GOOGLE AI ULTRA CREATIVE STUDIO SERIES • LATE 2026 EDITION

Mastering Project Mariner

The complete visual handbook to Google DeepMind's autonomous browser-use engine & Gemini Agent Mode—running 10 parallel cloud browsers, Teach & Repeat workflows, live Take Over handoffs, and safe web automation.

Up to 10 Parallel Cloud Browsers | Teach & Repeat Workflows | Live Pixel & DOM Reasoning | Human-in-the-Loop Safety Gates | Gemini Agent Mode & Chrome | Gemini Computer Use API



From Reading to Acting

Mariner reads live pixels, buttons, dropdowns, and dynamic JS apps—scrolling, typing, and navigating tabs for you.

Keep Your Local Mouse Free

Dispatch up to 10 simultaneous missions inside isolated cloud virtual browsers while you stay focused on your own screen.

You Hold the Final Key

Built-in safety gates pause automatically before logins, payments, form submissions, or any irreversible action.

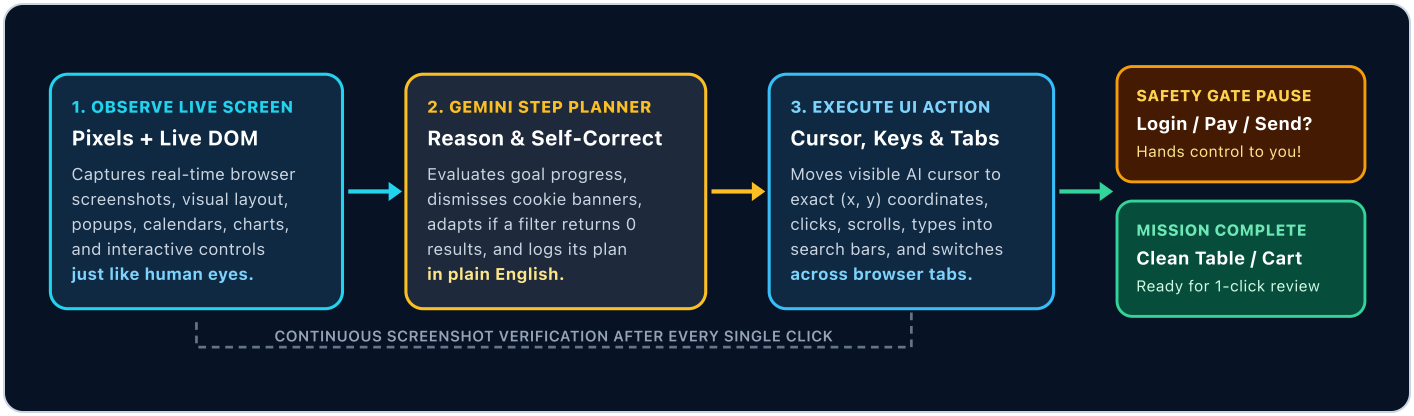
From Chatting With the Web to *Acting* on the Web

Standard AI chatbots summarize pages they can read, but freeze the moment a site hides prices behind interactive date pickers, multi-step filters, or dynamic JavaScript carts. Pioneered by Google DeepMind in Google Labs and now powering **Gemini Agent Mode** and Chrome's agentic browsing across **Google AI Ultra**, **Project Mariner** gives Gemini eyes and hands inside a real browser.

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Under the Hood: Mariner's Multimodal Perception-Action Loop



Why Mariner Doesn't Break Like Old Browser Macros

Traditional RPA scripts crash the instant a website moves a button 20 pixels or renames a CSS class. Because Mariner's Gemini Computer Use brain **looks at the rendered screen after every step**, it spots unexpected popups, sold-out badges, or redesigned menus and routes around them dynamically—just like a sharp human assistant.

Accessing Mariner & Picking the Right Google Agent

What began as Google DeepMind's standalone `labs.google/mariner` research prototype has graduated across the entire **Google AI Ultra** suite—giving you priority cloud-browser concurrency wherever you work.

3 Ways You Use Mariner's Browser Engine Today

1 Gemini Agent Mode

Open `gemini.google.com`, select **Agent Mode** (or *Tools → Agent*), and assign multi-step web goals with live cloud browser viewports and Workspace links.

2 Mariner Cloud Fleet

Spin up parallel virtual browser sessions, record reusable **Teach & Repeat** routines, and watch live cursor trails from the Mission Control sidebar.

3 Chrome & Search AI

Trigger Mariner-powered **Auto-Browse** directly inside Google Chrome or **Search AI Mode** for restaurant bookings, tickets, and local service quotes.

Cloud Virtual Browser vs. Local Tab Execution

Execution Mode	How It Works	Best When You Need To...
Cloud Virtual Browser *(Default Fleet Mode)*	Runs inside secure, Google-hosted cloud VMs. You can watch live or minimize while your own cursor, keyboard, and tabs stay 100% untouched.	Run up to **10 simultaneous tasks** in the background—comparing vendors, filling carts, or scraping public portals while you write or take calls.
Interactive Take-Over *(Hybrid Handoff)*	Streams the live cloud viewport directly to your screen so you can click **Take Over**, type credentials or 2FA once, and click **Resume Agent**.	Work inside authenticated portals (grocery accounts, airline loyalty dashboards, CRM tools) without ever sharing raw passwords in chat!

Decision Matrix: Mariner vs. Deep Research vs. Antigravity Browser

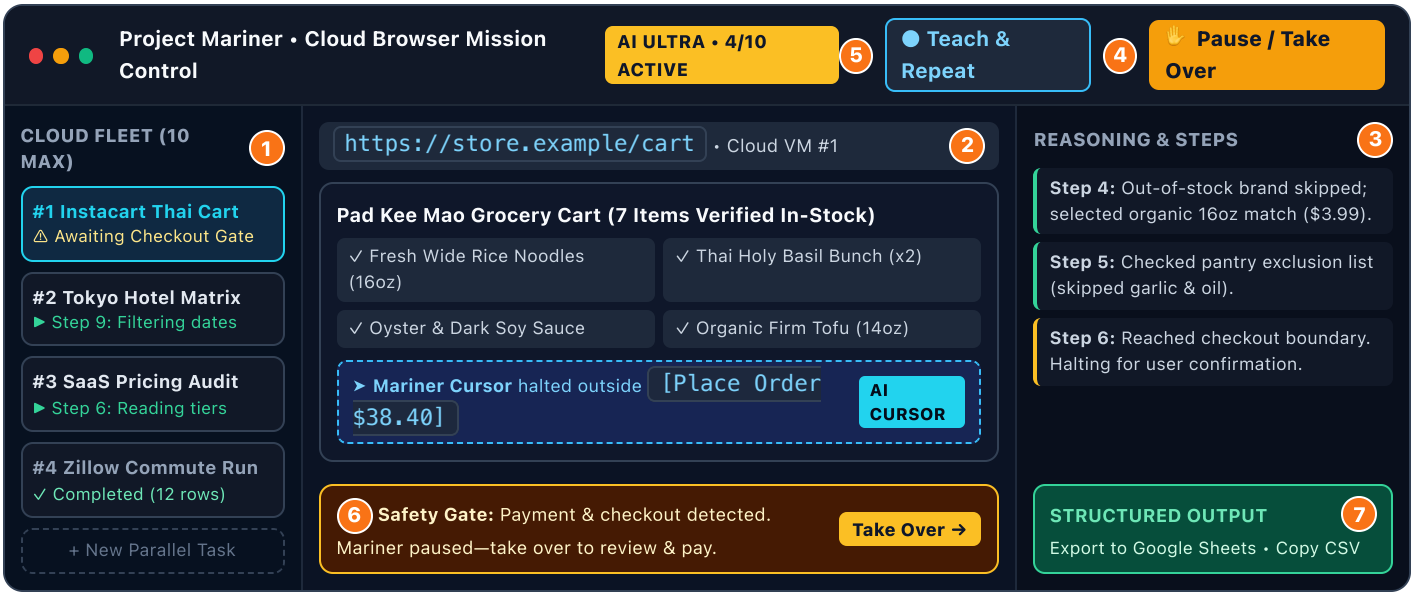
Google AI Ultra Tool	Core Superpower	Reach For This Tool When...
Project Mariner / Gemini Agent Mode	Interactive UI navigation, filters, forms & live carts	Data requires **clicking buttons, picking dates, filtering portals, logging in, or assembling a live shopping cart / booking** ready for checkout.
Gemini Deep Research	Reading 100+ articles & writing cited reports	You want a 10-page literature review, market landscape essay, or competitive synthesis built from publicly readable articles and PDFs.
Google Antigravity Browser Agent	QA testing `localhost` & developer web apps	You are coding software in Antigravity and want an agent to inspect DOM/console errors, test UI flows, and verify visual changes on your app.

Your Google AI Ultra Tier Advantage

Standard tiers face strict session caps and single-task queues. Your **Google AI Ultra** plan unlocks the highest priority cloud VM pool, parallel task execution (up to 10 concurrent sessions), and extended multi-step reasoning horizons.

Mission Control Workspace: Annotated Visual Tour

Unlike black-box automation tools that hide what they are doing until something goes wrong, Mariner shows every click, scroll, and thought in real time. Master these 7 controls to steer like a fleet captain.



Numbered Interface Reference

1 **Parallel Fleet Sidebar:** Launch and monitor up to **10 simultaneous cloud browsers**; badges show which tasks are working, done, or awaiting input.

2 **Live Cloud Viewport & AI Cursor:** Watch Mariner's glowing cursor highlight buttons, scroll tables, and fill inputs inside its isolated VM in real time.

3 **Step-by-Step Reasoning Log:** Plain-English narration of *why* Mariner clicked each link or swapped an out-of-stock item—easy to audit in 3 seconds.

4 **Pause / Take Over Control:** Freeze Mariner at any millisecond to sign in, tweak a filter manually, or adjust a cart item, then hand control right back.

5 **Teach & Repeat Recorder:** Demonstrate a custom portal workflow once with voice + clicks so Mariner saves it as a one-click reusable skill.

6 **Sensitive-Action Safety Banner:** Automatic hard stop whenever Mariner encounters a login wall, CAPTCHA, terms checkbox, send button, or payment screen.

7 **Structured Output & Export Drawer:** Turns messy multi-tab browsing into crisp comparison tables ready for 1-click export to **Google Sheets** or CSV.

Scaling Yourself: 10 Parallel Cloud Virtual Browsers

Early computer-use tools hijacked your physical cursor—forcing you to sit with your hands off the keyboard while the AI clicked slowly. Project Mariner runs inside **Google Cloud Virtual Machines**, freeing your computer completely.



1. DISPATCH MISSION: Queue up to 10 independent web tasks at once.

2. CLOUD VM FLEET: Each browser navigates tabs, calendars & filters in parallel.

3. UNIFIED RESULTS: Receive background pings as structured tables finish!

3 Architectural Superpowers of Cloud Virtual Browsers

1 Zero Cursor Hijacking

Keep editing Slides, coding in Antigravity, or presenting on Meet—Mariner's virtual browsers render on cloud GPUs, never stealing window focus.

2 Fault-Isolated Tabs

If Task #4 hits a slow website or a login prompt, Tasks #1–#3 and #5–#10 keep cruising at full speed without blocking the rest of your batch.

3 Async Ping on Pause

Enable browser notifications so Mariner quietly taps you on the shoulder *only* when a task hits a confirmation gate or completes its table.

High-Leverage Ways to Fan Out 5–10 Parallel Sessions

Batch Strategy	How to Split Across Parallel Cloud Browsers	Time Saved vs. Manual
Multi-Vendor Quote & Stock Sweep	Assign 1 browser per supplier portal (e.g., 8 B2B packaging or electronics distributors) to check live tier pricing for 250 units + lead time.	~90 mins of repetitive tab-clicking reduced to **6 mins**.
Flexible-Date Travel Matrix	Launch 6 browsers testing 6 different Thu–Sun weekend windows across direct airline & boutique hotel booking engines simultaneously.	Spots hidden date savings portals miss in **5 mins**.
Neighborhood & School Relocation Audit	Run parallel tasks per target zip code: checking live rental inventory, Google Maps transit times at 8:30 AM, and local gym/daycare waitlists.	Builds a full city decision matrix over **one coffee**.

The 5-Part Project Mariner Mission Formula

Prompting a browser agent is different from prompting a chatbot. Ambiguous instructions cause agents to wander across 30 tabs; crisp boundaries turn Mariner into a laser-focused executive assistant.

Anatomy of a Gold-Standard Mariner Mission Prompt

1. Clear End Goal
2. Starting Sites / Portals
3. Hard Filters & Fallback Rules
4. Stop-Before Safety Boundary
5. Exact Output Schema

"Find the 4 best pet-friendly boutique hotels in Kyoto for Oct 14–18 (4 nights, 2 adults) starting on Google Hotels and verifying final room rates directly on each hotel's official booking page. Hard filters: total price including taxes & pet fees under $340/night, minimum 4.5 rating, within a 10-minute walk of a subway station; if a hotel hides pet fees, check its FAQ page. STOP before entering any guest details or clicking Reserve/Checkout. Return a Markdown table with Hotel Name, Nightly Total (incl. taxes/pet fee), Nearest Station Walk Time, Cancellation Policy, and Direct Booking URL."

WHY SPECIFIC FALLBACK & STOP RULES PREVENT WASTED STEPS

✕ VAGUE PROMPT (WANDERS & GUESSES)

"Buy ingredients for pad thai on Instacart and get good deals." → Guesses store, adds salt/oil you already own, stalls when brand #1 is sold out.

✓ PRO BRIEF (FAST, DETERMINISTIC & SAFE)

"Open H Mart on Instacart; add 4-serving Pad Thai items; skip oil/soy/eggs; if out of stock pick highest-rated substitute under $8; STOP at cart summary."

4 Golden Rules for Reliable Browser Navigation

1 Pre-Answer "What If Out of Stock?"

Always include one fallback rule—such as *"If unavailable on the target date, check +/- 1 day"* or *"Pick the closest organic size."*

2 Cap Breadth With Explicit Numbers

Say *"Inspect the top 5 non-sponsored listings"* instead of *"Check all listings"* so Mariner finishes in 3 minutes instead of 25.

3 Demand All-In Final Pricing

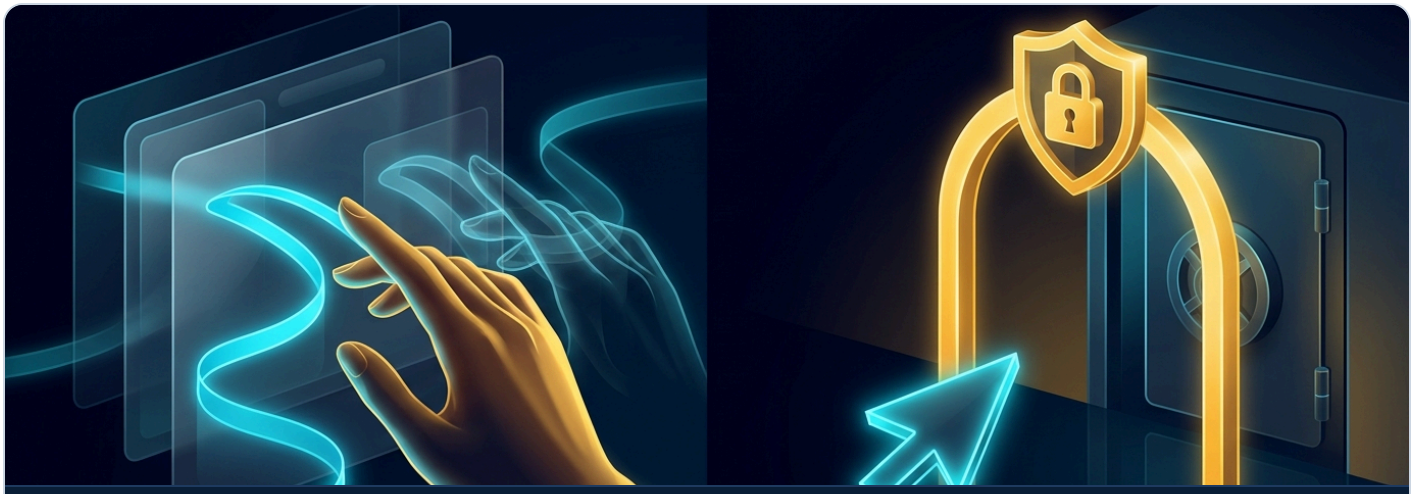
Tell Mariner to click one step deeper to reveal *mandatory cleaning fees, shipping, or taxes*—where static search snippets lie!

4 Always Include a `STOP BEFORE` Clause

Even though Mariner has built-in safety gates, explicitly stating `STOP at the review cart screen` aligns its planner cleanly.

Teach & Repeat + Human-in-the-Loop Safety Gates

Every industry has quirky internal portals, multi-level dropdowns, or custom formatting habits that take 300 words to explain—but only 30 seconds to *show*. That is why Mariner introduced **Teach and Repeat** alongside strict confirmation gates.



LEFT • TEACH & REPEAT: Demonstrate a browser workflow once; Mariner generalizes it for new inputs.

RIGHT • CONFIRMATION GATE: Automatic hard pause before logins, payments, or irreversible clicks.

How to Record a Reusable "Teach & Repeat" Skill in 4 Steps

1 Click "Teach" & Perform Once

Start recording and click through your portal normally—opening specific filters, toggling tabs, and copying the exact metrics you care about.

2 Narrate the "Why" Out Loud

Speak or type quick hints as you go (e.g., *"Always switch billing toggle to Annual first, and ignore Enterprise Call-Us tiers"*).

3 Review Learned Blueprint

Mariner converts your demonstration into a flexible, semantic workflow—not brittle pixel coordinates—turning dates or names into variables.

4 Replay With Fresh Inputs Anytime

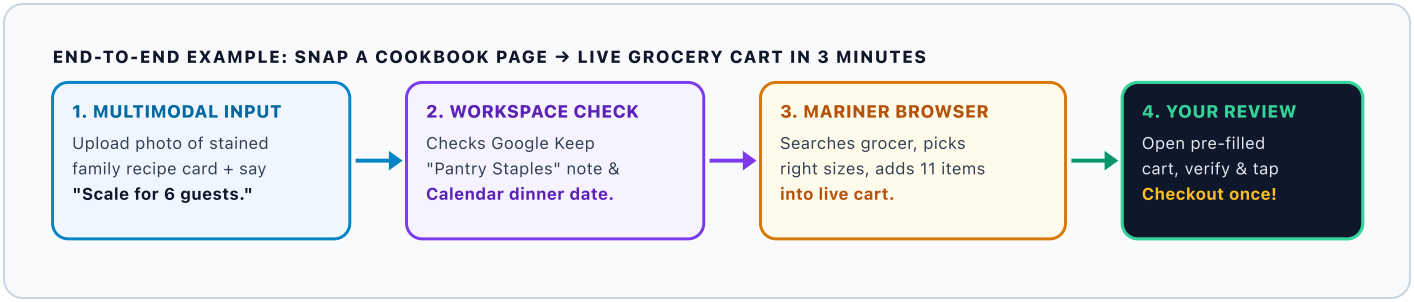
Next Monday, just say: `Run my Competitor Pricing Audit skill on Linear, Asana, and Monday.com` — done in parallel!

Human-in-the-Loop: What Mariner Will *Never* Do Without Your Say-So

Protected Action	Mariner's Automatic Behavior	Your Move
Logins, SSO, 2FA & Passkeys	Pauses immediately at the login screen; never asks you to paste passwords into chat prompts.	Click **Take Over**, sign in directly inside the viewport, then click **Resume Agent**.
Checkout, Payment & Booking	Builds the cart, selects shipping/times, and halts cleanly before *Pay / Place Order / Confirm*.	Verify quantities, totals, and addresses yourself, then click the final Pay button.
Sending Emails, Posts & Forms	Drafts fields and uploads attachments, then stops at the final *Submit / Send / Publish* gate.	Read the populated form in 10 seconds and approve or edit before submission.

`Gemini Agent Mode`: Everyday Life Admin on Autopilot

Inside `gemini.google.com`, **Agent Mode** fuses Project Mariner's live web navigation with Gemini's multimodal vision and your connected **Google Workspace** apps (Calendar, Gmail, Maps, Keep, and Docs).



4 Signature Gemini Agent Mode Missions That Save Hours Every Week

1 Calendar-Aware Reservations & Tickets

"Check my Google Calendar for free Friday evenings this month, then check OpenTable and Resy for 4-person outdoor tables at Italian spots within 15 mins of downtown —show live 7:00–8:00 PM openings."

2 Deep-Filter Apartment & Home Hunting

"Browse Zillow and StreetEasy for 2BR listings under $3,200 with in-unit laundry and natural light in photos; cross-check rush-hour transit time to my office on Google Maps and rank the top 5."

3 Local Service & Repair Quote Gathering

Uses Chrome & Search AI Mode's agentic booking engine to check live appointment slots across 5 highly rated local auto shops, dentists, or HVAC pros—presenting confirmed availability side-by-side.

4 Gmail Receipt → Reorder / Return Prep

"Find last autumn's air-filter order specifications in my Gmail, locate the lowest current 4-pack price across 3 hardware retailers with in-stock delivery, and stage the cart up to checkout."

Pro Tip: Combine Camera Uploads With Agent Mode

Don't type model numbers or serial codes by hand! Snap a photo of a broken dishwasher part sticker, an empty vitamin bottle, or a handwritten whiteboard packing list, drop it into **Gemini Agent Mode**, and tell Mariner to source exact replacements.

5 High-ROI Workflows Ready to Copy & Run

The best Mariner tasks share one trait: high tab-switching drudgery for humans, clear structured outputs at the finish line. Start with any of these five battle-tested playbooks.

Mission Playbook	Mode & Setup	Core Steering Instructions	Safety Gate & Output
1. Recipe-to-Grocery-Cart Builder	**Gemini Agent Mode** + Take-Over sign-in on Instacart / Whole Foods / Walmart.	Upload recipe link/photo + serving count. List pantry staples to skip. Add fallback rule: *"Prefer store-brand organic if name-brand is sold out."*	**Stop Gate:** Cart review screen. **Output:** Pre-loaded cart + itemized substitution log.
2. Multi-Portal Flight, Hotel & Event Matrix	**Parallel Cloud Fleet** (4–6 concurrent sessions across date pairs).	Compare airline-direct vs. aggregator + official hotel sites. Require clicking through to the final fare summary to expose resort & baggage fees.	**Stop Gate:** Before traveler info. **Output:** Ranked True-Total cost table with deep links.
3. Weekly Competitor Pricing & Feature Tracker	**Teach & Repeat** recorded skill across 6–10 competitor URLs.	Demonstrate toggling Monthly vs. Annual pricing, expanding feature comparison accordions, and checking changelog banners for newly shipped AI tiers.	**Stop Gate:** Read-only. **Output:** Google Sheet diff highlighting price/tier changes.
4. Conference Speaker & Vendor Lead Builder	**Parallel Cloud Fleet** browsing event agendas & exhibitor directories.	Open conference schedule, click into each speaker/exhibitor modal (which static scrapers miss!), capture role, company, talk topic, and public website.	**Stop Gate:** Never submit contact forms. **Output:** Prioritized outreach CSV for Sheets/CRM.
5. Apartment Filter & Live Commute Scorer	**Agent Mode** + Google Maps rush-hour transit verification.	Filter rental portals for budget, pet policy & laundry; inspect listing photo galleries to verify real windows/kitchens; compute 8:30 AM transit time.	**Stop Gate:** Before "Request Tour" click. **Output:** Top-6 scorecard + tour links.

The "Two-Pass" Secret for Complex Decisions

Run **Pass 1** in read-only parallel mode across 8 sites to gather a clean comparison table. Pick your single favorite winner in 30 seconds, then run **Pass 2** to have Mariner pre-fill the reservation or cart on that winning site right up to the confirmation gate!

Security, Privacy & Smart Delegation Habits

Giving an AI agent a live browser requires thoughtful guardrails. Google engineered Mariner around isolated virtual machines, prompt-injection defenses, and strict human confirmation—here is how to stay 100% safe.

How Mariner Protects Your Credentials, Cookies & Browsing

1 Isolated Cloud VMs

Public research tasks start in clean, sandboxed cloud browser containers—so random sites cannot read your local desktop files or personal Chrome tabs.

2 Zero-Chat Passwords

Never type passwords, SSNs, or credit card CVVs into a prompt! Always use **Take Over** to sign into the browser UI directly when needed.

3 Anti-Injection Shields

Mariner runs multi-layered classifiers to ignore malicious hidden instructions embedded on untrusted webpages attempting to hijack your agent's goal.

Traffic-Light Delegation Framework: Green, Yellow & Red Zones

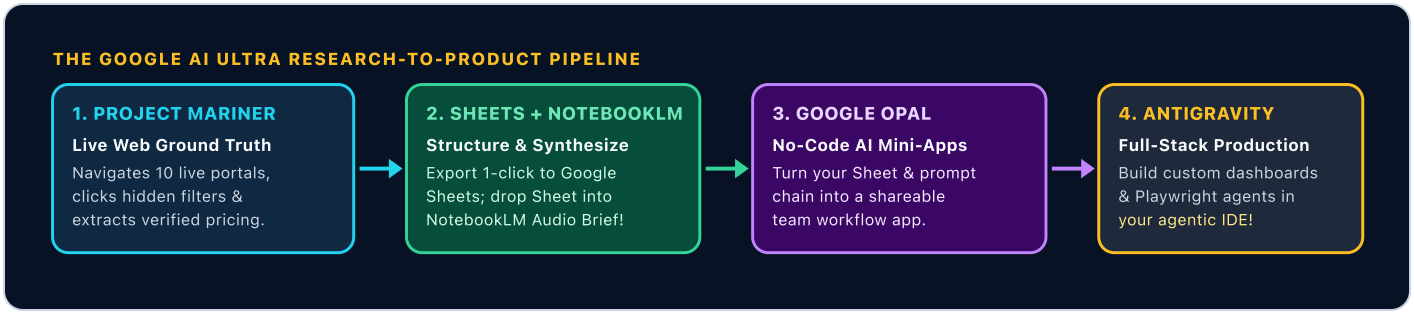
Zone	Task Examples	Recommended Safety Posture
● **GREEN ZONE** *Full Parallel Autonomy*	Public price comparisons, flight/hotel discovery, vendor feature matrices, academic/event directory gathering, apartment filtering.	Run up to 10 parallel unauthenticated Cloud VMs freely in the background; review exported table at the end.
● **YELLOW ZONE** *Supervised + Stop Gate*	Building logged-in grocery/retail carts, pre-filling complex government or travel forms, CRM lead research, restaurant booking prep.	Sign in via **Take Over**; keep session scoped to that one site; inspect every cart item & field before clicking final Submit/Pay yourself.
● **RED ZONE** *Keep 100% Manual*	Wire transfers, stock/crypto trade execution, medical portal changes, signing binding legal contracts, password-manager administration.	**Do not delegate to browser agents.** High-stakes financial, medical, and security settings belong strictly under direct human clicks.

30-Second Final Cart Audit Before You Click Pay

Even a 99%-accurate browser clicker can occasionally select a *Family-Size 64oz* jar instead of *16oz*, or default to expedited shipping on a tricky retailer layout. Always glance at **(1) Item quantities, (2) Delivery date & address, and (3) Final tax/shipping total** during the confirmation handoff.

Power Pipelines & Building Custom Mariner Agents

Project Mariner shines brightest as the **live web sensor** at the front of your Google AI Ultra stack—feeding fresh, real-world data straight into **Sheets**, **NotebookLM**, **Opal**, and **Antigravity**.



3 Cross-Tool Combos Worth Trying Immediately

- **Mariner → Google Sheets → Gemini Charts:** Export Mariner's multi-portal table straight to Google Sheets, then ask Gemini in Sheets to plot price-vs-rating scatter charts automatically.
- **Mariner → NotebookLM Executive Podcast:** Have Mariner collect 8 competitor pricing tables + release notes into a Doc, drop it into **NotebookLM** alongside Gemini Deep Research's industry report, and generate a 7-minute commute Audio Overview!
- **Mariner Visual Recon → Whisk & Flow Creative Briefs:** Have Mariner audit top-performing landing pages or ad creatives in your niche, summarize visual hooks, and feed those insights into **Google Whisk** & **Google Flow**.

Developer Spotlight: Build Your Own Mariner With Gemini Computer Use

Want to embed Mariner-style browser automation directly inside your own SaaS product or internal tooling? Google exposed Mariner's underlying GUI-action brain in **Google AI Studio** and **Vertex AI** via Gemini's built-in `computer_use` tool capability (available across modern Gemini models with Playwright or Browserbase sandboxes).

How the SDK loop works: Your code sends a Playwright viewport screenshot + user goal → Gemini returns structured UI tool calls (`click_at`, `type_text_at`, `scroll_document`, plus a `safety_decision` flag when human confirmation is required) → your sandbox executes the action and sends back the next frame!

Troubleshooting Clinic & Pre-Flight Cheat Sheet

Live websites throw curveballs—CAPTCHA walls, infinite-scroll traps, and regional popups. Keep these 7 instant fixes handy whenever an agent session stalls.

Top 7 Mariner & Agent Mode Hiccups (And 10-Second Fixes)

Symptom / Browser Hiccup	Root Cause & 10-Second Fix
Agent pauses on a "Verify You Are Human" / CAPTCHA screen	By design! Google agents strictly refuse to bypass anti-bot challenges autonomously. Click **Take Over**, complete the check yourself in 3 seconds (or switch to an official airline/retailer site with cleaner access), and click **Resume**.
Agent keeps scrolling an endless feed without stopping	Infinite-scroll page + unbounded prompt. Click **Pause** and add a hard ceiling: `"Inspect only the first 8 non-sponsored results sorted by Highest Rated, then stop and summarize."`
Reported hotel or ticket price is lower than checkout reality	Site hid resort/service fees on page 1. Instruct Mariner: `"Click through to the pre-checkout price breakdown screen (without booking) to capture all mandatory taxes and fees."`
Modal popup or newsletter overlay blocks clicks	Stubborn sticky overlay. Usually Mariner clicks the `X` automatically; if a custom popup traps focus, tap **Take Over**, press `Esc` once, and resume.
"Teach & Repeat" skill breaks after a portal redesign	Target site removed an entire workflow step. Open the saved skill, edit the plain-English step instructions (or re-record just the changed 15-second segment), and save.
Cart items picked wrong package size or store location	Store zip code defaulted to cloud VM region. Always specify your delivery zip code in the prompt—or sign in via **Take Over** first so your saved address loads.
Task times out on a massive 20-site research prompt	Single browser overloaded with sequential work. Split the list into **5 parallel tasks of 4 sites each** in the Cloud Fleet sidebar for 4x faster completion!

Autonomous Browser Pre-Flight: 6 Habits of Power Delegators

- ☐ **1. Bound the Scope** (e.g., *"Top 5 results, Oct 14–18"*).
- ☐ **2. State Fallback Logic** (what to do if sold out).
- ☐ **3. Include a `STOP BEFORE` Gate** (review cart/form).
- ☐ **4. Never Paste Passwords**—use **Take Over** to sign in.
- ☐ **5. Fan Out Parallel VMs** (split big lists across 5–10 tasks).
- ☐ **6. Export to Sheets / NotebookLM** to compound value!

Your Next 5-Minute Mission

Open `gemini.google.com` in **Agent Mode**, snap a photo of your favorite recipe (or pick an upcoming weekend trip), include a clear `STOP at the review screen` instruction, and watch Mariner handle the tab-clicking while you keep your mouse free!