

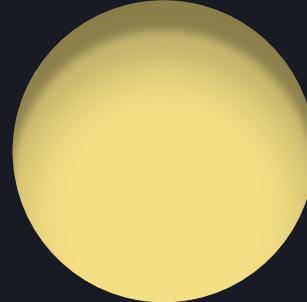


2026 ANZ Diversity Hackathon

Compass

Student Services Navigator
Guiding students to the right support, faster.





A Brief Overview

Compass is an agentic AI designed to help university students navigate complex support services with clarity and confidence.

By asking targeted questions and providing explainable recommendations, Compass guides students to the right support, faster.

Who is it for?

- University students seeking academic, well-being or administrative support.
- Student support staff and institutions aiming to improve service accessibility and engagement.

The Challenge

A clearer, comprehensive, and guided approach to navigating student support is needed.

Universities offer a multitude of academic, well-being, and administrative support services. Yet, many students remain unaware of their existence, are unsure about which services are relevant to them and their situation, or are unclear on where and how to access this support.

Current information is often fragmented across websites and portals, or clouded by differing policies and fine text. This requires students to self-navigate during inherently stressful circumstances, when actually need a bit of guidance.

This cognitive overload often leads to delayed help, confusion, disengagement, and dissatisfaction. Subsequently, students may miss much needed timely support. Additionally, staff face inefficient enquiries and underutilised services.

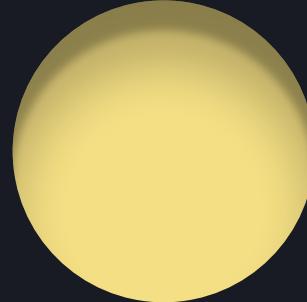


The Agentic Solution

Compass addresses this challenge by acting as a personalised navigation tool. Accessed within a university app, Compass authenticates students in order to establish relevant identity and enrolment context. This allows Compass to scope responses to services applicable to each student.

Students describe their situation to Compass using natural language, without needing to know which service to ask for.

Compass also supports text-to-speech responses via Amazon Polly to improve accessibility and reduce cognitive load during high-stress situations.



The Agentic Solution

Before recommending services, Compass asks a small number of clarifying questions to better understand the student's situation. Explanations for each question are also outlined so students understand how their input is shaping recommendations.

After each response, Compass reasons whether sufficient information has been gathered, or whether asking an additional question will improve accuracy or relevance.

Compass then presents ranked recommendations to the student using clear, concise cards. Recommendation relevance, next steps, and what comes next after selection an option are all outlined on these cards.

Compass analyses student intent in real time, retrieves grounded information from curated student service knowledge bases, and applies decision logic to rank support options.

Our

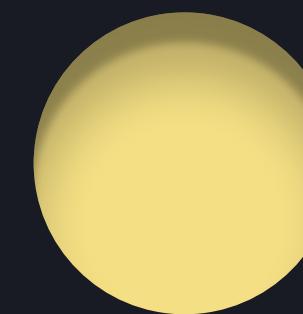
Technical Approach

Compass is built using Amazon Bedrock (Claude 3 Haiku) to perform large language model reasoning and service classification, including determining whether additional clarifying questions are required before making a recommendation.

The application layer, implemented in Python using Streamlit, orchestrates the agent's decision logic by ranking support options and applying confidence scoring to prioritise recommendations.

Crisis detection guardrails operate prior to model reasoning to ensure the responsible handling of high-risk inputs. Amazon DynamoDB stores interaction logs to support explainability and analytics, while Amazon Polly provides text-to-speech functionality to improve accessibility.

University service data (including policies, eligibility rules, contacts, and next steps) is structured within a controlled service configuration file, enabling deterministic recommendations grounded in institutional knowledge.



The Impact

Compass helps students access the right support faster, improving student well-being, engagement, and satisfaction.

For universities, it offers a scalable, explainable way to guide students through complex service ecosystems, reducing repetitive enquiries and increasing utilisation of services.

Built using AWS services, Compass is technically feasible, extensible across institutions, and adaptable to changes in student needs.

Planned Capabilities

- Speech-to-text support within Compass' chat interface.
- Optional human-in-the-loop review could be incorporated for sensitive cases.
- Source transparency
- Real-time fact-checking
- Amazon Translate for international students.