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Part A Theory (Short Questions)

Nine Pillars & AI Agents

AI tools like Gemini CLI handle repetitive setup tasks, freeing developers to focus on system design and architecture.

The Nine Pillars of AI-Driven Development (AIDD) guide developers toward becoming M-Shaped (deep expertise in coding/architecture + broad skills in planning, testing, collaboration).

Vibe Coding vs Specification-Driven Development

Vibe Coding: Fast at first but leads to messy, untested, hard-to-maintain code.

Specification-Driven Development (SDD): Starts with clear requirements and tests, ensuring maintainable, reliable, and extensible systems.

Architecture Thinking

Developers shift from writing raw code to designing systems and orchestrating AI agents.

Layered/system thinking ensures scalability, maintainability, and proper validation.

Part B — Practical Task

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Ctrl+Y - Toggle YOLO mode
Enter - Send message
Esc - Cancel operation / Clear input (double press)
Page Up/Down - Scroll page up/down
Shift+Tab - Toggle auto-accepting edits
Up/Down - Cycle through your prompt history

For a full list of shortcuts, see docs/cli/keyboard-shortcuts.ad

> Generate a 1-paragraph specification for an email validation function with these requirements:
  - Must contain "@".
  - Must contain a valid domain (e.g., .com, .org).
  - Should return clear error messages.

  + The email validation function will rigorously check if a given string constitutes a valid email address. It must ensure the presence of an "@" symbol, followed by a domain that includes at least one dot and a top-level domain (e.g., ".com", ".org"). The function should also handle common invalid formats, such as missing username or domain parts, and return specific, human-readable error messages to clearly indicate the nature of any validation failure.

Using: 1 GEMINI.ad file
> "C:\3 days challenge\venv\Scripts\activate"
```

► Part C — Multiple Choice Questions (with correct answers)

Biggest mindset shift in AIDD → Thinking in systems and clear instructions.

Biggest failure of Vibe Coding → Architecture becomes hard to extend.

Advantage of AI CLI agents → Handle repetitive tasks so developers focus on design/problem-solving.

Definition of M-Shaped Developer → Deep skills in multiple related domains.