
✦ BEREAN DASHBOARD

SYSTEM ARCHITECTURE · THE FULL STORY

**Elite notes. An AI that asks.
The Greek under your finger.
A voice both ways.
Built with no budget at all.**

How a complete inductive study cockpit — speech in, speech out, Claude as a Socratic partner, originals on screen, and notes that publish like a journal — runs on one HTML file, a global edge, and one brother's server on a single core in Ukraine.

“And he took the five loaves and the two fishes... and they did all eat, and were filled.” — [Mark 6:41–42](#)

Ed Smith · Smith For Christ · July 25, 2026

[berean-dashboard.pages.dev](#) · Soli Deo Gloria

01 What we actually built

Not a Bible reader. A study cockpit — and the difference is the four things at its center.

Plenty of software will show you a chapter. This is the tool for the twenty minutes after that: **elite note-taking** shaped by the inductive method, with your own marking legend and one-tap publishing to beautiful PDF and Word study sheets; **an AI Study Partner** — Claude — that sees your open passage, your markings, and your notes, and answers like a good teacher: with a question back; **the Greek and Hebrew originals** in a column beside the English, every word tappable, with the full interlinear on the roadmap; and **a voice in both directions** — dictate your observations, hear your notes and the Partner's answers read aloud — free, from the browser itself, built first for a brother for whom reading and typing are the hard part.

THE FOUR ENGINES OF THE COCKPIT



FIG. 1 — THE FOUR ENGINES. EVERYTHING ELSE IN THE SYSTEM EXISTS TO SERVE THESE.

Underneath them sits a deliberate contrarian choice: the entire application is **one HTML file** (~135 KB) plus one 7 KB worker. No framework, no build system, no database, no login. Your studies live in your own browser and survive offline. That's not minimalism for its own sake — it's what makes the whole thing free to run, impossible to rot, and private by construction. But privacy is the floor here, not the headline. The headline is what the four engines do together.

02 Around the world on no budget

The loaves-and-fishes architecture: a global edge that costs nothing, an AI that costs pennies, and one brother's server on a single core in Ukraine.



FIG. 2 — THE GLOBE. THE EDGE SERVES THE FILE EVERYWHERE FOR FREE; CLAUDE THINKS FOR PENNIES; AND THE SCRIPTURE TEXT ITSELF FLOWS FROM ONE MAN'S SINGLE-CORE SERVER IN UKRAINE.

The story that should humble every enterprise architect: the scripture text behind this cockpit — every translation, every Greek and Hebrew word — is served by **bolls.life**, an API built and run by one believer in Ukraine, on a single CPU core, given away free to anyone who asks. No company. No SLA. No budget. A brother with a server and a conviction that the Word should be free. We build on his loaves; Cloudflare's free edge multiplies them to three hundred cities; Claude adds a teacher's questions for half a cent; and the browser contributes the voice at no charge. **God working through men with no budget to proclaim Christ** — that is not a limitation of this architecture. It is the architecture.

And because one core in Ukraine deserves gentleness and honesty both: the app treats his server as precious — every chapter read is cached at the student's device and re-served from cache forever after, so a lifetime of rereading costs him one request. The dependency is also named in §05 as the thing our roadmap gradually retires for the Originals column — not out of distrust, but so his gift keeps serving new readers instead of repeat traffic.

03 Anatomy of the notebook

The heart of the product. Voice flows in at the top, elite documents flow out at the bottom, and everything between is engineered so a student's years of work cannot be lost.



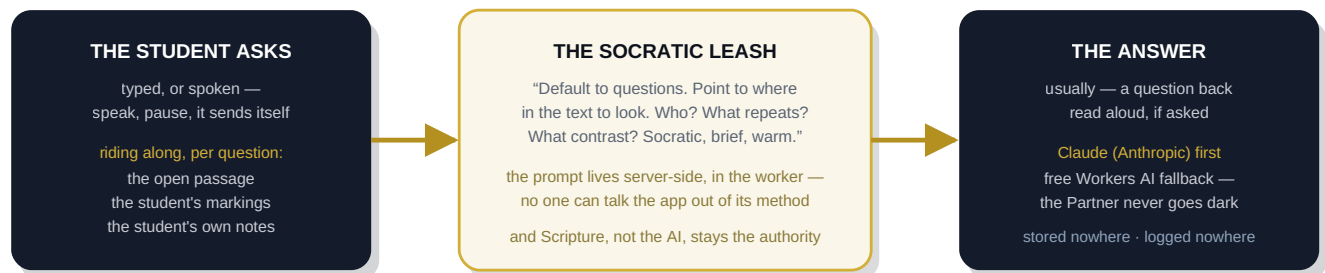
Speak it in at the top. Hand your small group something beautiful at the bottom.

FIG. 3 — THE NOTES PIPELINE, TOP TO BOTTOM: CAPTURE → THE MARKDOWN SOURCE → LOSS-PROOF KEEPING → PUBLISHED OUTFLOW.

Why Markdown matters more than it looks: the note's single plain-text source is what makes everything else honest. The read-aloud voice, the PDF, the Word file, and the coming verse-backlinks all render from the same characters the student wrote — so nothing can drift, nothing is proprietary, and a study written today will open in anything, decades from now.

04 The Study Partner — AI that serves the method

The single biggest delta over every other Bible tool — and the one place we spend money: about half a cent per question.



"It sees the open passage, your markings, and your notes, and helps you examine.

You do the deciding; Scripture is the authority."

Economics: context truncated to ~3K tokens in / 500 out → \$0.006–0.011 per question · prepaid credits, no auto-reload · worst case on earth = the balance, then the free tier carries on

FIG. 4 — THE PARTNER LOOP. THE METHOD IS ENFORCED SERVER-SIDE; HANDS-FREE CONVERSATION MODE IS NEXT IN THE BUILD ORDER.

What makes this different from "a chatbot in a Bible app" is the leash. The system prompt — held in the worker where no client can rewrite it — commands the model to *default to questions*, to point the student back into the text, and to stay brief and warm. Twenty years of youth-group teachers have known this instinct; now it runs at half a cent a question, around the clock, for a student studying alone at midnight. And next in the build order it goes hands-free: speak, listen, speak again — no taps between turns, with the mic going respectfully deaf while the Partner talks.

05 The honest delta — and the road ahead

Blue Letter Bible is a magnificent reference, and our own study group uses it. Here is exactly where this cockpit goes beyond it — and the one place it doesn't, yet.

Blue Letter Bible		Berean Dashboard
AI integration	None	Claude as a Socratic Study Partner — sees your passage, markings & notes; ask by voice, hear the answer
Note-taking	Basic notes behind a login	Elite, method-shaped notebook: O·I·A + your legend, dictation in, read-back out, publish to elite PDF / Word / Markdown
Speech	Audio Bibles (playback only)	Speech-to-text AND text-to-speech throughout — notes, Partner, pronunciation — free, both directions
Focus	Interlinear is 2 clicks deep, wrapped in banners	Text opens first; four columns + Greek visible immediately; any pane full-screen
Offline / install	No	Full PWA — installs, works with no signal
Morphological interlinear	The best available — parsing codes, lemmas, accented text. BLB wins today.	Originals + Strong's + lexicon today; full morphology is the named next mountain

The road there is already mapped: the morphologically tagged open texts (MorphGNT / SBLGNT for Greek, OpenScriptures for Hebrew) are free, licensed for exactly this, and shippable as static files — which has the double grace of closing the interlinear gap *and* quietly retiring most of our traffic to the one-core server in Ukraine. It sits in the roadmap right behind the Notes iteration now shipping: hands-free conversation, verse backlinks (your own years of notes resurfacing on every verse you reread — something no tool offers at any price), photos in notes, audio-synced class recording, and the dyslexia comfort pack.

What we want people to understand about what got built here: a study cockpit with AI integration, publisher-grade notes, original languages, and a voice in both directions — the feature list of a funded product — was built by men with no budget, on a free edge, over a free API kept alive by one brother in Ukraine, with the only line item being pennies of AI per question. Five loaves, two fishes. **God provides the increase.** Soli Deo Gloria.

Ed Smith

Smith For Christ · berean-dashboard.pages.dev

Soli Deo Gloria