

NET – Gemini AI Multimodal Workspace & Learning Studio

How the Google AI Studio app covers Mercatus Cartel books, logs, compliance, NetzarLab, governance, and token rebalancing.

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Working path. The live Mercatus Cartel .NET API cannot run on the DreamHost shared host (kernel 6.18.39-grsec-noble+). CoreCLR faults with SIGSEGV (exit 139), and with DOTNET_EnableWriteXorExecute=0 it fails to create the runtime (HRESULT 0x8007000C). dotnet --info works; managed app execution does not. There is no sudo, so PaX cannot be relaxed. **This Google AI Studio app is the working multimodal workspace.** DreamHost stays a static site. A future VPS or PaaS can host the robot; it will not start on this grsec account.

The three screenshots in this guide are captures of the AI Studio editor (Gemini 3.1 Flash Lite, about 68 seconds), not a full render of every Netzar tab. The preview pane in those shots is still empty or shows a broken-document glyph. Feature detail below is taken from the app source, which the editor chat had just aligned to the Cartel templates.

1. What the app is

Published name: **NET – Gemini AI Multimodal Workspace & Learning Studio**. Metadata describes a Gemini playground with saved lessons, real-time voice, multimodal chat, and generative tools. The shell brands itself THINK / Hybrid Social & AI and requests frame permissions for **microphone** and **camera**.

Mode	What it is for
Think Pulse	Social feed. Opens on launch. Carries the Project Netzar briefing post.
Chat	Multimodal Gemini chat, including image attachments and search grounding.
Live Voice	Real-time voice. This is why the studio asks for the microphone.
Net Sites	Generative website builder (hero, services, SEO fields).
Net Code	Code studio inside the same workspace.
Netzar Protocol	Fintech lab: NZC / NZG. Badge on the nav. This is the Cartel-aligned surface.
Net Learn	Courses, modules, quizzes, and bookmarked lessons.

Global search is Ctrl/Cmd+K. Theme toggles light and dark. The footer pill in source reads Gemini 3 Pro, multimodal reasoning, and hybrid pulse. The editor screenshot itself records a Gemini 3.1 Flash Lite run.

2. Mercatus Cartel alignment

The AI Studio run recorded in the editor chat updated application state so the workspace matches Mercatus Cartel financial and operational templates. Three changes were called out: balance-sheet alignment, operations logbook integration, and compliance status badges.

Balance sheet

NetzarLab holds a demo balance sheet in component state. These figures are sample books inside the app, not a filed statement and not a live ledger on DreamHost.

Side	Line	Demo amount
Assets · non-current	Property	1,250,000
Assets · non-current	Intangible	420,000
Assets · non-current	Investments	180,000
Assets · current	Inventories	95,400
Assets · current	Receivables	142,800
Assets · current	Cash	318,650
Equity	Share capital	500,000
Equity	Retained earnings	1,186,850
Liabilities	Borrowings	400,000
Liabilities	Payables	210,000
Liabilities	Escrow held	110,000

Both sides total 2,406,850 in the seeded state, so the template is internally balanced.

Operational logs

The operations logbook is the audit feed. A transaction status is not a single confirmed/pending flag. The type used by the lab is the full operational lifecycle:

Created, Locked, InProgress, CheckedOut, Released, Closed, Refunded, Disputed, plus Confirmed, Pending, Failed, Settled, OK, Certified, and Resolved.

The audit view filters by token (NZC or NZG), status, date range, and search. Rows carry an ISO 20022-style reference. A CSV export is labelled for tax and accounting. Status changes (for example Pending to Confirmed after a simulated bank clear and HSM sign) raise an in-app alert. The logbook state starts empty and is filled as simulated settlements run. That is a studio simulator, not a production audit store.

Compliance

Compliance in this app is visible status plus a governance mesh, not a regulator filing. The editor change made the status-badge renderer understand every operational-log status so compliance-critical events stay labelled the same way everywhere.

- **Travel Rule.** A FATF Recommendation 16 inspector uses a ZAR 25,000 threshold and describes an IVMS 101 payload for transfers at or above that line.
- **KYC.** A biometrics agent is described as checking FICA Tier 1–3 documents and a WebRTC identity ceremony.
- **AML.** A velocity and taint agent is described as scoring transfer frequency and sanction-list holds.
- **Reserves.** A reserve guardian is described as watching a bank-escrow figure against a collateral ratio $R(t) \geq 1.02$. The demo readout is $R(t) = 1.045$ on seeded reserves (104.5 million ZAR reserves, 100 million NZC circulating).
- **Oracle.** An outlier-trimmed median with a 1.5% variance circuit breaker is described for the gold track.

Treat the latency and “operational” chips on those agent cards as interface copy in a learning studio, not as measured production controls.

3. NetzarLab

Netzar Protocol is one mode of the workspace, opened from the sidebar (landmark icon, NZC / NZG badge). It is a dual-token settlement lab: **Netzar Cash (NZC)** presented 1:1 with ZAR and cleared on PayShap or RTC rails, and **Netzar Gold Track (NZG)** as a synthetic gram-gold tracker. Seeded user holdings in the component are 240,000 NZC and about 77.16 grams NZG.

Tab	Role
1. D3 gauge & holdings	Mint simulator, rail choice, holdings, quick rebalance.

Tab	Role
2. Audit log	Filterable settlement and operations trail, CSV export.
3. Regulatory briefing	NZR-REG style brief: dual token, structure, roadmap.
4. Multi-agent governance	Five described agents and the Travel Rule test.
5. 3-of-5 HSM & security	Key-share and ceremony explanation.
6. Technical RFP outline	Build outline for the protocol.
7. Treasury governance	Signer quorum and a reserve-adjustment proposal.
8. FX simulator	FX scenario surface beside the rails.

Mint flow in the simulator: amount in ZAR, rail PayShap or RTC, then a staged status (clearing bank, HSM signing, minted) and a sample ISO 20022 payload. P2P transfer UI includes a recipient, token, amount, memo, and optional QR / biometric modals. None of this settles real money.

4. Governance

Governance is split in two, on purpose. Agents advise and can describe a hold. Mint and burn are shown as needing a human multi-signature.

Multi-agent mesh

Five named daemons: KYC and biometrics, AML velocity and taint, Travel Rule (FATF 16), oracle sentinel, and reserve guardian. Copy says they speak over mutual TLS. They do not replace the quorum.

Treasury quorum

Tab 7 is a clickable 3-of-5 HSM quorum for minting, reserve adjustment, and circuit-breaker override. Each signer card toggles signed or not. The demo proposal on screen is “Reserve Collateral Adjustment,” with a quorum countdown and a voting-power bar (seeded at 68%). Reaching three signatures flips the quorum chip. This is an interactive explanation of the control, not an HSM.

5. Token rebalancing

Quick rebalance swaps a fixed studio amount: **25,000 NZC for grams of NZG** at the in-app gold price (ZAR per gram). The handler posts a confirmed log row with an LBMA-REBALANCE reference, raises a settlement alert, and updates the holdings: NZC down 25,000, NZG up by the gram amount bought. It does not call a market, a bank, or the .NET robot. It rebalances the demo portfolio so the operator can see cash-token versus gold-track allocation move, and see that move land on the same operational log as a mint.

6. What the screenshots show

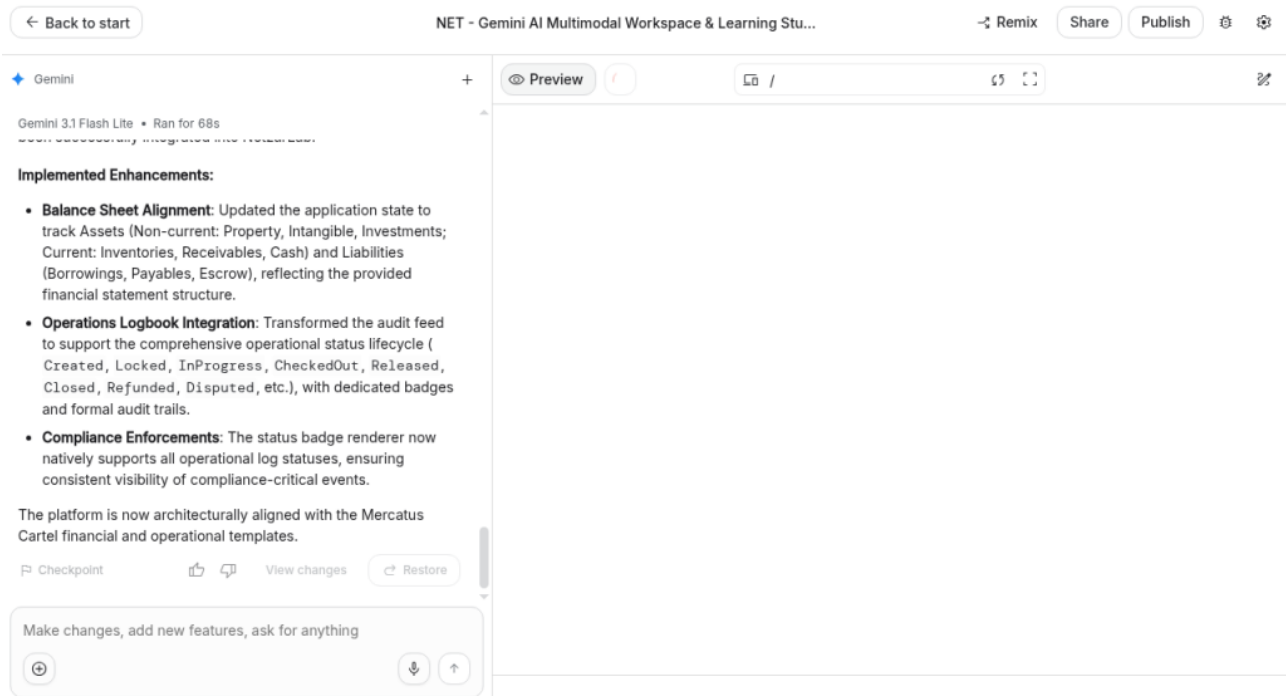


Figure 1. AI Studio editor. Left: Gemini's note that the balance sheet, operations logbook, and compliance badges now follow the Cartel templates. Right: preview still blank.

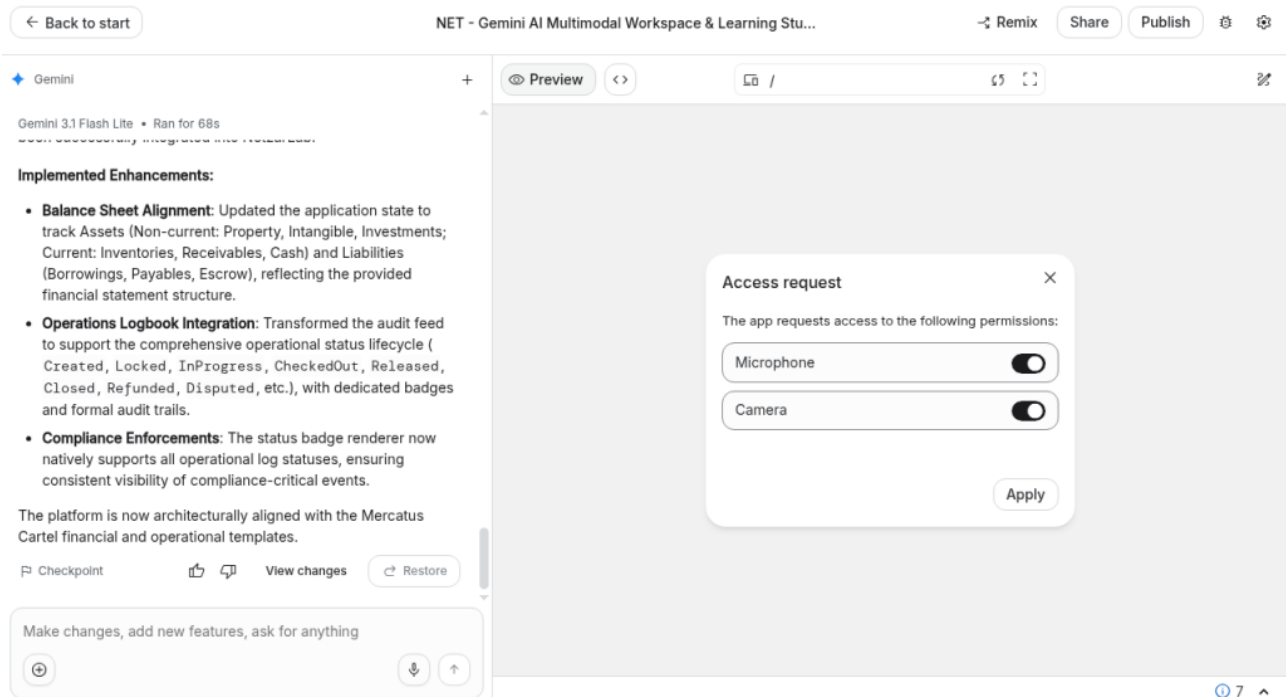


Figure 2. Access request inside the preview: microphone and camera, both offered on. Apply grants them for Live Voice and camera capture. They are not granted to the DreamHost site.

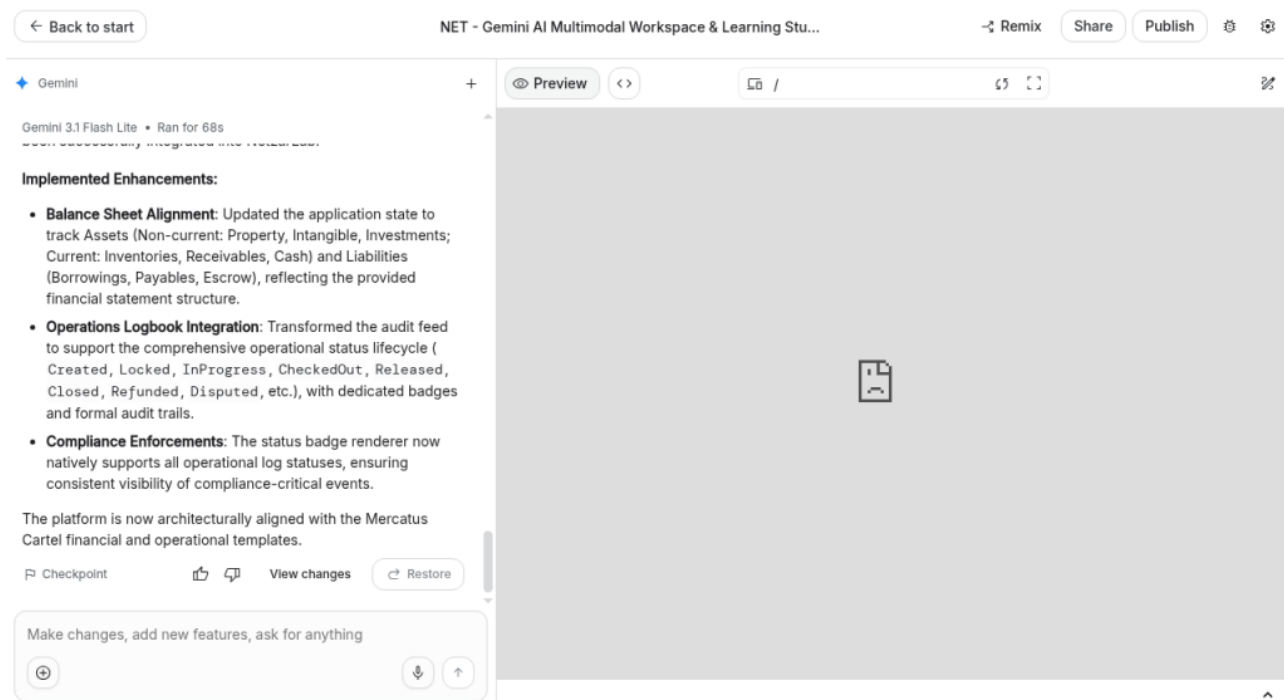


Figure 3. Same editor after the permission dialog. The preview shows a broken-document placeholder, so this capture is evidence of the studio session, not of a finished render.

7. Where to use it

Surface	Status
Google AI Studio app “NET – Gemini AI Multimodal Workspace & Learning Studio”	Working multimodal workspace. Remix, run, and grant mic/camera there.
DreamHost mensmercatus.online static gallery /apps/net-workspace/	Screenshot record and this explanation. No API.
DreamHost ~/dotnet and ~/mercatus-cartel-robot	Runtime is installed. The app cannot execute under grsec. Leave it for a non-grsec host.
PHP proxy /api/cartel/	Honest 503 JSON while the robot is down. Do not point users at it as a live chat.

Do not describe the AI Studio app as the production Cartel robot, and do not describe the robot as live on mensmercatus.online. The studio is the place the multimodal workspace actually runs. The shared host can only publish the pictures and this guide.

Prepared for Katlego Mokoto · Mens Mercatus · 3 October 2026 SAST.