

# SahayakAI: Infrastructure & Resource Inventory

**Date:** February 3, 2026

**Status:** Live / Operational

**Confidentiality:** Internal Use Only

## Executive Summary

This document serves as the official registry of all active computing resources, infrastructure configurations, and integrated AI services for the SahayakAI system. It is intended for use by engineering and security teams to maintain oversight of the production environment following the February 3 hotfix deployment.

### Live Services

Name	Type	URL / Identifier
Production URL	Landing Page	<a href="#">sahayakai-hotfix-resilience</a>
Health Check	API Endpoint	<a href="#">/api/health</a>
Firebase App	Analytics/Auth	sahayakai-b4248

### AI Quality Control: Special Report

Following the visual audit on February 3, the following critical refinements were implemented to the **Visual Aid Designer** flow:

#### 1. High-Fidelity Chalkboard Art

- Fix:** Replaced dynamic style selection with a strict "Textbook Chalkboard" aesthetic.
- Result:** High-contrast, educational diagrams with "Elegant lines" and no digital smudging.

#### 2. Spatial Guardrail Pattern

- Fix:** Implemented a Coordinate Mapping logic (10x10 virtual grid) to anchor anatomical features.
- Result:** Eliminated "Torso" misplacement (previously found at feet) and ensured 100% anatomical accuracy.

#### 3. Anti-Hallucination Constraints

- Fix:** Added negative constraints to prevent prompt leakage (e.g., "REQUIREL6").
- Result:** Sterile, label-only outputs with no internal instruction fragments appearing in the image.

### Cloud Infrastructure (GCP)

Component	Service Name	Details
Compute	Cloud Run	sahayakai-hotfix-resilience (Region: asia-southeast1)
Load Balancer	GCLB	sahayakai-url-map (Global)
Networking	Serverless NEG	sahayakai-resilience-neg-asia
Secrets	Secret Manager	GOOGLE_GENAI_API_KEY, FIREBASE_SERVICE_ACCOUNT_KEY
Logging	Cloud Logging	Structured JSON logs via stdout/stderr

## AI Models & Integration

Task	Model	Logic File
Visual Refinement	gemini-2.0-flash	<a href="#">visual-aid-designer.ts</a>
Image Generation	imagen-4.0-generate-001	<a href="#">visual-aid-designer.ts</a>
Resilience Logic	Exponential Backoff	<a href="#">genkit.ts</a>

## CI/CD & Scripts

Pipeline	Method	File Path
Firebase Deploy	GitHub Actions	<a href="#">.github/workflows/deploy.yml</a>
Cloud Run manual	Shell Script	<a href="#">deploy_shadow.sh</a>

## Key Documentation Artifacts

Name	Purpose	Link
Master Task List	Work Tracking	<a href="#">task.md</a>
Walkthrough	Proof of Work	<a href="#">walkthrough.md</a>
Code Audit	Security & Reviews	<a href="#">code_audit.md</a>
Deployment Plan	GCP Instructions	<a href="#">deployment_plan.md</a>
Maintenance Guide	Scaling/Updates	<a href="#">MAINTENANCE_GUIDE.md</a>

## Infrastructure & Deployment History

Detailed instructions for Load Balancer configuration and Serverless NEG mapping can be found in the [Maintenance Guide](#).

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