmed yet”).

— When the glasses app is reopened, anything missed is shown first, labelled “EARLIER”.

— Relatives can close a reminder from Telegram with **/done 08:00**; time zone is set with **/timezone Europe/Berlin**.

SECTION 04

Glasses interactions

The G2 has no camera and no speaker, so ByYourSide is built around what the hardware does well: a discreet display, temple touch, the R1 ring and a microphone.

Input	Action in ByYourSide
Single tap (temple or R1)	Confirm the current reminder
Double tap	Dismiss / go back
Swipe forward / back	Move through today’s reminders
Long press, then release	Hold-to-talk: ask a question (e.g. “Who is Anna?”)
Menu actions	Same actions as gestures, for accessibility
Phone location & head motion	Context signals via the Even Hub SDK, with consent

Gestures are decoded in a single module and routed through one handler, so the browser showcase and the real glasses behave identically. Microphone audio stays on the device, requires explicit consent and is discarded after capture.

The demo film

The website’s first-person film follows a day through the glasses, with prompts timed to what is on screen:

Scene	Prompt shown in the lens
Waking up	Good morning — take the blue pill from the table
Opening the fridge	You are allergic to soya beans
Leaving through the door	At 14:00 you visit Anna — your daughter
Driving	Anna lives at 128 Willow Lane, Apt 4B, New York (sample address)

Fullscreen opens with a “putting the glasses on” transition and closes by taking them off.

SECTION 05

Integrations

Integration	Role	Why it matters
Telegram (@bysappbot)	Family interface, pairing, alerts, confirmations	Zero onboarding for families; works on every phone they already own.
Even Realities G2 + R1	Display, gestures, microphone, sensors through the Even Hub SDK	Hands-free, glanceable care in the wearer's own field of view.
Cocoon on TON	Private AI answers to "who / what / when" questions, grounded in family-entered facts	Confidential compute: health-adjacent family data is processed without exposing it to a public AI provider.
Private backend	Care circles, reminders, people, pairing tokens, every-minute reminder check	Family data is never readable anonymously; access is server-only.

Why Cocoon

Memory-care data is intimate: medication, addresses, relatives' names. Cocoon runs models inside confidential computing on the TON network, so questions can be answered without handing the household's data to a conventional AI cloud. ByYourSide calls Cocoon through a server-only, OpenAI-compatible adapter. Credentials are supplied at runtime and never stored in code or the browser; until access is granted, answers are clearly labelled "COCOON AI · DEMO".

SECTION 06

Privacy & safety

— **Cocoon private compute.** AI questions are processed on the Cocoon Confidential Compute Open Network on TON: models run inside hardware-protected secure enclaves (TEEs), so prompts and family facts stay encrypted and are not visible to GPU providers, network operators or ByYourSide.

— Only the facts needed to answer a question are sent to Cocoon; nothing is used to train models and no conversation history is kept on the AI side.

— No API keys, bot tokens or credentials in the repository or in browser code.

— Family data sits in private tables with row-level security; Telegram updates enter only through a verified webhook.

— Pairing codes are six digits, single-use and expire after 15 minutes; devices hold a revocable token.

— Microphone use is opt-in, local and not uploaded.

— Terms clearly state ByYourSide is a support tool, not a medical device or emergency service.

SECTION 07

What is live today

The current state of the build, area by area:

Area	Status
Website, interactive demo, 3D glasses, first-person film	Live at byside.here
Glasses app (Even Hub package, /g2)	Built and packaged; tested with an instrumented bridge
Gestures, menu actions, location & motion	Implemented on the official SDK; simulated in browsers with labels
Reminder engine, 15-minute alerts, catch-up on reopen	Live; check runs every minute
Pairing and tap-to-Telegram confirmation	Built and tested end to end with temporary data
Telegram bot linking	Pending — connection check timing out on the platform side
Cocoon live endpoint	Pending client access; labelled demo answers meanwhile
Physical G2 / R1 test	Pending access to hardware
Automated tests	63 passing

Known limitation

Even App runs the glasses app in the foreground, so on-glasses prompts require the app to be open. Telegram nudges, family alerts and catch-up on reopen are designed specifically to cover that gap.

SECTION 08

Roadmap

— **Next:** live Telegram link, Cocoon endpoint, field test on G2 + R1 with a care family.

— **Then:** on-device speech recognition for hold-to-talk; multiple relatives per care circle with roles.

— **Later:** gentle location-aware prompts (“you’re near home”), weekly summaries for care partners, partnership pilots with memory clinics.