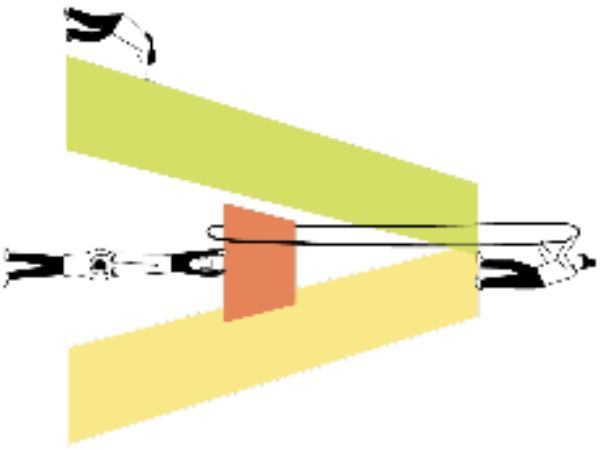




CALIFORNIA STATE UNIVERSITY
BAKERSFIELD™



**SUMMER
CAMP**

CAL POLY®
EXHUB
JULY 2026

CSUB SCHOOL OF BUSINESS

SCHEDULER TOOL ASSISTANT

PROBLEM STATEMENT

- Freshmen are unsure which courses to take in their first term
- leads to a lot of students to the advisors
- Advisors must balance: roadmap requirements + student time preferences + no conflicts
- Creating a conflict-free, roadmap-aligned schedule for each student is time-consuming and complex
- High demand courses and limited sections make it even harder

WE SOLVED THE PROBLEM



SOLUTION

Scheduling Tools Assistant



CSUB Scheduling Assistant

Business & Public Administration · Freshman planning

Major

General Business



Block

Block A — Morning core (10-3) (top pick)



WHY?

AI can help to make finding classes and understanding options easier through searching the database and roadmaps from data

AI

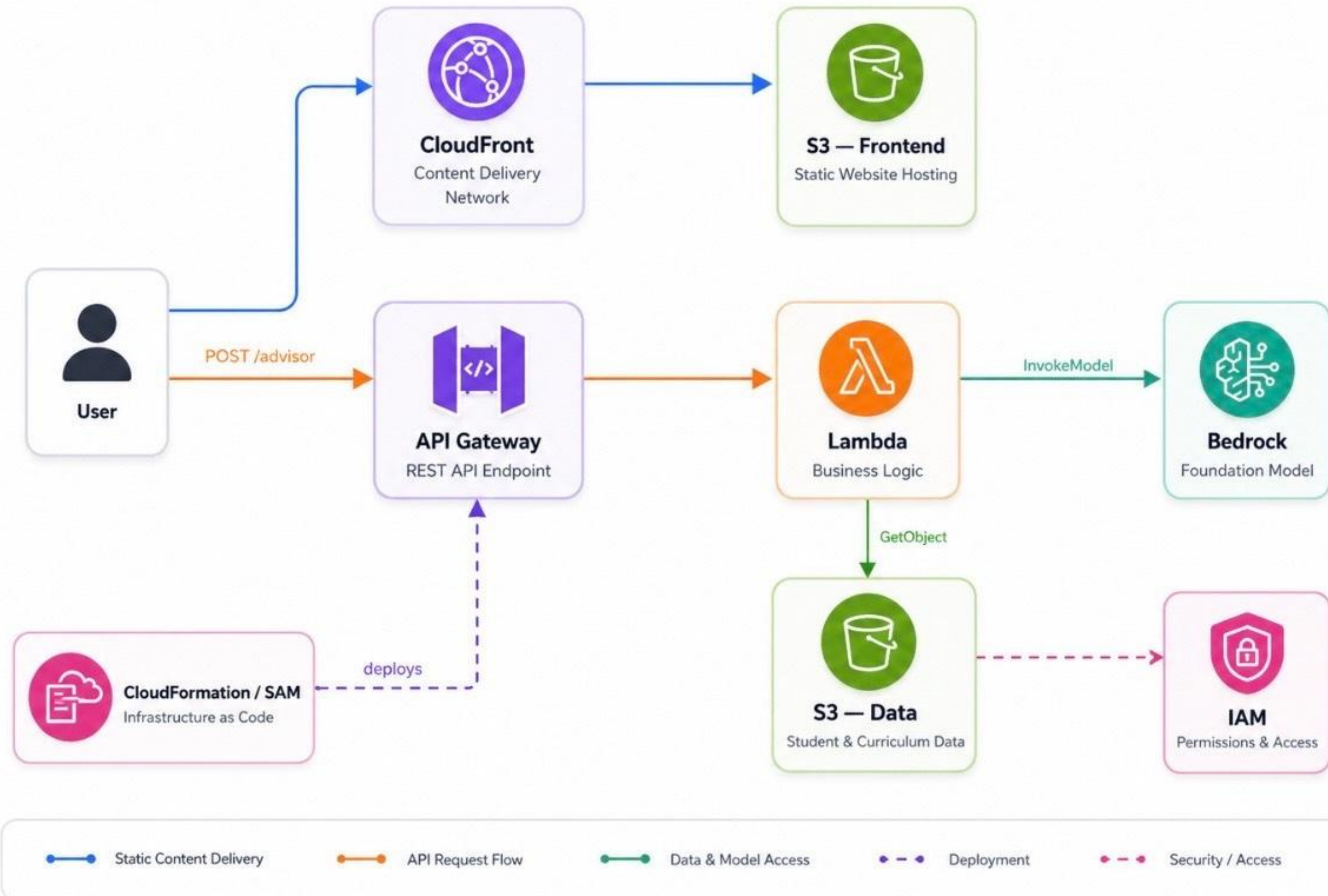
HOW?

Using historical data provided from CSUB and AWS services to build a smarter, more reliable solution.

note: AI DOES not generate the actual schedule, heuristic algorithm does

ARCHITECTURE

CSUB Curriculum & Enrollment — AWS Architecture



Advisor Benefits

- 🕒 Saves advising time
- 📅 Generates conflict-free schedules
- 🗺️ Follows degree roadmap
- ⚙️ Considers student preferences
- ✅ Reduces scheduling errors
- 📈 Increases advisor efficiency

Student Benefits

- 🎓 Clear first-semester plan
- 🤝 Personalized class schedule
- 😊 Reduces registration stress
- 🚀 Faster course planning
- ✔️ Better academic experience

CHALLENGES

- UNSUFFICIENT DATA
- UNCLEAR GOAL/DELIVERABLE AT EARLY STAGES
- AWS FIRST TIMERS
- NON TECH BACKGROUND MEMBERS (THEY DID AMAZING)
- WORKING AS A BIG TEAM AND COMMUNICATION

Did not stop us , only made us stronger

DEMO



CSUB Scheduling Assistant

Business & Public Administration · Freshman planning

Major

Finance

Block

Block A — Morning core (10-3) (top pick)

5 blocks · ~44 planned seats

DECISION SUPPORT · NOT A SCHEDULING ENGINE

BA - Finance — Fall 2026 freshman blocks

Real, conflict-checked cohort schedule blocks for incoming freshmen, built from the actual Fall 2026 section catalog, degree roadmap, and historical freshman course-taking patterns — not just a theoretical combination. For the department chair to review, adjust, and approve — not to auto-publish.

Major: BA - Finance

Term: Fall 2026

Preference profile: commuter_morning

Preferred window: 10:00–15:00

ASSUMPTIONS & METHODOLOGY

What this is

Real, section-level Fall 2026 blocks — every course/time was open at the snapshot, and each block is deterministically validated conflict-free.

Fit score

Composite of time-window fit, popularity, seat health, and compactness — higher is a better match for this profile, not a percentage or a cross-major comparison.

Meeting times

No listed time → “TBA” (not yet scheduled) or “Online — async”; neither is plotted on the calendar below.

Popularity

“N/D mined freshmen” = N of D real historical freshmen in this major took that course.

01 Selected block

TOP PICK

Block A — Morning core (10-3) (top pick) · 17 units · 6 courses

fit score 16.95

Composite of time-window fit, popularity, seat health, and compactness — higher is a better match for this profile, not a percentage or a cross-major comparison.

Seat advisories

FUTURE RENDITIONS

- More data for better results
- With more time we could implement custom trained ML model on student trends which would improve website functionality
- Scale to more colleges

OUR BEAUTIFUL TEAM

GITHUB: [HTTPS://GITHUB.COM/DANIEL-LZ26/CSUB-CURRICULUMENROLLMENTMODEL](https://github.com/DANIEL-LZ26/CSUB-CURRICULUMENROLLMENTMODEL)



DANIEL LOPEZ



FATIMA BAZURTO



RIVER COVEY



MARYAM BAVI



ABHIRAM SEGU



SANCHIT KAUSHIK