CORSEN AI Academy

Structured Output: JSON and Schemas

Course syllabus

Version 2026-11

Overview

Get structured JSON outputs from your models: JSON Mode, Pydantic and Zod schemas, client.chat.parse(), and best practices.

Learning objectives

- Distinguish JSON Mode and custom structured outputs, and choose based on the model used
- Enable JSON Mode and handle its limits when the response does not respect the format
- Define a Pydantic schema and apply it with client.chat.parse() to type responses
- Write the equivalent in TypeScript with Zod to validate outputs on the application side
- Implement a validation and retry strategy for non-compliant outputs

Audience and prerequisites

Developers, engineers, and integrators looking to leverage Mistral AI via API in their applications.

Ability to read Python (or TypeScript for examples using it) and JSON, command line basics. A Mistral AI Studio API key to try the examples.

Duration and format

Estimated duration : 1 h 15 min. 100% online self-paced course, accessible 24/7 from a browser. Progress saved, resume anytime. Estimated duration: 1 h 15 min.

Content

- Overview (3 lessons)
- JSON Mode (3 lessons)
- Custom with Pydantic and Zod (4 lessons)
- Conclusion (2 lessons)

Assessment

Self-assessment based on the Key takeaways concluding each lesson, and direct implementation of examples on your own examples. A final quiz of 5 corrected questions, at the end of the last lesson, validates acquired skills.

Accessibility

Course accessible to people with disabilities: text content compatible with screen readers, keyboard navigation, and compliant contrasts. For any adaptation needs, email hello@corsen.ai.

Price and recognition

Free

Certificate of completion issued by Corsen AI.

Access time

Immediate after account creation and email confirmation.

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