

AI-Driven Development - 30-Day Challenge

Task 3

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Class Slot: Friday — 6:00 PM to 9:00 PM

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PART A — Research Questions (Short Answers)

1. What new improvements were introduced in Gemini 3.0?

Gemini 3.0 (and Gemini 3 Pro) brings large gains in reasoning, reliability, and multimodal understanding higher benchmark performance versus prior Gemini models, a much larger context window (up to ~1M tokens on Pro), and new model modes (e.g., “Deep Think”) that improve multi-step planning and complex problem solving. It also adds finer control for latency, cost, and multimodal fidelity in the API.

2. How does Gemini 3.0 improve coding & automation workflows?

Gemini 3.0 introduces stronger agentic capabilities (better tool use, planning and orchestration across services), improved code generation and debugging at scale, and integrations that let the model operate inside developer tools and IDEs. Google also announced an “agent-first” development experience (Google Antigravity) plus richer CLI and API features so Gemini can manage multi-step developer tasks (write, run, test, and fix code) more autonomously.

3. How does Gemini 3.0 improve multimodal understanding?

Gemini 3.0 processes text, images, audio, video and PDFs more coherently: it offers finer control over image/video input fidelity (e.g., `media_resolution`), better ability to read fine text or small details in images/PDFs, and improved cross-modal reasoning so it can combine signals from different media types more accurately

4. Name any two developer tools introduced with Gemini 3.0.

Two developer tools/experiences announced with Gemini 3.0 are Google Antigravity (an agentic development platform/AI-first IDE experience) and the Gemini CLI / Gemini API developer features (new API parameters and CLI workflows for building agentic apps and controlling multimodal/latency settings).

PART B — Practical Task (Screenshot Required)

```
Command Prompt
Microsoft Windows [Version 10.0.19045.6466]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Mohit Computers>gemini -m gemini-3.0-pro
```

```
Gemini - Mohit Computers

> GEMINI

Tips for getting started:
1. Ask questions, edit files, or run commands.
2. Be specific for the best results.
3. /help for more information.

You are running Gemini CLI in your home directory. It is recommended to run in a project-specific directory.

Using: 1 GEMINI.md file

>  Type your message or @path/to/file

~ (main*)          no sandbox (see /docs)          gemini-3.0-pro
```

Gemini CLI update available! 0.17.0 → 0.17.1
Installed with npm. Attempting to automatically update now...

You are running Gemini CLI in your home directory. It is recommended to run in a project-specific directory.

Select Model

Gemini 3 is now available.
To use Gemini 3, enable "Preview features" in /settings.
Learn more at <https://goo.gle/enable-preview-features>

- 1. Auto
Let the system choose the best model for your task.
- 2. Pro (gemini-2.5-pro)
For complex tasks that require deep reasoning and creativity
- 3. Flash (gemini-2.5-flash)
For tasks that need a balance of speed and reasoning
- 4. Flash-Lite (gemini-2.5-flash-lite)
For simple tasks that need to be done quickly