

DxHub - AWS at Cal Poly

Call Willie

Ask naturally. Get routed instantly.

By Andrew N, Pranay J, Asher R, and Jose O.

THREE ACTIONS

Map • Call • Text

WHY

The problem

Campus help is scattered across dozens of offices, forms, and numbers — worse when you don't know the department, or it's urgent and unclear.

Slow discovery

Finding the right office or site takes too many searches.

Wrong entry points

Users must already know department or form names.

Urgent needs get lost

Emotional or time-sensitive requests need fast routing, not a search bar.

Beyond the ask

Trained on every Chico State service — it surfaces help you didn't know to ask for.

WHAT PEOPLE ACTUALLY TYPE

"I'm hurt."

"I need to report something."

"I haven't eaten."

"Where is the health center?"

*"My friend is acting differently
and I'm worried."*

Our goal

Route every user to the right resource in the fewest interactions, the least time, across the widest range of problems.

Minimum

INTERACTIONS

Every extra question costs time — we only ask when it truly narrows the need.

Fastest

TIME TO RESOURCE

Straight from question to map, call, or link — no dead-end search results.

Widest

RANGE OF NEEDS

From directions and forms to safety and crisis situations, in one entry point.

WHAT

The solution

Call Willie always replies with one of three interactive & intuitive outputs — instantly understandable, no matter who's asking.



A map you can tap

Drops a pin and directions right in the app — no link out to Google.



A number you can call

One tap connects the call — including emergency numbers.



An answer you can read

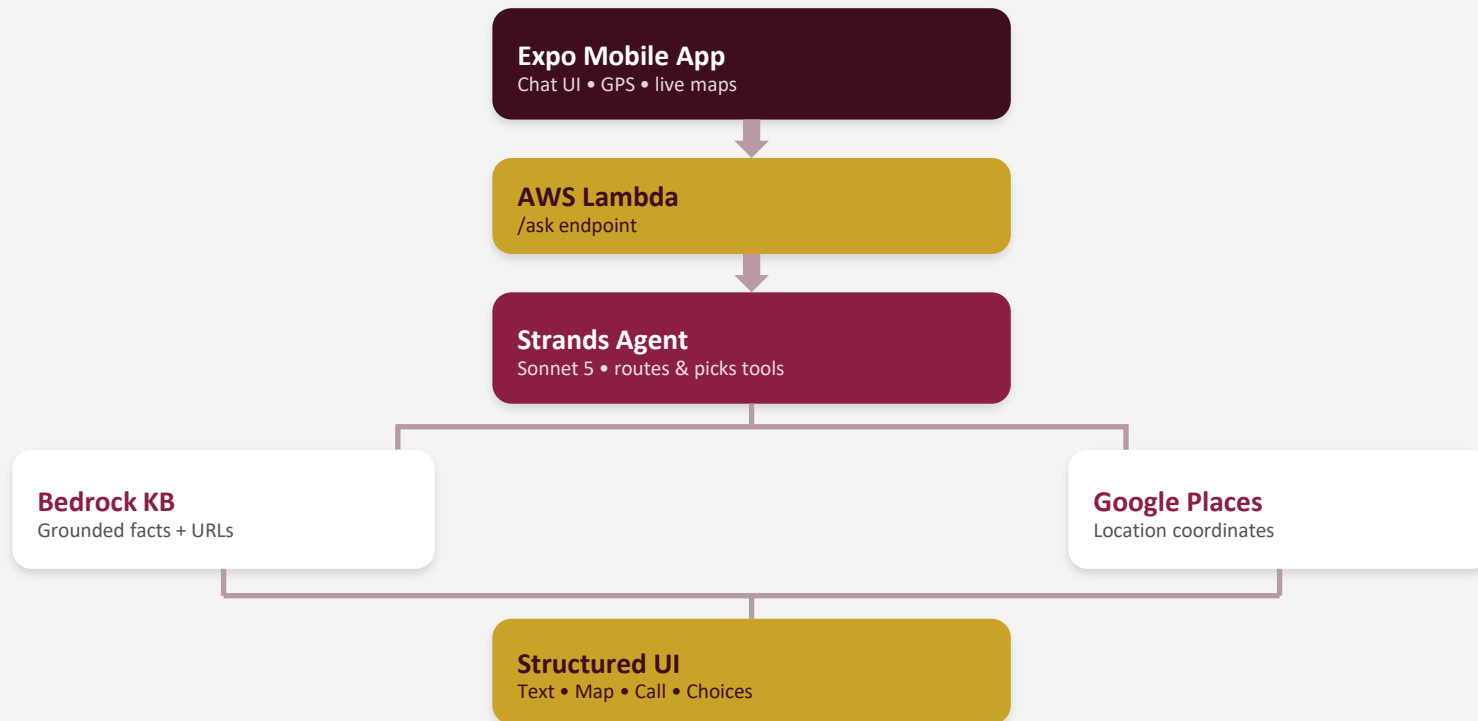
A couple of clear sentences. Nothing more, nothing to dig through.

When it's unclear: exactly two tap-to-choose options — never an open-ended follow-up question.

HOW

How it works

One request flows through a reasoning agent and two grounded data tools before the answer renders — guarded on the way in and out.



GUARDRAILS

- Input screening flags attempts to override instructions or leak the system prompt.
- The model can only call two whitelisted tools — no open-ended actions.
- Output is rejected unless it matches the exact schema; forbidden tags and unverified links are stripped before anything renders.

HOW

Powered by AWS Strands

A fresh Strands Agent runs Claude Sonnet 5 for every request — one prompt-driven orchestrator handling reasoning, tool choice, and routing.



Interprets intent

Rewrites terse queries like “library directions” into a full, actionable request.



Chooses the right tool

Calls Bedrock KB for facts, Google Places for locations — or both.



Routes by priority

Emergency → CARE → health → counseling → general office, in that order.



Stays in its lane

Points to the right resource instead of acting as a therapist or investigator.



Hands off cleanly

Emits structured JSON; live navigation runs client-side after that.



Stateless & warm

Fresh agent per request; AWS session objects reused for speed.

Future improvements



Portable to any campus: the same agent and validation layer can serve other schools with just a UI reskin and a new Knowledge Base — no core rebuild.



Live resource data

Real-time dining hall menus and food pantry stock levels, pulled straight from university data feeds.



Feedback loop

“Was this helpful?” to keep improving routing accuracy over time.

TRY IT NOW

Scan to try Call Willie

Launch the live demo on your own phone — no account needed.



Chico State • Call Willie Demo

<https://d3gmrc21asm6ic.cloudfront.net/>

SEE IT IN ACTION

Live demo



[YT Link](#)

Thank you!

Call Willie — Chico State Campus Resource Assistant



[YT Link](#)



PROJECT REPO

<https://github.com/RogueL90/CSU-Chico-Tool>