Cloud Contraptions
TRAINING & CONSULTING

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Agentic Coding with Google Antigravity: the Antigravity App, CLI, and Gemini Models

Class Duration

14 hours of live training delivered over 2-3 days to accommodate your scheduling needs.

Student Prerequisites

- Professional software development experience in at least one language
- Working knowledge of Git and GitHub
- Comfort with the command line
- A Google account; a Google AI Pro or Ultra plan or a Gemini Enterprise license is recommended
- Prior use of an AI coding assistant is helpful

Target Audience

Software engineers, tech leads, and platform teams who want to use Google's agentic coding tools on real projects. Teams moving from Gemini CLI or Gemini Code Assist, and organizations that run agents under Google Cloud identity and billing, will also benefit. Teams still comparing tools can start with Choosing Your AI IDE.

Description

Google Antigravity is Google's agentic development platform, powered by Gemini models. It includes the Antigravity App for running many agents, the `agy` CLI, IDE extensions, and a Python SDK. This course covers planning with implementation plans, reviewing artifacts, and checking UI changes with browser agents. Students run parallel agents in worktrees, add rules, skills, and MCP servers, and script the CLI for CI. The course also covers permissions, enterprise controls, and moving from Gemini CLI.

Learning Outcomes

- Choose between the Antigravity App, CLI, IDE extensions, and SDK.

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- Sign in with a personal, enterprise, or Google Cloud identity.
- Choose Gemini models and reasoning effort for a task.
- Run plan-then-execute work with implementation plans and artifacts.
- Verify front-end changes with browser agents.
- Run parallel agents and subagents in isolated worktrees.
- Ground agents with `AGENTS.md`, `GEMINI.md`, rules, and skills.
- Extend agents with MCP servers, plugins, and hooks.
- Automate agent tasks in CI with CLI headless mode.
- Apply permission presets, sandboxing, and quota controls.
- Migrate Gemini CLI configuration to Antigravity.

Training Materials

Comprehensive courseware is distributed online at the start of class. All students receive a downloadable MP4 recording of the training.

Software Requirements

The Antigravity App and Antigravity CLI installed (macOS, Windows, or Linux), a Google account (Google AI Pro or Ultra, or a Gemini Enterprise license, recommended), Google Chrome, Git, a GitHub account with a repository, and optionally VS Code or a JetBrains IDE with the Antigravity extension.

Training Topics

Google’s Agentic Coding Tools

- The Antigravity App
- The `agy` CLI
- IDE extensions and the Antigravity IDE
- The Antigravity SDK
- Choosing a surface per task
- Where Gemini CLI fits now
- Gemini Code Assist license changes
- The Jules wind-down
- Personal plans vs. Gemini Enterprise
- Keeping a human in the loop

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Setup and Sign-In

- Installing the App and CLI
- Installing IDE extensions
- Personal Google account sign-in
- Gemini Enterprise accounts and projects
- Gemini API keys for the CLI
- Application Default Credentials
- Configuration in `~/.gemini/config/`

Gemini Models and Model Choice

- Current Gemini model tiers
- Choosing a model per conversation
- `/model` and `--model` in the CLI
- Reasoning effort with `/effort`
- Claude models in Antigravity
- Matching models to task and quota

Working with Agents in the Antigravity App

- Projects and scoped settings
- Local mode vs. worktree mode
- Planning mode and `/plan`
- Implementation plans
- Walkthroughs, screenshots, and recordings
- Inline feedback on artifacts
- The plan review policy
- Reviewing diffs in the Review pane
- Staging and committing changes

Browser Use and Verification

- The browser subagent and `/browser`
- Checking responsive layouts
- Console errors and failed requests
- Screenshots and recordings as evidence
- URL allow, ask, and deny lists
- Protections for sign-ins and payments

Parallel Agents and Subagents

- Parallel conversations across projects

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- Built-in research and browser subagents
- Custom subagents in `.agents/agents/`
- Shared workspace vs. isolated worktree
- Agent teams with `/swarm`
- Dynamic Workflows with `/run-workflow`
- Automations for scheduled work
- Remote Control and Remote Agents

The Antigravity CLI

- Interactive sessions with `agy`
- Approvals and `/diff`
- Execution modes
- Resuming and forking conversations
- Working over SSH
- Antigravity in editors with `agy acp`

Project Context: Rules and Agent Skills

- `AGENTS.md` and `GEMINI.md`
- Rules in `.agents/rules/`
- Rule activation triggers
- Global rules under `~/.gemini/`
- Agent Skills in `.agents/skills/`
- Invoking skills as slash commands
- Migrating workflows to skills

MCP, Plugins, and Hooks

- MCP servers in `mcp_config.json`
- Workspace and global MCP scopes
- stdio and Streamable HTTP
- OAuth and Google credentials
- Google Cloud servers from the MCP Store
- Plugins and the Antigravity Marketplace
- Managing plugins with `agy plugin`
- Lifecycle hooks in `.agents/hooks.json`
- Guardrails with `PreToolUse` hooks

CI and Automation

- Headless runs with `agy -p`

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- Text, JSON, and streaming output
- Structured output with `--json-schema`
- Scoped allow rules for unattended runs
- Risks of `--dangerously-skip-permissions`
- Authenticating automation
- The `run-gemini-cli` GitHub Action
- Custom pipelines with the Antigravity SDK

Security, Governance, and Cost

- Permission presets
- Allow, ask, and deny rules
- The terminal sandbox
- Filesystem and network allowlists
- Antigravity in Gemini Enterprise
- Data governance and third-party models
- Quotas and AI credits
- AI Credit overage settings

Migrating from Gemini CLI and Gemini Code Assist

- Who moved to Antigravity
- Who keeps Gemini CLI
- Carrying over `GEMINI.md` and `AGENTS.md`
- Importing extensions with `agy plugin import`
- Moving MCP servers and skills
- Known feature gaps
- Running both tools side by side

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