



Campus **Companion**

A Proposal for Your University



A PROPOSAL FOR YOUR UNIVERSITY

Every class, every **shaded step**, every classmate.

A companion for the student's whole day. It's built for hot-climate campuses, lives inside the apps students already use, and deploys in a week.

Campus Companion · v0.1.0

Confidential



EXECUTIVE SUMMARY

The student's day, **reimagined**.

Campus Companion pulls a student's schedule, calendar, campus map, and classmates into one app that lives inside your existing student app. They tap in with their university login and they're there. No new app to download, no second password to remember.

1 wk

FROM SIGNATURE
TO STUDENTS

49%

SHORTER WALKING
ROUTES VS. ROADS

83%

SHORTER THAN
ROAD-BASED
ROUTING

0

STUDENT-SIDE
DOWNLOADS

The thing that sets it apart is the **shade-aware walking route engine**. No campus app, LMS, or map tool does this. It finds the walking route that keeps a student under trees as much as possible, using satellite imagery to read the canopy and the sun's real-time position to know where the shade actually falls. On a campus where the pavement gets hot enough to matter, that's not a gimmick. It's the difference between getting to class and skipping.

Why now. Students already have Canvas, a calendar, and Google Maps. They still jump between five tools every morning to answer one question: what do I do next, and how do I get there without roasting? Campus Companion is the one app that answers it, for the person walking across campus. Nobody else does.

The student's day is **scattered** across five tools.

A student heading to class juggles five disconnected systems to answer five questions: What's next? (Canvas). What's due? (Canvas plus a personal calendar). How do I get there, and how do I avoid the worst of the heat? (Google Maps, which routes on roads, not the paths students actually walk). Where exactly is my room? (a PDF campus map). Who else is in this class? (nobody tells you, by default).

None of those tools is broken. They're just not built for the student. Each one was built for the registrar, or the instructor, or the driver, and answers one question in its own silo before handing the student back to guesswork. So every morning starts with admin work instead of classwork, and every student solves the same puzzle on their own, every single day.

Campus Companion is built for the person walking across campus. One app, the second they open it, that already knows their classes, what's due, the shaded way to their next room, and who's in it with them.

Why hot-climate campuses make this urgent

Campuses in hot climates turn heat into an attendance and wellness variable. A route that's 49% shorter and under tree canopy changes whether a student gets to class on time and in decent shape, and whether they decide to walk at all instead of skipping. Google Maps doesn't model shade, because Google Maps isn't built for the pedestrian campus. That's the gap.

Four pillars, **one** companion.

Open the app and the day is already laid out, the way the student lives it, not the way an admin sees it. Each screen answers the next question they'd have to ask, so they don't have to ask it.

01 — Today

Today, at a glance

Cards for every class today: name, time, building, room, and a live "next in" countdown. Open the app, know what's next in two seconds.

02 — Calendar

A calendar that gets it

Today's classes on top, a full month grid with class and homework markers, manual events, Canvas homework import, and Google calendar sync. It pings you the moment something moves.

03 — Map

The shaded way there

A satellite campus map that routes on the real footpaths, through any gap between buildings. A shadiest-route mode reads tree canopy from imagery and the sun's position so you can pick the cool way.

04 — Network

Your classes, your people

An opt-in roster of classmates, study-buddy suggestions from shared courses and program, and a find-people view by course overlap. Nobody sees you unless you turn it on.

Routing through **shade**, not just streets.

Every map app out there, Google Maps, Apple Maps, all of them, routes students down roads. On a campus built for footpaths, that's two to five times longer, and none of them know anything about the sun. Ours is the only engine that treats shade as part of the route. It runs on a 2-meter walkability grid and weighs every step by real tree canopy and where the sun actually is right now. The coolest path and the shortest path are both one tap away.

HOW IT WORKS	WHAT IT DOES
2m walkability grid	We pull building footprints from OpenStreetMap and rasterize them to a ~600×600 grid. An A* search finds the true shortest walkable path through any gap between buildings, not just the mapped walkways.
Satellite canopy detection	We decode aerial tiles to RGBA and flag green-dominant pixels as trees. Every sample point along the route gets a shade score.
Sun-position aware	A NOAA solar-position algorithm tracks real-time azimuth and elevation, so the shadow direction and length (and therefore the shade) are right for the minute, not the season.
Shade-weighted A*	A* runs on a cost surface where sunny cells cost up to 5× more than shaded cells. It finds the globally optimal shade route, not just the best of a few guesses.

Verified on a benchmark route. A* comes back with a 269m path, versus 525m from a footway-graph Dijkstra (49% shorter) and 1,548m from a road-based OSRM route (83% shorter), with zero backtracking. Fastest or Shadiest, the student picks.

No comparable product exists

PRODUCT CATEGORY	EXAMPLES	SHADE ROUTING?	PEDESTRIAN CAMPUS ROUTING?
Campus mobile platforms	Modo Labs, Blackboard Mobile, Ellucian	No	No (content/app portal only)
LMS	Canvas, Blackboard, Moodle, D2L	No	No
General navigation	Google Maps, Apple Maps	No	Limited (road-based; no shade)

Student success	EAB Navigate, Civitas	No	No
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Because no one else does this, Campus Companion is available as a sole-source purchase. An RFP won't turn up a comparable bid, because there's nothing to compare it to. We've included a separate Sole-Source Justification on request.

WHY CAMPUS COMPANION

Built for scale and climate.

If your campus sits in a hot climate, the shade routing earns its keep on day one. If it doesn't, the rest of the app — schedule, calendar, campus map, classmate network — still replaces five disconnected tools with one. Either way, it deploys in a week and scales to every campus you operate.

WHAT YOU GET	DETAILS
All campuses, one deployment	Multi-campus support from day one
On-campus cohort served	Every student who walks to class
Online students (optional)	Add later at a reduced rate
Time to live	One week from signature

The map, shade routing, and in-person Network features are for the on-campus cohort. Online students can be added later at a reduced rate.

Embedded in the apps students **already** use.

Campus Companion is hosted on our side and delivered as a web view or deep link inside your existing student app. You own the front door; we handle the hosting, maintenance, and updates. Students don't download anything, and there are no platform builds to ship.

What you provide

- ▶ SSO relying-party registration (SAML or OIDC), the same setup as any other third-party tool
- ▶ A Canvas API developer key, if you want Canvas integration
- ▶ The embedding config in your existing student app (web view, iframe, or deep link)
- ▶ First-line student support through your existing IT helpdesk, if you'd like (it's optional)

What we provide

- ▶ The hosted app, backend API, and database on our cloud (US-based)
- ▶ SSO passthrough, so students never type a new password and we never see your credentials
- ▶ Server-side OAuth2 to Canvas and Google, with all secrets on our backend, never in the browser
- ▶ Your brand theme applied from your guidelines (it's a one-file CSS change)
- ▶ Bug fixes, security updates, uptime monitoring, and a support SLA

Privacy & FERPA posture

We're a **data processor**, not a data controller; your institution stays the controller. The app only reaches Canvas and SSO data on behalf of the signed-in student, the same data they can already see, so no new FERPA-protected data gets exposed. The Network feature is off by default. A student has to turn it on to appear in rosters, and turning it back off deletes their Network data right away. We'll sign a Data Processing Agreement covering FERPA, retention, breach notification, and deletion along with the main agreement. A full Deployment & Security Specification is available for your IT and security review.

DEPLOYMENT TIMELINE

From signature to students in a week.

The part that takes the longest is your IT team scheduling the SSO registration. Everything on our side is hours, not days.

Days 1-2 **SSO & API registration (your IT)**

Register the service as a SSO relying party, hand over the Canvas API developer key, and tell us the embedding origins. It's the same setup as any other third-party tool.

Day 3 **Instance provisioning (us)**

We stand up a dedicated instance, wire up SSO, apply your brand, load the campus coordinates and building data, and set the frame-ancestors.

Days 4-6 **Validation (together)**

UI check in mock-data mode, SSO tested with real credentials on a test cohort, Canvas sync verified, shade routes walked against known paths, and the Network opt-in flow reviewed for privacy.

Day 7 **Go live**

We drop the deep link into your student app. Students reach Campus Companion through the app they already have, no download, no install. We watch it; your IT team has a direct line to us if anything comes up.

WHAT'S INCLUDED & HOW TO BEGIN

Everything ships with the **subscription**.

Included in every subscription

- ▶ Hosted web app, backend API, and database
- ▶ SSO passthrough and server-side OAuth2 to Canvas and Google
- ▶ Brand theme set from your guidelines
- ▶ Campus coordinate and building configuration
- ▶ TLS, security hardening, CSP, encrypted backups
- ▶ Bug fixes, security updates, Canvas and SSO API compatibility
- ▶ Uptime monitoring at the tier's SLA

To move forward

- ▶ Get in touch and we'll walk you through the tiers
- ▶ Name your IT owner who'll handle SSO registration
- ▶ Pass the Sole-Source Justification and Deployment & Security Spec to procurement and IT/security
- ▶ Sign the vendor agreement with the DPA (our counsel has a draft ready for review)
- ▶ Tell us how you want it embedded in the existing app: web view, iframe, or deep link

The only platform that **routes through shade.**

What you get. The only student-experience platform that routes through shade, across every campus and the full on-campus cohort. It lives in the apps students already use, deploys in a week, handles data the way FERPA expects, comes with priority support, and needs no student-side install. Nobody else offers this, so a competitive bid won't turn up a comparable outcome.

This proposal is for your procurement team and the software approval committee. We're happy to share the supporting Sole-Source Justification and Deployment & Security Specification for the formal procurement file and IT/security review. · Campus Companion · v0.1.0 · Confidential