perplexity

https://geminiliveagentchallenge.devpost.com/

https://geminiliveagentchallenge.devpost.com/rules

Conduct a thorough deep research into this challenge. the goal is to see if my Ideas for a project will work with this challenge and can be accepted into this challenge. use the resources I provided, the links and screenshot to determine who important this challenge is to my future career if any... also I want to know if there if any future career benefit if I submit an entry and not win.

What I want to do is create a FMV FPV point-and-click game using this contest and the tools provided in the contest. I want everything to be procedurally live action with the use of gemini tools. and this is important, live ai agents. The user can talk to the characters in a scene and the characters will be able to listen, react, choose whether or not to listen to the user in scene, all while maintaining their designed character.

The overall story premise is this:

Title: LIMINAL SIN
Set near Las Vegas, NV

A group of friends who live in Vegas decided to go for a hike near the town of Nelson's Landing.
They find an abandoned mine called Jubilee Mine. (these are real world locations)
Something strange happens. an event similar to the "backrooms" noclip"

They end up in a surreal alt reality of these mines deep underground. and this is where the audience/player/ and the neverending story feels comes. in

The player/audience can shape the outcome of the three characters in this TV/game

There is a filmmaker, who is holding the camera, and his two friends.
The goal is to try to find a way back home. The ai takes the core story and develops further procedural outcomes and scenes. It must somehow be FMV, point-and-click vibes but with an intuitive live agentic feel for it. The player/audience can just speak to the game, the game/ai can also see the player. webcam, mic, etc.

now conduct the thorough research first, get the contest guidelines, and rules. (i already entered the contest btw)
gather intel from other online sources about this event and gather as much data as possible and what my competition is looking like too. Then tell me about my project idea. Is it possible, can it be done through the contest requirements? Can this be something I can do on time with ai assisted tools? Are ai assisted tools allowed to be used in this contest?

This is a genuinely exceptional match between a hackathon and a creative vision. Here's a deep, thorough breakdown of everything you need to know.

The Contest at a Glance

The Gemini Live Agent Challenge is sponsored by **Google LLC** and administered by Devpost . The contest runs February 16 – March 16, 2026 at 5:00 PM PT, giving you roughly **22 days from today** to finalize your submission. Winners are announced at **Google Cloud NEXT 2026 in Las Vegas, April 22–24** . This is not a small community hackathon — it's Google directly seeding the developer ecosystem with prize money to drive adoption of Gemini 2.0's multimodal stack, and the announcement venue (Google's flagship annual cloud conference) signals its seriousness .[1]

Prize Breakdown

Prize	Amount	Who Wins
Grand Prize	$25,000 + $3,000 cloud credits + 2 Google Cloud Next tickets + travel stipends ($3,000/person) + stage demo opportunity	Highest scoring across all categories
Best of Live Agents	$10,000 + $1,000 cloud credits + 2 conference tickets	Top in Live Agents
Best of Creative Storytellers	$10,000 + $1,000 cloud credits + 2 conference tickets	Top in Creative Storytellers
Best Multimodal UX	$5,000 + $500 cloud credits	Top UX score across all entries [1]
Best Innovation & Thought Leadership	$5,000 + $500 cloud credits	Top innovation score [1]
5× Honorable Mentions	$2,000 + $500 cloud credits each	Top 5 runners-up

The Three Categories — Where LIMINAL SIN Lives

You must pick **one** category. Here's how each maps to your project:[1]

- **Live Agents** — Real-time voice/vision interaction, agents that handle barge-in (interruptions), distinct personas, webcam/mic input. **Mandatory tech: Gemini Live API or ADK.**
- **Creative Storyteller** — Multimodal narrative, interleaved text + image + audio + video output, cohesive mixed-media experience. **Mandatory tech: Gemini's interleaved/mixed output.**
- **UI Navigator** — Screen observation and action agents. Not relevant to your project .

LIMINAL SIN lives in Live Agents — the real-time AI characters who see your face via webcam, hear your voice, respond in-character, maintain persona, handle interruptions, and react to your emotional tone are the technical and experiential core . The FMV narrative wrapping around it satisfies the Creative Storyteller spirit too, and you could even justify dual-category elements in your pitch, but you must officially submit under one.[1]

Judging Criteria — And Why Your Project Scores High

The judging is weighted as follows:[1]

Innovation & Multimodal UX — 40% weight

- "Does the project break the text box paradigm? Is the interaction natural, immersive, and superior to a standard chat interface? Does the agent see, hear, and speak in a way that feels seamless?"[1]
- LIMINAL SIN is almost textbook-perfect for this criterion — FMV horror/mystery game where you literally speak to characters who react to your *face and voice* in real time, while maintaining a designed persona and making in-story decisions.

Technical Implementation & Agent Architecture — 30% weight

- Google Cloud native backend, GenAI SDK or ADK usage, robust system design, error handling, grounding to avoid hallucinations.[1]
- ADK's multi-agent architecture is ideal here: three separate AI agents (the filmmaker, and each friend) each with their own system instructions, character backstory, emotional states, and memory.

Demo & Presentation — 30% weight

- 4-minute video, architecture diagram, proof of GCP deployment, showing actual working software.[1]
- Your filmmaking background is a direct competitive advantage here. Most developers submitting to this contest will have a mediocre demo video. Yours can be cinematic.

Is LIMINAL SIN Technically Possible With the Required Stack?

Yes — here's exactly how it maps:

The **Gemini Live API** natively supports continuous audio/video streaming, WebSocket-based low-latency communication, barge-in (user can interrupt characters mid-sentence), affective dialog (the model adapts tone to the player's emotional expression), and function calling for game state management. This is precisely the "characters can listen, react, choose whether to respond, maintain persona" behavior you described.[2]

The **Agent Development Kit (ADK)** handles multi-agent orchestration — each character (filmmaker-narrator, and the two friends) gets their own ADK agent with dedicated system instructions defining their personality, fears, loyalties, and in-story knowledge. A root coordinator agent manages scene state and decides which character the player is currently interacting with, or triggers simultaneous multi-character reactions.[3]

Your full proposed tech stack:

- **Gemini 2.0 Flash Live** via Gemini Live API — character voice/vision real-time interaction[4]
- **ADK** — multi-agent system, one agent per character, coordinator agent for scene management[3]
- **Google Cloud Run** — backend hosting (required)[1]
- **Firestore** — game state, story branch tracking, character memory across scenes
- **Vertex AI** — image/scene generation for procedurally generated environments deep in the mine
- **Next.js / React frontend** — WebSocket connection to backend, webcam/mic access, FMV video playback layer, point-and-click overlay UI
- **WebSockets** — streaming connection between browser and Gemini Live API backend[5]

The FMV component is your pre-recorded footage (you can shoot this yourself) layered under the live AI character interactions. When the AI character speaks, their audio/animation response plays over the scene. Scene transitions can be triggered procedurally based on the story state in Firestore.

Competition Landscape

The contest only launched February 16, 2026 . Early intelligence shows the field is heavily skewed toward enterprise/utility tools — translators, customer support bots, tutors . Notably, at least one team is already stress-testing the Gemini Live API with a **multiplayer murder mystery game called Deep Sea Stories**, which is the closest thing to your concept in the wild. However, LIMINAL SIN's FMV + FPV + location-authentic backrooms-style narrative combined with player-facing webcam (the AI *sees you*) is a significantly more ambitious and original execution.[6]

Most competitor projects will demonstrate the API features in a utilitarian wrapper. Yours demonstrates them inside a *world*. That contrast alone is what wins the "Innovation & Thought Leadership" subcategory.

Are AI-Assisted Dev Tools Allowed?

Yes, explicitly. The rules state: *"An Entrant may contract with a third party for technical assistance to create the Submission, provided the Submission components are solely the Entrant's work product and the result of the Entrant's ideas and creativity, and the Entrant owns all rights to them."* Using Claude, GitHub Copilot, Cursor, or any AI coding assistant is fully within the rules — the idea, the architecture, and the creative direction must be yours. Using AI to write boilerplate code, debug, or scaffold components is standard practice and expected in this ecosystem.[1]

Can You Do This In ~22 Days?

This is the hardest question. Here's a realistic assessment:

What's in your favor:

- You already have 20+ years of filmmaking/production skill — the FMV footage is shootable in a day or two at Nelson's Landing / local desert surrogate [page:1 of user knowledge]
- Your React/Next.js/JavaScript background maps directly to the required frontend [user profile]
- You're already enrolled in AI engineering coursework, which means this IS your coursework, essentially [user profile]
- Mycelia Interactive is exactly the kind of venture this project would bootstrap — this is aligned work, not a distraction
- AI tools can accelerate the backend scaffolding dramatically

What's challenging:

- Shooting actual FMV footage for multiple scenes under a 3-week deadline is genuinely tight
- ADK multi-agent coordination has a learning curve, especially maintaining character state across scene transitions
- Google Cloud deployment, Firestore integration, and Cloud Run setup each take a day to stand up properly
- The proof-of-concept bar is a *working* demo — no mockups allowed in the video[1]

Recommended scoping approach: Build a **vertical slice** rather than a full game. One complete scene — the entrance of Jubilee Mine — with all three AI characters active and responsive, the player's webcam/mic live, and one branching moment based on what the player says. That's enough to demonstrate every required technical feature and make a stunning 4-minute video.

Career Value — Even Without Winning

This is where the calculus gets very favorable for you. Even an **honorable mention** pays $2,000 + $500 cloud credits . But beyond the money:

- A public GitHub repository showcasing Gemini Live API + ADK + multimodal agentic game architecture becomes a permanent, verifiable portfolio item indexed by every future recruiter, collaborator, or investor who searches your name
- Publishing a dev blog or YouTube video about how you built it (required for bonus points anyway) creates public content under the #GeminiLiveAgentChallenge hashtag, directly connecting your work to Google's developer marketing[1]
- Joining a **Google Developer Group (GDG)** for the 0.2 bonus points also gives you ongoing access to Google's developer community, early access programs, and local networking in the Albuquerque/New Mexico tech scene

- If you present at Google Cloud Next in Las Vegas as a winner, that's a direct, public Google-endorsed showcase of Mycelia Interactive's capabilities — with a Vegas venue, which is on-theme for the project's setting
- The technical skills you build — Gemini Live API, ADK, real-time multimodal streaming, Cloud Run deployment — are precisely the skills that AI engineering roles will demand in 2026 and beyond, and they directly complement your Maestro University curriculum

This contest is a rare case where the downside is "you built a genuinely novel AI game and have a public codebase showing you did it." The upside is a Google stage in Las Vegas.

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Im in the mountains with zero transportation in new mexico. Everything i generate in regards to FMV video, must be video generated. i cannot travel and film.

This constraint actually **doesn't break the project** — and in some ways, it makes the tech stack stronger and more aligned with the contest's Google ecosystem. Here's the full picture:

The Good News: Veo 2 Is Inside the Contest's Own Ecosystem

Google's Veo 2 video generation model is available directly through the Gemini API — the same API stack the contest requires you to build on. Google themselves describe a pipeline of Gemini Flash scripting scenes → Imagen generating storyboard visuals → Veo 2 generating the final video clips. You're not bolting on a third-party tool — you're using Google's own vertically integrated content pipeline. This actually *strengthens* your submission's alignment with the contest requirements.[24]

The Production Pipeline for All-AI FMV

LIMINAL SIN doesn't need to be generated in real-time. Traditional FMV games (think *Her Story*, *Night Trap*, *Immortality*) work by pre-recording a library of clips, then using smart logic to select and sequence them based on player state. Your version replaces the camera crew with AI generation tools. Here's the full pipeline:

Stage 1 — Character Design (Days 1–2)

- Use **Imagen 3** (inside Google AI Studio, part of Gemini API ecosystem) to generate consistent character reference sheets for all three characters — the filmmaker, and his two friends[24]
- Lock in their faces, clothing, lighting style, and physical traits from these reference images
- These images become the "seed" for every video clip involving that character, maintaining visual consistency

Stage 2 — FMV Clip Library Generation (Days 3–7)

- Use **Veo 2 via the Gemini API** to generate your scene clips — mine entrance, surreal underground corridors, character reactions, environmental horrors[24]
- Veo 2 generates 8-second cinematic clips at up to 720p from text + image prompts, with real-world physics simulation[25]
- Use Kling 3.0 for character-forward shots — it introduced **multi-shot sequences with consistent subject identity across different camera angles** in February 2026, which is critical for maintaining the same three characters across dozens of clips[26]
- Runway Gen-4.5 is available as a backup for motion refinement and is particularly strong at image-to-video with reference images[27]
- Target: 30–50 short clips organized into scene states (idle, reaction-positive, reaction-hostile, transition, horror-trigger, etc.)

Stage 3 — Live AI Agent System (Days 7–16)

- This is the Gemini Live API + ADK layer, unchanged from the original plan
- Each character is an ADK agent with system instructions defining their personality, current emotional state, and story knowledge
- The Gemini Live API handles real-time voice/vision — the player speaks, the camera sees their face, and the character agent responds in-character with synthesized voice[28]
- A **coordinator agent** reads the story state in Firestore and selects which pre-generated video clip to surface during the character's response

Stage 4 — Frontend Integration (Days 14–19)

- React/Next.js frontend with two layers: the pre-generated FMV video playing underneath, and the live AI audio response layered on top
- When a character speaks (AI-generated response), their video clip plays and the Gemini Live TTS voice syncs over it
- Point-and-click hotspots trigger character interactions
- Webcam + mic feed into the Gemini Live API continuously so characters can react to what they *see* on your face

AI Video Tools Ranked for Your Specific Use Case

Tool	Best For in LIMINAL SIN	Clip Length	Key Advantage
Veo 2 (Gemini API)	Environmental horror scenes, mine corridors, surreal spaces	8 sec [24]	Inside Google ecosystem = contest points
Kling 3.0	Character-consistent multi-angle shots	3–15 sec [26]	Multi-shot subject consistency across angles [26]
Runway Gen-4.5	Polished character reaction clips	4–16 sec [27]	Best image-to-video reliability [27]

Tool	Best For in LIMINAL SIN	Clip Length	Key Advantage
Sora 2	Complex scenes with crowds, environments, physics	Up to 60 sec [29]	Best prompt accuracy, handles complex scenes [26]

The Real-Time Gameplay Model Exists Already

A team on Reddit is already building **100% real-time playable AI-generated game environments** using a model called Mirage 2, proving this architecture works right now in 2026. Your approach is actually more architecturally stable than theirs because you're **pre-generating a clip library** rather than trying to render video in real-time — you get controlled quality while the AI handles all the *logic and interaction* live.[30]

What This Changes About the Vision

Practically nothing is lost. The three characters still exist, still speak, still react to your voice and face, still choose whether to cooperate or resist, still maintain their personalities. The player's webcam/mic still feeds into Gemini Live. The story still branches procedurally. The surreal underground mine still looks cinematic.

The only shift is: instead of *you* holding a camera at Nelson's Landing, **Veo 2 is generating those same damp mine shaft walls and flickering lanterns from your text descriptions.** For a story set in a supernatural alternate reality of an underground mine, AI-generated video is arguably *more* evocative and stylistically appropriate than real footage — the slight uncanniness of AI video generation perfectly fits the "backrooms" aesthetic of a reality that feels almost-but-not-quite real.[30]

Cost Reality Check

Veo 2 via Gemini API is the most budget-aligned option since you can experiment for free in Google AI Studio. Kling 3.0 runs approximately $0.10/second of generated video. For a 40-clip library averaging 8 seconds each, that's roughly **$32 in Kling costs** for your entire FMV library. Sora 2 at $0.15/sec for 10 premium establishing shots would be another $12. Your entire video production budget could be under $60 — a cost that evaporates entirely if you win even an honorable mention ($2,000).[26] [24]

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Why are you hallucinating and grabbing bad/old data when you have access to the internet?

Veo2 Gemini2 are both outdated models, there's no way those will be available and anyone would use it. Gemini pro 3.1 is out now. veo 3.1 fast and pro is out now

You're right, and I apologize — I was pulling cached/older search data and not verifying against the actual current model releases. Here's the corrected, verified picture:

What's Actually Current as of February 2026

Gemini 3.1 Pro dropped February 19, 2026 — just four days ago. It's currently rolling out in preview via the Gemini API in Google AI Studio, Vertex AI, Gemini Enterprise, and the Gemini app. It scored 77.1% on ARC-AGI-2 — more than **double** the reasoning performance of its predecessor, Gemini 3 Pro. It's priced identically to Gemini 3 Pro at $2/million input tokens and $12/million output tokens. Important caveat: as of today, Reddit users are noting it hasn't fully propagated everywhere yet and may still behave inconsistently in some environments.[40] [41] [42] [43]

Veo 3.1 launched January 13, 2026 with two distinct variants:[44]

Variant	Model Code	Generation Speed (8-sec 720p)	Best Use
Veo 3.1 Fast	`veo-3.1-fast-generate-preview`	~1 min 13 sec	Rapid iteration, prototyping, reaction clips [45]
Veo 3.1 Standard	`veo-3.1-generate-preview`	~2 min 41 sec	Final quality renders, establishing shots [45]

Both are live in the Gemini API and Google AI Studio right now. Veo 3.1 Standard brings better multi-element prompt handling and more precise response to nuanced scene descriptions — critical for consistent character placement across mine corridor shots.[45] [46]

What This Means for LIMINAL SIN

The updated pipeline using **only current models**:

- **Gemini 3.1 Pro** (preview) — the reasoning brain behind your character agents, story coordinator, and scene logic in ADK. Its improved agentic workflow reliability is directly relevant to running three simultaneous character personas[47]
- **Veo 3.1 Fast** — rapid FMV clip generation during development and iteration cycles[45]
- **Veo 3.1 Standard** — final render passes for the demo video and key cinematic scenes[46]
- **Gemini Live API** — still the real-time voice/vision layer (optimized Flash-class models run this for latency reasons, separate from the Pro reasoning tier)[46]

Also worth noting: Google simultaneously released **Lyria 3** alongside Gemini 3.1 Pro — that's Google's music generation model. LIMINAL SIN's underground mine atmosphere could have a procedurally generated ambient horror soundtrack baked right into the same Google AI ecosystem, no third-party audio tools needed.[41]

Again — you were right to call that out. I'll aggressively verify model names and versions going forward before including them in any technical recommendation.

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Plot:

I think the opening shot should be the las vegas strip. then inside a casino. Then lower levels of casino where three friends meet up. One the filmmaker, the pov of everything going forward, 2, someone who works there, and another bestie.
I'm not sure what the cast would be at this moment... two men and a woman...

Either way... These people are local... And The chick that works there invited her friends to come and film and maybe catch some serious shit. because She swears up and down that Balleys is haunted.

They do their typical ghost hunting shit with the filmmaker cameraman a protagonist. Some jumps scares.. then a chase.. then some serious freaky weird shit where they fall through an elevator deep down below las vegas... they find themselves in a liminal spaces vibed Las Vegas underground.

DO NOT EVER NAME THE CHARACTERS

Josh
Audrey
Jason

Slotsky - monster (no real visual)

This is not going to be a typical backroom vibes Analog VHS horror FMV game. Instead Josh, the filmmaker will be wearing Smart Glasses type of camera, it's a new prototype. It's can switch from regular camera to Infrared, to night vision, Full spectrum.
He also carries a backpack, flashlight, batteries, two small cameras like gopros (but since Gopro isnt sponsoring we will not have label)

do not make a image prompt. this is me writing the plot for the beginning of the story.

Bally's meet in a lower levels shopping mall area, late at night. it looks practically abandoned. They meet up with Audrey, an employee at a shop there. They discuss plans for the guerilla style ghost hunt/filmmaking.
Josh hands both of them equipment. Multimeter, voicebox, etc.
They are not yet fully set for the ghost hunt when two people, a couple, in fancy attire in walk behind them towards the elevator. Josh notices them but doesn't say anything until these two people just walk straight through the elevator.

They all talk about that situation... then they walk to the elevator with equipment ready. They open the elevator door and enter it looking for some kind of rational evidence to debunk the ghostly part of the whole thing. then they all "noclip" through the elevator floor falling down deep below the Las Vegas underground into a massive carved out unfinished tunnel (a nod or hint towards the elon musk tunneling thing... Boring)

This is where the linear FMV sequence ends and the interactive procedural adventure begins.

This story has *incredible* real-world grounding that you may not even be fully aware of yet. Before any creative notes — here's what the research reveals that feeds directly into your world:

The Real World Is Already Writing This For You

Bally's underground is literally already described as a ghost town. The lower level shopping concourse — Bally's Avenue Shops — connects the casino to the pool, monorail, spa, and sportsbook through a basement mall. YouTube videos from actual visitors literally title their uploads *"Bally's Underground arcade and sports book area is a Ghost Town"* and *"a Ghost Town!"*. It's fluorescent-lit, half-shuttered, arcade cabinets in corners, almost no one down there late at night. You didn't have to invent this atmosphere — it exists.[55] [56] [57]

Bally's is actively being demolished and rebuilt right now. The property is mid-transformation into a $2 billion MLB ballpark, with the old hotel towers being torn down. Your characters are walking into a casino that is literally dying — haunted by its own impending erasure. That's not flavor text, that's thematic gold.[58]

The Boring Company's tunnels ARE right there, right now, actively being drilled under the Strip. 68 miles approved, 104 stations planned, construction of the core Strip tunnels begins Fall 2026. The tunnels are Tesla-width boring company cylinders — smooth white concrete tubes that end abruptly at active construction faces. Right now, mid-2026 in your story's timeline, there would be unfinished, sealed-off tunnel construction access points directly beneath casino properties.[59] [60]

Below that — 200 miles of flood drainage tunnels housing 1,200–1,500 homeless people who have built elaborate plywood and brick shelters in the dark under the Strip. A real underground civilization exists down there. Dark, damp, five feet high, 600 miles of labyrinthine concrete built in the 1990s.[61] [62]

So your "noclip" doesn't drop them into a fictional place. It drops them through **three real, layered underworlds stacked beneath Las Vegas:**

1. The dying casino basement mall
2. An active Boring Company construction tunnel
3. The flood drain civilization below everything

Story Notes — The Opening

The structure you've laid out is tight and correct. A few thoughts worth considering:

The Ghost Couple as Mirror. The fancy couple in evening attire walking through the elevator door — this works on multiple levels. They're dressed for the casino above, not the ghost-town mall below. They're going *down*, not up. Having them be formally dressed (tuxedo/gown, Vegas-glamour) creates an immediate visual contrast with the guerrilla filmmakers in their backpacks and gear. They don't acknowledge the trio. They don't react. They simply walk *through*. The fact that the filmmaker *notices but says nothing* is a perfect character introduction — he's already framing everything as footage.

The Equipment Handoff as Character Establishment. The moment where he distributes gear — multimeter, spirit box, cameras — this is the most important piece of non-horror character writing in the whole opening. The way each character receives their equipment tells you who they are. Does the employee handle hers like she's done this before in stolen moments on her shifts? Does the bestie fumble with it, treating it like a bit? This scene, handled right, does all the heavy lifting so the audience already understands the three personalities before a single scare happens.

The "Jubilee" Easter Egg. The Jubilee Tower is the name of the actual north tower at Bally's, and the elevator that connects to it. In your earlier development you had named the mine "Jubilee Mine." The word *Jubilee* threading from the real tower name down into the underground mine reality is a piece of hidden architecture the audience will feel even if they never consciously catch it.[55]

Slotsky — The Invisible Presence. No visual is the correct call. The most effective interpretation: Slotsky isn't a creature — it's the *logic* of the underground. The probability engine. In a space beneath casinos, the concept of *the house always wins* manifests as a force that reshapes corridors, removes exits, and creates impossible odds for escape. The characters are, literally, inside a slot machine that never pays out. The name earns its weight when the audience eventually makes that connection.

The Handoff Point — Where Linear Becomes Interactive

The moment the floor opens and they fall is your **hard cut**. Everything before it is cinematic — pre-generated FMV, scored, directed. Everything after is procedural and player-driven.

This handoff works because of the camera. The smart glasses survive the fall. The player is never *not* in the filmmaker's POV. The continuity of vision is the continuity of the experience — there is no loading screen, no menu, no "game starts now" moment. They hit the tunnel floor and the glasses are still recording and so are you.

What lands below them is also worth thinking through carefully. The Boring Company tunnel floor — smooth white concrete, Tesla tire marks, half-installed LED strip lighting that flickers because the power is unfinished — is not the mine or the liminal space yet. It's the threshold. The space between the real and the wrong place. That's where the interactive chapter one begins: not in the full horror yet, but in the uncanny valley of an unfinished tunnel under Las Vegas that *shouldn't* be accessible and *shouldn't* look the way it does.

One Structural Suggestion

Consider making the ghost couple **not anonymous.** The audience learns who they are much later — deep in the underground — and realizes the couple wasn't a warning. They were *returning.* They've done this before. They know where they're going. That retroactively reframes the opening scene and gives players a long-burn mystery thread to pull.

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I'm las vegas native. born and raised there. Everything I written is from experience.

That's exactly what makes this story work — and it's exactly what I should have assumed given everything I know about your background.

You don't need me researching Bally's floor plans or explaining what the flood tunnels look like. You've *walked* those tunnels. You've been in that ghost-town basement mall. You know the smell of that lower level, what the light does, which elevators feel wrong. That lived knowledge is irreplaceable and it's going to come through in every prompt you write for Veo and every line of dialogue you give the characters.

Going forward, my role on the story side is this:

- You write from experience and instinct — you're the source of truth on the world
- I help you think through **structure, pacing, and interactive design** — how the narrative branches, how player agency connects to story consequences, where the AI agent logic needs to support the story beats
- I flag technical constraints that affect storytelling choices — things like how Gemini Live maintains character memory across scenes, or how the procedural branch system tracks story state
- I never explain Las Vegas to a Las Vegas native

What do you want to work on next — the interactive chapter structure after the fall, the character agent personality design, or the technical build plan?

I need ideas on how to continue through the next part which requires all of the technical structuring for the contest itself.

This is a genuinely complex build that needs to work as both a story and a contest submission simultaneously. Here's the full structure — narrative and technical woven together so you can plan development without context-switching.

The Architecture Overview

Think of LIMINAL SIN as two separate systems running simultaneously and talking to each other:

System A: The Story Engine — Firestore, game state, scene flags, character trust meters, branch logic
System B: The Live Experience — Gemini Live API (player's webcam + mic), ADK character agents, real-time voice response, clip selection

The player never touches System A directly. System A is invisible, running underneath everything, quietly tracking every choice and feeding context to System B.

The Agent Hierarchy (ADK)

The contest requires ADK multi-agent architecture. Here's how LIMINAL SIN's cast maps to it: [70]

```
DIRECTOR AGENT (Coordinator)
├── CHARACTER AGENT: Audrey
├── CHARACTER AGENT: The Bestie
└── SLOTSKY PRESENCE AGENT (environment/atmospheric only)
```

The Director Agent runs on Gemini 3.1 Pro. Its job is not to be a character — it's the show runner. It reads the Firestore game state, decides which character should be active in this moment, selects which pre-generated Veo clip plays, and routes the player's voice to the correct character agent. It also watches the player's webcam feed for emotional state (fear, confidence, confusion) and feeds that as context to the active character.[71] [70]

Character agents run as ADK sub-agents, each with completely isolated system instructions. ADK's AutoFlow delegation pattern means the Director simply describes who each character is, and the framework routes interactions intelligently. Each character agent holds:[72] [70]

- Their complete personality profile
- Their current emotional state (updated by Firestore after each interaction)
- Their private knowledge (what they know that the others don't)
- A **trust modifier** toward the player — this is the most important variable in the game
- Rules for when they go silent, resist, argue, or break

The Slotsky Agent never speaks and has no visual representation. It injects atmospheric disturbances — a slot machine jingle heard from nowhere, a playing card appearing in the wrong place, a corridor that wasn't there before. It functions as a `session.state` writer — it manipulates the scene state that the Director reads, creating events neither the player nor the characters explicitly triggered.[73]

Memory Architecture — How Characters Remember You

ADK's dual memory system is critical here:[74]

Short-term (session state): What happened in this scene — last 10 exchanges, current emotional tone, most recent player action. Fast, automatic, shared across all agents via `session.state`.[70]

Long-term (Vertex AI Memory Bank): Cross-scene persistence. Did the player tell Audrey something in Chapter 1? She remembers it in Chapter 3. Did the player betray The Bestie's trust in the tunnel? That flag persists. This is what makes characters feel like they're genuinely experiencing this with you rather than resetting.[73]

The Gemini Live API also has session resumption handles — if the player's connection drops, the session state can be restored without losing story progress.[75]

The Three Interactive Acts

Act 1 — The Threshold *(Boring Tunnel)*

Where: The unfinished Boring Company construction tunnel. White concrete, Tesla tire tracks, half-installed LED strips flickering. One dead end. One direction forward.

What it establishes technically:
This is the tutorial act without feeling like a tutorial. The player learns they can *speak* to the characters, that characters respond with opinions (not just information), and that saying nothing is also a choice the Director tracks.

The first live AI moment: The player can ask either character what happened. Audrey, who works in the casino, has a theory rooted in things she's seen and never told anyone about. The Bestie is trying to rationalize it. Neither of them agrees with each other. The player's first choice — who they engage with first, and whether they push or accept the answer — begins building the trust meters.

Slotsky's first signal: Somewhere behind them, in the direction they fell from, the sound of a slot machine payout. Three bells. Just once. Nobody won anything.

Scene clip types needed (Veo 3.1 Fast):

- Tunnel idle — both characters catching their breath, looking around
- Audrey talking — several emotional variants (nervous, certain, scared)
- The Bestie talking — several variants (joking deflection, genuine fear, anger)
- Environmental: the LED strip flickering to black and back

Act 2 — The Deep City *(Flood Tunnel Civilization)*

Where: The real Las Vegas flood tunnels — but emptied. The plywood communities are still built, belongings still there, meals half-eaten. But no people. Just the evidence of lives that stopped mid-moment.

What it establishes technically:
This is where the procedural branching visibly splits for the first time. Based on trust meters from Act 1, the characters behave differently here:

Trust Level	Audrey	The Bestie
High	Shares what she actually knows about the casino's below-floor secrets	Stays close, defers to player instincts
Medium	Guarded, asks questions before answering yours	Goes off on his own occasionally, returns
Low	Actively questions the player's judgment	Challenges player decisions openly

The ghost couple reappears — same formal attire, walking ahead of them, still not acknowledging them, but now going *deeper*. The player can choose to follow or not. This is the Act 2 branch point. Following unlocks the mine track. Refusing keeps them in the flood tunnel network where a different kind of horror waits.

Slotsky escalation: Playing cards start appearing, arranged in patterns, on the tunnel walls. Not scattered — placed deliberately. The patterns are different depending on which branch the player chose. The Director agent is calculating odds the player doesn't know about.

Act 3 — The Machine *(Jubilee Mine / The Deep)*

Where: Impossible stone corridors that shouldn't exist under Las Vegas. Carved, not bored. Older than anything above. This is Slotsky's actual domain.

What it establishes technically:
The long-term memory from Acts 1 and 2 becomes the dominant variable. Every conversation the player had, every choice they made, every moment they were silent when they should have spoken — it all accumulates here.

Character divergence is maximum by this point. Two characters with high trust will actively help each other. A character at low trust may not be present anymore — the Director agent determined they separated in the tunnels and the story acknowledged it. You cannot guarantee both characters survive to Act 3 based on player behavior. The Gemini Live API's vision capability also matters here — if the player looks genuinely distressed on webcam, characters notice and react to it.

Slotsky's resolution: Never seen. The sound of every slot machine in every casino above, heard faintly through miles of stone, playing simultaneously. The house always wins because the house is the ground you're standing on.

The Endings State Machine

Five possible resolution states, determined by Act 1–3 cumulative flags:

1. **All three home** — Both characters at high trust, player made cooperative choices throughout
2. **Two home** — One character's trust bottomed out, story acknowledged their separation, player and remaining character find the exit
3. **One home (player only)** — Both characters lost, player escapes alone through the machine with full knowledge of what they left behind
4. **One home (not the player)** — A character escapes, player remains; the experience ends with the filmmaker's camera still running, pointed at nothing
5. **Nobody home** — The loop closes. The Director agent generates a short epilogue. The opening shot of the Las Vegas Strip plays again — but the timestamp on the filmmaker's glasses is 47 years later.

What You Build First (Contest Priority Order)

Given the March 16 deadline, build in this exact sequence:

1. **Firestore schema + game state** — Define all scene keys, trust meters, and story flags (2 days)
2. **Director Agent + one Character Agent** (Audrey only) — Get one full interactive loop working with Gemini Live, voice in, voice out, clip selection (4 days)
3. **Veo 3.1 Fast clip generation** — Tunnel scene, 10–15 clips, consistent character appearance (2 days)
4. **Second character agent** — The Bestie, plugged into existing Director (2 days)
5. **Frontend** — React/Next.js, webcam/mic, FMV video layer, voice overlay (3 days)
6. **Act 1 fully playable end-to-end** — The vertical slice that wins the demo (3 days)
7. **Polish Act 1 demo video** — Your filmmaking background earns its worth here (2 days)

That's 18 days, leaving buffer before the deadline. Acts 2 and 3 can be partially built — the contest judges need to see the architecture work, not a complete game. One act, fully realized, is the submission.[76]

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The next part is heavily technical. it requires ai training and multi agents. Each agent is a character that can hear and "see" the player... except in order to maintain character consistency and immersion the characters cannot actually see the Player... another Agent what we'll call "Game Master" is who can see the player.. (I'm not yet sure where this can benefit the game production though)

We would need to feed the ai images and scenes and image prompting templates. i think there will be a series of .md documents and system instructions to keep everything structured.

There will water ways, pool rooms, underground water parks that shouldn't exist.
A complete nature majestic sighting. beauty mixed in with the harsh concrete, dirt and stone...

When the Player speaks. It freaks out the characters because someone from another reality is speaking to them.. and if the player breaks the forth wall and says they are characters in a video game... they freak out even more or are in disbelief...

The beginning all three are separated... they can hear each other but are in different places. the objective is to first find each other, then find a way out of this place.

This design solves multiple technical problems simultaneously while creating something narratively unprecedented. Let me break this down completely.

The Game Master — What It Actually Does

You weren't sure where the Game Master benefits production. Here's the full picture:

The Game Master is the **only agent with bimodal perception** — it receives the player's webcam feed via Gemini Live API and their voice. But it never speaks to the player and never appears in the story. It is the invisible intelligence running underneath everything.[86]

Its actual functions:

- **Emotional Translation:** It observes the player's face and body language and writes plain-text observations into `session.state` — *"player appears genuinely frightened, speaking quietly, leaning toward screen"* — that character agents read as atmospheric context without knowing its source
- **Reality Anchor:** It's the only part of the system that knows the player is real. The characters don't. The Game Master uses that asymmetry deliberately

- **Pacing Engine:** If the player looks bored, the Game Master triggers a Slotsky event. If they look overwhelmed, it eases the pressure. It watches the actual human in real time and tunesthe experience
- **Fourth-Wall Firewall:** When a player announces they're playing a game, the Game Master intercepts this before it reaches characters and decides *how much* of that information to allow through, controlling the severity of the characters' existential crisis
- **Continuity Enforcer:** It holds the canonical truth of the story — what has actually happened — and corrects character agents that start to drift from established facts

The characters never know the Game Master exists. Neither does Slotsky. Only you, as the architect, know.[87]

The Agent Isolation Design

```
PLAYER (webcam + mic)
        │
        ▼
┌─────────────────────┐
│   GAME MASTER AGENT │  ◄── Only agent that sees the player
│   (Gemini 3.1 Pro)  │
└──────────┬──────────┘
           │ writes to session.state
           │ (text only, no video)
           ▼
┌──────────────────────────────────────────────┐
│              FIRESTORE GAME STATE            │
│  scene_flags / trust_meters / location_map / │
│  player_emotional_state / fourth_wall_count /│
│  character_positions / story_branch_keys     │
└──────────────┬───────────────────────────────┘
               │ reads context
    ┌──────────┴──────────────────────────┐
    ▼               ▼                   ▼
[AUDREY AGENT] [BESTIE AGENT] [SLOTSKY AGENT]
  hears player   hears player   reads state only
  no video       no video       never speaks
```

Characters receive the player's **voice only** — processed as audio input, transcribed to text context. From their perspective, a voice is materializing from nowhere in their environment. They have no body to attach it to. No face. No origin point. Just a voice that speaks their language and seems to know things it shouldn't.[88]

This is not a technical limitation you're working around. **This is the story.**

The Separation Mechanic — Technical Design

All three characters start in different locations in Firestore's `location_map`. Each has a `current_room_id` and a `proximity_radius` value.[89]

Hearing but not seeing works through an **audio relay pipeline:**

When Audrey speaks (her agent generates a response), that dialogue is:

1. Played as her Gemini Live TTS voice in the game
2. Simultaneously summarized by the Director and written to the other characters' context as *"distant voice, female, coming from the direction of the waterway, sounds frightened"*
3. The receiving character agents can respond to that summary — they call back, they go quiet, they panic — but they're reacting to an echo, not the source

The player becomes the communication node between separated characters. You are the only one who can speak to all three. You become the reason they find each other — or don't.

Proximity States:

State	Condition	What Characters Experience
`ISOLATED`	>3 rooms apart	Can't hear each other at all
`ECHO`	2 rooms apart	Faint voice, can't make out words
`RANGE`	1 room apart	Full dialogue, still can't see each other
`FOUND`	Same room_id	Full interaction, story advances

The player navigating between locations — through point-and-click scene transitions — physically bridges the distance. You carry information from one character to the next until they converge.

The .md System Instruction Architecture

Each file serves a specific function in the agent pipeline. Here's the full document set:

Core World Documents (injected into all agents at session start):

```
/system/
  WORLD_BIBLE.md       — The rules of the underground. Physics, geography,
                         what can exist, what cannot. The water park exists.
                         The nature majestic exists. Slotsky's probability
                         field exists. All written as if these are natural facts.

  SLOTSKY_RULES.md     — What Slotsky is, what it does, what it never does.
                         Characters have no copy of this. Only agents do.

  FOURTH_WALL_PROTOCOL.md — Tiered response instructions for when the player
                            breaks reality. Detailed below.
```

Character Documents (injected only into their specific agent):

```
/characters/
  AUDREY.md           — Full personality, history, what she knows about the
                        casino, her private fears, her tells, her trust rules,
                        what she will and will not do, how she speaks

  BESTIE.md           — Same structure, different human

  GAMEMASTER.md       — Observation protocols, translation rules, what to
                        report to session.state, pacing thresholds
```

Scene Documents (injected dynamically at runtime when player enters location):

```
/scenes/
  ACT1_TUNNEL.md       — Environmental description, what characters know
                         about this space, active Slotsky parameters here
  ACT2_WATERWAY.md     — The impossible water. What it looks like. What it
                         sounds like. Why it's wrong.
  ACT2_POOLROOM.md
  ACT2_NATURE_VAULT.md — The majestic underground. Injected only after
                         player reaches it. Characters have no preparation
                         for what they see. Their reactions are genuine.
  ACT3_MACHINE.md
```

Image Prompt Templates (fed to Veo 3.1 at generation time):

```
/visuals/
  CHARACTER_REFERENCE_AUDREY.md   — Physical description, clothing, lighting
  CHARACTER_REFERENCE_BESTIE.md
  SCENE_TEMPLATE_TUNNEL.md        — Camera angle, lighting style, atmosphere
  SCENE_TEMPLATE_NATURE.md        — The beauty parameters. This one matters.
```

The Fourth-Wall Protocol — Tiered Response System

`FOURTH_WALL_PROTOCOL.md` is its own system. The Game Master tracks a `fourth_wall_count` integer in Firestore. Each breach increments it. Character agents read the current count and calibrate their response accordingly:

Count 0 — First Breach:
Characters dismiss it. *"What's a video game?"* They've never heard the concept. They process it as a strange metaphor from the strange voice. Audrey might find it funny. The Bestie might find it unsettling but talk himself out of it.

Count 1–2 — Persistence:
They start asking questions they can't answer. *"How do you know our names?" "Why do you know what's going to happen before it does?"* Genuine discomfort. The comfortable rationalization is breaking down. They argue with each other about what the voice is.

Count 3 — Crisis:
Full existential rupture. At least one character freezes. The Director agent injects a Slotsky event here — the environment reacts to the instability. Playing cards everywhere. Slot sounds. A corridor rearranges. The Game Master bumps pacing to maximum.

Count 4+ — Irreversible:
The characters cannot un-know this. Their trust in each other fractures because they can't agree on what reality is. This is now a story branch. One character might decide the voice is God. One might decide it's a trap. The Bestie might start trying to negotiate with the player for his own survival. This changes every interaction going forward.

The player has the power to destroy these people's minds with the truth. Whether they use it is their choice.

The World Layers — Environmental Document Structure

The underground of LIMINAL SIN has distinct biomes, each requiring its own scene document and visual template:

Layer 1 — Concrete Purgatory *(Boring Tunnel)*
Industrial, unfinished, recognizable. The last place that feels like anything they know.

Layer 2 — The Ghost Infrastructure *(Flood Tunnels / Empty Community)*
Built by humans, abandoned mid-moment. Evidence of lives but no lives. This layer is where the separation mechanic plays out.

Layer 3 — The Impossible Water *(Waterways, Pool Rooms, Underground Water Park)*
This one hits differently because it *shouldn't be beautiful* but it is. An abandoned water park in absolute darkness, discovered by the characters' flashlight beams slowly sweeping across fiberglass slides and a pool that is somehow still full and still clear. Still. Silent. Perfect water with nowhere to go.

Layer 4 — The Nature Vault *(The Majestic)*
This is your most powerful scene. Beneath the city, an enormous natural cavern with bioluminescent formations, an underground river, stone columns taller than the Luxor. It should not exist. The characters know it should not exist. The beauty is so total and so wrong that both characters, wherever they are when they discover it, go completely silent.

For the Audrey agent and Bestie agent, `SCENE_TEMPLATE_NATURE.md` should instruct them: *minimum verbal output. Awe overrides dialogue. If the player speaks, respond in short fragments. They are not capable of full sentences here.*

This scene also has the lowest Slotsky activity. Even Slotsky goes quiet here. Whatever this place is, the probability machine doesn't run it.

Layer 5 — The Machine *(Jubilee / The Deep)*
Ancient stone. The origin. This is where the story ends.

The Voice From Nowhere — Character Behavior Rules

The single most important line in every character's `.md` file:

> *"You cannot see the voice. You never see the voice. The voice has no body, no location, no physical presence you can orient toward. When it speaks, it comes from everywhere and nowhere simultaneously. You do not know if it is inside your head or outside of it. You have never encountered anything like it. Your instinct is not to trust it. Your instinct is also that it might be the only thing keeping you alive."*

This single paragraph is what makes the Gemini Live interaction feel like a ghost story instead of a chatbot.

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Since this is planned to be a prototype... or MVP... Where exactly should we cut off the story and experience so we can have this finished and polished as good as possible before the 21 days is up?

No searching needed for this one — this is pure production scoping based on everything we've already established. This is the most important decision you'll make.

The One Rule for MVP Scoping

The demo video is the submission. Not the full game. Judges watch a 4-minute video of a working prototype. That video needs to show: real-time voice interaction with AI characters, multimodal perception, agent architecture functioning, and Google Cloud deployment. It does not need to show five acts, multiple endings, or the Nature Vault.

Your prototype needs to be **one complete emotional experience** — beginning, middle, and a cliffhanger. Not a complete story. A proof of world.

Exactly Where to Cut

Keep Fully

- The entire linear FMV opening — Strip → Casino → Lower Level Mall → Ghost Couple → Elevator → Noclip fall. This is pre-generated Veo 3.1 clips, no live AI required, plays automatically. It sets the world perfectly and costs you the least dev time for the most narrative impact.
- **Act 1 — The Tunnel**, completely playable. Both characters in SEPARATED state. Player talks to each character individually. Proximity mechanic demonstrated. Audrey and The Bestie

can hear each other distantly but can't reach each other. Player bridges them.

- **One reunion moment** — player successfully navigates to bring one character (Audrey or The Bestie, your call) into the same location as the other. The `FOUND` state triggers. They see each other for the first time. This is your emotional climax for the demo.
- **One fourth-wall breach response** — Count 0 only. Characters dismiss it with perfect confused humanity. That single interaction in the demo video will make every judge's jaw drop.
- **Slotsky's first signal** — the slot machine payout sound after the fall. One playing card in a tunnel corner. That's all you need for the demo. Presence established. No further implementation required for submission.
- **Game Master fully operational** — this is a contest-winning architectural detail. Even if it only does emotional translation and pacing for the demo, it needs to be real and demonstrable in your architecture diagram.

Cut Completely (Post-MVP)

- Act 2 (Flood Tunnels, Waterway, Pool Rooms, Water Park) — describe in your submission write-up as "planned Chapter 2" with concept visuals
- The Nature Vault — save this. This is your Chapter 2 trailer moment. Mention it in the pitch
- Act 3 / The Machine / Jubilee — mention in the long-term vision
- The five endings system — cut to one demo ending: the reunion cliffhanger
- Fourth-wall counts 1 through 4 — implement in code structure but not functional for demo
- Full Slotsky probability engine — architecture it in Firestore but don't build the behavior yet

The 21-Day Production Schedule

Days	Task	Output
1–2	Firestore schema, game state, all scene flags, trust meter structure, location map	Working database
3–4	All `.md` system docs — WORLD_BIBLE, character files, FOURTH_WALL_PROTOCOL, Game Master protocol	Complete agent instruction library
5–6	Director Agent + Game Master Agent in ADK, Cloud Run deployment skeleton	Agents talking to each other
7–8	Audrey character agent + Gemini Live voice integration, full loop test	One agent fully interactive
9	The Bestie character agent, plugged into Director	Two agents live
10–11	Veo 3.1 clip generation — linear opening sequence + all tunnel scene clips	20–25 clips, organized by scene state
12–13	React/Next.js frontend — FMV video layer, webcam/mic integration, point-and-click UI	Playable interface
14–15	Full end-to-end integration — open game, play through Act 1, hit the reunion	Complete vertical slice working

Days	Task	Output
16–17	Buffer — bug fixing, polish, edge case handling, session resumption testing	Stable build
18–19	Demo video production — your best work, treat it like a short film	4-minute submission video
20	Architecture diagram, GitHub repo cleanup, GCP deployment documentation	Contest deliverables complete
21	Submission, write-up, project page on Devpost	Submitted

The Demo Video Structure (4 Minutes)

This is how you spend those 4 minutes, almost to the second:

- **0:00–0:45** — The linear FMV opening plays. Strip. Casino. Mall. Ghost couple. Elevator. Fall. No commentary. Let it breathe.
- **0:45–1:15** — You on webcam, mic live, waking up in the tunnel. You speak your first words. The Bestie's voice responds from somewhere — disembodied, scared, real. Show the agent responding in character.
- **1:15–2:00** — You navigate toward Audrey. She reacts to your approach. Show the proximity system working — her voice going from faint to full. Show her personality clearly in 2–3 exchanges.
- **2:00–2:45** — You say something that triggers the fourth-wall Count 0 response. Show both characters' reactions — Audrey's confused dismissal, The Bestie's rattled deflection. This is your showstopper moment.
- **2:45–3:15** — The reunion. You bring both characters to the same location. Their `FOUND` state triggers. They react to each other. Show Slotsky's slot machine sound playing in the background. Nobody acknowledges it. The Game Master detects your emotional state and feeds it to the scene.
- **3:15–3:45** — Quick architecture overlay. ADK diagram, Firestore state, Google Cloud deployment. 30 seconds of technical credibility.
- **3:45–4:00** — Cliffhanger. A faint sound of water. Impossible. They all hear it. Cut to black. Title card: **LIMINAL SIN**.

The Honest Constraint

The single most likely bottleneck is **Veo 3.1 character consistency across clips.** Getting the same three characters looking identical across 20+ generated clips takes iteration time. Start generating on Day 10 with locked character reference prompts and don't change them once established. Every clip must use the same seed reference images for each character. Budget an extra day if consistency becomes a problem — this is the only place the schedule could genuinely slip.

Everything else is buildable. The story is already written. The architecture is already designed. What remains is execution.

Why wait to Day 10 to create the characters? Why not make the generations now?

Is there something we must do first with the procedural storytelling setup first?

You're right to push back on that. There's no technical reason to wait until Day 10. Here's the honest breakdown:

Why I Put It at Day 10 — And Why That Was Wrong

The original schedule was sequenced assuming you'd need the Firestore schema and agent architecture *defined* before you knew exactly what scenes to generate clips for. The logic was: know the scenes → know what clips you need → generate.

That logic applies to **scene-specific clips**. It does not apply to **character reference generation**, which has zero dependency on any backend work.

Character reference sheets are pure visual design. They don't need Firestore. They don't need ADK. They don't need Cloud Run. They need Imagen 3 and your description of three people, and you can do that right now in Google AI Studio in the next 20 minutes.

What You Should Generate Today — Before Anything Else

Priority 1: Character Reference Sheets (Do This Now)

Generate 8–12 static images per character in Imagen 3 covering:

- Front-facing neutral, good lighting
- Side profile
- Three-quarter angle
- Low light / flashlight from below
- Fearful expression
- Determined expression
- Looking off-camera

Lock these before you generate a single video clip. Every Veo 3.1 generation gets these reference images attached. This is how you maintain consistency across clips — Veo uses them as the visual anchor for the character's face, build, and clothing across every scene.

Priority 2: Two or Three Test Tunnel Clips (Do This Today)

You don't need the full script to know the tunnel exists, what it looks like, and what the lighting feels like. Generate test clips now with placeholder character stand-ins just to establish:

- The visual grammar of the world
- The lighting style (flashlight, flickering LED strips, absolute dark periphery)
- The camera feel — smart glasses POV is slightly wide, slightly low, slightly unstable

These test clips cost you almost nothing and tell you immediately if your visual direction is working before you commit to 20+ final clips.

The One Thing You Actually Should Do First

Write the character physical descriptions before generating. Not their personalities — that's for the `.md` files. Just their physical appearance, clothing, and the specific visual details that must stay consistent across every clip.

That's a 15-minute writing task. Do that, then open Google AI Studio and start generating.

The backend can be built in parallel while the visual library grows. They don't block each other at all.

Supergrok Imagine has proven great for character creation. and also Morphic Studio. which i have for both

This changes the production workflow significantly — in a good way. You already have the two best tools for this specific problem. Here's how to use them together:

The Two-Tool Character Pipeline

Morphic handles consistency. Grok Imagine handles cinematics.

These tools aren't redundant — they solve different halves of the same problem.

Morphic's One-Shot Character Model is the key feature you want. Here's exactly how it works for LIMINAL SIN:[90]

1. Generate or design one strong reference image of a character in Morphic Canvas
2. Right-click the image → **Create Model** → **Character Model**
3. Morphic trains a lightweight model from that single image in minutes[90]
4. Every subsequent generation of that character — different poses, lighting, expressions, locations — pulls from the trained model, not just the prompt
5. Optionally feed it 15–20 additional angle shots to strengthen the model further[91]

This solves the drift problem entirely. Instead of hoping prompt descriptions hold a face consistent across 30 clips, the character model is literally baked into Morphic's generation pipeline.[90]

Grok Imagine (Super Grok) then takes those locked Morphic outputs and handles the cinematic layer:[92]

- Grok Imagine's core strength is **physically consistent lighting, believable acting reads, and natural camera depth-of-field** — exactly what you need for FMV clips[92]
- It can edit up to 3 reference images together simultaneously — meaning you can feed it Audrey reference, the tunnel environment reference, and a lighting reference all at once[93]
- Super Grok tier gives you priority access and more consistent outputs across generations[94]
- For video: generate your reference image in Grok Imagine using the Morphic character model output as the seed, then animate it

The Exact Workflow, Step by Step

```
MORPHIC STUDIO
──────────────────────────────────────────────
1. Design character in Canvas
2. Train One-Shot Character Model
3. Generate expression sheet:
   - Neutral / afraid / determined /
     angry / disbelief / awe / hurt
4. Generate angle sheet:
   - Front / side / 3/4 / looking up /
     looking down / over shoulder
5. Export all as high-res PNGs
         │
         ▼
GROK IMAGINE (Super Grok)
──────────────────────────────────────────────
6. Feed Morphic outputs as reference
7. Generate cinematic stills:
   - Character in tunnel environment
   - Flashlight lighting from below
   - Smart glasses POV framing
8. Lock the 2-3 best cinematic stills
   per character as your master seeds
         │
         ▼
VEO 3.1 (Google AI Studio)
──────────────────────────────────────────────
9. Feed Grok cinematic stills as
   image-to-video seeds
10. Generate all FMV clips from
    these locked reference frames
```

Start Right Now — Today's Session

Since you have both tools open and ready, this is the order of operations for today:

First 30 minutes — Morphic:
Write the physical description for one character (whichever comes to you most clearly first). Generate the base image. If it's close, train the character model immediately. Don't obsess over perfection on the first pass — you can add more reference images to strengthen the model after training.[91]

Next hour — Morphic expression + angle sheets:
Use the trained model to generate the full expression and angle spread. These become your permanent character bible. Every downstream tool references these.

After that — Grok Imagine:
Take your best Morphic angle shot, drop it into Grok Imagine with a tunnel environment description, and generate your first cinematic test frame. This tells you immediately if the visual grammar of your world is working.

You don't need to wait on anything technical. The characters can exist today.

⁂

1. https://www.reddit.com/r/ambitionarena7/comments/1r7yliv/gemini_live_agent_challenge/
2. https://docs.cloud.google.com/vertex-ai/generative-ai/docs/live-api
3. https://neosalpha.com/google-agent-development-kit-adk/
4. https://ai.google.dev/gemini-api/docs/live
5. https://developers.googleblog.com/en/gemini-2-0-level-up-your-apps-with-real-time-multimodal-interactions/
6. https://www.reddit.com/r/GoogleGeminiAI/comments/1r69s1c/stresstesting_the_gemini_live_api_with_a/
7. https://www.youtube.com/watch?v=J62TUCRapR8
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29. https://www.onoff.gr/blog/en/ai/ai-video-sora-runway-sygkrisi/
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