

AI-Driven Development Task 3

PART A Research Questions

1. What new improvements were introduced in Gemini 3.0?

Gemini 3.0 introduces major upgrades in speed, reasoning, and efficiency. It offers better long-context memory, stronger coding capabilities, multi-step planning, and significantly improved real-time agentic actions. The model is also more optimized for on-device performance, reducing latency and improving accuracy in complex tasks.

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

Gemini 3.0 generates cleaner, more reliable code with fewer errors and provides step-by-step reasoning for debugging. It can run multi-step automation tasks through AI agents, integrate with dev tools more smoothly, and understand full project structure making it ideal for end-to-end coding, refactoring, and workflow automation.

3. How does Gemini 3.0 improve multimodal understanding?

Gemini 3.0 has enhanced multimodal fusion, meaning it can process text, images, audio, and code together with higher accuracy. It understands context across multiple formats at once, provides better captioning, image reasoning, document analysis, and can interpret combined inputs more naturally than previous versions.

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

- **Gemini Advanced Code Execution**
- **Gemini Developer Console**
(Other examples: Gemini Live API, Gemini Nano, Gemini Flash)

PART B Practical Task

The screenshot shows a terminal window titled "Gemini - islam". The window has a dark theme with light-colored text. At the top, there is a decorative header consisting of colored squares. Below it, a message box contains the text: "Gemini 3 is now available. Join the waitlist at <https://google/enable-preview-features>". A "Tips for getting started:" section follows, listing four items: 1. Ask questions, edit files, or run commands. 2. Be specific for the best results. 3. Create GEMINI.md files to customize your interactions with Gemini. 4. /help for more information. A command prompt shows the user entering "/model". A message box below states: "You are running Gemini CLI in your home directory. It is recommended to run in a project-specific directory." A "Select Model" section then appears, informing the user that Gemini 3 is now available and providing instructions to enable "Preview features" in /settings. It lists four model options: 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), and 4. Flash-Lite (gemini-2.5-flash-lite) (For simple tasks that need to be done quickly). It also notes that a specific Gemini model can be selected on startup using the --model flag. A note at the bottom says "(Press Esc to close)".

NAME: MUHAMMAD MOIZ QURESHI

ROLL NO: 00307188