

Berean Dashboard Architecture

One HTML file that is the whole app, one worker at the edge, and four outside services it is a good guest to. Measured against the v46 build on 13 September 2026, the release branch the day it was cut.

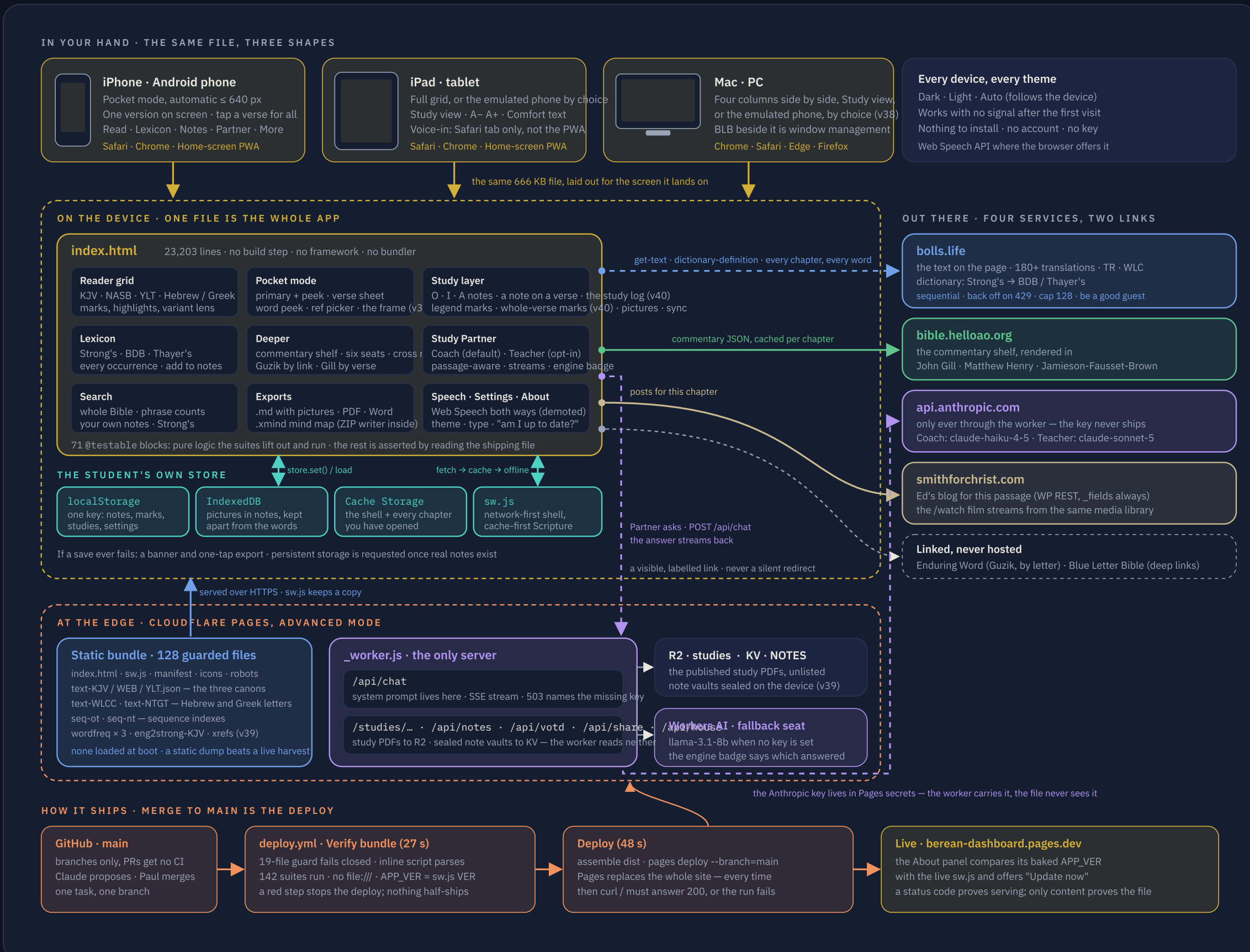
v46

WORDS THAT HAVE MOVED, AND THE O-I-A RAIL

THE SYSTEM MAP

Where a verse comes from, and where your notes go

Read it top to bottom: the device you hold, the one file that runs on it, the edge that serves it, and the services beyond. Every arrow is labelled with what actually moves along it.



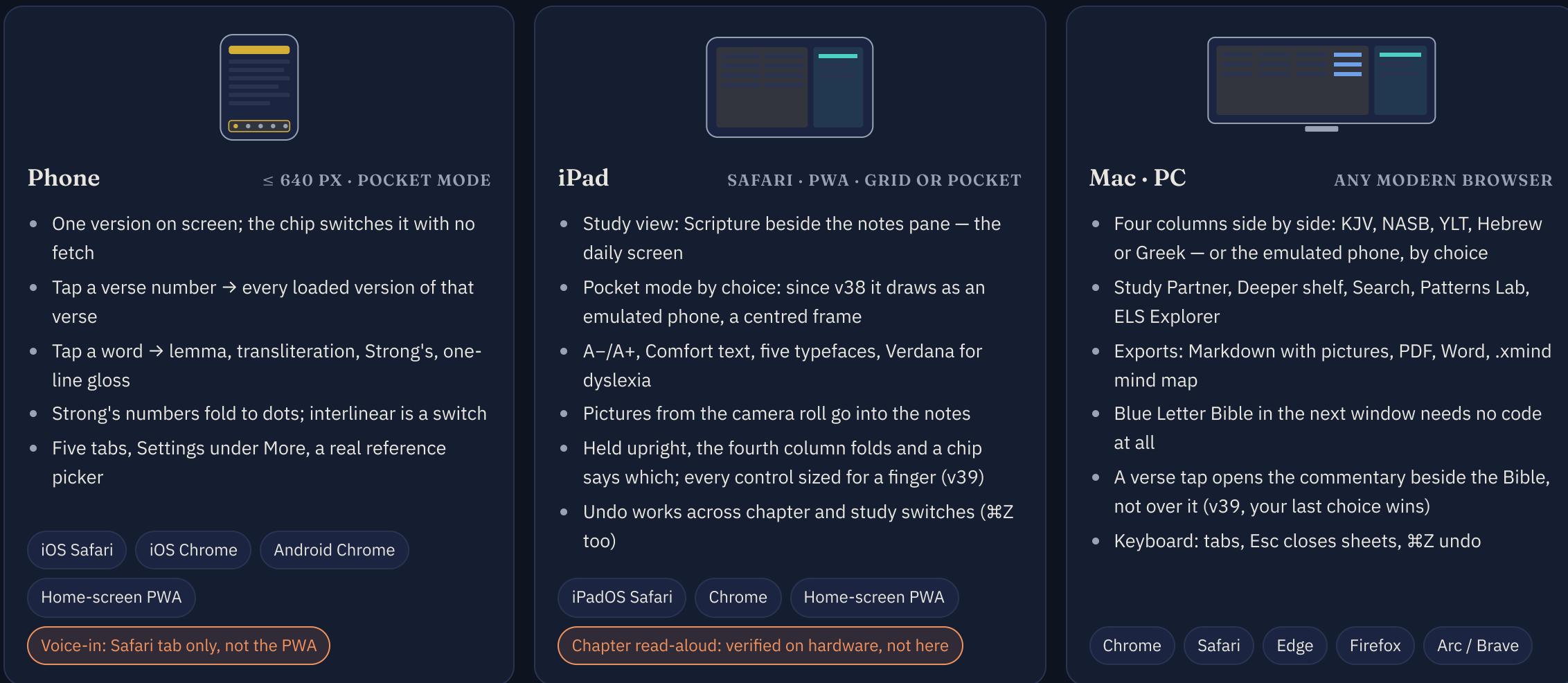
The app is the gold band. Nothing above it is installed; nothing below it holds a student's notes. The worker is the one server, and the four services on the right are the only things the file ever asks another computer for.

■ the app itself ■ the student's store & offline ■ Scripture text & static data ■ commentary shelf ■ the Study Partner ■ Smith For Christ ■ build & deploy

WHERE IT RUNS

Same file, laid out for the screen it lands on

There is no phone build and no tablet build. `index.html` reads the viewport and the pointer and puts on the shape that fits: pocket mode under 640 px, the four-column grid above it, and every switch in Settings on both.



THE PARTS

Every component, by colour

■ The app · one file

index.html	23,203 lines, 1.5 MB. Reader, pocket mode, study layer, lexicon, Deeper with cross references, Search, Partner UI, exports, speech, settings, sync, the study log, the peek, verse landing, the camera — live, frozen, from a photo, or on a Mac through an iPhone — and, since v45, the Verse Cockpit at /cockpit: one verse in the middle, the tagged original beneath it, the helps in columns either side, the AI in three groups one gesture away, and the King James words that have quietly changed sense marked in the verse itself. Since v53 the block diagram and the map, on the stage and in the phone's verse sheet from one code; the verse of the day above the chapter; seven reading plans above the paths. Since v57 the shared study, the Partner's observation check, the memory room, drive mode and the journeys. Since v58 the handout with the marks in it, two legend presets, the household, and prompts that land at the end of the note. Since v59 Examine · Lampstand: Teachers from a list kept by hand, Elsewhere as links and only links, the cross references as chips, and a bar where every action has a name; since v60 the same on the phone's verse sheet, which /examine opens there. 111 @testable blocks.
manifest.json	Name, icons, standalone display — what makes "Add to Home Screen" an app.
doc pages	about · manual · field guide · why · architecture · Hebrew 101 · Greek 101 · Patterns Lab · ELS Explorer · change log · inductive method · /watch. Folding header on phones.

■ The student's store & offline

localStorage	One key, Notes, marks, named studies, legend, settings. Safety-critical: every write path is tested against a throwing store. Still the source of truth with sync on.
KV · NOTES (v39)	One sealed blob per vault id. Since v52 the id and the key are both derived on the device from a 256-bit secret the app generates — never a passphrase a reader chose, and never typed on a second device: it travels as a pairing code the camera reads. The blob is encrypted with AES-GCM under a key the server never sees. Field-level three-way merge on the device; conflicts keep both sides. No reset. The worker answers 503 naming the binding if it is missing. Since v53 the same binding also holds votd:sub:<hash> — one push subscription per device for the morning verse: an endpoint, two keys, a clock offset, a plan and the memory room's review dates; nothing that names anyone. Since v57 share:<id> too — a sealed study the worker cannot open, thirty days. Since v58 house:<id> — one sealed document per household, first names and day counts inside it, 180 days from its last write.
IndexedDB	Pictures in notes — kept apart so a big photo can never cost a sentence.
sw.js	Precaches the shell; network-first for the app, cache-first for chapters; a real Response every time, never undefined.

■ Scripture text & static data

bolts.life	Every translation on the page and the BDB/Thayer dictionary. KJV is the one that counts — it drives search and analytics.
sidecars	ocr/ — Tesseract in WebAssembly and the English model, ~6 MB on the first shutter press, never at boot (v42); text-KJV / WEB / YLT, text-WLCC, text-NTGT, seq-ot/nt, wordfreq × 3, eng2strong-KJV, and since v39 xrefs.json — 344,756 openbible.info cross references, CC BY 4.0. Ship with the app, loaded on demand, never at boot.

■ The commentary shelf

helloao	Gill, Henry, Jamieson-Fausset-Brown — rendered in, verse-keyed, cached per chapter.
Enduring Word	Guzik is a per-chapter link and nothing else, by written permission; a suite fails the build if that ever changes.
Blue Letter Bible	The shelf for lookups: deep links carry book, chapter, verse and version.

■ The Study Partner

_worker.js	1,110 lines. Holds the system prompt and docs/DOCTRINE.md's 27 load-bearing phrases; streams SSE; answers 503 naming the missing setting. Since v39 also /api/notes, a GET and a PUT of a blob it cannot read. Since v53 /api/votd/subscribe and /api/votd/send: Web Push signed and sealed in WebCrypto (VAPID, aes128gcm), one page of ten devices per call, driven by a daily workflow with a bearer secret. Since v57 /api/share: POST a sealed share, GET it by id, thirty days. Since v58 /api/house: POST, GET and PUT of one sealed document per household.
Coach	claude-haiku-4-5 — the default seat, pinned by nine literal values and a prompt hash.
Teacher	claude-sonnet-5, opt-in, five method lenses, never fabricates a living teacher's words. Env-overridable.
Workers AI	llama-3.1-8b fallback when no key is set; the engine badge always says which answered.

■ Build & deploy

142 suites	Plain Node, no browser. Bonds as well as tests: version-agreement, docs-version-agreement, board-arithmetic, guzik-linked-not-hosted.
deploy.yml	Push to main only. Guard 19 files, parse the inline script, run every suite, check APP_VER = sw VER, deploy, curl for 200.
R2 · /studies/	Weekly study PDFs published behind a token, served as unlisted links.

BY THE NUMBERS · MEASURED 11 SEPTEMBER 2026 AGAINST THE V44 BUILD

1

HTML file is the app

15,630

lines in index.html

106

test suites, all green

83

@testable blocks, repo-wide

43

files the deploy guard requires

4

outside services · 2 links

0

accounts, keys, or installs for a reader

4,701 px

Acts 17 on a phone (was 22,327)