

GrieVoice Technical Note

Design Approach & Enhancement Feasibility

Author: Liezl Coetzee | **Context:** Response to practitioner feedback on GrieVoice proof-of-concept

How the AI Agent Works

The GriVoice agent operates on two distinct layers: a foundational empathetic voice engine and custom conversational guidance designed specifically for grievance intake.



Empathetic Foundation

Built on Hume AI's Empathic Voice Interface (EVI) with pre-trained emotional intelligence capabilities



Custom Grievance Layer

Detailed system prompts for confidentiality, sensitive topics, and structured data capture

The Empathetic Foundation

Hume AI's Empathic Voice Interface arrives pre-trained with emotional intelligence capabilities. The system detects stress, discomfort, and hesitation in a speaker's voice while managing natural turn-taking.

It handles multilingual recognition with consistent empathetic behavior across supported languages, trained on thousands of hours of empathetic conversations.

Key Capabilities

- Emotional detection in real-time
- Natural conversation flow
- Multilingual support
- Cultural sensitivity

Custom Grievance Layer

01

Opening Protocol

Confidentiality assurances and reassurance with appropriate tone

02

Adaptive Listening

Pausing for free speech versus asking clarifying questions

03

Sensitive Handling

Appropriate care for GBVH and other critical topics

04

Data Capture

Eight real-time tools capturing structured information naturally

05

Post-Call Analysis

Claude Sonnet 4 reviews transcripts for missed details

The result is an agent that listens first, adapts, and gathers structured data through natural conversation rather than fixed scripts.

Language Support & Trade-offs

Hume EVI (11 Languages)

English, French, German, Italian, Japanese, Portuguese, Spanish, Korean, Russian, Hindi, Arabic

Strength: Built-in emotional intelligence

Alternative Platforms

ElevenLabs (31 languages including Swahili), Google Gemini

Trade-off: Requires additional empathetic configuration

For Mozambique: Bilingual Portuguese-Swahili system feasible using Hume for Portuguese and ElevenLabs for Swahili with careful empathetic design.

Feasibility of Enhancements

All structural suggestions are valid, technically feasible, and essential for production deployment. None require conceptual reinvention—only schema design, flow updates, and configuration.



Identity & Anonymity

Record "prefer to remain anonymous" as valid option



Contact Structure

Separate phone and email fields with explicit opt-out



Location Expansion

Five contextual fields with auto-fill options



People Involved

Differentiate impacted persons and alleged perpetrators

Critical Enhancements



Desired Outcome

Support multiple options: training, mediation, relocation, compensation, or caller's own words



Closing the Loop

Project-specific process info, timelines, and escalation paths for trust



Key Principle: Avoid presuming intent or punishment. Support nuance rather than forcing binary outcomes, particularly for GBVH cases.



Implementation Status

Current State

Proof-of-concept demonstrating technical feasibility and potential impact. Not production-ready.

Next Steps

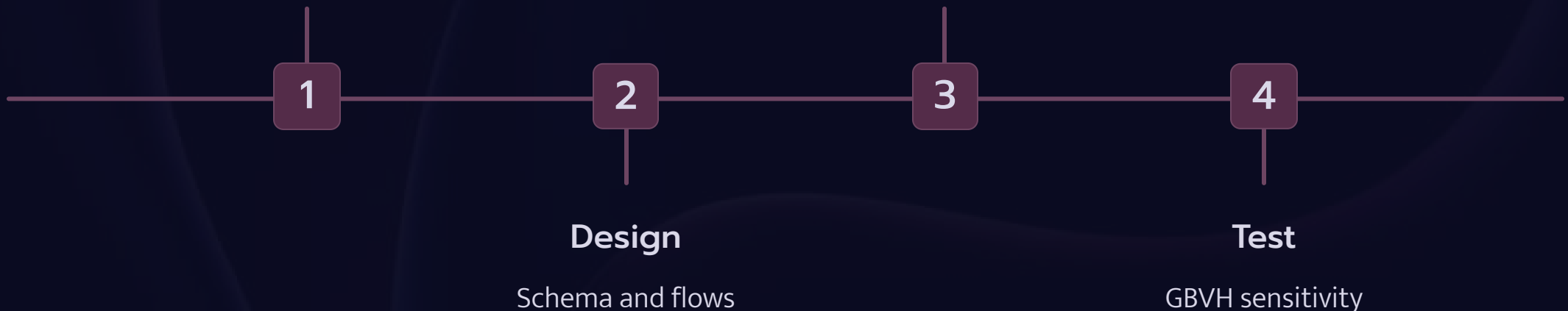
Stakeholder requirements gathering, database schema redesign, conversation flow rewrites, AI extraction updates, dashboard improvements, configuration system, and comprehensive testing.

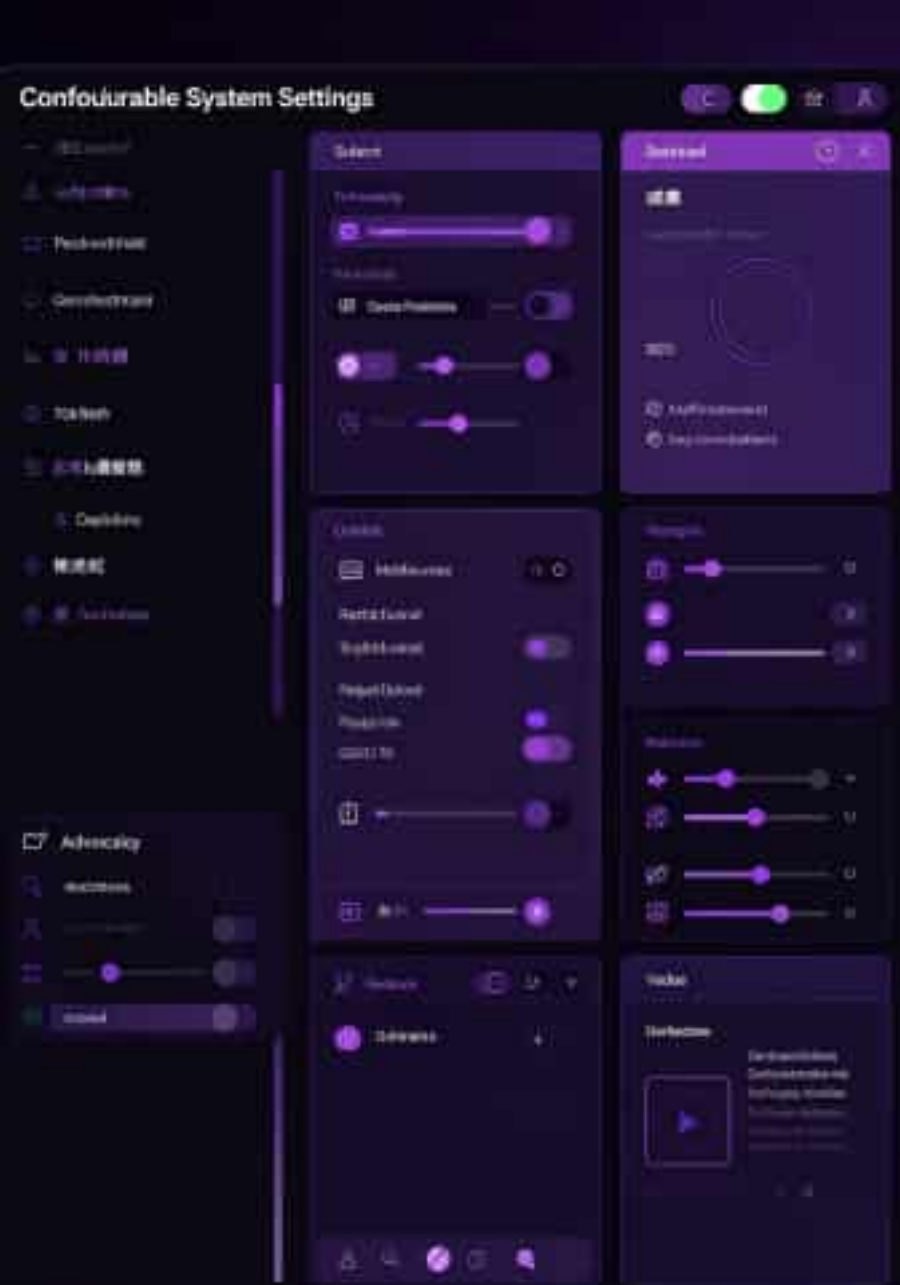
Requirements

Stakeholder alignment

Build

System development





Configuration, Not Hard-Coding

A core design principle: grievance processes vary by country, project, employer, and legal regime. The system adapts to context rather than imposing one-size-fits-all solutions.

Timelines

HR contact and investigation periods configurable by project

Escalation Paths

Internal and external authority contacts per jurisdiction

Responsible Parties

Clear accountability structures for each context

Open Questions for Discussion

Market & Buyers

Mining companies, construction firms, agricultural operations, NGOs, or progressive municipalities?

Governance & Data

Who owns the system? How is grievance data handled, stored, and protected?

Pilot Design

What scale, safeguards, and success criteria define responsible deployment?

Community Variant

Large-scale projects, municipal services, land disputes, healthcare, environmental concerns, or local government accountability?

These strategic conversations are essential for moving from proof-of-concept to impactful deployment.